ADMINISTRATIVE REGISTER OF KENTUCKY

LEGISLATIVE RESEARCH COMMISSION
FRANKFORT, KENTUCKY

VOLUME 20, NUMBER 7
SATURDAY, JANUARY 1, 1994

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MEETING NOTICE: The Administrative Regulation Review Subcommittee is **tentatively** scheduled to meet on January 4, 1994 at 10 a.m.. See **tentative** agenda on pages 1751-1754 in this Administrative Register.

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KENTUCKY ADMINISTRATIVE REGULATIONS are codified according to the following system and are to be cited by Title, Chapter and Regulation number, as follows:

Title		Chapter	Regulation
806	KAR	50:	155
Cabinet, Department, Board or Agency		Office, Division, or Major Function	Specific Regulation

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Room 149, Capitol Annex

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ADMINISTRATIVE REGULATION REVIEW PROCEDURE

Filing and Publication

Administrative bodies shall file with the Regulations Compiler all proposed administrative regulations, public hearing information, tiering statement, regulatory impact analysis, fiscal note, and the federal mandate comparison. Those administrative regulations received by the deadline required in KRS 13A.050 shall be published in the Administrative Register.

Public Hearing

The administrative body shall schedule a public hearing on proposed administrative regulations to be held not less than twenty (20) nor more than thirty (30) days following publication. The time, date, and place of the hearing and the name and address of the agency contact person shall be included on the last page of the administrative regulation when filed with the Compiler's office.

Any person interested in attending the scheduled hearing must submit written notification of such to the administrative body at least five (5) days before the scheduled hearing. If no written notice is received at least five (5) days before the hearing, the administrative body may cancel the hearing.

If the hearing is cancelled, the administrative body shall notify the Compiler of the cancellation. If the hearing is held, the administrative body shall submit within fifteen (15) days following the hearing a statement of consideration summarizing the comments received at the hearing and the administrative body's responses to the comments.

No transcript of the hearing need to be taken unless a written request for a transcript is made, and the person requesting the transcript shall have the responsibility of paying for same. A recording may be made in lieu of a transcript.

Review Procedure

If a proposed administrative regulation is amended as a result of the public hearing, the amended version shall be published in the next Administrative Register; and the administrative regulation shall be reviewed by the Administrative Regulation Review Subcommittee at its next meeting following publication. If a proposed administrative regulation is not amended as a result of the hearing or if the hearing is cancelled, the administrative regulation shall be reviewed by the Administrative Regulation Review Subcommittee at its next meeting. After review by the Subcommittee, the administrative regulation shall be referred by the Legislative Research Commission to an appropriate jurisdictional committee for a second review. The administrative regulation shall be considered as adopted and in effect as of adjournment on the day the appropriate jurisdictional committee meets or thirty (30) days after being referred by LRC, whichever occurs first.

EMERGENCY ADMINISTRATIVE REGULATIONS NOW IN EFFECT

(NOTE: Emergency regulations expire 120 days from publication or upon replacement, repeal, or withdrawal)

STATEMENT OF EMERGENCY
2 KAR 2:010E

Emergency amended administrative regulation 2 KAR 2:010E is necessary in order to comply with the transition schedule set out in Section 87 of Senate Bill 7, enacted during the 1993 Extraordinary Session. This regulation establishes the forms to be used to register as a legislative agent or employer of an agent, to update registration as a legislative agent or employer of an agent, and to give notice of terminations of engagements. This emergency administrative regulation shall be replaced by an ordinary administrative regulation which was filed with the Regulations Compiler on December 6, 1993.

JUDGE GEORGE E. BARKER, Chair

KENTUCKY LEGISLATIVE ETHICS COMMISSION

2 KAR 2:010E. Legislative agent or employer registration statement, legislative agent's updated registration statement, legislative agent's notice of termination of engagement, employer's updated registration statement, employer's notice of termination of engagement.

RELATES TO: KRS 6.666(6) to (13), 6.807
STATUTORY AUTHORITY: KRS 6.666(5)
EFFECTIVE: December 6, 1993
NECESSITY AND FUNCTION: KRS 6.807 requires each legislative agent and employer to file an initial registration statement, periodic updated registration statements, and a notice of termination of engagements. This administrative regulation establishes the required forms [~~registration statement~~].

Section 1. The registration forms and termination forms required by KRS 6.807 shall be mailed to the Kentucky Legislative Ethics Commission, Room 318, Capitol Annex, Frankfort, Kentucky 40601.

Section 2. (1) The "Initial Legislative Agent/Employer Registration Statement", "Legislative Agents Updated Registration Statement", "Legislative Agents Notice of Termination of Engagement", "Employers Updated Registration Statement", "Employers Notice of Termination of Engagement", are [~~("KLEC 7/93") is~~] incorporated by reference.
(2) These documents [~~This document~~] may be inspected, copied, or obtained at the Kentucky Legislative Ethics Commission, Capitol Annex, Room 318, Frankfort, KY 40601, 8 a.m. to 4:30 p.m., Monday through Friday.

JUDGE GEORGE E. BARKER, Chair
APPROVED BY AGENCY: December 6, 1993
FILED WITH LRC: December 6, 1993 at 3 p.m.

STATEMENT OF EMERGENCY
2 KAR 2:020E

Emergency administrative regulation 2 KAR 2:020E is necessary in order to comply with the transition schedule set out in Section 87 of Senate Bill 7, enacted during the 1993 Extraordinary Session. This regulation establishes the Statement of Financial Disclosure. This emergency administrative regulation shall be replaced by an ordinary administrative regulation which was filed with the Regulations Compiler on December 6, 1993.

JUDGE GEORGE E. BARKER, Chair

KENTUCKY LEGISLATIVE ETHICS COMMISSION

2 KAR 2:020E. Statement of financial disclosure.

RELATES TO: KRS 6.781 to 6.797
STATUTORY AUTHORITY: KRS 6.666(5), (6)
EFFECTIVE: December 6, 1993
NECESSITY AND FUNCTION: KRS 6.781 requires all members of the General Assembly, all candidates and nominees for election to the General Assembly, and major management personnel in the Legislative Branch of state government to file Statements of Financial Disclosure. This administrative regulation establishes the required form.

Section 1. The Statement of Financial Disclosure required by KRS 6.781 shall be mailed to the Kentucky Legislative Ethics Commission, Room 318, Capitol Annex, Frankfort, Kentucky 40601.

Section 2. (1) The "Statement of Financial Disclosure" is incorporated by reference.
(2) This document may be inspected, copied, or obtained at the Kentucky Legislative Ethics Commission, Room 318, Capitol Annex, Frankfort, Kentucky 40601, 8 a.m. to 4:30 p.m., Monday through Friday.

JUDGE GEORGE E. BARKER, Chair
APPROVED BY AGENCY: November 22, 1993
FILED WITH LRC: December 6, 1993 at 3 p.m.

STATEMENT OF EMERGENCY
2 KAR 2:030E

Emergency administrative regulation 2 KAR 2:030E is necessary to establish procedural guidelines for the Kentucky Legislative Ethics Commission. This regulation establishes the practices to be followed in the course of adjudicatory proceedings. This emergency administrative regulation shall be replaced by an ordinary administrative regulation which was filed with the Regulations Compiler on December 6, 1993.

JUDGE GEORGE E. BARKER, Chair

KENTUCKY LEGISLATIVE ETHICS COMMISSION

2 KAR 2:030E. Rules of procedure.

RELATES TO: KRS Chapter 6
STATUTORY AUTHORITY: KRS 6.666(5)
EFFECTIVE: December 6, 1993
NECESSITY AND FUNCTION: KRS 6.691 requires the Kentucky Legislative Ethics Commission to conduct adjudicatory proceedings in appropriate cases. The function of this administrative regulation is to regulate the proceedings of the commission.

Section 1. Definitions. (1) "Chairman" means Chairman of the

Kentucky Legislative Ethics Commission.

(2) "Commission" means the Kentucky Legislative Ethics Commission.

(3) "Formal complaint" means a formal written statement accusing one (1) or more persons of a violation of the provisions of KRS Chapter 6.

(4) "Respondent" means a person accused of violating KRS Chapter 6.

Section 2. Purpose and Policy. These rules shall govern the proceedings of the commission and its subcommittees when applicable.

Section 3. Right of a Respondent to Request an Adjudicatory Hearing. If, after an investigation, the commission determines that probable cause exists to support an alleged violation of KRS Chapter 6 and, due to mitigating circumstances set forth in KRS 6.686(5)(a), the commission issues a confidential reprimand, the respondent may file a written request, within five (5) days of receipt of the reprimand, requesting a public adjudicatory proceeding. No respondent shall file an appeal based on a confidential reprimand without having first filed a timely request for an adjudicatory proceeding.

Section 4. Formal Complaints. (1) If the commission determines that probable cause exists to support an alleged violation of KRS Chapter 6, and further decides that a confidential reprimand as defined by KRS 6.686(5)(a) is not appropriate, a formal complaint shall be issued against the respondent. All such votes shall be secret.

(2) The formal complaint shall be prepared in writing, stating the facts alleged to constitute a violation of KRS Chapter 6, and containing a general statement of the applicable law. The formal complaint shall be signed by the chairman or such other member as the commission may authorize.

(3) Any number of acts or omissions, and any number of separate and distinct transactions alleged to constitute a violation of KRS Chapter 6 may be alleged in a single formal complaint, but each act or omission shall be set out in a separate paragraph.

(4) Separate complaints may be consolidated and heard as a single case.

(5) A formal complaint may be filed against two (2) or more persons if based upon the same or related sets of facts, and may, at the commission's discretion, be consolidated and heard as a single proceeding.

(6) When two (2) or more persons are proceeded against in the same proceeding, the commission shall make a separate finding regarding each respondent.

Section 5. Notice of Filing of Formal Complaint: Time to Answer. Upon the filing of a formal complaint, the administrative secretary, by certified mail with return receipt requested shall furnish the respondent with a copy of the formal complaint and notify the respondent that within twenty (20) days after the receipt of the notice, he must file his answer with the administrative secretary and serve a copy of his answer on the attorney for the commission by mailing or delivering a copy to him.

Section 6. When a Formal Complaint Can be Taken as Confessed. The commission may take the allegations of the formal complaint as admitted or confessed if a respondent who was notified of the formal complaint by the commission files an answer admitting the allegations or fails to file an answer within the time provided in these rules. The commission may receive such evidence as it deems of assistance in making its determination.

Section 7. Proceedings When Pleadings Present Only an Issue of Law. If the pleadings present only an issue of law, the commission shall fix a time for filing of briefs. The commission shall have the right to receive evidentiary material if it deems such may be of assistance.

Section 8. Pleadings and Preliminary Motions. (1) There shall be a formal complaint and answer and, when permitted by the chairman, such amendments to the pleadings as may be required to serve the ends of justice. No preliminary motions may be filed except for a more definite statement of the formal complaint or answer.

(2) The chairman shall rule on all motions, unless another commission member is authorized by the commission.

(3) All pleadings shall be filed with the administrative secretary and copies served upon opposing parties or their counsel as provided by the Kentucky Rules of Civil Procedure.

Section 9. Discovery. Either party may at any time after the issuance of a formal complaint move the chairman to order that discovery from the other party be allowed by any of the following methods:

(1) Oral deposition, provided however, that any party may request an order that the deposition be entered into the record in lieu of further testimony by the witness; and

(2) Requests for production of names of witnesses, documents, and other demonstrative evidence; and

(3) Requests for a brief synopsis of the testimony expected to be given by any expert witness.

The chairman may limit or allow discovery of any matter relevant to the issues and may issue protective orders as necessary.

Section 10. Exchange of Witness Lists. At least seven (7) days before the date set for a hearing the attorneys for all parties, and for the commission, shall provide the names of all proposed witnesses to the commission. Copies of the witness lists shall be served upon opposing parties or their counsel as provided by the Kentucky Rules of Civil Procedure and additional witnesses may only be called for rebuttal, or with the permission of the commission for good cause shown.

Section 11. Prehearing Conference. The chairman may order that a prehearing conference be held with reasonable notice to all parties.

Section 12. Amendments to Formal Complaint or Answer. The formal complaint may be amended to conform to the proof or to set forth additional facts, either occurring before or after the commencement of the hearing. If such an amendment is made, the respondent shall be given reasonable time to answer the amendment and to prepare and present his defense against the matters charged thereby.

Section 13. Hearing Additional Evidence. The commission may order a hearing for the taking of additional evidence at any time while the matter is pending before it. The order shall set the time and place of hearing and shall indicate matters on which the evidence is to be taken. A copy of such order shall be sent by mail to the respondent at least ten (10) days prior to the date of the hearing.

Section 14. Transcript of Evidence. The proceedings before the commission shall be reported by a reporter appointed by the commission, or recorded by a mechanical device. If after a hearing the commission is of the opinion that the charge or charges should be dismissed, or that the respondent should only be administered a reprimand, the commission may direct the reporter to preserve all notes of the hearing, but defer a transcription of the record until ordered by the commission to prepare such a transcript. In all other proceedings the testimony shall be transcribed.

JUDGE GEORGE E. BARKER, Chair

APPROVED BY AGENCY: December 6, 1993

FILED WITH LRC: December 6, 1993 at 3 p.m.

STATEMENT OF EMERGENCY
501 KAR 6:020E

In order to continue to operate the Department of Corrections in accordance with KRS Chapters 196 and 197, the department needs to implement this emergency administrative regulation. An ordinary administrative regulation will not suffice as this regulation should be effective immediately. The Department of Corrections has recently completed an internal review of its classification system to determine if certain violent offenders should be excluded from placement in minimum security institutions. As a result of that review, the Department is proposing to revise its regulations to prohibit persons convicted of Class A felonies and sex offenses from being held in state-operated minimum security institutions, halfway houses and private prisons, facilities in which most walk-aways occur. I am requesting that these regulations be declared an emergency so that the tighter security measures can be put into effect immediately. It is my belief that the revisions will result in better protection of Kentucky citizens.

BRERETON C. JONES, Governor
JACK C. LEWIS, Commissioner

DEPARTMENT OF CORRECTIONS

501 KAR 6:020E. Corrections policies and procedures.

RELATES TO: KRS Chapters 196, 197, 439
STATUTORY AUTHORITY: KRS 196.035, 197.020, 439.470, 439.590, 439.640
EFFECTIVE: December 1, 1993
NECESSITY AND FUNCTION: KRS 196.035, 197.020, 439.470, 439.590, and 439.640 authorizes the commissioner to adopt, amend or rescind administrative regulations necessary and suitable for the proper administration of the cabinet or any division therein. These policies and procedures are incorporated by reference in order to comply with the accreditation standards of the American Correctional Association. These administrative regulations are in conformity with those provisions.

Section 1. Pursuant to the authority vested in the Department of Corrections the following policies and procedures, revised November 29 [~~October 15~~], 1993, are incorporated by reference and shall be referred to as Corrections Policies and Procedures. Copies of the procedures may be obtained from the Office of the General Counsel, Kentucky Department of Corrections, State Office Building, Frankfort, Kentucky 40601 or may be reviewed at the Office of General Counsel weekdays from 8 a.m. to 4:30 p.m.

1.1	Legal Assistance for Corrections Staff
1.2	News Media
01-04-01	The operation of Contracted Adult Correctional Facilities
1.6	Extraordinary Occurrence Reports
1.9	Institutional Duty Officer
1.11	Population Counts and Reporting Procedures
1.12	Operation of Motor Vehicles by Department of Corrections Employees
2.1	Inmate Canteen
2.2	Warden's Fund
2.10	Surplus Property
3.12	Institutional Staff Housing
4.2	Staff Training and Development
4.3	Firearms and Chemical Agents Training
6.1	Open Records Law
7.2	Asbestos Abatement
8.1	Occupational Exposure to Bloodborne Pathogens
8.4	Emergency Preparedness
9.1	Use of Force
9.4	Transportation of Inmates to Funerals or Bedside Visits
9.6	Contraband
9.7	Storage, Issue and Use of Weapons Including Chemical Agents
9.8	Search Policy
9.9	Transportation of Inmates
9.10	Security Inspections
9.11	Tool Control
9.18	Informants
9.19	Found Lost or Abandoned Property
10.2	Special Management Inmates
10.3	Safekeepers
10.4	Special Needs Inmates
11.2	Nutritional Adequacy of the Diet for Inmates
11.3	Special Diet Procedures
13.1	Pharmacy Policy and Formulary
13.2	Health Maintenance Services
13.3	Medical Alert System
13.4	Health Program Audits
13.5	Acquired Immune Deficiency Syndrome
13.6	Sex Offender Treatment Program
13.9	Dental Services [~~(Amended 10/15/93)~~]
14.2	Personal Hygiene Items
14.3	Marriage of Inmates
14-04-01	Legal Services Program
14.6	Inmate Grievance Procedures
15.1	Hair and Grooming Standards
15.2	Offenses and Penalties
15.3	Meritorious Good Time [~~(Amended 10/15/93)~~]
15-05-01	Restoration of Forfeited Good Time
15.6	Adjustment Procedures and Programs
15.7	Inmate Account Restriction
16.1	Inmate Visits
16.2	Inmate Correspondence
16.3	Telephone Calls
16.4	Inmate Packages
17-01-01	Inmate Personal Property
17.2	Assessment Center Operations
17.3	Controlled Intake of Inmates
18.1 [~~18.4~~]	Classification of the Inmate (Amended 11/29/93)
18.5	Custody/Security Guidelines (Amended 11/29/93)
18.6	Classification Document
18.7	Transfers (Amended 11/29/93)
18.8	Guidelines for Transfers Between Institutions
18.9	Out-of-state Transfers (Amended 11/29/93)
18-10-01	Preparole Progress Reports
18.11	Kentucky Correctional Psychiatric Center Transfer Procedures
18.12	Referral Procedure for Inmates Adjudicated Guilty But Mentally Ill
18.13	Population Categories
18.15	Protective Custody
19.1	Government Services Projects
19.2	Community Services Projects
19.3	Inmate Wage Program
20.1	Educational Programs and Educational Good Time
21.1	Staffing Pattern for the First Incarceration Shock Treatment Program (FIST) [~~(Added 10/15/93)~~]
21.2	Phase I: Program Selection Assessment Criteria [~~(Added 10/15/93)~~]
21.3	Program Schedule - Phase II and Phase III [~~(Added 10/15/93)~~]
21.4	Platoon Size and Composition [~~(Added 10/15/93)~~]
21.5	Physical Conditions Program Component [~~(Added 10/15/93)~~]
21.6	Group and Individual Counseling [~~(Added 10/15/93)~~]

21.7	Drug and Alcohol Abuse Counseling and Treatment [~~(Added 10/15/93)~~]
21.8	Work Programs Component [~~(Added 10/15/93)~~]
21.9	Education and Life Management [~~(Added 10/15/93)~~]
21.10	Auxiliary Services [~~(Added 10/15/93)~~]
21.11	Offenses and Penalties [~~(Added 10/15/93)~~]
22.1	Privilege Trips
25.1	Gratuities
25.2	Public Official Notification of Release of an Inmate
25.3	Prerelease Program
25.4	Inmate Furloughs
25.6	Community Center Program (Amended 11/29/93)
25.7	Expedient Release
25.8	Extended Furloughs
25.10	Administrative Release of Inmates
27-01-01	Probation and Parole Procedures
27-02-01	Duties of Probation and Parole Officers
27-03-01	Workload Formula Supervisor/Staff Ratio
27-05-01	Testimony, Court Demeanor and Availability of Legal Services
27-06-01	Availability of Supervision Services
27-06-02	Equal Access to Services
27-07-01	Cooperation with Law Enforcement Agencies
27-08-01	Use of Force
27-09-01	Kentucky Community Resources Directory
27-10-01	Advanced Supervision
27-11-01	Intensive Supervision
27-12-01	Supervision: Case Classification
27-12-02	Risk/Needs Assessment
27-12-03	Initial Interview
27-12-04	Conditions of Regular Supervision/Request for Modification
27-12-05	Releasee's Report
27-12-06	Grievance Procedures for Offenders
27-12-07	Employment, Education/Vocational Referral
27-12-08	Supervision Plan
27-12-09	Casebook
27-12-10	Guidelines for Monitoring Supervision Fee
27-12-11	Guidelines for Monitoring Financial Obligations Ordered by the Releasing Authority
27-12-12	Other Financial Obligations (Not Ordered by Releasing Authority)
27-12-13	Community Service Work
27-12-14	Client Travel Restrictions
27-13-01	Drug and Alcohol Testing of Offenders
27-13-02	Alcohol Detection
27-14-01	Interstate Compact Transfers
27-14-02	Interstate Compact Out-of-state Probation and Parole Violation
27-15-01	Supervision Report; Violations, Unusual Incidents
27-16-01	Search; Seizure; Chain of Custody; Disposal of Evidence
27-17-01	Absconder Procedures
27-18-01	Probation and Parole Issuance of Detainer/Warrant
27-19-01	Preliminary Revocation Hearing
27-20-01	Division of Probation and Parole Controlled Intake Program
27-20-02	Prisoner Intake Notification
27-20-03	Prisoner Status Change
27-21-01	Apprehension and Transportation of Probation and Parole Violators
27-22-01	Fugitive Unit - Apprehensions
27-22-02	Fugitive Unit - Transportation of Fugitives
27-23-01	In-state Transfer
27-24-01	Closing Supervision Report
27-24-02	Reinstatement of Clients to Active Supervision
27-25-01	Application for Final Discharge from Parole
27-26-01	Assistance to Former Clients and Dischargees
27-27-01	Restoration of Civil Rights
27-28-01	Firearms/Explosives: Application for Relief from Disability
27-29-01	Parole Review Dates Modification
28-01-01	Probation and Parole Investigation Reports (Introduction, Definitions, Confidentiality, Timing, and General Comments)
28-01-02	Probation and Parole Investigation Reports (Administrative Responsibilities)
28-01-03	Probation and Parole Investigation Reports (Presentence/Postsentence Investigation Interview Procedure)
28-01-04	Probation and Parole Investigation Reports (Presentence/Postsentence Verification, Composition, Case Material and Submission Schedules)
28-01-05	Probation and Parole Investigation Reports (Computation of Jail Custody Credit)
28-01-06	Probation and Parole Investigation Reports (Misdemeanant Presentence Investigation Reports for the Circuit and District Courts)
28-01-07	Probation and Parole Investigation Reports (Supplemental Postsentence Investigation Report, Case Material, and Submission Schedule)
28-01-08	Probation Parole Investigation Reports (Partial Investigation Reports and Submission Schedule)
28-01-09	Release of Information of Factual Content on Presentence/Postsentence Investigation Reports
28-02-01	Expedient Release Program
28-03-01	Parole Plans/Halfway Houses/Extended Furlough/Sponsorship/Gradual Release
28-04-01	Furlough Verifications
28-05-01	Out-of-state Investigations.

JACK C. LEWIS, Commissioner
APPROVED BY AGENCY: November 29, 1993
FILED WITH LRC: December 1, 1993 at 1 p.m.

STATEMENT OF EMERGENCY
501 KAR 6:080E

In order to continue to operate the Department of Corrections in accordance with KRS Chapters 196 and 197, the department needs to implement this emergency administrative regulation. An ordinary administrative regulation will not suffice as this regulation should be effective immediately. The Department of Corrections has recently completed an internal review of its classification system to determine if certain violent offenders should be excluded from placement in minimum security institutions. As a result of that review, the department is proposing to revise its regulations to prohibit persons convicted of Class A felonies and sex offenses from being held in state-operated minimum security institutions, halfway houses and private prisons, facilities in which most walk-aways occur. I am requesting that these regulations be declared an emergency so that the tighter security measures can be put into effect immediately. It is my belief that the revisions will result in better protection of Kentucky citizens.

BRERETON C. JONES, Governor
JACK C. LEWIS, Secretary

CORRECTIONS CABINET

501 KAR 6:080E. Department of Corrections Manuals.

RELATES TO: KRS Chapters 196, 197, 439
STATUTORY AUTHORITY: KRS 196.035, 197.020, 439.470, 439.590, 439.640
EFFECTIVE: December 1, 1993

NECESSITY AND FUNCTION: KRS 196.035, 197.020, 439.470, 439.590, and 439.640 authorize the commissioner to adopt, amend or rescind administrative regulations necessary and suitable for the proper administration of the department or any division therein. These policies and procedures are incorporated by reference in order to comply with the accreditation standards by the American Correctional Association. These administrative regulations are in conformity with those provisions.

Section 1. Pursuant to the authority vested in the Department of Corrections [~~Cabinet~~] the following policies and procedures are [~~revised on May 14, 1993 and are~~] incorporated by reference on November 29, 1993 and hereinafter shall be referred to as Department of Corrections [~~Cabinet~~] Manuals. Copies of the procedures may be obtained from the Office of the General Counsel, Department of Corrections [~~Cabinet~~], State Office Building, Frankfort, Kentucky 40601 or may be reviewed at the Office of General Counsel weekdays from 8 a.m. to 4:30 p.m.

Offender Records Manual - None
Stock Procedure Manual - None
Food Services Manual - None [~~(Added 5/14/93)~~]
Classification Manual - (Amended 11/29/93) [~~None~~]
Diet Manual

JACK C. LEWIS, Commissioner
APPROVED BY AGENCY: November 29, 1993
FILED WITH LRC: December 1, 1993 at 1 p.m.

STATEMENT OF EMERGENCY
902 KAR 13:090E

Emergency regulation 902 KAR 13:090E is necessary in order to act in a timely manner to restrict the certificates of inmates who were recently certified at the Kentucky State Reformatory as EMT-first responders to practice as EMT-first responders only while they are incarcerated and only within the reformatory. This emergency administrative regulation shall be replaced by an ordinary administrative regulation which will be filed with the Regulations Compiler on or before December 15, 1993.

BRERETON C. JONES, Governor
FONTAINE BANKS, JR., Secretary

CABINET FOR HUMAN RESOURCES
Department for Health Services
Division of Health Systems Development

902 KAR 13:090E. Disciplinary actions.

RELATES TO: KRS 211.960 to 211.968, 211.990(5)
STATUTORY AUTHORITY: KRS 194.050, 211.964
EFFECTIVE: December 2, 1993
NECESSITY AND FUNCTION: KRS 211.964 directs the Cabinet for Human Resources to adopt [~~rules and~~] administrative regulations relating to emergency medical technicians. [~~The function of~~] This administrative regulation [~~is to~~] establishes procedures for taking disciplinary action against an applicant for certification or certified emergency medical technician (EMT), EMT-first responder, EMT-first responder instructor, EMT [~~and emergency medical technician~~]-instructor, or EMT-instructor trainer.

Section 1. Denial, Revocation, [~~and~~] Suspension, and Restriction of Certificates. The cabinet may deny, revoke, [~~or~~] suspend, or restrict the certificate of a person who:

(1) Has engaged in dishonorable, unethical, or unprofessional conduct of a character likely to deceive, defraud, or harm the public;

(2) Uses drugs or controlled substances to the extent it may effect his ability to perform the duties of an EMT, or becomes a drug dependent person or drug abuser as defined in KRS 222.011(8);

(3) Uses alcohol to the extent that it may affect his ability to perform the duties of an EMT or becomes an alcoholic person who suffers from alcoholism as defined in KRS 222.011(3);

(4) Has or develops a [~~such~~] physical or mental disability or other condition that continued practice or performance of his duties may be dangerous to patients or the public; [~~or~~]

(5) Fails to:

(a) Follow the appropriate standards of care in the management of a patient;

(b) Administer medicine or treatment in a responsible manner in accordance with:

1. His level of certification;
2. Orders of a physician; or
3. Locally approved medical protocols;

(c) Maintain patient confidentiality;

(d) Meet the requirements for certification or recertification pursuant to:

1. 902 KAR 13:050 for an EMT, EMT-instructor or EMT-instructor trainer; or

2. 902 KAR 13:110 for an EMT-first responder or EMT-first responder instructor;

(e) Meet the requirements for an applicant for certification pursuant to 902 KAR 13:020; or

(f) Meet the requirements for an EMT-instructor or EMT-instructor trainer pursuant to 902 KAR 13:070;

(6) Reproduces or reconstructs, or attempts to reproduce or reconstruct, a portion of an emergency medical technician examination, or disseminates information for purposes of reproduction or reconstruction of a portion of an emergency medical technician examination;

(7) Cheats, or assists another to cheat, on an examination for certification, recertification, challenge, or reentry;

(8) Does not meet the qualifications, minimum requirements, special requirements, and basic competency areas outlined in the "Emergency Medical Technician/Basic Functional Position Description". The "Emergency Medical Technician/Basic Functional Position Description", April 1993, is incorporated by reference, and may be inspected, copied, or obtained from the Office of the Commissioner for Health Services, 275 East Main Street, Frankfort, Kentucky 40621, 8 a.m. until 4:30 p.m., Monday through Friday;

(9) Issues a check for a certificate on an invalid account or an account which does not have sufficient funds to pay the fee for the certificate required by 902 KAR 13:030;

(10) Discriminates in the provision of services on the basis of race, sex, age, religion, color, creed, or national origin;

(11) Practices outside or beyond the scope of his level of certification, or represents he is qualified at a level other than his current certification;

(12) Appropriates or possesses without authorization medicines, supplies, equipment, or personal items of a patient;

(13) Materially alters a certificate, or uses or possesses an altered certificate;

(14) Obtains or attempts to obtain a certificate by fraud, forgery, deception, misrepresentation, or subterfuge; or assists another to obtain a certificate by fraud, forgery, deception, misrepresentation, or subterfuge.

(15) Falsifies an application for certification or recertification;

(16) Falsifies a patient record;

(17) Has had an EMT, EMT-first responder, EMT-first responder instructor, EMT-instructor, EMT-instructor trainer, or equivalent certificate denied, suspended, revoked, or restricted in another state while holding a Kentucky certificate;

(18) Uses or attempts to use his certificate to obtain or attempts

to obtain any benefit to which he is not entitled by duress, coercion, fraud, or misrepresentation;

(19) Is not at least eighteen (18) years of age at the time of application for certification;

(20) Has been convicted of a felony or misdemeanor for which a jail sentence may be imposed. [~~comply with an administrative regulation of the cabinet relating to the certification of an EMT.~~]

Section 2. Restricted Certificate. The cabinet may restrict the certificate of a person who is certified or obtains certification as an EMT or EMT-first responder while incarcerated in a prison, correctional facility, reformatory, or jail to function as an EMT or EMT-first responder only within that facility during the period of incarceration.

Section 3. Cease and Desist Order. The cabinet may issue an order directing a person to immediately cease and desist functioning as an EMT, EMT-first responder, EMT-first responder instructor, EMT-instructor, or EMT-instructor trainer if the cabinet has reasonable cause to believe that the person may cause harm or create an imminent danger to the public if his certificate is not denied, suspended, revoked, or restricted.

Section 4. Notice Procedures. (1) The cabinet shall notify a person by certified mail sent to his last known address of record of an action to deny, revoke, suspend, or restrict his certificate, and of his right to request a hearing. Failure of an EMT to notify the cabinet of a change of address or to accept or claim the certified notice at his last known address of record shall not:

(a) Delay or negate the disciplinary action;

(b) Change the effective date of the action; or

(c) Suspend, alter, or negate the time period allowed to respond to the action or request a hearing.

(2) The written notice shall state [~~Hearings. (1) The cabinet shall furnish the certificate holder with written notice setting out~~] the substance of each offense charged with sufficient detail to reasonably apprise him of the nature, time, and place of the violation [~~thereof~~].

Section 5. Hearings. (1) An applicant or certificate holder shall have twenty (20) days to request, in writing, a hearing after written notice is given by the cabinet of its decision to deny, suspend, revoke, or restrict a certificate.

(2) The applicant or certificate holder shall have the right to:

(a) Be present in person;

(b) Be represented by counsel;

(c) Present evidence or witnesses on his behalf; and

(d) Be heard in opposition to the charges which may be instituted; and

(e) Cross-examine witnesses.

(3) The hearing may be conducted by a hearing officer appointed by the cabinet.

(4) A transcript of the hearing shall not be made unless requested. The expense of transcribing the hearing shall be the responsibility of the requesting party.

(5) The hearing officer shall[~~:~~

~~(a)~~] make written findings of fact and conclusions of law, [~~;~~] and enter a decision based upon the evidence presented. The decision of the hearing officer shall be the final decision of the cabinet.

[~~(b) Submit them to the cabinet for a final decision.~~]

(6) If an applicant or certificate holder does not request a hearing within twenty (20) days of the written notice of intended action, the action shall be final.

(7) If a person receives a certificate and his check for the certification fee is later returned unpaid due to an invalid account or insufficient funds, the certificate shall be automatically suspended until:

(a) The fee is paid in full by cash, certified check, or money order; or

(b) The person requests a hearing on the suspension.

(8) The cabinet may publish in the EMS newsletter:

(a) The name of a person whose certificate has been denied, suspended, revoked, or restricted and the time period involved;

(b) The administrative regulation violated; and

(c) The nature of the violation.

(9) If a person is employed as an EMT, EMT-first responder, EMT-first responder instructor, EMT instructor, or EMT-instructor trainer at the time a final decision is made by the cabinet to deny, suspend, revoke, or restrict a certificate, the cabinet may notify the employer of the action taken.

(10) If a person fails to abide by a decision of the cabinet to deny, suspend, revoke, or restrict his certificate, the person shall be in violation of KRS 211.962 and may be charged with a Class A misdemeanor under KRS 211.990(5).

RICE C. LEACH, Commissioner
FONTAINE BANKS, JR., Secretary
APPROVED BY AGENCY: November 10, 1993
FILED WITH LRC: December 2, 1993 at 9 a.m.

STATEMENT OF EMERGENCY
902 KAR 20:004E

Emergency regulation 902 KAR 20:004E is necessary in order to allow applications for certificate of need to establish day health care programs to be processed under the provision of nonsubstantive review and in order to give legal notice as well as individual notice to adjoining property owners and local government in the case of applications for psychiatric residential treatment facilities. An ordinary administrative regulation will not allow the Interim Office of Health Planning and Certification to address these matters in a timely fashion. The emergency regulation will be replaced by an ordinary administrative regulation in accordance with KRS Chapter 13A. The ordinary administrative regulation will also be filed with the Regulations Compiler.

BRERETON C. JONES, Governor
FONTAINE BANKS, JR., Secretary

CABINET FOR HUMAN RESOURCES
Interim Office of Health Planning & Certification

902 KAR 20:004E. Certificate of need process.

RELATES TO: KRS 216B.010 to 216B.130, 216B.990(1), (2)
STATUTORY AUTHORITY: KRS 13A.350, 216B.040, 216B.075, Executive Orders 92-419, 92-540
EFFECTIVE: December 15, 1993
NECESSITY AND FUNCTION: KRS 216B.040 and 216B.075 require the promulgation of administrative regulations relating to certificate of need applications and review procedures and requirements for batching, issuing advisory opinions, cost escalations and cost overruns and progress reports.

Section 1. Definitions. (1) "Affected persons" is defined by KRS 216B.015(2).

(2) "Capital expenditure authorized" means the amount of the capital expenditure approved by the interim office to implement a proposal.

(3) "Cost escalation" means an increase in the capital expenditure authorized on a certificate of need which has not been obligated as prescribed in KRS 216B.015(28).

(4) "Cost overrun" means an increase in the capital expenditure authorized on a certificate of need which has been obligated without hearing officers' approval.

(5) "Emergency circumstances" means an act of God, fire, vandalism, structural or mechanical failure, other situations that pose a threat to life, health, or safety if not acted upon immediately, and the unavailability of ambulance services within a thirty (30) minute response time.

(6) "Hearing officers" means those persons appointed by the Secretary of the Cabinet for Human Resources to perform the adjudicatory and decision-making functions of the Interim Office of Health Planning and Certification.

(7) "Improvement" means change or addition to the premises of an existing facility so as to enhance its capability to deliver those services which it is authorized to offer under its existing license or under an outstanding certificate of need approval.

(8) "Interim office" means the Interim Office of Health Planning and Certification created by Executive Order 92-419, dated April 27, 1992, and any successor office or agency.

(9) "Mobile health services" means those services which provide medical services in various locations and which in some instances utilize a specially equipped vehicle such as a van, trailer or mobile home. These services include mobile diagnostic imaging and examination services, mobile treatment services, and any other medical or dental services provided through the use of a mobile vehicle or performed at various locations.

(10) "New construction" means building projects other than those which constitute the repair, renovation, alteration or improvement to the physical plant of an existing health facility.

(11) "Public information channels" means the Office of Communications in the Cabinet for Human Resources.

(12) "Review commences" means the date of public notice of the appropriate batching cycle for the particular application after it is deemed complete.

(13) "Temporary basis" means on an occasional and irregular basis or until the applicant's proposal for permanent acquisition or regular use by a health care facility is reviewed under the formal or nonsubstantive review process.

Section 2. Criteria. In determining whether to issue or deny a certificate of need, an applicant shall provide and the hearing officer shall utilize the following information:

(1) Consistency with state plan. Whether the proposal is consistent with the state health plan.

(2) Need and accessibility.

(a) The need that the population that is to be served has for the services proposed to be offered or expanded;

(b) The extent to which residents of the area to be served, in particular members of medically under-served groups, are likely to have access to the services;

(c) Whether the proposed service will assist in meeting the health needs of members of medically under-served groups, by:

1. Comparing the percentage of the medically under-served in the applicant's service area that currently use the applicant's service with the percentage of the medically under-served who will use the proposed services if the application is approved; and

2. Determining the means, such as a clinic or emergency room and excluding admission by a physician, by which a person will have access to its services.

(d) The effect of the means proposed for the delivery of health services on the clinical needs of health professional training programs in the area in which the services are to be provided.

(e) If proposed health services are to be available in a limited number of facilities, the extent to which the health professions schools in the area will have access to the services for training purposes.

(f) The special needs and circumstances of an entity, such as a medical and other health profession school, multidisciplinary clinic, or specialty center, that provides a substantial portion of its services or resources to persons who do not reside in the:

1. Health service area in which the entity is located; or

2. Adjacent health service areas.

(g) Whether the approval of the proposal will adversely impact the public's access to needed services.

(3) Interrelationships and linkages.

(a) The relationship of the services to be provided to the existing health care system of the area in which the services are proposed to be provided.

(b) The relationship, including the organizational relationship, of the health services proposed to be provided to ancillary or support services.

(c) For proposed health services or facilities, the efficiency and appropriateness of the use of similar existing services and facilities.

(4) Costs, economic feasibility, and resource availability.

(a) The availability of less costly or more effective alternative methods of providing the services to be offered, expanded or relocated.

(b) The immediate and long-term financial feasibility of the proposal, including the probable impact of the proposal on the costs of and charges for providing health services by the person proposing the service.

(c) The availability of:

1. Resources, including health personnel, management personnel, and funds for capital and operating needs; and

2. Alternative uses of resources for the provision of other health services.

(d) The impact of the proposal on the financial resources of the overall health care delivery system.

(e) For of construction or renovation projects the:

1. Costs and methods of the project, including the costs and methods of energy provision; and

2. Probable impact of the project on the:

a. Costs of providing health services by the applicant; and

b. Costs and charges to the public of providing health services by other persons.

(f) The effect of competition on the supply of the health services being reviewed, and whether the approval of the application will unnecessarily increase the cost of health care to the public.

(g) Improvements or innovations in the financing and delivery of health services which foster competition and serve to promote quality assurance and cost effectiveness.

(5) Quality of services.

(a) The quality of care provided by the applicant in the past; or

(b) The qualifications of the principals who will provide the health service which would assure that quality care will be provided; and

(c) Any perceivable detrimental effects of the proposal on the quality of similar services in the area including:

1. Whether the approval of the applicant's proposal will have an adverse impact on the quality of care provided by any person offering the same or similar services in any portion of the applicant's proposed service area due to decreased volume or number of procedures; and

2. Whether the applicant will be able to comply with applicable licensure requirements.

Section 3. Proposed New Use. If a person acquires major medical equipment without a certificate of need and proposes at any time to use that equipment to serve inpatients of a health care facility, the proposed new use must be reviewed unless the equipment will be used to provide services to inpatients of a health care facility only on a temporary basis in the case of an emergency, a natural disaster, a major accident, or an equipment failure.

Section 4. Letter of Intent. (1) At least thirty (30) days prior to submitting an application for a certificate of need, an applicant shall file a letter of intent with the Interim Office on "Letter of Intent Form #1".

(2) A letter of intent shall be valid for one (1) year.

(3) If an application is denied, a new letter of intent shall be filed

in order to resubmit an application.

(4) If an application is withdrawn prior to a final decision, a new letter of intent shall be filed.

(5) A letter of intent shall not be required for a request for nonsubstantive review under the provisions of Section 8 of this administrative regulation.

Section 5. Application For Certificate Of Need. (1) Upon receipt of a letter of intent, the interim office shall:

(a) Acknowledge receipt of the letter of intent; and

(b) Provide an applicant with, as applicable:

1. "Certificate of Need Application Form #2a"; or

2. "Certificate of Need Application for Ground Ambulance, Air Ambulance and Nonemergency Health Transportation Services Form #2b".

(2) An original, and two (2) copies of, a certificate of need application shall be filed with the interim office as provided by the schedule established by Section 6 of this administrative regulation.

(3)(a) Fifteen (15) days after receipt of an application, the interim office shall:

1. Acknowledge receipt of the application; and

2. Notify the applicant whether the application is complete.

(b) If an application is not complete, the notice shall state that the applicant shall:

1. Complete the application by submitting specific additional information; or

2. Notify the interim office that its application shall be processed as submitted.

(4) Upon receipt of an applicant's response, the interim office shall:

(a) Deem an application complete except as provided in subsection (5) of this section; and

(b) Notify the applicant of the beginning of the review.

(5) An application to establish or relocate a psychiatric residential treatment facility (PRTF) shall not be declared complete unless the applicant provides the names and addresses of all persons owning property adjoining the proposed location of the PRTF, the county judge executive and the nearest municipal or city government.

(6)(a) An application shall be included in the next appropriate public notice of review, if it has been declared complete at least six (6) working days prior to the date of the public notice.

(b) After an application has been declared complete, an applicant may submit additional information to be made part of the public record only at the public hearing.

(7) [~~(6)~~](a) The notification of the beginning of the review shall include the:

1. Schedule for the review; and

2. Period during which a public hearing may be requested by the applicant and other affected persons.

(b) Notice to members of the public, and third party payors, shall be provided through public information channels.

(c) Notice to all other known affected persons shall be by mail.

(d) In the case of an application to establish or relocate a psychiatric residential treatment facility (PRTF) legal notice shall be given pursuant to KRS Chapter 424. Notice shall also be given to adjoining property owners, the county judge executive, and the nearest municipal or city government by mail.

Section 6. Review of Certificate of Need Application. (1) Batching review cycles shall be as follows:

TYPE OF PROPOSAL	Applications shall be filed by third Wednesday of:	Month of public notice, ninety (90) days prior to decision date	Month of decision, third Wednesday of:
(a) Acute, psychiatric, rehab, chemical dependency facilities, psychiatric residential treatment facilities and other related components in the SHP (except specialized equipment and services) such as IC/CC, neonatal, and surgical services (including free-standing ambulatory surgical center) and birthing centers.	October, January, April, July	November, February, May, August	February, May, August, November
(b) Skilled nursing, nursing home, intermediate care, personal care, or nursing facility.	November	December	March
(c) Personal care or IC MR/DD	November, February, May, August	December, March, June, September	March, June, September, December
(d) Transplantation, magnetic resonance imaging, lithotripter, radiation therapy, C.T. scanner, cardiac catheterization, open heart surgery, and new technological developments.	December, June	January, July	April, October
(e) Day health care center, ambulatory care clinic, rehab agency, hospice, home health or home health/hospice.	October, January, May, July	November, February, June, August	February, May, September, November
(f) Ambulance, NE health transportation, and air ambulance services.	November, January, April, June, August	December, February, May, July, September	March, May, August, October, December
(g) All mobile services except those covered under specialized equipment and services.	October, December, February, April, June, August	November, January, March, May, July, September	February, April, June, August, October, December
(h) Any proposals not listed above shall be placed in the most appropriate cycle as determined by the interim office.	(i) Any proposals granted nonsubstantive review status as specified in KRS 216B.095(3)(a)(b)(c)(d)(e)(f) and (g) shall be processed in accordance with KRS 216B.095(1).		

(2) The interim office shall notify the applicant by certified mail, and any party to the proceeding by regular mail, of the hearing officers' final action on a certificate of need application.

(3) The written notification shall include:

(a) Verification that the criteria have been met;

(b) If the application is inconsistent with any criteria, the reasons for approval notwithstanding the inconsistency;

(c) Amount of capital expenditure authorized, where applicable;

(d) If the application is disapproved, the reasons for the disapproval; and

(e) Notice of appeal rights.

(4) If an application is not declared complete with a year from the date of filing it shall expire and shall not be reviewed.

(5) If an application for certificate of need is disapproved, it shall not be refiled for a period of twelve (12) months, absent a showing of a significant change in circumstances to be determined by a hearing officer.

Section 7. Certificate of Need Hearings. (1) Notice of the date, time and location of the hearing shall be:

(a) Given to third party payors and members of the public through public information channels; and

(b) Mailed to other known affected persons at least ten (10) days before the date of the hearing.

(c) In the case of an application to establish a psychiatric residential treatment facility (PRTF) legal notice shall be given pursuant to KRS Chapter 424. Notice shall also be given to adjoining property owners, the county judge executive, and the nearest municipal or city government by mail at least ten (10) days before the date of the hearing.

(2)(a) A hearing request may be withdrawn by written request filed with the interim office.

(b) If a hearing has been scheduled, a written request to withdraw shall be accepted if it is received by the interim office at lest three (3) working days prior to the scheduled hearing date.

(c) A public hearing shall be canceled if all persons who requested the hearing agree in writing to its cancellation.

(d) Agreement of other affected persons shall not be required.

(3) A hearing officer may:

(a) Conduct prehearing conferences to resolve issues not in dispute or not requiring an evidentiary record; and

(b) Issue prehearing orders which shall determine the form and the manner in which the evidentiary hearing is conducted.

(4) A hearing officer may, by prehearing order, require affected persons to submit to the interim office five (5) working days prior to the scheduled date of the hearing a list of:

(a) Witnesses on Form #3 (Witness List (1993));

(b) Exhibits they intend to introduce on Form #4 (Exhibit List (1993)); or

(c) Those persons who will enter an appearance on behalf of a party on Form #5 (Notice of Appearance (1993)).

(5) A hearing officer may:

(a) Place reasonable time limits upon the presentation of testimony, evidence, and argument; and

(b) Terminate or exclude irrelevant or redundant evidence, testimony, or argument.

(6) Except for the exchange of exhibits, prehearing discovery of an affected person by another affected person shall not be permitted.

(7) Upon completion of the hearing, the record on a certificate of need application shall be:

(a) Final for evidentiary purposes; and

(b) Reopened only upon order of the hearing officer.

(8) Upon completion of a public hearing, parties to the proceedings may submit proposed findings of fact and conclusions of law for consideration by the hearing officers, within reasonable time limits set by the hearing officers.

Section 8. Request for Reconsideration. (1) The hearing officers shall act upon request for reconsideration no later than thirty (30) days following receipt of a request.

(2) If reconsideration is granted, a reconsideration hearing shall be held within thirty (30) days of the decision to grant reconsideration, and a final decision shall be made no later than thirty (30) days following the reconsideration hearing.

Section 9. Nonsubstantive Review. (1) In addition to the projects specified in KRS 216B.095(3)(a) through (f), a proposal specified in this section that requires approval of a certificate shall be granted for nonsubstantive review status.

(a) Technical modifications to an approved certificate of need;

(b) Cost overruns of the capital expenditure authorized by an approved certificate of need;

(c) Emergency circumstances which, if not promptly acted upon, would pose a threat to the life, health and safety of any citizen of the Commonwealth. An applicant acting under this subsection may proceed to relieve any of these listed emergency circumstances provided the:

1. Office is notified in writing prior to an action; and

2. Application is submitted within thirty (30) days of the occurrence of the emergency.

(d) New construction which does not involve a substantial change in bed capacity, a substantial change in a health service, or the addition of major medical equipment;

(e) Applications proposing the use of existing mobile services and equipment to provide health care access in unserved geographic areas of the Commonwealth;

(f) Applications proposing the use of existing mobile services to provide health care access for which the Kentucky General Assembly has specifically appropriated funds; and

(g) Department of Corrections applications proposing the establishment or construction of nursing facility beds for which the Kentucky General Assembly has specifically appropriated funds.

(h) Day health care programs.

(2) Procedures for nonsubstantive review shall be as follows:

(a) The original certificate of need application and two (2) copies, with a request for nonsubstantive review shall be submitted to the interim office.

(b) Within fifteen (15) days of the receipt of the application, the interim office shall:

1. Acknowledge receipt of the application; and [~~in writing to the applicant, and shall~~]

2. Notify the applicant whether [~~or not~~] the application is complete.

(c) If the application is not complete, the notice shall state that [~~to~~] the applicant shall:

1. Complete the application by submitting specific additional information; or

2. Notify the interim office that its application shall be processed as submitted. [~~give the applicant the option of submitting the additional information or of notifying the interim office upon receipt of the request for additional information, that he elects for the application to be processed as originally submitted.~~]

(d) Upon receipt of an applicant's response, the interim office shall:

1. Deem an application complete except as provided in subparagraph 3 of this paragraph; and

2. Notify the applicant of the beginning of the review.

3. An application to relocate a psychiatric residential treatment facility (PRTF) shall not be declared complete unless the applicant provides the names and addresses of all persons owning property adjoining the proposed location of the PRTF, the county judge executive and the nearest municipal or city government. [~~the requested additional information by the interim office, or upon receipt of a letter from the applicant that he elects for the application to be~~

~~processed as originally submitted, the interim office shall declare the application to be deemed complete.~~]

(e) No later than ten (10) days after an application has been deemed complete, a decision by a hearing officer on a request for nonsubstantive review shall be mailed to the applicant. A notice of a decision to conduct a nonsubstantive review shall be:

1. Given to third party payors and members of the public through public information channels; and

2. Mailed to other known affected persons.

3. In the case of a request for a change of location of a psychiatric residential treatment facility (PRTF) legal notice shall be given pursuant to KRS Chapter 424. Notice shall also be given to adjoining property owners, the county judge executive, and the nearest municipal or city government by mail no later than the tenth day after the application is deemed complete.

(f) If nonsubstantive review status is denied, the applicant may request a public hearing by filing a request with the interim office within ten (10) days of the notice to deny nonsubstantive review. As applicable, hearings shall be conducted as provided by KRS 216B.085.

(g) If a certificate of need is denied following a nonsubstantive review and a formal review is requested, no letter of intent shall be required, but the filing of the request for nonsubstantive review shall be considered compliance with any requirement for a letter of intent.

Section 10. Conditions Relative to a Certificate of Need. (1) A person shall not transfer from one (1) legal applicant to another an approved certificate of need for the establishment of a new health facility or the replacement of an existing facility without first obtaining a certificate of need.

(2) Other certificates of need may be transferred to the new owner of the facility or service if the change of ownership occurs prior to the implementation of the project for which the certificate of need was issued.

(3) A certificate of need approved for establishment of a new health facility or the replacement of an existing facility is valid only for the location stated on the certificate.

(4) A certificate of need holder shall notify the interim office of any reduction or termination of a health service or a reduction in bed capacity for an approved project no later than the first progress report after the decision to make the change has been determined.

Section 11. Administrative Cost Escalations and Overruns. (1) A certificate of need using Form #2c (1993) shall be required for an escalation or cost overrun of the capital expenditure authorized by an approved certificate of need in all instances where there is a substantial change in the project, or where the escalation or overrun exceeds the following limits:

(a) Twenty (20) percent of the capital expenditure authorized or $100,000, whichever is greater, in the case of projects with a capital expenditure of less than $500,000;

(b) Twenty (20) percent of the capital expenditure authorized, in the case of projects with a capital expenditure of $500,000 or greater, but less than $5,000,000;

(c) Ten (10) percent of the amount in excess of $5,000,000, plus $1,000,000, in the case of projects with a capital expenditure of $5,000,000 or greater, but less than $25,000,000;

(d) Five (5) percent of the amount in excess of $25,000,000, plus $3,000,000, in the case of projects with a capital expenditure of $25,000,000 or greater, but less than $50,000,000; or

(e) Two (2) percent of the amount in excess of $50,000,000, plus $4,250,000 in the case of projects with a capital expenditure of $50,000,000 or greater.

(2)(a) Requests for administrative cost escalations or cost overruns shall be submitted to the interim office, on the following forms:

1. Form #6 (Cost Escalation (1992)); or

2. Form #7 (Cost Overrun (1992)).

(b) The requests shall include:

1. Amount of the escalation of overrun;

2. Factors causing the escalation or overrun; and

3. Information to assure that the scope of the project as originally approved has not changed.

(c) The hearing officers shall review all requests for administrative cost escalations and overruns and the interim office shall notify the certificate of need holder within thirty (30) days of receipt whether the requested escalation or overrun meets the requirements of subsection (1) of this section.

(3) The certificate of need holder shall submit any additional certificate of need application fee required by the increased capital expenditure pursuant to the requirements of 902 KAR 20:135.

Section 12. Timetables and Standards for Implementation. (1) As a condition for the issuance of a certificate of need, a holder of a certificate of need shall submit progress reports on "Progress Report Form #8" at the six (6) month intervals specified in this section.

(2)(a) A notice specifying the date each progress report is due shall be sent to a holder of a certificate of need.

(b) The interim office shall review a progress report and shall:

1. Determine whether the items required to be completed during the six (6) month period covered by the progress report have been completed; and

2. If the items have not been completed, whether sufficient reasons for failure to complete have been provided.

(3) A certificate of need shall be deemed complete when:

(a) The project has been approved for licensure and occupancy by the Division of Licensing and Regulation; or

(b) The appropriate license has been obtained; and

(c) A final cost breakdown has been submitted; and

(d) For projects for which a certificate of need has been issued for a specific service area, documentation that services are being provided to all of the licensed service area has been submitted.

(4) Until a project has been deemed complete by the interim office, if the information submitted is deemed incomplete, or otherwise deficient, the interim office may require:

(a) The submission of additional reports; or

(b) Progress reports in addition to those required at six (6) month intervals under the provisions of this section.

(5) If the interim office determines that the items have not been completed for reasons other than those set forth in paragraph (c) of this subsection, for the failure to complete, it shall notify the holder of the certificate of need, in writing, that:

(a) It has determined to revoke the certificate of need;

(b) The revocation shall become final thirty (30) days from the date of the notice of revocation, unless the holder requests a hearing to show cause why the certificate of need shall not be revoked.

(c) A certificate of need shall not be revoked for failure to complete the items required during a six (6) month period, if the holder of the certificate of need establishes that the failure to complete the items required was due to emergency circumstances, or other causes that:

1. Could not reasonably be anticipated and avoided by the holder; or

2. Were not the result of action or inaction of the holder.

(6) The first progress report shall include the following:

(a) On all projects for purchase of equipment only, a copy of the purchase order;

(b) For all projects involving the acquisition of real property, evidence of an option to acquire the site;

(c) For all construction or renovation projects, evidence that schematic plans have been submitted to the Department of Housing, Buildings and Construction and the Division of Licensing and Regulation.

(7) For projects not deemed complete a second progress report

shall include the following:

(a) Documentation that beds in all projects for conversion of beds are licensed;

(b) Documentation that all projects for addition of new services or expansion of existing services, not involving construction or renovation or the installation of equipment, are approved for licensure and occupancy by the Division of Licensing and Regulation and licensed, if applicable; and

(c) All construction or renovation projects shall include:

1. Schedule for project completion with projected dates;
2. Evidence of preliminary negotiation with financial agent; and
3. Evidence of preliminary negotiation with contractors.

(8) For projects not deemed complete, a third progress report shall include the following:

(a) For construction or renovation projects:

1. Copy of deed or lease of land;
2. Documentation of final financing. If the source of capital is to be a financing agreement, the holder must have evidence that a final enforceable agreement or note has been executed;
3. Documentation that final plans have been submitted to the Department of Housing, Buildings and Construction and the Division of Licensing and Regulation;
4. Enforceable contract with construction contractor;

(b) On all projects for purchase of equipment only, evidence of approval for licensure and occupancy by the Division of Licensing and Regulation.

(9) For projects not deemed complete, a fourth progress report shall include documentation of final plan approval by the Department of Housing, Buildings and Construction and the Division of Licensing and Regulation and that the walls and roof are up and plumbing is roughed in on all construction/renovation projects.

(10) For projects not deemed complete, a fifth progress report shall include documentation that construction/renovation is progressing according to schedule for project completion on all construction or renovation projects.

(11) For projects not deemed complete, a sixth progress report shall include documentation that the project has been approved for licensure and occupancy by the Division of Licensing and Regulation and where applicable, that the appropriate license has been obtained for the project.

(12) For projects not deemed complete after the sixth progress report, the certificate holder shall, upon request, provide the interim office with a written statement showing cause why the certificate should not be revoked. The interim office may defer revocation action upon a showing by the certificate holder that the project will be completed on a revised schedule of completion, subject to progress reports which the interim office may require.

(13) Within six (6) months following licensure of a project for which a certificate of need has been issued for a specific service area, the certificate holder shall submit documentation that services are being provided to all of the licensed service area. Failure to provide such documentation shall constitute grounds for revocation of the certificate of need and the license for those areas where service is not being provided.

(14) If the project involves a capital expenditure, a final cost breakdown shall be included in the final progress report.

Section 13. Advisory Opinions. The process for seeking an advisory opinion from the hearing officers shall be as follows:

(1) Requests for advisory opinions shall be completed on Form #9 (Advisory Opinion (1993 [~~1992~~])).

(2) The hearing officers may require verification of information and may request additional documentation, if necessary.

(3) The hearing officers shall issue a written advisory opinion within thirty (30) days of receipt of a completed request for an opinion or of receipt of additional information.

(4) An affected person may request a public hearing regarding a written advisory opinion by requesting same from the interim office in writing within thirty (30) days of the public notice of the advisory opinion which shall be published in the monthly certificate of need newsletter and disseminated through public information channels. If a public hearing is not requested, the advisory opinion shall be the final action of the administrative agency, subject to judicial review. Failure to request a public hearing shall not constitute a failure to exhaust administrative remedies.

(5) Advisory opinion hearings shall be conducted pursuant to the provisions of Section 5 of this administrative regulation.

Section 14. Final Decisions. All final decisions regarding certificate of need related matters will be decided by the individual hearing officer to whom that particular matter is assigned.

Section 15. Incorporation by Reference. (1) "Form #1 (Letter of Intent (1992))", "Form #2a (Certificate of Need Application (1993-1))", "Form #2b (Certificate of Need Application for Ground Ambulance, Air Ambulance and Nonemergency Health Transportation Services (1993))", "Form #2c (Certificate of Need Application for Change of Location, Ownership, Replacement, Cost Escalation or Cost Overrun (1993-1))", "Form #3 (Witness List (1993))", "Form #4 (Exhibit List (1993))", "Form #5 (Notice of Appearance List (1993))", "Form #6 (Cost Escalation (1992))", "Form #7 (Cost Overrun (1992))", "Form #8 (Progress Report (1993))" and "Form #9 (Advisory Opinion (1993))", "Form #10 (Acquisition of a Health Facility Notice of Intent (1993))" are incorporated by reference.

(2) These forms may be inspected, copied or obtained at the Interim Office of Health Planning & Certification, Cabinet for Human Resources, 275 East Main, Frankfort, Kentucky 40621, 8 a.m. to 4:30 p.m., Monday through Friday.

Section 16. This administrative regulation shall expire on adjournment of the next regular session of the General Assembly.

GREG LAWTHER, Acting Executive Director
FONTAINE BANKS, JR., Secretary
APPROVED BY AGENCY: November 11, 1993
FILED WITH LRC: December 15, 1993 at 10 a.m.

STATEMENT OF EMERGENCY
902 KAR 50:031E

Federal mandate requires that all USDA approved plants must comply with changes made effective June 7, 1993. These changes incorporate provisions to specify the sampling, testing, and record-keeping requirements relating to an expanded drug residue monitoring program in USDA approved plants. All Kentucky manufacturing dairy plants maintain USDA status. This emergency administrative regulation shall be replaced by an ordinary administrative regulation. The ordinary administrative regulation was filed with the Regulations Compiler simultaneously with this emergency administrative regulation.

BRERETON C. JONES, Governor
FONTAINE BANKS, JR., Secretary

CABINET FOR HUMAN RESOURCES
Department for Health Services
Division of Environmental Health and Community Safety

902 KAR 50:031E. Standards for producer eligibility for manufacturing grade milk.

RELATES TO: KRS 217.005 to 217.215, 217C.010 to 217C.990
STATUTORY AUTHORITY: KRS 194.050, 211.090

EFFECTIVE: December 2, 1993

NECESSITY AND FUNCTION: KRS 217C.040 authorizes the Cabinet for Human Resources to regulate milk for manufacturing purposes. This administrative regulation sets uniform standards for the production, handling, examination, grading, and sale of manufacturing milk and milk products.

Section 1. Manufacturing Milk Producer Permits and Inspections. (1) Prior to the issuance of any permit to a manufacturing milk producer, the cabinet shall conduct an inspection of the producer's facilities. If the producer is not in substantial compliance with 902 KAR 50:032, a permit shall not be issued, the violation shall be given in writing, and the violation shall be posted in a visible place at the dairy farm. A permit may be issued if the inspection reveals substantial compliance with 902 KAR 50:032.

(2) All producers shall possess a valid permit prior to beginning shipment of milk.

(3) Permits shall not be transferable with respect to persons or locations and shall remain valid unless suspended or revoked by the cabinet.

Section 2. Producer Eligibility Requirements. (1) New producers. A test for bacterial quality and sediment shall be made on the first shipment of milk or after a period of nonshipment for more than ten (10) days. Subsequent tests of milk shall meet the requirements for frequency of testing and producer compliance outlined in Section 3(2)(a) of this administrative regulation.

(2) Transfer producers. Prior to collection and acceptance of milk from a transfer producer, the receiving company shall review the official status of the producer with the cabinet. The existing status of a transfer producer with regard to his farm sanitation and milk quality record shall be in effect with the receiving company. A producer whose permit has been suspended by the cabinet is not eligible to transfer until the permit has been reinstated, unless approved by the cabinet. The receiving company shall sample each transfer producer's milk within ten (10) days after receipt of the producer's first shipment of milk. Subsequent sample results shall be in accordance with the provisions of Section 3 of this administrative regulation.

(3) Any Grade A producer whose permit has been suspended shall be allowed to sell milk as a degraded producer to a manufacturing milk company if the Grade A violative sample is within manufacturing standards set forth in this administrative regulation. A degraded producer shall not sell milk to a manufacturing milk company for a period in excess of ten (10) days without applying for and obtaining a milk for manufacturing producer permit.

(4) Grade A surplus milk shall be tested or screened by the manufacturing milk company upon arrival to assure that the milk is in compliance with this administrative regulation.

Section 3. Quality Requirements for Raw Milk. (1) Basis. Classification of raw milk for manufacturing purposes shall be based on organoleptic examination (sight and odor), bacterial estimate, quality test for sediment content, abnormal milk, and drug residue testing.

(a) Sight and odor. Flavor and odor of acceptable raw milk shall be fresh and sweet. Milk shall be free from feed and other off-flavors and off-odors that would adversely affect the finished product. Milk shall be observed and shall not show an abnormal condition (ropy, bloody, or mastitic).

(b) Bacterial classification. Bacterial limit shall be 1,000,000/ml by standard plate count, plate loop method, or direct microscopic bacterial determination methods.

Bacterial Estimate Classification	Direct Microscopic Clump Count, Standard Plate Count, or Plate Loop Method
No. 1 Satisfactory	Not Over 500,000/ml.
No. 2 Satisfactory	Not Over 1,000,000/ml.
Undergrade	Over 1,000,000/ml.

(c) Sediment content classification.

Sediment Content Classification	Milk in Cans (off-the-bottom method) 1 1/8 inch diameter disc	Milk in Farm Bulk Tanks sample 0.40 inch diameter disc
No. 1 Acceptable equivalent	Not to exceed 0.50 mg.	Not to exceed 0.50 mg.
No. 2 Acceptable equivalent	Not to exceed 1.50 mg.	Not to exceed 1.50 mg.
No. 3 Probational equivalent	Not to exceed 2.50 mg.	Not to exceed 2.50 mg.
No. 4 Reject equivalent	Over 2.50 mg.	Over 2.50 mg.

(d) Abnormal milk. Somatic cell count limit shall not exceed 1,000,000/ml.

(e) Drug residue classification. Test results shall be negative on commingled load or individual producer test as determined in 902 KAR 50:033, Section 1(5).

(2) Examinations and tests. Examinations and tests to detect excessive water, chemical contaminants, or other adulterants shall be conducted by the cabinet as deemed necessary.

(a) Frequency of tests.

1. Bacterial estimate: monthly.
2. Sediment content: monthly.
3. Abnormal milk: four (4) times each six (6) months.
4. Drug residues: all marketed manufacturing grade milk shall be sampled and tested for drug residues prior to processing.
5. Excessive water, chemical contaminants, or other adulterants: as deemed necessary by the cabinet.

(b) Methods of testing. Methods for determining quality test shall be those described in the "Standard Methods for the Examination of Dairy Products", 16th Edition, 1992, published by the American Public Health Association, and the "Official Methods of Analysis", 15th Edition, 1990, Volumes I and II, published by the Association of Official Analytical Chemists, Inc., unless otherwise approved by the cabinet, and shall be performed in an official laboratory or an officially designated laboratory. Copies of the "Standard Methods for the Examination of Dairy Products", revised 1992, incorporated by reference, and the "Official Methods of Analysis", revised 1990, are incorporated by reference, are available for inspection and copying, 8 a.m. until 4:30 p.m., Monday through Friday, at the Office of the Commissioner, Department for Health Services, 275 East Main Street, Frankfort, Kentucky 40621.

Section 4. Personnel Health and Cleanliness. No person affected with any disease in a communicable form, or while a carrier of a communicable disease, shall work at any dairy farm in any capacity which brings him in contact with the production, handling, storage, and transportation of milk for manufacturing purposes, containers, equipment, and utensils. No milk producer shall employ in any

capacity any person suspected of having any disease in a communicable form, or of being a carrier of a communicable disease. Any milk producer upon whose dairy farm any communicable disease occurs or who suspects that any employee has contacted any disease in a communicable form, or has become a carrier of a disease in a communicable form, shall notify the cabinet immediately. All persons engaged in the milking operation shall wear clean outer garments. The milker's hands shall be kept clean.

Section 5. Procedure If Infection is Suspected. If reasonable cause exists to suspect the possibility of transmission of infection from any person concerned with the handling of milk for manufacturing purposes, the cabinet shall require the following measures:

(1) Immediate exclusion of that person from milk handling;

(2) Immediate exclusion of the milk supply concerned; and

(3) Medical and bacteriological examination of the person and body discharges.

Section 6. Prohibited Acts Relating to Manufacturing Milk Producers. The following acts are prohibited:

(1) No person shall produce, sell, or offer for sale any manufacturing milk or milk products without a permit as provided in 902 KAR 50:032, 902 KAR 50:033, and this administrative regulation.

(2) No person shall produce, provide, sell, offer, or expose for sale, or have in possession with intent to sell, any manufacturing milk or milk product which is adulterated, misbranded, or in violation of 902 KAR 50:032, 902 KAR 50:033, or this administrative regulation.

(3) No person shall prohibit entry of inspection, taking of a sample, or access to records or evidence to a duly authorized agent of the cabinet.

(4) No person shall remove, destroy, alter, forge, or falsely represent, without proper authority, any tag, stamp, mark, or label used by the cabinet.

(5) No person shall remove or dispose of a detained or quarantined article without proper authority from the cabinet.

Section 7. Survey Procedures. A survey shall be conducted at least one (1) time every two (2) years on all groups of producers assigned to milk companies, producer associations, or producer groups. If the survey indicates an unsatisfactory rating, the company, association, or group shall be notified and given a reasonable period of time, not to exceed six (6) months, to attain a satisfactory rating. If upon resurvey, the producer's rating is not an acceptable level, the producer shipping milk to the company shall be inspected by the cabinet to determine individual compliance. A producer in violation may have his permit suspended in accordance with 902 KAR 50:032, 902 KAR 50:033, and this administrative regulation. No producer shall be allowed to transfer to another company during the resurvey period unless authorized by the cabinet.

Section 8. Repeal. 902 KAR 50:030, Raw millk standards, is hereby repealed.

RICE C. LEACH, Commissioner
FONTAINE BANKS, JR., Secretary
APPROVED BY AGENCY: October 18, 1993
FILED WITH LRC: December 2, 1993 at 9 a.m.

STATEMENT OF EMERGENCY
902 KAR 50:032E

Federal mandate requires that all USDA approved plants must comply with changes made effective June 7, 1993. These changes incorporate provisions to specify the sampling, testing, and record-keeping requirements relating to an expanded drug residue monitoring program in USDA approved plants. All Kentucky manufacturing dairy plants maintain USDA status. This emergency administrative regulation shall be replaced by an ordinary administrative regulation. The ordinary administrative regulation was filed with the Regulations Compiler simultaneously with this emergency administrative regulation.

BRERETON C. JONES, Governor
FONTAINE BANKS, JR., Secretary

CABINET FOR HUMAN RESOURCES
Department for Health Services
Division of Environmental Health and Community Safety

902 KAR 50:032E. Standards for farm requirements for manufacturing grade milk.

RELATES TO: KRS 217.005 to 217.215, 217C.010 to 217C.990
STATUTORY AUTHORITY: KRS 194.050, 211.090
EFFECTIVE: December 2, 1993
NECESSITY AND FUNCTION: KRS 217C.040 authorizes the Cabinet for Human Resources to regulate milk for manufacturing purposes. This administrative regulation sets uniform standards for herd health; the production, handling, and sale of manufacturing milk and milk products; and, construction and inspection of dairy farms.

Section 1. Farm Requirements for Milk for Manufacturing. (1) Health of herd.

(a) General health. All animals in the herd shall be maintained in a healthy condition.

(b) Tuberculin test. The herd shall be located in an area within the state which meets the requirements of a modified accredited area in which not more than one-half (1/2) of one (1) percent of the cattle have been found to be infected with tuberculosis. This requirement is in accordance with the provisions of the "Bovine Tuberculosis Eradication, Uniform Methods and Rules", February 3, 1989, incorporated by reference, for establishing and maintaining tuberculosis-free herds of cattle and modified accredited areas approved by the Animal and Plant Health Inspection Service, Veterinary Services, U.S. Department of Agriculture. If the herd is not located in a modified accredited area, it shall be tested annually under the jurisdiction of the program. Additions to the herd shall be from a modified accredited area or from herds meeting the requirements of this administrative regulation. Copies of the "Bovine Tuberculosis Eradication, Uniform Methods and Rules" are available for inspection and copying, 8 a.m. until 4:30 p.m., Monday through Friday, at the Office of the Commissioner for Health Services, 275 East Main Street, Frankfort, Kentucky 40621. This publication may also be obtained from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C., 20402.

(c) Brucellosis test. The herd shall be located in an area within the state in which the percentage of cattle affected with brucellosis does not exceed one (1) percent, and the percentage of herds in which brucellosis is present does not exceed five (5) percent. This requirement is in accordance with provisions of the "Brucellosis Eradication, Uniform Methods and Rules", May 6, 1992, incorporated by reference, for establishing and maintaining certified brucellosis-free areas approved by the Animal and Plant Health Inspection Service, Veterinary Services, U.S. Department of Agriculture. If the herd is located in an area that does not meet these requirements, the herd shall be blood-tested annually or milk-ring-tested semiannually. Additions to the herd shall be from herds meeting the requirements of this administrative regulation. Copies of the "Brucellosis Eradication, Uniform Methods and Rules" are available for inspection and copying, 8 a.m. until 4:30 p.m., Monday through Friday, at the Office of the Commissioner for Health Services, 275 East Main Street, Frankfort, Kentucky 40621. This publication may also be obtained from the Superintendent of Documents, U.S. Government Printing

Office, Washington, D.C., 20402.

(2) Milking procedures. Milking shall be done in an approved milking barn, stable, or parlor under relatively dust free conditions.

(a) The udders, flanks, and teats of all milking cows shall be free of dirt and dust at time of milking as far as is practicable.

(b) Cows which secrete abnormal milk shall be milked last or with separate equipment. This milk shall be excluded from the supply, and shall be prohibited from sale under this administrative regulation.

(3) Milking barn or milking area. An approved milking area shall be provided to permit normal sanitary milking operations.

(a) Work areas shall have a minimum of ten (10) foot candles of light properly distributed for both day and night milking.

(b) The milking area shall be well ventilated to minimize odors and prevent excessive condensation.

(c) Floors and gutters shall be kept clean, in good repair, graded to drain, and constructed of concrete or other impervious materials.

(d) No swine or fowl shall be permitted in the milking area.

(e) Bedding shall be permitted in the milking area if kept clean and manure is removed daily. Bedding shall be relatively dust free.

(f) The milk area ceiling shall be dust tight to prevent the entry of dust from feed stored overhead.

(g) Walls and ceilings shall be kept clean and in good repair. It is recommended that the milking area be completely enclosed. If clean, orderly, dust free milking operations can be conducted, the requirements of the walls may be waived.

(h) Feed shall be stored in a manner not to increase the dust content of the air or attract flies in the milking area.

(i) The milking area floor shall be kept clean and the manure removed daily.

(j) Outside surfaces of pipeline systems located in the milking area shall be kept clean.

(k) Milk stools, surcingles, and antikickers shall be kept clean and stored above the floor.

(4) Cowyard and cattle housing area. The cowyard and cattle housing area shall be constructed to be well drained and relatively free of organic waste.

(a) The cowyard shall be graded to drain as well as local conditions will permit.

(b) Cowyards which are muddy due to recent rains shall not be considered in violation of this section.

(c) The cattle housing area shall be free of excessive manure, soiled bedding, and waste material to prevent the soiling of cows' udders.

(d) All manure removed from the milking area shall be stored to prevent access of cows to the accumulation. Manure shall be stored to minimize fly breeding.

(5) Milkhouse or milkroom. There shall be a conveniently located milkhouse or milkroom in which the cooling, handling, and storing of milk; and the washing, sanitizing, and storing of equipment and utensils shall be done. Milking areas with milkhouse and milkroom facilities combined in an operation that have been given approval prior to the effective date of this administrative regulation, will be acceptable for as long as the combined facility is operated in a sanitary manner.

(a) The floor shall be constructed of concrete and well drained.

(b) The walls and ceilings shall be constructed of relatively smooth, easily cleanable material. A light colored material is recommended.

(c) A drain through the floor or wall shall be provided. The drain shall not be located under the can cooler or bulk tank. The drain may discharge to the surface of the ground if waste from the drain does not pool or cause an insect breeding problem.

(d) The milkhouse space shall be large enough to meet the following requirements:

1. Walkways and working areas shall be a minimum of thirty (30) inches wide;

2. The bulk tank shall be kept a minimum of eighteen (18) inches from the walls on all sides, except tanks that extend through the wall; and

3. There shall be a minimum of six (6) inches between the lowest point of the bulk tank and the floor.

(e) Artificial light shall be provided with a minimum 100 watts capacity. The light fixture shall not be located over the bulk tank. Flood lights are recommended near the ends of the bulk tank.

(f) Ventilation shall be sufficient to prevent odors and condensation.

(g) The milkhouse shall be kept clean and free from unnecessary articles and used only for purposes permitted by the cabinet. Only insecticides and rodenticides approved for use in the milkhouse shall be stored in the milkhouse. Insecticides and rodenticides shall be stored to prevent contamination of milk, milking equipment, sinks, or cleaning supplies.

(h) All outer openings shall be screened or protected against the entrance of insects and rodents. Outer doors shall open outward and be self-closing, except doors between the milkroom and milking area may open either way or both ways and shall be self-closing. If during the winter months a screen door is taken down, the milkhouse door may open inward if it is self-closing. Bulk tank installations shall have an approved hose port properly constructed through the outer wall for milk pickup operations.

(i) Running water under pressure shall be provided. Water heating facilities conveniently available to supply hot water to the milkhouse shall be provided for all bulk tank installations. A supply of water shall be available to the milkroom for all can shippers.

(j) A two (2) compartment wash and rinse vat shall be provided; if milking equipment is cleaned in place, a single compartment wash vat will be acceptable.

(k) A concrete slab at least four (4) feet by four (4) feet shall be located outside the milkhouse under the hose port.

(l) The milkhouse shall be supplied with approved brushes, cleaners, and sanitizers to properly clean and sanitize equipment and utensils.

(m) If approval is given by the cabinet, the can cooler may be stored in a suitable place away from the milkhouse in order to be easily accessible to the can hauler.

(6) Utensils and equipment. Utensils, milk cans, milking machines (including pipeline systems), and other equipment used in the handling of milk shall be maintained in good condition. Milk equipment shall be free from rust, open seams, milkstone, or any unsanitary condition. Milk equipment shall be washed, rinsed, and drained after each milking, stored in suitable facilities, and sanitized immediately before use. All farm bulk tanks installed after the effective date of this administrative regulation shall meet "3-A Sanitary Standards", for construction and shall be installed in accordance with this administrative regulation. Single service articles shall be properly stored and shall not be reused. "3-A Sanitary Standards", revised May 1993, is incorporated by reference, and a copy is available for inspection and copying, 8 a.m. until 4:30 p.m., Monday through Friday, at the Office of the Commissioner, Department for Health Services, 275 East Main Street, Frankfort, Kentucky 40621.

(a) Utensil - construction.

1. All multiuse containers, utensils, pails, and pipelines shall be constructed of smooth, heavy-gauge material, with a noncorrodible surface which is nonabsorbent and nontoxic (the use of cadmium is prohibited), and shall be constructed to be easily cleaned. All joints and seams shall be flush with solid welds or use "3-A Sanitary Standards" approved gaskets.

2. All containers, utensils, and other equipment shall be in good repair and free of breaks and corrosion.

3. Strainers, if used, shall be constructed to use single-service strainer pads only, and strainer pads shall not be reused. Woven-wire cloth strainers shall not be used.

4. All milking machines, including pails, milker heads, milk claws, milk tubing, and other milk contact parts shall be constructed to be

easily cleaned.

5. New or replacement milk cans shall have an umbrella-type cover.

6. All cleaned-in-place milk pipelines installed after the effective date of this administrative regulation shall be installed to be rigid and self-draining. All connections shall provide a smooth, flush interior surface.

7. Pipelines installed prior to the effective date of this administrative regulation may be accepted if joined with tygon or other material approved by the cabinet, and if joints are hand cleaned or sufficiently cleaned by C-I-P methods. Each joint shall have a tight, rigid hanger next to the joint.

(b) Utensils - cleaning. All multiuse containers, equipment, and other utensils used in handling, storage, or transportation of milk and milk products shall be thoroughly cleaned after each usage. All multiuse containers, equipment, and other utensils shall be stored in the milkhouse unless approved by the cabinet.

(c) Utensils - bacterial treatment. Prior to use, all multiuse containers, equipment, and other utensils used in handling, storage, or transportation of milk or milk products shall be subjected to a bactericidal process approved by the cabinet. Steam, hot-water, or hot-air treatment shall not be accepted unless the equipment or containers are completely immersed or exposed for the required time, or longer, and at the required temperature, or higher, throughout the period of exposure. Pouring hot or boiling water from vessel to vessel shall not be acceptable. All milk containers, utensils, and other equipment, with the exception of milking machine pulsators and air hoses, shall be immersed for at least one (1) minute in, or exposure for at least one (1) minute to a flow of, an approved chemical bactericide containing at least fifty (50) p.p.m. chlorine or other approved sanitizer of proper strength. All milk contact surfaces shall be wetted by the bactericidal solutions. Bactericidal sprays may be used for large equipment. Chemical solutions, once used, shall not be reused for bactericidal treatment on any subsequent day, but may be reused for other purposes.

(d) Utensils - storage. All containers and other utensils used in the handling, storage, or transportation of milk or milk products, unless stored in bactericidal solutions, shall be stored to drain dry, and to prevent contamination before being used. All equipment and utensils shall be accessible for inspection. All milking equipment containers and other utensils used shall be stored in the milkhouse unless otherwise approved by the cabinet.

1. Milk utensils and equipment shall be left in the bactericidal solution or stored in the milkhouse on racks to protect them from contamination, inverting articles that can be inverted. Pipeline milkers which are cleaned in place may be stored in place. Storage racks shall be constructed of metal protected against rusting, with the lowest shelf not less than twenty-four (24) inches above the floor.

2. Strainer pads, parchment papers, and gaskets shall be stored in the original package or in a suitable container or cabinet to protect them from contamination.

3. All equipment and utensils shall be accessible for inspection.

(e) Utensils - handling. After bactericidal treatment, containers and other milk and milk product utensils shall be handled to prevent contamination of any surface that milk or milk products come into contact. Sanitized product-contact surfaces, including farm bulk tank openings and outlets, shall be protected against contact with unsanitized equipment, utensils, hands, clothing, splash, condensation, and other sources of contamination. Any sanitized product-contact surface which has been exposed to contamination, shall be cleaned and sanitized before being used.

(7) Surroundings shall be relatively neat and clean to prevent insect breeding and rodent harborage.

Section 2. Cooling. (1) All milk shall be cooled within two (2) hours after milking to fifty (50) degrees Fahrenheit or lower and maintained at a maximum of fifty (50) degrees Fahrenheit until transferred to the transport truck, unless delivered to the plant within two (2) hours after milking. Milk in bulk tanks shall be cooled to a maximum of forty (40) degrees Fahrenheit within two (2) hours after milking and maintained at a maximum of fifty (50) degrees Fahrenheit until transferred to the transport truck. If the first milking does not reach the bulk tank agitators, cooling shall be considered in violation.

(2) Cooling facilities shall be available to cool and store a full supply of milk between pickup at a maximum of fifty (50) degrees Fahrenheit. Can milk shall be collected at least every twenty-four (24) hours.

(3) Bulk tanks shall be designed and sized for everyday or every other day pickup and be capable of cooling the milk to forty (40) degrees Fahrenheit after each milking and maintaining the milk to a maximum of fifty (50) degrees Fahrenheit. No bulk tank milk shall be picked up after three (3) days except in case of emergency. Paper towels shall be available for wiping the bulk tank measuring stick during milk pickup.

(4) Milk shall not be transferred from one (1) producer to another or received by one (1) producer from another.

Section 3. Water supply. (1) Each producer shall have a properly located and protected water supply.

(2) The supply shall meet the needs of the producer to properly clean equipment, milkhouse, and milking area.

(3) The supply shall be protected against surface water and, in the case of cisterns, have a filter or roof wash barrel approved by the cabinet.

(4) The supply shall not be within 100 feet of any cesspool, privy, or lateral field unless approved by the cabinet.

(5) If the cabinet is in doubt to the physical protection of the supply, a water sample shall be collected and analyzed by the cabinet. Samples that do not meet the requirements of this administrative regulation shall be retested within thirty (30) days after notification is given to the producer in writing by the cabinet. If two (2) consecutive samples are found to be in excess of the coliform standard, a notice of intent to suspend permit shall be issued by the cabinet and a follow-up sample collected within thirty (30) days. If the follow-up sample is in excess of the standard, the producer may be suspended until a negative sample is obtained.

(6) All new producers shall have a negative water sample analysis prior to the issuance of a permit. A negative water sample shall be taken after any repair or alteration of the water supply has been made and at least every thirty-six (36) months.

Section 4. Waste Disposal. (1) Manure, discarded milk, and toilet waste shall be properly disposed in a manner approved by the cabinet.

(2) Waste discharging to the ground surface shall not pool or promote fly breeding.

(3) Waste from flush type toilets shall be properly disposed underground.

(4) Pit privies shall be properly constructed to prevent fly breeding.

Section 5. Hearing Procedures. Upon notification of intent to suspend or upon suspension, the producer may request a hearing.

(1) The request for a hearing shall be made in writing on Form DFS-8, "Request for Hearing", revised January 1989, incorporated by reference. Form DFS-8, "Request for Hearing", may be viewed or obtained, 8 a.m. until 4:30 p.m., Monday through Friday, at the Office of the Commissioner of Health Services, 275 East Main Street, Frankfort, Kentucky 40621.

(2) The cabinet shall notify the requesting party in writing of the:

(a) Name of the hearing officer; and

(b) Time and place of the hearing.

(3) All parties shall be allowed a reasonable time to prepare for the hearing, including the right to:

(a) Be represented by counsel;
(b) Present evidence on his behalf; and
(c) Cross-examine witnesses.

(4) A transcript of the hearing shall not be made unless requested. The expense of transcribing the hearing shall be the responsibility of the requesting party.

(5) The hearing officer shall make written findings of fact and conclusions of law, and render a decision based upon the evidence presented. The decision of the hearing officer shall be the final decision of the cabinet.

RICE C. LEACH, Commissioner
FONTAINE BANKS, JR., Secretary
APPROVED BY AGENCY: October 18, 1993
FILED WITH LRC: December 2, 1993 at 9 a.m.

STATEMENT OF EMERGENCY
902 KAR 50:033E

Federal mandate requires that all USDA approved plants must comply with changes made effective June 7, 1993. These changes incorporate provisions to specify the sampling, testing, and record-keeping requirements relating to an expanded drug residue monitoring program in USDA approved plants. All Kentucky manufacturing dairy plants maintain USDA status. This emergency administrative regulation shall be replaced by an ordinary administrative regulation. The ordinary administrative regulation was filed with the Regulations Compiler simultaneously with this emergency administrative regulation.

BRERETON C. JONES, Governor
FONTAINE BANKS, JR., Secretary

CABINET FOR HUMAN RESOURCES
Department for Health Services
Division of Environmental Health and Community Safety

902 KAR 50:033E. Standards for enforcement procedures for manufacturing grade milk.

RELATES TO: KRS 217.005 to 217.215, 217C.010 to 217C.990
STATUTORY AUTHORITY: KRS 194.050, 211.090
EFFECTIVE: December 2, 1993
NECESSITY AND FUNCTION: KRS 217C.040 authorizes the Cabinet for Human Resources to regulate milk for manufacturing purposes. This administrative regulation sets uniform standards for the enforcement of 902 KAR 50:031 and 902 KAR 50:032 pertaining to the production, transportation, handling, sampling, examination, grading, and sale of manufacturing milk and milk products; inspection of dairy farms; and, provides for the revocation and reinstatement of producer permits.

Section 1. Enforcement Procedures for Raw Milk. (1) Sight and odor. Bulk tank loads or individual producer milk received shall be examined on an organoleptic basis by the hauler or by the milk grader. Milk shall not be received if any off odors or abnormal conditions are found which will adversely affect the finished product. Producer milk rejected for sight and odor by a hauler or milk grader shall be identified by coloring if in a can or tagged with a reject tag if in a bulk tank.

(2) Bacterial estimates. At least one (1) time each month at irregular intervals, a representative mixed sample of each producer's milk shall be tested. Producers shall be notified of the results of all tests performed.

(a) A producer shall be given a notice of intent to suspend permit by the cabinet if two (2) of the last four (4) counts exceed bacterial standards specified in 902 KAR 50:031. An additional sample shall be taken within twenty-one (21) days of sending the notice, but not before the lapse of three (3) days. A producer shall remain under notice of intent to suspend permit if two (2) of the last four (4) samples exceed the standards.

(b) A producer's permit shall be suspended by the cabinet if three (3) of the last five (5) samples exceed the standard.

(c) A producer may be issued a temporary permit by the cabinet upon receipt from the producer of a satisfactory farm inspection and Form DFS-7A, "Application for Reinstatement of Permit", incorporated by reference. If the sample from the first milk offered for sale is in compliance, the permit is reinstated. If the sample is not in compliance, the temporary permit shall be withdrawn. A copy of Form DFS-7A, "Application for Reinstatement of Permit", revised October 1986, is available for inspection and copying, 8 a.m. until 4:30 p.m., Monday through Friday, at the Office of the Commissioner for Health Services, 275 East Main Street, Frankfort, Kentucky 40621.

(d) Upon issuance of the temporary permit, the producer shall have no milk in the bulk tank produced during the period the permit was suspended unless specified by the cabinet. Three (3) samples shall then be taken at the rate of not more than two (2) per week on separate days within a three (3) week period.

(e) The cabinet may reinstate the producer's permit upon receipt of a bacteria sample in compliance with standards set in 902 KAR 50:031.

(3) Sediment.

(a) Bulk tank producers.

1. If the sediment disc is classified as #1 or #2, the producer's milk may be accepted.

2. If the sediment disc is classified #3, the producer's milk may be accepted. The producer shall be notified by the cabinet in writing and a second milk sample shall be collected by a certified sampler and retested on the next milk pickup. If the second sample is classified #3, the producer shall be issued a notice of intent to suspend permit and an additional sample shall be collected and tested. If the additional sample fails to obtain a #1 or #2 sediment sample result, the producer's permit shall be suspended. If the second sample is classified #4, the producer's permit shall be suspended.

3. If the sediment disc is classified as #4, the producer shall be notified by the cabinet in writing and the producer's milk sample shall be collected by a certified sampler and retested on the next milk pickup. If the retest of this sample fails to obtain a #1 or #2 sediment sample result, the producer's permit shall be suspended.

4. The permit suspension shall be in effect until a #1 or #2 sediment test is obtained and upon receipt by the cabinet of an "Application for Reinstatement of Permit".

(b) Can producers.

1. If the sediment disc is classified as #1 or #2, the producer's milk may be accepted.

2. If the sediment disc is classified #3, the producer's milk may be accepted. The producer shall be notified by the cabinet in writing and a second milk sample shall be collected by a certified sampler and retested on the next milk pickup. If the second sample is classified #3, the producer shall be notified and additional samples shall be collected and tested. If the additional samples fail to obtain a #1 or #2 sediment sample result on two (2) consecutive samples, the producer's permit shall be suspended. If the second sample is classified #4, the producer's permit shall be suspended.

3. If the sediment disc is classified as #4 the milk shall be rejected and an approved color added to the milk. The producer shall be notified by the cabinet in writing and the producer's milk sample shall be collected by a certified sampler and retested on the next milk pickup. If the retest of this sample fails to obtain a #1 or #2 sediment sample result, the producer's permit shall be suspended.

4. The permit suspension shall be in effect until a #1 or #2 sediment test is obtained and upon receipt by the cabinet of an "Application for Reinstatement of Permit".

(4) Abnormal milk. Each producer shall be tested at least four (4) times each six (6) months and those tests showing a somatic cell count in excess of 1,000,000/ml. shall be notified in writing by the cabinet. If two (2) of the last four (4) somatic cell counts exceed 1,000,000/ml., the producer shall be given a notice of intent to suspend permit by the cabinet. The producer shall remain under notice if two (2) of the last four (4) samples exceed the limit. An additional sample shall be collected within twenty-one (21) days after issuance of the notice of intent to suspend permit, but not before the lapse of three (3) days. A producer's permit shall be suspended by the cabinet if three (3) of the last five (5) somatic cell counts exceed the limit. Upon receipt of an "Application for Reinstatement of Permit", a sample shall be analyzed. If the sample is in compliance, the permit is reinstated. Three (3) samples shall be taken at the rate of not more than two (2) per week on separate days within a three (3) week period.

(5) Drug residues.

(a) All marketed milk shall be sampled prior to processing using approved screening procedures defined in 902 KAR 50:031. If the presence of drug residue is detected, a confirmatory test approved by the cabinet shall be performed. If the confirmatory test result is positive for drug residue, the milk shall be disposed of either in a manner that removes it from the human and animal food chain or acceptably reconditioned for animal food as determined by the cabinet. If a commingled sample is positive, each producer represented in the sample shall be tested immediately.

(b) All positive drug residue sample results shall be reported to the Cabinet for Human Resources, Milk Control Branch, 275 East Main Street, Frankfort, Kentucky 40621.

(c) Milk for manufacturing permit shall be suspended upon confirmed positive drug residue sample.

1. First suspension within a twelve (12) month period shall require a two (2) day minimum loss of milk or equivalent as determined by the cabinet.

2. Second suspension within a twelve (12) month period shall require a four (4) day minimum loss of milk or equivalent as determined by the cabinet.

3. Third suspension within a twelve (12) month period shall require a four (4) day minimum loss of milk or equivalent as determined by the cabinet. The cabinet shall initiate administrative procedures to revoke the producer's permit by proceeding to an informal hearing.

(d) The milk for manufacturing permit shall be temporarily reinstated for fourteen (14) days if a negative drug residue sample of raw milk is reported to the cabinet, and the cabinet is in receipt of an "Application for Reinstatement of Permit".

1. The milk for manufacturing permit shall be reinstated after the cabinet receives a copy of the "Milk and Dairy Beef Residue Prevention Protocol" Completion Certificate signed by the producer and his veterinarian. The "Milk and Dairy Beef Residue Prevention Protocol", 1993 Producer Manual, is published by Agri-Education, Inc., 801 Shakespeare Avenue, Stratford, Iowa 50249. The "Milk and Dairy Beef Residue Prevention Protocol", revised October 1, 1992, is incorporated by reference, and a copy is available for inspection and copying, 8 a.m. until 4:30 p.m., Monday through Friday, at the Office of the Commissioner for Health Services, 275 East Main Street, Frankfort, Kentucky 40621.

2. Failure to return the completion certificate within fourteen (14) days of the temporary reinstatement shall result in a minimum one (1) day temporary permit suspension.

(6) Excessive water.

(a) Milk producers with supplies found to contain at least ten (10) percent excessive water shall be issued a permit suspension requiring the supply to be withheld from sale immediately. Milk from this supply shall not be sold and the permit shall not be reinstated until a sample is negative for excessive water, and the cabinet is in receipt of an "Application for Reinstatement of Permit".

(b) Milk producers with supplies found to contain at least two (2) percent and less than ten (10) percent excessive water shall be notified of adulteration and retested after the lapse of three (3) days. If the retested sample continues to show at least two (2) percent and less than ten (10) percent excessive water, the producer's permit shall be suspended. Milk shall not be sold from this supply and the permit shall not be reinstated until a sample is negative for excessive water, and the cabinet is in receipt of an "Application for Reinstatement of Permit".

(c) Milk producers with supplies found to contain at least five-tenths (.5) percent but less than two (2) percent excessive water shall be notified. If the following sample shows at least five-tenths (.5) percent and less than two (2) percent excessive water, a supervised sample shall be collected. The supervised sample shall be used as a future reference for the accurate freezing point for the supply.

(7) Chemical contaminants.

(a) If laboratory results of an individual producer sample show a violation of an established tolerance level for a particular chemical contaminant, the supply shall be withheld from the market channels. The producer shall be notified immediately and confirmed in writing by the cabinet.

(b) Continued sampling of an excluded milk producer's supply shall be maintained until an acceptable level of the contaminant is attained. The frequency of additional sampling may be at seven (7), fifteen (15), thirty (30), or sixty (60) day intervals, depending on the laboratory workload and the previous contaminant level. Higher chemical contaminant levels shall be sampled at lesser frequencies.

(c) If levels based on an official sample fall below acceptable tolerance levels, the producer shall be notified immediately and confirmed in writing by the cabinet that the supply is again acceptable for sale.

(d) Producer assistance in testing individual cows, feeds, and water supplies may be obtained on an unofficial basis from the Kentucky Diagnostic Laboratories and commercial laboratories.

Section 2. Manufacturing Milk Producer Permit Suspension and Reinstatement. (1) An individual producer's permit shall be suspended if the cabinet has reason to believe that a public health hazard exists; the producer has violated any of the requirements of 902 KAR 50:031, 902 KAR 50:032, or this administrative regulation; or the producer has interfered with the cabinet in the performance of its duties. The cabinet shall in all cases, except if the milk involved creates, or appears to create, an imminent hazard to the public health; or in any case of willful refusal to permit authorized inspection, serve upon the producer a written notice of intent to suspend the permit. This notice shall specify the violation in question and afford the permit holder reasonable opportunity to correct the violation. Suspension of a permit shall remain in effect until the violation has been corrected to the satisfaction of the cabinet.

(2) If the producer's permit has been suspended three (3) times within a twelve (12) month period for a violation of any type in accordance with 902 KAR 50:031, 902 KAR 50:032, or this administrative regulation, the producer shall be issued a notice that upon the fourth suspension within a twelve (12) month period the producer shall appear at the cabinet for a conference to show cause why the permit should be reinstated. Upon the fourth suspension within a twelve (12) month period, the producer shall appear before the cabinet to show cause why the permit should be reinstated. At this conference the cabinet may set conditions under which the permit may be reinstated. This permit suspension shall remain in effect until the conditions of the conference have been met. If a fifth suspension occurs within a twelve (12) month period, the cabinet shall proceed to a hearing. At this hearing the producer shall have the opportunity to show cause why the permit should not be permanently revoked, and the cabinet shall affirm, modify, or rescind the producer's permit.

(3) Upon written application of any person whose permit has been suspended, or upon application within forty-eight (48) hours of any

person who has been served with a notice of intention to suspend, and in the latter case before suspension; the cabinet shall, within a reasonable time, proceed to hearing to ascertain the facts of the violation or interference.

(a) The request for a hearing shall be made in writing on Form DFS-8, "Request for Hearing", revised January 1989, incorporated by reference. Form DFS-8, "Request for Hearing", may be viewed or obtained, 8 a.m. until 4:30 p.m., Monday through Friday, at the Office of the Commissioner of Health Services, 275 East Main Street, Frankfort, Kentucky 40621.

(b) The cabinet shall notify the requesting party in writing of the:

1. Name of the hearing officer; and
2. Time and place of the hearing.

(c) All parties shall be allowed a reasonable time to prepare for the hearing, including the right to:

1. Be represented by counsel;
2. Present evidence on his behalf; and
3. Cross-examine witnesses.

(d) A transcript of the hearing shall not be made unless requested. The expense of transcribing the hearing shall be the responsibility of the requesting party.

(e) The hearing officer shall make written findings of fact and conclusions of law, and render a decision based upon the evidence presented. The decision of the hearing officer shall be the final decision of the cabinet.

(4) Any permit suspended under the provisions of 902 KAR 50:031, 902 KAR 50:032, or this administrative regulation may be reinstated by submission of satisfactory evidence to the cabinet that the violation has been corrected.

RICE C. LEACH, Commissioner
FONTAINE BANKS, JR., Secretary
APPROVED BY AGENCY: October 18, 1993
FILED WITH LRC: December 2, 1993 at 9 a.m.

STATEMENT OF EMERGENCY
902 KAR 55:030E

Emergency regulation 902 KAR 55:030E is necessary to provide conformity with federal regulation 21 CFR 1308.14 and to schedule a drug of abuse and protect the public health. In order to continue enforcement of abusable substances as scheduled by federal regulations and as dictated by KRS 218A.100 the Cabinet for Human Resources is required to implement this regulation. An ordinary regulation will not suffice due to the effective date required by the U.S. Drug Enforcement Administration. This emergency administrative regulation shall be replaced by an ordinary administrative regulation which will be filed with the Regulations Compiler on or before November 15, 1993.

BRERETON C. JONES, Governor
FONTAINE BANKS, JR., Secretary

CABINET FOR HUMAN RESOURCES
Department for Health Services

902 KAR 55:030E. Schedule IV substances.

RELATES TO: KRS 218A.010 to 218A.030, 218A.100 to 218A.110, 21 CFR 1308.14 [~~Chapter 218A~~]

STATUTORY AUTHORITY: KRS 194.050, 211.090, 218A.020, 218A.100, 218A.250

EFFECTIVE: November 23, 1993

NECESSITY AND FUNCTION: KRS 218A.100 authorizes the Cabinet for Human Resources to place a substance in Schedule IV if it finds that: (1) the substance has a low potential for abuse relative to substances in Schedule III; (2) the substance has currently accepted medical use in treatment in the United States; and (3) abuse of the substance may lead to limited physical dependence or psychological dependence relative to the substances in Schedule III. In addition, KRS 218A.020(3) provides that if any substance is designated, rescheduled, or deleted as a controlled substance under a federal law and notice of the designation, rescheduling or deletion [~~thereof~~] is given to the cabinet, the cabinet may similarly control the substance by administrative regulation. The Cabinet for Human Resources, after considering the [~~such~~] criteria, [~~hereby~~] designates the substances set forth in this administrative regulation as Schedule IV controlled substances.

Section 1. Stimulants. The Cabinet for Human Resources [~~hereby~~] designates as "Schedule IV" controlled substances, in addition to those specified by KRS 218A.110, any material, compound, mixture, or preparation which contains any quantity of the following substances, including their salts, isomers (whether optical position or geometric), and salts of the [~~such~~] isomers, if [~~whenever~~] the existence of the [~~such~~] salts, isomers, and salts of isomers is possible:

(1) Cathine ((+)-norpseudoephedrine);
(2) Diethylpropion;
(3) Fencamfamin;
(4) Fenfluramine;
(5) Fenproporex;
(6) Mazindol;
(7) Mefenorex;
(8) Pemoline (including organometallic complexes and chelates);
(9) Phentermine;
(10) Pipradrol; and
(11) SPA ((-)-1-dimethylamino-1,2-diphenyl ethane).

Section 2. Depressants. The Cabinet for Human Resources [~~hereby~~] designates as "Schedule IV" controlled substances, in addition to those specified by KRS 218A.110, any material, compound, mixture, or preparation which contains any quantity of the following substances, including its salts, isomers, and salts of isomers if [~~whenever~~] the existence of the [~~such~~] salts, isomers, and salts of isomers is possible within the specific chemical designation:

(1) Alprazolam;
(2) Bromazepam;
(3) Camazepam;
(4) Carisoprodol;
(5) Chlordiazepoxide;
(6) [~~(5)~~] Clobazam;
(7) [~~(6)~~] Clonazepam;
(8) [~~(7)~~] Clorazepate;
(9) [~~(8)~~] Clotiazepam;
(10) [~~(9)~~] Cloxazolam;
(11) [~~(10)~~] Delorazepam;
(12) [~~(11)~~] Diazepam;
(13) [~~(12)~~] Estazolam;
(14) [~~(13)~~] Ethyl loflazepate;
(15) [~~(14)~~] Fludiazepam;
(16) [~~(15)~~] Flunitrazepam;
(17) [~~(16)~~] Flurazepam;
(18) [~~(17)~~] Halazepam;
(19) [~~(18)~~] Haloxazolam;
(20) [~~(19)~~] Ketazolam;
(21) [~~(20)~~] Loprazolam;
(22) [~~(21)~~] Lorazepam;
(23) [~~(22)~~] Lormetazepam;
(24) [~~(23)~~] Mebutamate;
(25) [~~(24)~~] Medazepam;
(26) [~~(25)~~] Methohexital;
(27) [~~(26)~~] Midazolam;
(28) [~~(27)~~] Nimetazepam;

(29) [~~(28)~~] Nitrazepam;
(30) [~~(29)~~] Nordiazepam;
(31) [~~(30)~~] Oxazepam;
(32) [~~(31)~~] Oxazolam;
(33) [~~(32)~~] Pinazepam;
(34) [~~(33)~~] Prazepam;
(35) [~~(34)~~] Quazepam;
(36) [~~(35)~~] Temazepam;
(37) [~~(36)~~] Tetrazepam; [~~and~~]
(38) [~~(37)~~] Triazolam; and
(39) Zolpidem.

Section 3. Narcotics [~~Analgesics, Nonnarcotics~~]. The Cabinet for Human Resources [~~hereby~~] designates as "Schedule IV" controlled substances, in addition to those specified by KRS 218A.110, any material, compound, mixture, or preparation containing any of the following narcotic drugs, or their salts calculated as the free anhydrous base or alkaloid, in limited quantities as set forth below: [~~which contains any quantity of the following substance, including its salts:~~]

(1) Dextropropoxyphene (Alpha-(+)-4-dimethylamino-1, 2-diphenyl-3-methyl-2-propionoxybutane); and

(2) Not more than one (1) milligram of difenoxin and not less than twenty-five (25) micrograms of atropine sulfate per dosage unit.

RICE C. LEACH, M.D., Commissioner
FONTAINE BANKS, JR., Secretary
APPROVED BY AGENCY: October 26, 1993
FILED WITH LRC: November 23, 1993 at 3 p.m.

STATEMENT OF EMERGENCY
904 KAR 2:116E

This emergency administrative regulation is being amended to reflect the plan for heating assistance contained in the Low Income Home Energy Assistance Program Block Grant for the federal fiscal year 1994. In order to implement the program on November 8, 1993, as specified in the plan narrative, it is necessary to promulgate this emergency administrative regulation. This emergency administrative regulation shall be replaced by an ordinary administrative regulation in accordance with KRS Chapter 13A.

BRERETON C. JONES, Governor
FONTAINE BANKS JR., Secretary

CABINET FOR HUMAN RESOURCES
Department for Social Insurance
Division of Management & Development

904 KAR 2:116E. [~~Low-income~~] Home energy assistance program.

RELATES TO: KRS 194.050, 42 USC 8621 et seq.
STATUTORY AUTHORITY: KRS 194.050, 42 USC 8621 et seq.
EFFECTIVE: December 15, 1993
NECESSITY AND FUNCTION: The Cabinet for Human Resources has responsibility as prescribed by 42 USC 8621 et seq., [~~Title XXVI of the Omnibus Budget Reconciliation Act of 1981~~] as amended, [~~and Augustus F. Hawkins Human Services Reauthorization Act of 1990~~] to administer the Low Income Home Energy Assistance Program (LIHEAP) [~~a program~~] to provide assistance for eligible low income households within the Commonwealth of Kentucky to help meet the costs of home energy. This administrative regulation states the eligibility and benefits criteria for heating [~~energy~~] assistance.

Section 1. Definitions. (1) An "authorized representative" means the person who presents to the cabinet or its representative a written statement signed by the appropriate household member authorizing that person to apply on the household's behalf.

(2) "Crisis component" means the component that provides assistance to households which are experiencing a home heating crisis.

(3) "Economic unit" means one (1) or more persons sharing common living arrangements.

(4) "Emergency" means the household is without heat at the time of application or will be disconnected from a utility service within forty-eight (48) hours.

(5) "Energy" means electricity, gas, and any other fuel that is used to sustain reasonable living conditions.

(6) "Gross income" means all earned and unearned income, including lump sum payments received by the households during the calendar month preceding the month of the application.

(7) [~~(12)~~] "HEAP" means home energy assistance program and shall refer to the heating assistance portion of LIHEAP.

(8) [~~(7)~~] "Heating season" means the period from October through April.

(9) [~~(8)~~] "Household" means any individual or group of individuals who are living together in the principal residence as one (1) economic unit and who share complete kitchen facilities for the exclusive use of the individual or individuals.

(10) [~~(9)~~] "Life threatening situation" means without heat or will be without heat within forty-eight (48) hours and temperatures are at a dangerous level for household members.

(11) [~~(10)~~] "Principal residence" means the place:

(a) Where a person is living voluntarily and not on a temporary basis;

(b) He considers home;

(c) To which, when absent, he intends to return; and

(d) Is identifiable from other residences, commercial establishments, or institutions.

(12) [~~(11)~~] "Subsidy component" means the component that provides eligible households with a one (1) time payment to the household's energy provider.

Section 2. Application. (1) Each household or authorized representative shall complete an application and provide information necessary to determine eligibility and benefit amount.

(2) An application shall not be considered completed until all information needed is received.

Section 3. Eligibility Criteria. (1) Income.

(a) Gross income shall be at or below 110% of the federal poverty income guidelines as published annually by the U.S. Department of Health and Human Services. The Department for Social Insurance shall announce the income guidelines after being published by the Department of Health and Human Services.

(b) Excluded from income are:

1. Payments received by a household from a federal, state, or local agency designated for a special purpose and which the applicant must spend for that purpose;
2. Payments made to others on the household's behalf;
3. Loans;
4. Reimbursements for expenses;
5. Incentive payments (JET and JTPA) normally disregarded in AFDC;
6. Federal payments or benefits which shall be excluded according to federal law; and
7. Supplemental medical insurance premiums.

(2) Liquid assets.

(a) The household shall have total liquid assets at the time of application of not more than $5,000.

(b) Excluded assets are:

1. Cars;
2. Household or personal belongings;

3. Principal residence;
4. Cash surrender value of insurance policies;
5. Prepaid burial policies;
6. Real property; and
7. Cash on hand or in a bank account if the cash is income considered under subsection (1)(a) of this section.

(3) Crisis component.

(a) Applicants shall meet the income and liquid assets criteria; and

(b) Be without heat; or

(c) Be without fuel within five (5) days; or

(d) Have received a notice of disconnection of service; or

(e) Require a heat system repair to obtain adequate heat; or

(f) For those households whose home heating costs are included as an undesignated portion of the rent, the household must have received a notice of eviction for nonpayment of rent.

Section 4. Benefit Levels. (1)(a) Payments to the households' heating fuel providers shall be made for the full benefit amount.

(b) Benefits shall be determined from fuel usage data and from the average heating season energy cost for the six (6) primary heating fuels prior to the implementation of the subsidy component.

(c) Households shall receive benefits based on the household's poverty level and the type of heating fuel. Those households with the lowest incomes and highest heating season fuel costs shall receive the highest benefits. Benefits shall be a percentage of the average annual heating season energy costs of the primary heating fuel.

(d) Benefit matrix subsidy component.

Households Income as a Percent of 100% Federal Poverty Level	Benefit Amount as a Percent of Heating Season Energy Costs (October through April)
0- 22%	18.5%
23- 44%	16.5%
45- 66%	14.5%
67- 88%	12.5%
89-110%	10.5%

(2) Crisis component. Benefits to households shall be the minimum amount necessary to alleviate the crisis. Benefits may be fuel or other energy for heating, heaters, blankets, or emergency shelter. Space heaters shall be a temporary service and shall be loaned to a household until fuel is delivered, the heating system is repaired or other resources are located which will alleviate the crisis. The contracting agency shall determine the type and value of assistance necessary to alleviate the crisis.

(a) In determining the minimum amount of assistance, the contracting agency shall take into consideration direct subsidies for payment of utility cost received by the household from other programs.

(b) A household shall receive assistance more than once, but shall not receive more than the maximum allowable for the primary heating fuels determined prior to component implementation.

(c) The benefits for a household threatened with eviction whose heat is an undesignated portion of the rent shall not receive more than the maximum allowable for the primary heating fuel as determined prior to component implementation.

(d) A household needing a heat system repair shall be referred to the local weatherization program.

Section 5. Benefit Delivery Methods. (1)(a) Payment under the subsidy component is authorized by a one (1) party check made payable to the vendor or landlord if the heating is included as an undesignated portion of rent.

(b) At the recipient's discretion, the total benefit may be made in separate authorizations to more than one (1) provider (for example, when the recipient heats with both a wood stove and electric space heaters). However, the total amount of the payments shall not exceed the maximum for the primary source of heating.

(2) For the crisis component, direct cash payments shall not be made to the recipient. Payments shall be authorized to the energy provider by one (1) party checks upon delivery of fuel, heaters, blankets, emergency lodging, or restoration or continuation of service.

Section 6. Right to a Fair Hearing. Any individual who has been denied assistance or whose application has not been acted upon with reasonable promptness has a right to request and receive a fair hearing in accordance with 904 KAR 2:055.

Section 7. Time Standards. (1) Under the subsidy component, an eligibility determination shall be made promptly after receipt of a completed and signed application but not to exceed thirty (30) days.

(2) Under the crisis component, completed applications shall be processed so that the crisis is resolved within forty-eight (48) hours and in life threatening situations within eighteen (18) hours.

(3) Applicants shall have five (5) working days from the date of application to provide information necessary to complete the application.

Section 8. Effective Dates. (1) Implementation and termination dates for HEAP, depending upon the availability of funds, are:

(a) Applications for the subsidy component shall be accepted within the time period the department designates in the annual LIHEAP state plan as submitted to the federal government. [~~beginning November 9, 1992 and ending by December 11, 1992.~~]

(b) Applications for the crisis component shall be accepted beginning on the date specified in the annual LIHEAP state plan [~~January 4, 1993~~] and ending by March 31, [~~1993,~~] or until all available funds have been expended. Applications shall be processed in the order taken until funds are expended.

(2) HEAP may be reactivated after termination under the same terms and conditions as shown in this administrative regulation if additional federal funds are made available.

Section 9. Allocation of Funds. (1) [~~Up to fifteen (15) percent of the federal LIHEAP allocation shall be reserved for weatherization assistance. These funds shall be used for regular weatherization services and for all heating system repairs identified during the subsidy and crisis components of HEAP.~~

~~(2)~~] An amount of funds sufficient to provide benefits to all eligible households that apply during the subsidy application period shall be reserved for the subsidy component.

(2) [~~(3)~~] The balance of benefit funds for HEAP shall be reserved for the crisis component. All benefit funds reserved for the crisis component shall be allocated based upon each local administering agency's share of nonduplicated households assisted in the preceding year's crisis component.

(3) [~~(4)~~] Each agency shall reserve ten (10) percent of the allocation under subsection (2) [~~(3)~~] of this section to assure component availability until March 31, [~~1992~~] for emergency crisis assistance for households who are without heat or will be disconnected from utility services within forty-eight (48) hours.

(4) No less than [~~(5) Up to~~] $25,000 shall be reserved for the Preventive Assistance Program administered by the Department for Social Services to assist families with an energy payment not to exceed $300 for each family if the payment shall prevent the removal of a child from a family or if it shall assist in reuniting a child with the family.

Section 10. Energy Provider Responsibilities. Any provider accepting payment from HEAP for energy or services provided to eligible recipients shall comply with the following:

(1) Reconnection of utilities and delivery of fuel during the crisis component shall be accomplished upon certification for payment;

(2) The household shall be charged in the normal billing process the difference between the actual cost of the home energy and the amount of payment made through this program;

(3) HEAP recipients shall be treated the same as households not receiving benefits;

(4) The household on whose behalf benefits are paid shall not be discriminated against, either in the costs of goods supplied or the services provided; and

(5) A landlord shall not increase the rent of recipient households due to receipt of this payment.

MIKE ROBINSON, Commissioner
FONTAINE BANKS, JR., Secretary
APPROVED BY AGENCY: November 9, 1993
FILED WITH LRC: December 15, 1993 at 10 a.m.

ADMINISTRATIVE REGULATIONS AMENDED BY PROMULGATING AGENCY AND REVIEWING SUBCOMMITTEE

KENTUCKY HIGHER EDUCATION ASSISTANCE AUTHORITY (As Amended)

11 KAR 3:001. Definitions.

RELATES TO: KRS 164.740, 164.744(1), 164.748(1), (3) (14), (15), 164.753(2), 164.766, 8 USC 1101(a)(22), 10 USC Chapters 2, 106, 107, 20 USC 421-429, 1070a, 1070b, 1070c, 1078, 1078-1, 1078-2, 1078-3, 1078(c)(1), as amended by PL 103-66 §4108(a), 1087a, 1087aa-1087ii, 1095-1, 37 USC Chapter 2, 38 USC Chapters 30, 31, 32, 35, **20 USC 1087vv(c)** ~~[PL 97-376 §156, PL 96-342 §903]~~

STATUTORY AUTHORITY: KRS 13A.222(4)(e), 164.746(6), 164.748(4), (15), 34 CFR §682.401(b)(10)(ii)

NECESSITY AND FUNCTION: KRS 164.744(1) empowers the authority to insure loans to students, provided that the loans meet the criteria of the federal act. This administrative regulation sets forth general definitions applicable to one (1) or more administrative regulations in this chapter. KRS 164.740(12) and (14) define the terms "insured student loan" and "loan guarantee" to pertain to loans reinsured by the secretary to the extent of not less than eighty (80) percent. PL 103-66 §4108(a) amended 20 USC §1078(c)(1) by reducing the minimum rate of reinsurance from eighty (80) percent to seventy-eight (78) percent. KRS 164.748(15) authorizes the authority board to adopt "rules, regulations and policies consistent with the federal act" to overcome a conflict "between KRS 164.740 to 164.764 and the federal act, which conflict would result in a loss by the authority of any federal funds." This amendment is necessary to conform the definitions of "insured student loan" and "loan guarantee" to changes in the federal act enacted in PL 103-66 §4108(a).

Section 1. The following definitions apply to all authority insured student loan programs:

(1) "Academic year" means:

(a) A period of at least thirty (30) weeks of instructional time in which a full-time student is expected to complete at least twenty-four (24) semester hours or thirty-six (36) quarter hours at an institution which measures academic progress in credit hours but does not use a semester, trimester or quarter system; or

(b) At least 900 clock hours at a participating institution which measures academic progress in clock hours.

(2) "Applicable interest rate" means the maximum annual interest rate that a lender may charge on an authority insured loan.

(3) The definition of "authority" is governed by KRS 164.740(1).

(4) "Borrower" means a student or parent to whom a federal Stafford loan, a federal SLS loan, a federal PLUS loan, or a federal Consolidation loan is made.

(5) "Clock hour" means the equivalent of:

(a) A fifty (50) to sixty (60) minute class, lecture or recitation;

(b) A fifty (50) to sixty (60) minute faculty supervised laboratory, shop training, or internship; or

(c) Sixty (60) minutes of preparation in a program of study by correspondence.

(6) "College work study program (CWS)" means the part-time employment program for students authorized by Part C of the federal Act (42 USC §2751 - 2756b).

(7) "Co-maker" means one (1) of two (2) individuals who are joint borrowers on a federal PLUS Program loan and who are equally liable for repayment of the loan.

(8) "Default" means the failure of a borrower to make an installment payment when due, or to meet other terms of the promissory note under circumstances where the authority finds it reasonable to conclude that the borrower no longer intends to honor the obligation to repay, provided that this failure persists for:

(a) 180 days for a loan repayable in monthly installments; or

(b) 240 days for a loan repayable less frequent installments.

(9) "Defense loan" means a loan made before July 1, 1972, under Title II of the National Defense Education Act (20 USC 421-429).

(10) "Dependent student" means any student who does not qualify as an independent student (see independent student).

(11) "Direct loan" means a loan made under Part E of the federal Act (20 USC 1087aa, et seq.) after June 30, 1972, which does not satisfy the definition of "Perkins loan."

(12) "Disbursement" means the transfer of loan proceeds by a participating lender to a borrower, a school, or an escrow agent by issuance of a check or by electronic funds transfer.

(13) The definition of "disposable pay" is governed by Section 488A(d) of the federal Act (20 USC 1095-1).

(14) The definition of "eligible student" is governed by KRS 164.740(7).

(15) The definition of "endorser" is governed by KRS 164.740(8).

(16) "Enrolled" means the status of a student who:

(a) Has completed the registration requirements (except for the payment of tuition and fees) at the participating institution he is attending; or

(b) Has been admitted into a correspondence study program and has submitted one (1) lesson, completed by him or her after acceptance for enrollment and without the help of a representative of the school.

(17) "Escrow agent" means the authority acting in a capacity in which it agrees to receive the proceeds of an insured student loan as an agent of a participating lender for the purpose of transmitting those proceeds to the borrowers.

(18)(a) "Estimated cost of attendance" means, for loans disbursed prior to July 1, 1993, the tuition and fees applicable to a student, plus the participating institution's estimate of other expenses reasonably related to attendance at that school, for the period of enrollment for which the loan is sought. These expenses shall not include the purchase of a motor vehicle. The expenses may include, but are not limited to, reasonable transportation and commuting costs, costs for room, board, books, and supplies, the insurance premium for the loan, and if applicable, the origination fee for the loan.

(b) "Estimated cost of attendance" means, for loans disbursed on or after July 1, 1993.

1. Tuition and fees normally assessed a student carrying the same academic workload as determined by the participating institution, and including costs for rental or purchase of any equipment, materials, or supplies required of all students in the same course of study;

2. An allowance for books, supplies, transportation, and miscellaneous personal expenses for a student attending the participating institution on at least a half-time basis, as determined by the participating institution at which such student is enrolled;

3. An allowance (as determined by the participating institution) for room and board costs incurred by the student, which shall be not less than $1,500 for a student without dependents residing at home with parents, the amount normally assessed most of the institution's residents for room and board for students without dependents residing in institutionally owned or operated housing, or an allowance of not less than $2,500 for all other students based on the expenses reasonably incurred by the students for room and board;

4. For a student enrolled in an academic program of study abroad approved for credit by the student's home institution, reasonable costs associated with the study (as determined by the participating

institution at which such student is enrolled);

5. For a student with one (1) or more dependents, an allowance based on the estimated actual expenses incurred for such dependent care, based on the number and age of such dependents, except that the allowance shall not exceed the reasonable cost in the community in which the student resides for the kind of care provided, and the period for which dependent care is required includes, but is not limited to, class time, study time, field work, internships, and commuting time;

6. For a student with a disability, an allowance (as determined by the participating institution) for those expenses related to the student's disability, including special services, personal assistance, transportation, equipment, and supplies that are reasonably incurred and not provided for by other assisting agencies;

7. For a student receiving all or part of the student's instruction by means of telecommunications technology, no distinction shall be made with respect to the mode of instruction in determining costs, except that the financial aid officer at a participating institution shall reduce the amount of an authority insured student loan for which a student is otherwise eligible, if the financial aid officer determines that the student's cost of attendance is substantially reduced due to instruction by means of the use of telecommunication, but this paragraph shall not be construed to permit including the cost of rental or purchase of equipment; and

8. For a student placed in a work experience under a cooperative education program, an allowance for reasonable costs associated with such employment (as determined by the participating institution at which such student is enrolled).

(19) "Estimated financial assistance" means the estimated amount of assistance that a student has been or will be awarded during the period of enrollment for which the loan is sought from federal, state, institutional or other scholarship, grant, work, or loan programs, including but not limited to:

(a) Any Social Security benefits paid to, or on account of, the student that would not be paid if he was not a student;

(b) Any veterans' education benefits paid because of enrollment in a postsecondary education institution, including veterans' education benefits received under United States Code Title 10 chapters 2, 106, and 107; Title 37 chapter 2; Title 38 chapters 30, 31, 32, and 35; **20 USC 1087vv(c)** [~~PL 97-376, section 156; and PL 96-342, section 903~~]; and

(c) Other scholarship, grant, or loan assistance;

(d) The estimated amount of other federal student financial aid, including but not limited to Pell Grants and assistance under the SEOG, federal work-study, and federal Perkins Loan programs, which the student would be expected to receive if the student applied, whether or not the student has applied for that aid; and

(e) Loan proceeds withheld by the lender and applied towards an origination fee or insurance premium, if these costs are included in computing the borrower's estimated cost of attendance.

(20) The definition of "federal act" is governed by KRS 164.740(9).

(21) "Federal Consolidation Loan Program" means the loan program authorized by section 428C of the federal Act (20 USC Section 1078-3).

(22) "Federal PLUS Program" means the loan program authorized by section 428B of the federal Act (20 USC Section 1078-2).

(23) "Federal Supplemental Loans for Students (SLS) Program" means the loan program authorized by section 428A of the federal Act (20 USC Section 1078-1) and formerly called the ALAS Program.

(24) "Foreign school" means a school not located in a state.

(25) "Full-time student" means:

(a) A student enrolled in a participating institution (other than a student enrolled in a program of study by correspondence) who is carrying a full-time academic workload as determined by the institution under standards applicable to all students enrolled in that student's particular program. The student's workload may include any combination of courses, work, research or social studies, whether or not for credit, that the school considers sufficient to classify the student as a full-time student; or

(b) A student enrolled in a vocational program of study (other than a student enrolled in a program of study by correspondence) who is carrying a workload of not less than twenty-four (24) clock-hours per week or twelve (12) semester or quarter hours of instruction, or its equivalent.

(26) "Grace period" means the period that begins on the day on which a federal Stafford loan borrower ceases to be enrolled as at least a half-time student at a participating institution and ends on the day that the repayment period begins. See also "postdeferment grace period".

(27) "Graduate or professional student" means a student who:

(a) Is enrolled in a program or course above the baccalaureate level at an institution of higher education or is enrolled in a program leading to a first professional degree;

(b) Has completed the equivalent of at least three (3) years of full-time study at an institution of higher education, either prior to entrance into the program or as part of the program itself; and

(c) Is not receiving aid under Title IV of the federal Act (20 USC Sections 1070 through 1099c-1) as an undergraduate student for the same period of enrollment.

(28) "Guarantee agency" means a state or private nonprofit organization that has an agreement with the secretary to administer a loan guarantee program under the federal Act.

(29) "Guaranteed Student Loan (GSL) Program" means the student loan program, which has been redesignated as the Robert T. Stafford Federal Student Loan program, authorized by Part B of Title IV of the federal Act (20 USC 1071(c)).

(30) "Half-time student" means a student who is enrolled in a participating institution, is carrying an academic workload that amounts to at least one-half (1/2) the workload of a full-time student, as determined by the school, and is not a full-time student. A student enrolled solely in an eligible program of study by correspondence is considered a half-time student.

(31) "Holder" means a participating lender in possession of authority insured student loan.

(32) "Income Contingent Loan (ICL) Program" means the student loan program authorized by Part D of the federal Act (20 USC 1087a, et seq.).

(33) "Independent student" means any individual who:

(a) Is twenty-four (24) years of age or older by December 31 of the award year;

(b) Is an orphan or ward of the court;

(c) Is a veteran of the Armed Forces of the United States;

(d)1. Is a graduate or professional student; and

2. For award years beginning prior to July 1, 1993, declares that he will not be claimed as a dependent for income tax purposes by his parents for the first calendar year of the award year;

(e)1. Is a married individual; and

2. For award years beginning prior to July 1, 1993, declares that he will not be claimed as a dependent for income tax purposes by his parents for the first calendar year of the award year;

(f) Has legal dependents other than a spouse;

(g) For award years beginning prior to July 1, 1993, is a single undergraduate student with no dependents who was not claimed as a dependent for income tax purposes by his parents for the two (2) calendar years preceding the award year and demonstrates total self-sufficiency for those two (2) years by total annual resources of at least $4,000; or

(h) Is a student for whom a financial aid administrator makes a documented determination of independence by reason of other unusual circumstances.

(34) The definition of "insured student loan" is governed by KRS 164.740(12), except that, for loans on which the first disbursement is made on or after October 1, 1993, the term shall include loans

reinsured by the secretary to the extent of not less than seventy-eight (78) percent.

(35) "Legal guardian" means an individual appointed by a court to be a "guardian" of a person and specifically required by the court to use his financial resources for the support of that person.

(36) The definition of "loan" is governed by KRS 164.740(13).

(37) The definition of "loan guarantee" is governed by KRS 164.740(14), except that, for loans on which the first disbursement is made on or after October 1, 1993, the term shall include loans reinsured by the secretary to the extent of not less than seventy-eight (78) percent.

(38) "National Defense Student Loan program" means the student loan program authorized by Title II of the National Defense Education Act of 1958 (20 USC 421-429).

(39) "National Direct Student Loan (NDSL) Program" means the student loan program authorized by Part E of the federal Act (20 USC 1087aa-1087ii) between July 1, 1972, and October 16, 1986.

(40) "National of the United States" means:

(a) A citizen of the United States; or

(b) As defined in the Immigration and Nationality Act, 8 USC 1101(a)(22), a person who, though not a citizen of the United States, owes permanent allegiance to the United States.

(41) "One (1) year training program" means a program which is at least:

(a) Twenty-four (24) semester or trimester hours or units, or thirty-six (36) quarter hours or units at an institution using credit hours or units to measure academic progress;

(b) 900 clock hours of supervised training at an institution using clock hours to measure academic progress; or

(c) 900 clock hours in a correspondence program.

(42) "Origination relationship" means a special relationship between a participating institution and a lender, in which the lender delegates to the institution, or to an entity or individual affiliated with the institution, substantial functions or responsibilities normally performed by lenders before making loans.

(43) "Parent" means a student's mother, father, or legal guardian. A parent by adoption is considered to be a student's mother or father.

(44) The definition of "participating institution" is governed by KRS 164.740(15).

(45) The definition of "participating lender" is governed by KRS 164.740(16).

(46) "Pell Grant program" means the grant program authorized by subpart 1 of Part A of the federal Act (20 USC 1070a).

(47) "Perkins loan" means a loan made under Part E of the federal Act (20 USC 1087aa, et seq.) to cover the cost of attendance for a period of enrollment beginning on or after July 1, 1987, to an individual who on July 1, 1987, had no outstanding balance of principal or interest owing on any loan previously made under the National Direct Student Loan program.

(48) "Perkins Loan program" means the student loan program authorized by Part E of the federal Act (20 USC 1087aa-1087ii) after October 16, 1986.

(49) "Postdeferment grace period" means for an insured student loan made prior to October 1, 1981, a period of six (6) consecutive months being on the day following the last day of an authorized deferment period.

(50) "Recognized equivalent of a high school diploma" means:

(a) A general education development (GED) certificate; or

(b) A state certificate received by a student after the student has passed a state authorized examination which the state recognizes as the equivalent of a high school diploma.

(51) "Regular student" means a person who is enrolled or accepted for enrollment at a participating institution for the purpose of obtaining a degree, certificate, or other recognized educational credential offered by that institution.

(52) "Robert T. Stafford Federal Student Loan program" means the student loan program authorized by Part B of the federal Act, consisting of subsidized and unsubsidized loans authorized by sections 428 (20 USC Section 1078) and 428H (20 USC Section 1078-8) of the federal Act, and includes loans previously made under the guaranteed student loan program.

(53) The definition of "secretary" is governed by KRS 164.740(20).

(54) "Six (6) month training program" means:

(a) A program which is at least:

1. Sixteen (16) semester or trimester hours or units, or twenty-four (24) quarter hours or units, at an institution using credit hours or units to measure academic progress;

2. 600 clock hours of supervised training at an institution using clock hours to measure academic progress; or

3. 600 clock hours in a correspondence program;

(b) A program which the secretary determines is at least a six (6) month training program on the basis of:

1. A certification by the nationally recognized accrediting association that accredits the institution that the program offered by the institution is equal in course content and student workload to the comparable clock or credit hour program described in paragraphs (a)1 through 3 of this subsection; and

2. The secretary's ratification of that accrediting agency's determination.

(55) "State" means each state of the Union, the Commonwealth of Puerto Rico, the District of Columbia, American Samoa, Guam, the Trust Territory of the Pacific Islands, the Virgin Islands, and the Northern Mariana Islands.

(56) "State Student Incentive Grant (SSIG) program" means the grant program authorized by subpart 4 of Part A of the federal Act (20 USC 1070c, et seq.).

(57) "Subsidized Federal Stafford Student loan" means a loan qualifying for payment of an interest subsidy on behalf of the borrower under section 428 of the federal Act (20 USC Section 1078).

(58) "Supplemental Educational Opportunity Grant (SEOG) program" means the grant program authorized by subpart 3 of Part A of the federal Act (20 USC 1070b, et seq.).

(59) "Totally and permanently disabled" means the inability of a borrower to work and earn money because of an impairment that is expected to continue indefinitely or result in death.

(60) "Undergraduate student" means a student who is enrolled at a school in a course or program of study, at or below the baccalaureate level, that usually does not exceed four (4) academic years, or is up to five (5) academic years in length and shall be designed to lead to a first degree. A student enrolled in any other length program is considered an undergraduate student for only the first four (4) academic years.

(61) "Unsubsidized federal Stafford student loan" means a student loan authorized under section 428H of the federal Act (20 USC Section 1078-8).

(62) "U.S. citizen or national" means:

(a) A citizen of the United States; or

(b) A person defined in the Immigration and Nationality Act (8 USC 1101, (a)(22)) who, though not a citizen of the United States, owes permanent allegiance to the United States.

WAYNE STRATTON, Chairman

APPROVED BY AGENCY: September 24, 1993

FILED WITH LRC: September 27, 1993 at 9 a.m.

DEPARTMENT OF MILITARY AFFAIRS
(As Amended)

106 KAR 2:010. Kentucky Veterans' Program Trust Fund implementation of program.

RELATES TO: KRS 40.460(2)(b), **141.444**
STATUTORY AUTHORITY: KRS 40.450**(3)** **[~~(2)~~]**
NECESSITY AND FUNCTION: KRS 40.460(2)(b) establishes the Veterans' Program Trust Fund and authorizes the department to administer the fund and programs financed by the proceeds and interest derived from the fund. This administrative regulation establishes a Board of Directors to administer the fund and establishes criteria for programs financed by the fund.

Section 1. Definitions. "Fund" means the Kentucky Veterans' Program Trust Fund.

Section 2. Criteria for Programs. (1) Monies derived from the fund may be expended for approved programs that:

(a) Provide items for recreational use or service centers or for organizations providing services to veterans if the items are not provided by programs, centers, or organizations established by federal or state law or appropriation;

(b) Organize and foster programs that assist veterans including assistance in the use of existing resources that do not duplicate assistance available from programs established by federal or state law or appropriation;

(c) Encourage and assist veterans to volunteer for programs or services dealing with problems encountered by veterans;

(d) Work with the public and private sectors to honor and recognize the service and sacrifice of veterans;

(e) Provide services, supplies, programs, equipment or other expenditures deemed essential to the operation of the Kentucky Veterans Center and other Kentucky veterans nursing homes that would otherwise not be available; and

(f) Provide financial support to the construction or operation of state veterans cemeteries when such support would not otherwise be available.

(2) Fundraising.

(a) The fund may accept gifts, donations, and grants from an individual, a corporation, or government entity.

(b) Solicitations of funds or fundraising on behalf of the fund shall not be made unless approved by the Adjutant General.

Section 3. Board of Directors. (1) Board of Directors shall be appointed by the Adjutant General.

(2) The Board of Directors shall consist of:

(a) The Adjutant General, who shall serve as its chairman;

(b) The Deputy Adjutant General, who shall serve as its vice-chairman;

(c) The Director, Kentucky Center for Veterans Affairs;

(d) The executive director of the fund appointed by the Adjutant General;

(e) A member of each of the following:

1. Joint Executive Council of Veterans Organizations of Kentucky;
2. Governor's Advisory Board for Veterans Affairs**[~~; and~~**
~~3. Special Subcommittee on Veterans' Affairs~~].

(3) Board members.

(a) The organizations specified in subsection (2)(e) of this section shall recommend two (2) members of their organizations to the Adjutant General for his final selection for appointment to the Board of Directors.

(b) A member of the Board of Directors shall be an honorably separated veteran, as defined by the provisions of KRS 36.310.

(4) Term of members. The members appointed pursuant to subsection (3)(e) of this section shall serve for a period of three (3) years.

(5) The Board of Directors shall:

(a) Meet at the call of the chairman;

(b) Inform organizations represented on the board of actions considered and taken by the board;

(c) Review projects and recommend approval or disapproval of projects to the Adjutant General;

(d) Prioritize projects for the Adjutant General's approval;

(e) At the request of the Adjutant General, investigate the need for specific projects or programs;

(f) Recommend guidelines for projects to the Adjutant General;

(g) Make recommendations to the Adjutant General for the utilization and control of funds in the Veterans' Program Trust Fund; and

(h) Prepare an annual report providing an accounting of the Veterans' Program Trust Fund assets and financial activity for each calendar year.

(6) The executive director of the fund shall:

(a) Administer approved projects;

(b) Maintain records of the fund that are required for the administration of the Veterans' Program Trust Fund and projects approved under the provisions of this administrative regulation; and

(c) **Attend meeting as the representative of the fund as directed by the chairman.** **[~~Attend meetings of the following organizations as the representative of the fund:~~**
~~1. Legislative Special Subcommittee on Veterans Affairs;~~
~~2. Joint Executive Council of Veterans Organizations;~~
~~3. Governor's Advisory Board for Veterans Affairs; and~~
~~4. Meetings of state veterans organizations.~~]

MG ROBERT L. DeZARN, The Adjutant General
APPROVED BY AGENCY: October 15, 1993
FILED WITH LRC: October 15, 1993 at 9 a.m.

GENERAL GOVERNMENT CABINET
Board of Hairdressers and Cosmetologists
(As Amended)

201 KAR 12:060. Inspections.

RELATES TO: KRS 317A.050, 317A.060
STATUTORY AUTHORITY: KRS 317A.060
NECESSITY AND FUNCTION: Establishments licensed by this board require periodic inspections to insure compliance of the statutes and administrative regulations of the board. Posting of the licensees' pictures with their licenses aids the inspector and board members in determining the validity of each license of the personnel.

Section 1. Any board member, the administrator and inspectors shall be allowed to enter any establishment licensed by this board or any place purported to be practicing cosmetology at any reasonable hour for the purpose of determining if the individuals are complying with the statutes and administrative regulations of the board.

Section 2. Each licensee shall attach his picture to his license and place same in a conspicuous area in the salon or school.

Section 3. Any salon closing for business but maintaining yearly license renewal shall be considered an inactive salon and shall remain same provided plumbing and equipment is not removed. The **[~~Said~~]** salon shall be inspected periodically. Any salon removing equipment and plumbing shall be considered out of business and **the** **[~~said~~]** license voided.

Section 4. All establishments licensed by this board shall be inspected a minimum of two (2) times per year.

PAT WILSON GAISER, Chairman
APPROVED BY AGENCY: October 4, 1993
FILED WITH LRC: October 12, 1993 at 4 p.m.

GENERAL GOVERNMENT CABINET
Board of Hairdressers and Cosmetologists
(As Amended)

201 KAR 12:065. Inspection of new, relocated and change of owner salons.

RELATES TO: KRS 317A.050, 317A.060
STATUTORY AUTHORITY: KRS 317A.060
NECESSITY AND FUNCTION: Any business seeking licensing by this board shall meet various city, county and state zoning laws, building and plumbing codes, as well as inspection by board personnel. **The board shall** **[~~This board does~~]** not issue a dual license for barber shops and beauty salons.

Section 1. All new beauty salons and all beauty salons moving to a new location shall complete an application furnished by the board.

Section 2. All new beauty salons, all beauty salons moving to a new location, and all beauty salons changing owners shall notify the board five (5) days before opening for business of the new location, date on which the salon is to be opened for business and name of the owner and**[~~/or~~]** manager of the salon.

Section 3. All new beauty salons and all beauty salons moving to a new location shall be inspected by an inspector employed by the board before issuance of license. **A** **[~~No~~]** salon shall **not** open for business prior to issuance of a salon license.

Section 4. All new beauty salons and all beauty salons moving to a new location shall comply with all city, county, and state zoning, building and plumbing laws, administrative regulations and codes.

Section 5. (1) Except as provided by subsection (2) of this section, all beauty salons shall be separated from all barber shops by a soundproof partition extending to the ceiling and each facility shall have its own individual entrance.

(2) The provisions of subsection (1) of this section **shall** **[~~do~~]** not apply to a nursing home if it:

(a) Has obtained a salon license from the board; and

(b) The practice of barbering does not occur at the same time as the practice of cosmetology.

(3) If the provisions of subsection (2) of this section have been met, a cosmetologist may engage in the practice of cosmetology on the premises of a nursing home in the same facility established by the nursing home for the practice of barbering.

Section 6. Any salon located in a residence shall have an outside entrance.

PAT WILSON GAISER, Chairman
APPROVED BY AGENCY: October 4, 1993
FILED WITH LRC: October 12, 1993 at 4 p.m.

GENERAL GOVERNMENT CABINET
Board of Hairdressers and Cosmetologists
(As Amended)

201 KAR 12:085. School advertising.

RELATES TO: KRS 317A.050
STATUTORY AUTHORITY: KRS 317A.050
NECESSITY AND FUNCTION: Schools advertise for student enrollments and services rendered.

Section 1. Schools shall not use deceptive statements and false promises which act as inducements in an effort to get students to enroll in **the** **[~~said~~]** schools.

Section 2. A school of cosmetology shall display in the reception room, clinic room, or any other area in which the public receives services a sign to read: "School of Cosmetology - Work Done by Students Only." The sign shall be large enough to be read the length of the room in which **the** sign is posted.

Section 3. **A** **[~~No~~]** school **shall not be** **[~~is~~]** permitted to guarantee students' work.

Section 4. Schools shall be **[~~are~~]** forbidden to guarantee future employment to students.

PAT WILSON GAISER, Chairman
APPROVED BY AGENCY: October 4, 1993
FILED WITH LRC: October 12, 1993 at 4 p.m.

GENERAL GOVERNMENT CABINET
Board of Hairdressers and Cosmetologists
(As Amended)

201 KAR 12:100. Sanitation standards.

RELATES TO: KRS 317A.060
STATUTORY AUTHORITY: KRS 317A.130
NECESSITY AND FUNCTION: KRS 317A.060 authorizes the Kentucky State Board of Hairdressers and Cosmetologists to regulate the practice of cosmetology in Kentucky and establish uniform standards for sanitation.

Section 1. All establishments, including furniture, equipment, utensils, floors, walls, ceilings, restrooms and lavatories shall be kept in a clean and sanitary condition. Clean towels shall be provided for use of the patrons. The use in common of towels of any type **shall be** **[~~is~~]** prohibited.

Section 2. Each student, apprentice cosmetologist, and cosmetologist shall have a sufficient number of combs and brushes at their disposal. **[~~Said~~]** Combs and brushes shall be sterilized after each use. **A** **[~~No~~]** comb or brush shall **not** be used in common on any patron. Any article dropped on the floor shall be disinfected before being used again.

Section 3. All water supply and waste connections shall be constructed in conformity with the city, county, and state plumbing statutes, administrative regulations and code.

Section 4. A sufficient number of covered waste receptacles shall be provided in every establishment for disposal of trash and other waste.

Section 5. A protective covering shall be placed around the

patron's neck so the cape does not come into contact with the nude skin. The protective covering shall be discarded after each use.

Section 6. The Cabinet for Human Resources, Department for Health Services, has approved the following methods of disinfection.

(1) Dry disinfection. The use of Formalin and ultraviolet rays are considered acceptable methods of dry disinfection provided labels and manufacturer's directions are followed.

(2) Liquid disinfection.

(a) A ten (10) percent solution of Formalin **shall be** [~~is~~] satisfactory for disinfection of all equipment. Formalin does not attack copper, nickel, zinc, or other metal substances.

(b) A seventy (70) percent solution of alcohol **shall be** [~~is~~] an effective disinfectant for cleaning equipment.

(c) Any other liquid disinfectant approved by the Cabinet for Human Resources **shall** [~~will~~] be acceptable, provided labels and manufacturer's directions are followed.

Section 7. Use of brush rollers shall be [~~are~~] prohibited in any establishment licensed by this board.

Section 8. (1) The following grading shall be used for the inspection of any salon or school of cosmetology: 100%-90% = A; 89%-80% = B; 79%-70% = C.

(2) Any standard of less than an "A" rating shall [~~will~~] indicate failure to comply with the statutes and administrative regulations of the board.

PAT WILSON GAISER, Chairman
APPROVED BY AGENCY: October 4, 1993
FILED WITH LRC: October 12, 1993 at 4 p.m.

GENERAL GOVERNMENT CABINET
Board of Hairdressers and Cosmetologists
(As Amended)

201 KAR 12:110. School license.

RELATES TO: KRS 317A.060, 317A.090
STATUTORY AUTHORITY: KRS 317A.050, 317A.060
NECESSITY AND FUNCTION: Each school owner shall submit an application to operate a school of cosmetology, furnish proof of financial responsibility, and meet all city, county, and state zoning, building, and plumbing codes.

Section 1. Each person, firm or corporation applying for a license to operate a school of cosmetology shall submit an application provided by the board.

Section 2. Each individual owner, or one (1) partner, in the instance of a partnership, or one (1) corporate officer in the instance of a corporation, shall submit a financial statement indicating financial assets in the amount of $10,000 for twenty (20) students enrolled and $1,000 for each additional student enrolled.

Section 3. A person having any interest in operating a school shall submit a minimum of two (2) character references, proposed copy of student contract indicating all financial charges to enrolling students, and term of lease for location, if applicable.

Section 4. Application for license to operate a school of cosmetology shall be accompanied by an architect's or draftsman's plan of proposed premises drawn to scale, showing the arrangements of the classroom, clinic area, mannequin area, dispensary, reception area, shampoo area, office and any other area of the school, entrance and exits, and placement of equipment.

Section 5. A license to operate a cosmetology school carries the approval of this board and shall be [~~is~~] valid only for the location and person, firm, or corporation named on application and license issued by the board. A school of cosmetology license **shall not be** [~~is never~~] transferable from one location to another or from one person, firm or corporation to another.

Section 6. The owners, firm or corporation operating a school of cosmetology shall notify the board in writing twenty (20) days prior to selling, transferring, or changing of ownership and management of a school. Prospective ownership shall meet all qualifications of owning a school and have the approval of the board.

Section 7. Following approval of the application to operate a school of cosmetology by the board, the site shall be inspected by a quorum of the board or by at least one (1) member of the board and the board administrator. A final inspection of the premises shall be conducted by the members of the board prior to issuing of license. All schools shall comply with city, county, and state zoning laws, plumbing and building codes. The construction or renovation of the proposed school shall be completed and a final inspection conducted by the board within twelve (12) months from the date of approval of the site. Any extension of this period of time shall be granted for good cause shown provided **the** [~~said~~] request is presented, in writing, to the board.

Section 8. Any cosmetology school owner, manager, or instructor who misrepresents facts to the board, to the students, or to the general public concerning any information regarding the school or any student enrolled **in the school** [~~therein~~], or in any way violates administrative regulations adopted by this board, may be served notice to show cause before this board, why the school's license and the instructor's license should not be revoked.

Section 9. Any person, establishment, firm or corporation which accepts, directly or indirectly, compensation for teaching persons any branch or subjects of cosmetology as defined in KRS 317A.010 shall be classified as a school and shall [~~will~~] be required to comply with all the provisions of law and the rules and administrative regulations of this board.

Section 10. The board shall not license a correspondence school, nor shall the board license any school of cosmetology in an establishment that teaches any other trade, profession or business, excluding vocational training schools.

Section 11. **A** [~~No~~] person who is an owner, partner, stockholder, corporate officer or who has any financial or other interest in the management and control of the school, shall **not** be enrolled in the [~~said~~] school as a student.

Section 12. **A** [~~No~~] school of cosmetology shall **not** permit or require students to be in attendance at school more than forty (40) hours in any one (1) week.

Section 13. Any school of cosmetology desiring night classes may, by proper application, be granted permission from the board to operate **the** [~~such~~] classes. Under no condition shall the school operate past 10 p.m. local time.

Section 14. (1) It shall be considered a conflict of interest and therefore impermissible for a member of the board or for an employee of the board to apply for a new school license or to apply for any existing school license under KRS 317A.090 and this administrative regulation. If any member of the board or any employee of the board desires to apply for a new school license or for any existing school license, the [~~said~~] board member or employee of the board shall

submit a letter of resignation to the board no later than thirty (30) days prior to submitting an application for a school license.

(2) The board may choose not to consider any application for a school license submitted by a relative of a member of the board, by a relative of a board employee or by any person with whom a member of the board or a board employee shares a significant financial interest. Failure to make full disclosure to the board as to the exact nature of the relationship between the board member or employee of the board and the applicant may result in denial of approval of licensure.

(3) The provisions of this section shall apply only to applications for licenses approved or filed, licenses issued, or actions of a person serving as a member of the board or as a board employee after June 10, 1986.

PAT WILSON GAISER, Chairman
APPROVED BY AGENCY: October 4, 1993
FILED WITH LRC: October 15, 1993 at 10 a.m.

GENERAL GOVERNMENT CABINET
Board of Hairdressers and Cosmetologists
(As Amended)

201 KAR 12:120. School faculty.

RELATES TO: KRS 317A.010
STATUTORY AUTHORITY: KRS 317A.050, 317A.090
NECESSITY AND FUNCTION: All instructors and apprentice instructors shall hold the appropriate license and provide adequate supervision and instruction to students.

Section 1. Any person employed by a school for the purpose of managing, teaching and instruction, shall be licensed as a cosmetologist instructor. Each licensed instructor or apprentice instructor shall keep their photograph posted with their license.

Section 2. All students shall be under the immediate supervision of a licensed instructor during all classes and study hours and practical student work.

Section 3. **A** **[~~No~~]** licensed cosmetologist shall **not** render services in a school. Instructors and apprentice instructors shall render services only incidental to and for the purpose of instruction.

Section 4. Every instructor and apprentice instructor employed in a school of cosmetology shall devote their entire time during the school hours to that of instructing the students and shall not apply his or her time to that of private or public practice for compensation during school hours or permit students to instruct or teach other students in the absence of a teacher.

Section 5. Teaching by demonstrators shall be [~~is~~] strictly forbidden, except properly qualified licensed operators may demonstrate to the students new processes, new preparations, and new appliances in the presence of licensed teachers. **[~~Such~~]** A demonstration may only take place in a licensed school. Schools shall not permit more than one (1) demonstration in any calendar month.

Section 6. All services rendered in a school on patrons shall be done by students only. Instructors shall be allowed to teach and aid the students in performing the various services.

Section 7. Instructors and apprentice instructors in attendance shall, at all times, wear a clean, washable uniform, and an insignia or badge indicating they are an instructor or apprentice instructor in the school.

Section 8. Each school of cosmetology shall, within five (5) days after the termination, employment or other change in faculty personnel, notify the board of such change.

Section 9. Schools enrolling an apprentice instructor shall maintain the following ratio: one (1) apprentice instructor to one (1) instructor.

PAT WILSON GAISER, Chairman
APPROVED BY AGENCY: October 4, 1993
FILED WITH LRC: October 12, 1993 at 4 p.m.

GENERAL GOVERNMENT CABINET
Board of Hairdressers and Cosmetologists
(As Amended)

201 KAR 12:125. Schools' student regulations.

RELATES TO: KRS 317A.090
STATUTORY AUTHORITY: KRS 317A.060
NECESSITY AND FUNCTION: To protect the health and safety of the public and to protect the general public and students enrolled in schools of cosmetology against misrepresentation, deceit, or fraud while seeking services or **while** enrolled **[~~therein~~]**.

Section 1. **[~~No~~]** Student**s** enrolled in a school of cosmetology shall **not**be [~~is~~] permitted to receive a salary or commission from the school while enrolled as a student in **the** **[~~said~~]** school.

Section 2. Students shall not be permitted to smoke while providing services to patrons.

Section 3. **[~~No~~]** Student**s** shall **not** be allowed to remain in the school to work on patrons upon completion of the required hours for the appropriate course of enrollment.

Section 4. **After graduation from school, a student shall not** **[~~No student, after he or she has graduated from a school, shall~~]** be allowed to return to that school or any other school for further practice and work in the pay departments without permission of the board.

Section 5. Schools shall, at all times, display in a centralized conspicuous place the enrollment permits of all students enrolled therein.

Section 6. Schools shall require students to wear some kind of insignia, badge, cap, or marking on their uniforms to indicate that he or she is a student in the school.

Section 7. Schools shall require students to, at all times, wear a clean washable uniform, coat, or smock.

Section 8. Students shall be on time for all class studies and work.

Section 9. **[~~No~~]** Student**s** shall **not** be permitted to leave during school hours without special permission from the manager.

Section 10. **[~~No~~]** Student**s** shall **not** be permitted to leave a class during a lecture or demonstration.

Section 11. Students are not permitted to operate any equipment in which there is known an operating hazard.

Section 12. All student kits containing all equipment, tools, and implements shall remain on school premises until completion of the

course of enrollment or withdrawal from the school.

Section 13. A student desiring to change from one school to another shall notify the school in which the student is presently enrolled of their withdrawal and complete an application for enrollment when entering another school.

Section 14. Students **shall be** [~~are~~] required to comply with the rules of their school, as long as they do not conflict with KRS Chapter 317A or the **administrative** regulations of the board.

Section 15. Owners of schools shall include the schools' refund policy in school-student contracts.

Section 16. Each student in a school shall be [~~is~~] permitted to file a complaint with this board concerning the school in which they are enrolled, provided the information is clearly and concisely given and the complaint shall at all times be signed by the complainant.

Section 17. Student Dismissal and Appeals. (1) Schools may dismiss students for law violations, rule violations, insubordination, or for any reason for which the board could deny, refuse to renew or revoke a license if the students were licensed pursuant to KRS Chapter 317A.

(2) Schools may dismiss students for violations of any of KRS Chapter 317A or for the violation of any **administrataive regulation adopted by the board** [~~rule of the board adopted pursuant thereto~~] or for violation of any school rule not in conflict with said chapter or the board rules.

(3) Any student aggrieved by dismissal from a school may appeal to the board by writing the board and requesting that an appeal be granted, but **the** [~~such~~] appeal shall be taken within ten (10) days after the date of dismissal and such appeal shall be docketed by the board for a hearing within thirty (30) days after the appeal request is received. The hearing day shall be set for as early a day as possible. The hearing and production of evidence shall be in conformity with that provided for board hearings in KRS Chapter 317A.

(a) Upon hearing the appeal, the board shall determine: whether [~~or not~~] the school acted **with**in **the** scope of its power; and whether or not there is sufficient evidence to support the order of dismissal appeal from **the** [~~said~~] school.

(b) After the hearing the board shall enter an order sustaining or setting aside the school's order of dismissal. If the order of dismissal is overruled and set aside by the board, then the school shall reinstate the student.

Section 18. Within ten (10) working days from a student's withdrawal, a cosmetology school shall report the name of the withdrawing student and send the permit card and a notarized certification of the total number of hours that the withdrawing student has acquired in their cosmetology school to the board's office.

Section 19. In the event that the school after receiving request for the information outlined in Section 18 of this **administrative** regulation does not forward same to the board within ten (10) days after receiving requests, a verified affidavit from the student as to the number of hours received may be accepted by the board and entered on their records as the appropriate number of hours earned.

Section 20. A training period for students **shall be** [~~is~~] as follows: eight (8) hours per day, forty (40) hours per week (maximum). A student of cosmetology shall have a minimum of 225 days of school attendance under instruction. A student of manicuring shall have a minimum of thirty-seven and one-half (37 1/2) days of school attendance under instruction.

Section 21. All students shall be allowed thirty (30) minutes toward the middle of any eight (8) hour day for eating or taking a rest break. Students shall not be given credit for the one-half (1/2) hour break toward meeting the 1,800 hour requirement.

Section 22. An informational copy of the statutes and **administrative** regulations of the Kentucky Board of Hairdressers and Cosmetologists shall be provided to each student enrolled in a school of cosmetology. Copies may be obtained from the board's office.

Section 23. [~~No~~] Student**s** shall **not** be in attendance in a school of cosmetology more than eight (8) hours in one (1) day and no more than five (5) days in one (1) week.

Section 24. Persons completing hours in a school of cosmetology within a period of five (5) years from date of enrollment shall be given credit by the board for hours completed. Any extension of this period of time may be granted at the discretion of the board.

PAT WILSON GAISER, Chairman
APPROVED BY AGENCY: October 4, 1993
FILED WITH LRC: October 12, 1993 at 4 p.m.

GENERAL GOVERNMENT CABINET
Kentucky Board of Nursing
(As Amended)

201 KAR 20:240. Fees for applications and for services.

RELATES TO: KRS 314.041(5), 314.042(3), (6), 314.051(3), 314.071(1), (2), 314.073(4), (6), 314.161
STATUTORY AUTHORITY: KRS 314.131
NECESSITY AND FUNCTION: To establish fees to carry out the provisions of KRS Chapter 314.

Section 1. Fees for Licensure and Registration Applications. (1) The board shall collect fees for applications for licensure or for registration, and for renewal or reinstatement thereof.

(2) The fees shall not exceed the amounts indicated for the following applications:

(a) Licensure as a registered nurse - seventy (70) [~~ninety (90)~~] dollars.

(b) Licensure as a licensed practical nurse - seventy (70) [~~ninety (90)~~] dollars.

(c) Biennial renewal of active license - fifty (50) [~~seventy (70)~~] dollars.

(d) Biennial renewal of inactive license - thirty-five (35) [~~fifty (50)~~] dollars.

(e) Reinstatement of license - seventy (70) [~~ninety (90)~~] dollars.

(f) Active to inactive license status - thirty-five (35) [~~fifty (50)~~] dollars.

(g) Inactive to active license status - fifty (50) [~~seventy (70)~~] dollars.

(h) Endorsement verification of Kentucky licensure or registration - twenty (20) [~~fifty (50)~~] dollars.

(i) Duplicate license or registration card or letter - twenty (20) dollars.

(j) Registration as an advanced registered nurse practitioner - seventy (70) [~~ninety (90)~~] dollars.

(k) Biennial renewal of registration as an advanced registered nurse practitioner - fifty (50) [~~seventy (70)~~] dollars.

(l) Reinstatement of registration as an advanced registered nurse practitioner - seventy (70) [~~ninety (90)~~] dollars.

(3) An application shall not be evaluated unless current fee is submitted.

Section 2. Fees for Applications for Continuing Education

Approvals. The board shall collect fees for applications for approval of providers of continuing education and for renewal or reinstatement thereof not to exceed the following amounts:

(1) Initial provider approval - $100.

(2) Reinstatement of provider approval - $100.

(3) Biennial renewal of approval - seventy-five dollars.

(d) Individual review of continuing education offerings - thirty-five (35) dollars.

Section 3. Fees for Services. (1) The board shall collect fees for the following services not to exceed the amounts indicated:

(a) Administration of examination for registered nurse licensure - sixty (60) dollars.

(b) Administration of examination for practical nurse licensure - thirty-five (35) dollars.

(c) Verification of licensure or registration letter - ten (10) dollars.

(d) Copy of examination results or transcripts - ten (10) dollars.

(e) Nursing certificate (optional) - thirty (30) dollars.

(2) The fee for copies of statutes, regulations, and duplicated or printed materials shall be one (1) dollar minimum or shall not exceed twenty-five (25) cents per page.

(3) An applicant for licensure who takes or retakes the licensure examination shall pay the current examination fee as required by the national council of state boards of nursing in addition to the board application for licensure and administration of examination fees pursuant to subsection (5) of this section.

(4) A nurse who is licensed in another state, United States territory or country and who submits an application for licensure in Kentucky as a registered nurse or a licensed practical nurse, but who is required to take or retake the licensure examination, shall pay the current examination fee as required by the national council of state boards of nursing in addition to the board application for licensure and administration of examination fees.

(5) Applicants retaking the licensure examination shall:

(a) Submit fee for administration of examination prior to each time examination is taken.

(b) Submit new application and current fees if more than one (1) year has passed since date last examination was written or more than two (2) years have passed since the filing date of the original application.

(6) Graduates of foreign schools of nursing shall assume responsibility for costs incurred to submit credentials translated into English, commission on graduates of foreign nursing schools certificates, immigration documents and other documents needed to verify meeting licensure requirements.

Section 4. With the exception as stated in Section 3(5)(b) of this **administrative** regulation, an application, which is not completed within one (1) year from the date the application form is filed with the board office, shall lapse and the fee shall be forfeited.

Section 5. An applicant who meets all requirements for approval, licensure or registration will be issued the appropriate approval, license or registration without additional fee.

Section 6. Refunds. (1) Current administration of examination fee on file for an examination candidate unable to be present for the administration of an examination due to unusual circumstances such as weather conditions, accidents, illness, family circumstances, **shall** ~~[will]~~ be refunded upon submission of written request by candidate.

(2) Overpayment of five (5) dollars or more of current fee **shall** ~~[will]~~ be refunded upon submission of written request by payer.

Section 7. A partial application fee may be held on record for one (1) year and may be applied toward the fee to meet the requirements for licensure or registration.

Section 8. Fees properly collected by the board are nonrefundable with the exceptions as stated in Section 6 of this **administrative** regulation.

~~[Section 9. This administrative regulation shall expire on adjournment of the next regular session of the General Assembly.]~~

ROBERTA G. SCHERER, President
APPROVED BY AGENCY: October 14, 1993
FILED WITH LRC: October 15, 1993 at 9 a.m.

GENERAL GOVERNMENT CABINET
Kentucky Athletic Commission
(As Amended)

201 KAR 27:010. General requirements for boxing, elimination events, kick boxing, matches, shows, or exhibitions.

RELATES TO: KRS 229.071(2), 229.171
STATUTORY AUTHORITY: KRS 229.180
NECESSITY AND FUNCTION: ~~[KRS 229.071(2) provides that an applicant for a license to conduct professional boxing and wrestling matches must always conduct himself in the best interest of boxing and wrestling generally.]~~ KRS 229.171 states that the commission is given the sole control, authority and jurisdiction over professional boxing ~~[and wrestling]~~ and all persons who participate therein. This administrative regulation sets forth the general requirements for boxing, elimination events, and kick boxing matches, shows, or exhibitions.

Section 1. The proposed program for a show shall ~~[must]~~ be filed with the commission~~[er]~~ at least five (5) days prior to the date of the show. ~~[Substitutions may be made for good cause before noon of the day of the show.]~~ Notice of any change in a program or any substitutions in a show shall ~~[must]~~ be immediately filed with the commission~~[er. After receipts of approval of the commissioner for such change or substitution, such changes or substitutions must immediately be publicly announced by the club in a newspaper of general circulation and by such other methods as are available and convenient]~~.

Section 2. Before the commencement ~~[beginning]~~ of a show, all changes or substitutions shall be announced from the ring, and in addition, notice of any change or substitution shall ~~[must]~~ be posted in a conspicuous place at the ticket office. Purchasers of tickets shall ~~[will]~~ be entitled, upon request by them, to a refund of the purchase price of **the** ~~[such]~~ tickets, provided **the** ~~[such]~~ request is made before the commencement of the show.

~~[Section 3. Promoters shall be held responsible for any betting, wagering or gambling in any form which takes place upon their premises. Each club shall post in four (4) parts of the arena the warning "No Betting Allowed."~~

~~Section 4. All promoters shall cause the prompt ejection of any person guilty of any disorderly conduct or drunkenness.~~

~~Section 5. Promoters shall not permit drinks to be dispensed on the floor of the arena nor on the premises except in paper cups, and not at all during the actual presentation of the show.]~~

Section 3. For boxing, elimination events, and kick boxing shows ~~[6.]~~ the row nearest the ring on all four (4) sides shall be ~~[known as "Commission and Press Row" and shall be]~~ under the exclusive control of the commission.

[Section 7. All applications for permits must reach the commissioner not less than ten (10) days prior to the date of the proposed match or exhibition.]

Section 4. [8.] The ring specifications for boxing, kick boxing, and elimination events shall be as follows:

(1) All matches [contests] shall be held in a roped ring not less than sixteen (16) [nor more than twenty (20)] feet square inside the ropes; and the floor of the ring shall extend beyond the ropes for a distance of not less than one (1) [two (2)] feet and shall be elevated not more than four (4) feet above the arena floor and shall be provided with steps for the use of those properly entitled to enter the ring on two (2) sides.

(2) The ring shall be formed of posts and ropes, **with [said]** ropes extending in a triple line eighteen (18) inches, thirty-five (35) inches and fifty-two (52) inches above the ring floor, and **with [said]** ropes to be not less than one (1) inch in diameter and wrapped in clean, soft material drawn taut. Ropes shall be held in place with vertical straps on each of the four (4) sides. A fourth rope may be used subject to prior approval by the commission[er].

(3) Ring posts shall be made of metal or other strong material not less [more] than three (3) inches in diameter and not nearer the ropes than eighteen (18) inches and shall be wrapped in soft, clean material.

(4) The ring floor shall be padded or cushioned with clean, soft material, to be approved by the commission[er], of not less than one (1) inch in thickness and extending over the edge of the platform, with a covering of canvas or similar material tightly stretched.

(5) Turnbuckles shall be padded with a safe, soft vertical pad at least six (6) inches in width.

Section 5. [9.] A bell [gong] or horn shall be used by the timekeeper in indicating the time.

Section 6. [10.] Buckets, water buckets, stools, towels, rubber gloves, [powdered resin, fans] and **[such]** other articles as are necessary in the show [contest] shall be furnished in sufficient number and quantity by the promoter.

[Section 11. Boxing decisions shall be rendered as follows:

(1) If a contest lasts the scheduled limit, the winner of such contest shall be decided by a majority vote of the judges if three (3) are used, or by a majority vote of the judges and the referee if two (2) judges are used, or by the referee alone if no judges are used.

(2) Decisions shall be based primarily on effectiveness, giving credit for:

(a) Clean, forceful hitting in boxing bouts;

(b) Aggressiveness;

(c) Defensive work; and

(d) Ring generalship and deducting points for an opposite showing.

(3) The winner of a wrestling contest shall be decided by a fall or falls or time limit as may be agreed upon in making the match.

Section 12. Boxing scoring shall be as follows:

(1) Each round in boxing is to be accounted for on the score card, using the five (5) point (or ten (10) point at the commissioner's discretion) must system. Score in ratio of merit and demerit, the difference displayed by the contestants.

(2) Score cards must be signed and handed to the announcer in the ring and filed by him with the commissioner or employee of the Kentucky Athletic Commission in attendance. The decision shall then be announced from the ring.

Section 13. No boxing contestant shall take part in any bout until after six (6) days have elapsed since his participation in a bout of ten (10) rounds or more nor until three (3) days have elapsed since his participation in a bout of less than ten (10) rounds.

Section 14. Boxing rounds shall be as follows:

(1) Rounds shall be of three (3) minutes duration, with one (1) minute rest period between rounds.

(2) No boxing bout, except championship bouts, shall be of more than twelve (12) rounds.

(3) All main bouts shall be ten (10) rounds or more unless the commissioner in his discretion provides otherwise.

(4) Championship bouts may be more than twelve (12) rounds, but the number of rounds shall be approved by the commissioner.

Section 15. Requirements for boxing gloves shall be as follows:

(1) Contestants shall wear boxing gloves, to be furnished by the promoter, of equal weight and not less than six (6) ounces for contestants over the featherweight class and not less than five (5) ounces, in or under, the featherweight class.

(2) Gloves for all main bouts shall be new and shall be put on in the ring subject to the commissioner's discretion. All gloves shall be clean and in a sanitary condition. No breaking, roughing or twisting of gloves shall be permitted. The laces on gloves shall be tied on the back of the wrist and taped.

Section 16. Requirements for bandages shall be as follows:

(1) Only soft cotton or linen bandages shall be used for the protection of the boxer's hands. Bandages shall not be more than two (2) inches in width and five (5) yards in length for each hand.

(2) Medical adhesive tape not more than one (1) inch in width may be used to hold bandages in place. Adhesive tape shall not be lapped more than one eighth (1/8) of one (1) inch. Adhesive tape not to exceed one (1) thickness shall be crossed over the back of the hand for its protection. Three (3) strips of adhesive tape, lapping not to exceed one eighth (1/8) of one (1) inch, may be used for protection of the knuckles.

Section 17. The boxing count shall be as follows:

(1) If a boxer is knocked to the floor by his opponent or falls from weakness or other causes, his opponent shall immediately retire to the farthest corner of the ring and remain there until the referee completes his count or signals a resumption of action. The referee, after the opponent reaches the farthest corner of the ring, shall commence counting off the seconds and indicating the count with a motion of the arm.

(2) If a boxer fails to arise before the count of ten (10), the referee shall declare him the loser by waving both arms to indicate a knockout.

(3) If a boxer who is down arises during the count, the referee may, if he deems it necessary, step between the boxers long enough to assure himself that the boxer just arisen is in condition to continue the bout.

(4) Should a boxer who is down arise before the count of ten (10) is reached and again go down from weakness or the effects of a previous blow, without being struck again, the referee shall resume the count where he left off.

Section 18. A failure to resume a bout shall be as follows:

(1) Should a boxer fail to resume the bout for any reason after a rest period, or leave the ring during the rest period and fail to be in the ring when the gong rings to begin the next round, the referee shall count him out the same as if he were down in that round.

(2) If a boxer who has been knocked out of or has fallen out of the ring during a bout fails to return immediately to the ring and be on his feet before the expiration of ten (10) seconds, the referee shall count him out as if he were down.

Section 19. A boxer shall be considered "down" when:

(1) Any part of his body other than his feet is on the ring floor; or

~~(2) He is hanging helplessly over the ropes and in the judgment of the referee, he is unable to stand; or~~

~~(3) He is rising from the "down" position.~~

~~Section 20. (1) The following shall be considered boxing fouls:~~

~~(a) Hitting below the belt;~~

~~(b) Hitting an opponent who is down or who is getting up after having been down;~~

~~(c) Holding an opponent and deliberately maintaining a clinch;~~

~~(d) Holding an opponent with one (1) hand and hitting with the other;~~

~~(e) Butting with head or shoulder or using the knee;~~

~~(f) Hitting with inside or butt of the hand, the wrist, or the elbow, and all backhand blows;~~

~~(g) Hitting or "flicking" with the glove open or thumbing;~~

~~(h) Wrestling, or roughing, against the ropes;~~

~~(i) Purposely going down without having been hit;~~

~~(j) Deliberately striking at the part of opponent's body over the kidneys;~~

~~(k) Use of the pivot blow or rabbit punch or any physical action which may injure a contestant;~~

~~(l) Use of abusive or profane language; or~~

~~(m) Failure to obey the referee.~~

~~(2) A contestant who commits a foul may be disqualified and the decision awarded to his opponent by the referee. The referee must immediately do so if contestant commits a deliberate and willful foul which incapacitates his opponent.~~

~~(3) Any boxer committing a foul may be suspended for any length of time deemed necessary.~~

~~(4) If a bout is temporarily stopped by the referee, due to accidental fouling, said referee, with the aid of the physician, if necessary, shall decide whether the contestant who has been fouled is in physical condition to continue the bout. If in their opinion said contestant's chances have not been seriously jeopardized, as a result of the foul, he shall order the bout resumed after a reasonable time, such time to be set by the referee, but in any event not exceeding three (3) minutes.~~

~~Section 21. The following shall be prohibited in boxing:~~

~~(1) "Battle Royal;" and~~

~~(2) Use of grease or any other substance which may handicap an opponent.~~

~~Section 22. The wrestling canvas ring shall be clean and sanitary and free from grit, dirt, resin, or other foreign substances. The following provisions shall relate to wrestling "falls:"~~

~~(1) Both shoulders momentarily pinned to the canvas (for the referee's silent count of three (3) seconds) shall constitute a fall. Flying and rolling falls shall not count.~~

~~(2) Conceding a fall, or quitting because of having received punishment from a legitimate hold, constitutes a fall.~~

~~(3) Referee shall not place his hands under the shoulders of a contestant unless necessary to determine a fall.~~

~~(4) The referee shall slap on the back, or shoulder, a contestant securing a fall.~~

~~Section 23. When wrestling contestants roll off the canvas and under the ropes, they shall be ordered to the middle of the ring to resume the contest. If a contestant fails to obey the referee's order to return to the ring before the expiration of ten (10) seconds he shall be counted out and the decision awarded to his opponent.~~

~~Section 24. The following shall relate to wrestling holds:~~

~~(1) Any legitimate holds or methods known to wrestling science may be used by the contestant, but no deliberate slugging, strangling, gouging, biting, kicking, hair pulling, spitting, or scratching shall be permitted. (2) Contestant's fingernails must be trimmed well below the tips of the fingers.~~

~~(3) No contestant shall be permitted to grasp or hang onto clothing, canvas, or ropes for support during the progress of a contest.~~

~~(4) When a contestant throws an opponent over the ropes he will be automatically disqualified.~~

~~(5) When a referee orders the contestants to break, they must do so within a three (3) count.~~

~~Section 25. For use of foul tactics after warning by the referee, the offending wrestling contestant may be placed on the defensive or disqualified by the referee and the decision awarded to his opponent.~~

~~Section 26. No boxer whose license to box is under suspension in any other jurisdiction shall box in the Commonwealth of Kentucky.~~

~~Section 27. All referees and judges must attend at least one (1) seminar approved by the commission during each calendar year.~~

~~Section 28. Each promoter must furnish the commission copies of all contracts between him and any of the contestants.~~

~~Section 29. The annual license fee shall be $300 where the professional matches are to be conducted within fifteen (15) miles of the city limits of a city or cities containing an aggregate population of 200,000 or more and $100 elsewhere. Each such license shall expire twelve (12) months after the date of issue.~~

~~Section 30. An invoice showing the number of tickets printed along with full tickets not sold and stubs must accompany the promoter's report on the show and the figures shown thereon must correspond to the difference between tickets printed and full tickets not sold.~~]

TODD J. NEAL, Chairman
APPROVED BY AGENCY: October 13, 1993
FILED WITH LRC: October 14, 1993 at 9 a.m.

GENERAL GOVERNMENT CABINET
Kentucky Athletic Commission
(As Amended)

201 KAR 27:013. Scoring and conduct of boxing, kick boxing, and elimination events.

RELATES TO: KRS 229.101, 229.131, 229.171
STATUTORY AUTHORITY: KRS 229.180
NECESSITY AND FUNCTION: KRS 229.171 states that the commission is given the sole control, authority and jurisdiction over professional boxing, kick boxing, and elimination events and all persons who participate therein. This administrative regulation sets forth the rules relative to the conduct of all forms of boxing matches. The following administrative regulation applies to boxing, kick boxing, and elimination events.

Section 1. Judges, physicians, referees, and timekeepers shall be selected, licensed, and assigned by the commission.

Section 2. Decisions shall be rendered as follows:

(1) If a contest lasts the scheduled limit, the winner of **the** [~~such~~] contest shall be decided by:

(a) A majority vote of the judges if three (3) are used; or

(b) A majority vote of the judges and the referee if two (2) judges are used.

(2) Decisions shall be based primarily on effectiveness, giving credit for:

(a) Clean, forceful hitting;
(b) Aggressiveness;
(c) Defensive work; and
(d) Ring generalship, and deducting points for an opposite showing.

Section 3. Scoring shall be as follows:
(1) Each round in boxing shall be accounted for on the score card, using the ten (10) point must system. Scoring shall be in ratio of merit and demerit, the difference displayed by the contestants.
(2) Score cards shall be:
(a) Signed;
(b) Handed to the referee in the ring; and
(c) Filed by him with the commissioner or employee of the commission in attendance.
(3) The decision shall then be announced from the ri

Section 4. Rounds shall be as follows:
(1) Boxing or kick boxing rounds shall:
(a) Be of either two (2) or three (3) minutes duration; and
(b) Have not less than a one (1) minute rest period between rounds.
(2) Elimination rounds shall:
(a) Not exceed ninety (90) seconds duration; and
(b) Have not less than a one (1) minute rest period between rounds.

Section 5. Requirements for boxing gloves shall be as follows:
(1) For boxing, contestants shall wear boxing gloves which shall be:
(a) Clean and sanitary;
(b) Furnished by the promoter;
(c) Of equal weight;
(d) Not less than eight (8) ounces; and
(e) Thumbless or thumb-attached.
(2) For elimination events:
(a) Contestants shall wear boxing gloves and headgear which shall be:
1. Clean and sanitary;
2. Furnished by the promoter;
3. Clearly labeled with the promoter's name;
4. Of equal weight;
5. Not less than sixteen (16) ounces; and
6. Thumbless or thumb-attached.
(b) Contestants shall not be allowed to provide substitute gloves or headgear.
(3) For kick boxing:
(a) Contestants shall wear boxing gloves which shall be:
1. Clean and sanitary;
2. Furnished by the promoter;
3. Of equal weight;
4. Not less than eight (8) ounces; and
5. Thumbless or thumb-attached.
(b) Contestants shall also wear padded kick boxing boots on their feet approved by the commission.
(4) Gloves for all main matches shall be new and shall be put on in the ring subject to the discretion of the commissioner or employee of the commission.
(5) ~~[No]~~ Breaking, roughing, or twisting of gloves shall **not** be permitted.
(6) The laces on gloves shall be tied on the back of the wrist and taped.

Section 6. Requirements for bandages shall be as follows:
(1) For boxing and kick boxing only soft cotton or linen bandages shall be used for the protection of the boxer's hands. Bandages shall not be more than two (2) inches in width and twelve (12) yards in length for each hand.
(2) For elimination events bandaging of the hands shall not be allowed.
(3) Medical adhesive tape not more than one (1) inch in width may be used to hold bandages in place. Adhesive tape shall not be lapped more than one-eighth (1/8) of one (1) inch. Adhesive tape not to exceed one (1) layer shall be crossed over the back of the hand for its protection. Three (3) strips of adhesive tape, lapping not to exceed one-eighth (1/8) of one (1) inch, may be used for protection of the knuckles.

Section 7. Requirements for knock downs shall be as follows:
(1) If a contestant is knocked to the floor by his opponent or falls from weakness or other causes, his opponent shall:
(a) Immediately retire to the farthest neutral corner of the ring; and
(b) Remain there until the referee completes his count or signals a resumption of action.
(2) The timekeeper shall commence counting off the seconds and indicating the count with a motion of the arm when the contestant is down. The referee shall pick up the count from the timekeeper.
(3) If a contestant fails to arise before the count of ten (10), the referee shall declare him the loser by waving both arms to indicate a knockout.
(4) If a contestant who is down arises during the count, the referee may, if he deems it necessary, step between the contestants long enough to assure himself that the contestant just arisen is in condition to continue the match.
(5) Should a contestant who is down arise before the count of ten (10) is reached and again go down from weakness or the effects of a previous blow, without being struck again, the referee shall resume the count where he left off.
(6) At the discretion of the referee, a standing eight (8) count may be used.
(7) If a contestant is knocked down three (3) times during a round, the contest shall be stopped. The contestant scoring the knock downs shall be the winner by a technical knockout. This rule may be waived by the commission upon the request of both contestants. Any request for waiver shall be made prior to the beginning of the show.
(8) When a round, other than the last round, ends before a contestant who was knocked down rises, the bell shall ring and the count shall continue. If the contestant fails to arise before the count of ten (10), the referee shall declare him the loser by waving both arms to indicate a knockout.

Section 8. A failure to resume a match shall be as follows:
(1) If a contestant fails to resume the match for any reason after a rest period, or leaves the ring during the rest period and fails to be in the ring when the bell rings to begin the next round, the referee shall count him out the same as if he were down in that round.
(2) If a contestant who has been knocked out of or has fallen out of the ring during a match fails to return immediately to the ring and be on his feet before the expiration of ten (10) seconds, the referee shall count him out as if he were down.

Section 9. A contestant shall be considered "down" when:
(1) Any part of his body other than his feet is on the ring floor; or
(2) He is hanging helplessly over the ropes and in the judgment of the referee, he is unable to stand; or
(3) He is rising from the "down" position.

Section 10. (1) The following shall be considered fouls:
(a) Hitting below the belt;
(b) Hitting an opponent who is down or who is getting up after having been down;
(c) Holding an opponent and deliberately maintaining a clinch;
(d) Holding an opponent with one (1) hand and hitting with the

other;

(e) Butting with head or shoulder or using the knee;

(f) Hitting with inside or butt of the hand, the wrist, or the elbow, and all backhand blows except for those backhand blows allowable in kick boxing;

(g) Hitting or "flicking" with the glove open or thumbing;

(h) Wrestling, or roughing, against the ropes;

(i) Purposely going down without having been hit;

(j) Deliberately striking at the part of opponent's body over the kidneys;

(k) Use of the pivot blow or rabbit punch or any physical action which may injure a contestant;

(l) Use of abusive or profane language; or

(m) Failure to obey the referee.

(2) A contestant who commits a foul may be disqualified and the decision awarded to his opponent by the referee. The referee shall immediately do so if contestant commits a deliberate and willful foul which incapacitates his opponent.

(3) Any contestant committing a foul may be disciplined by the commissioner or employee of the commission.

(4) If a match is temporarily stopped by the referee, due to accidental fouling, **the** [~~said~~] referee, with the aid of the physician, if necessary, shall decide whether the contestant who has been fouled is in physical condition to continue the match. If in their opinion **the** [~~said~~] contestant's chances have not been seriously jeopardized, as a result of the foul, he shall order the match resumed after a reasonable time, **the** [~~such~~] time to be set by the referee, but not exceeding five (5) minutes.

(5) If a contestant is unable to continue as the result of an accidental foul and the match is in one (1) of the first three (3) rounds, the match shall be declared a technical draw. If the foul occurs after the third round, or if an injury sustained from an accidental foul in the first three (3) rounds causes the contest to be subsequently stopped, the contest shall be scored on the basis of the judges' scorecards.

Section 11. The following shall be prohibited:

(1) "Battle royal"; and

(2) Use of excessive grease or any other substance which may handicap an opponent.

Section 12. Boxer Repeatedly Knocked Out or Otherwise Defeated. (1) A boxer or kick boxer who has been repeatedly knocked out and severely beaten shall be retired and not permitted to box again if, after subjecting him to a thorough examination by a physician, the commission decides **the** [~~such~~] action is necessary in order to protect the health and welfare of **the** [~~such~~] boxer.

(2) A boxer or kick boxer who has suffered six (6) consecutive defeats by knockout shall not be allowed to box again until he has been investigated by the commission and examined by a physician.

(3) A contestant whose license is under suspension in any other jurisdiction may be allowed to participate in any boxing, kick boxing, or elimination match only after review and approval of the case by the commissioner or employee of the commission.

TODD J. NEAL, Chairman

APPROVED BY AGENCY: October 13, 1993

FILED WITH LRC: October 14, 1993 at 9 a.m.

GENERAL GOVERNMENT CABINET
Kentucky Athletic Commission
(As Amended)

201 KAR 27:015. Prompt payment of fees, fines and forfeitures required.

RELATES TO: KRS 229.081, 229.091(1), 229.991

STATUTORY AUTHORITY: KRS 229.180

NECESSITY AND FUNCTION: KRS 229.091(1) provides that every licensee shall be subject to such administrative regulations as the commission prescribes. This administrative regulation is intended to insure that licensees pay all fees, fines and forfeitures owed to the Commonwealth in a prompt manner.

Section 1. All compensation agreements shall be in writing and submitted to the commission[~~er~~] for [~~his~~] approval not less than five (5) calendar days prior to the date of the proposed show.

Section 2. Compensation shall not be paid to any contestant [~~or official~~] in advance unless by prior approval of the commission[~~er~~].

Section 3. **A** [~~No~~] promoter shall **not** pay any part of the compensation due to managers, contestants, or their agents, if such manager or contestant or agent owes the Commonwealth of Kentucky any fees, fines, forfeitures, or other funds incurred in conducting, holding, giving, officiating at, or participating in, boxing, kick boxing, elimination events [~~or sparring matches~~], wrestling matches, shows, or exhibitions.

Section 4. Before the commencement of any boxing, elimination event, kick boxing show or exhibition, the promoter of the show or exhibition shall tender to the commissioner or an employee of the commission a check or money order made payable to each official who will officiate the show or exhibition in the amount prescribed by the schedule of compensation for officials set forth in Section 5 of this administrative regulation.

Section 5. The schedule for compensation to be paid in advance to officials participating in a professional show [~~match~~] shall be as follows:

(1) Judges for elimination events (minimum three (3)) - $125 each per day. [~~Announcers - $50.~~]

(2) Judges for boxing shows or kick boxing shows (minimum three (3)) - $50 each.

(3) Timekeeper for:

(a) Boxing shows or kick boxing shows - $50; and

(b) Elimination event - $125 per day.

(4) Physician for elimination events - $225 per day. [~~(less than nine (9) contestants - $125.~~]

(5) Physician for boxing shows or kick boxing shows [~~(nine (9) or more contestants)~~] - $150.

(6) Referees for elimination events (minimum two (2)) - $125 per day. [~~Seconds (minimum two (2)) - $10 each.~~]

(7) Referees for boxing shows and kick boxing shows - $50 each. If there are more than thirty (30) scheduled rounds [~~four (4) bouts~~], a minimum of two (2) referees shall be [~~is~~] required.

[~~(8) Each official (except seconds) must be paid an additional fifty (50) dollars if the site of the show to which he must travel is located more than fifty (50) miles from the official's principal residence.~~]

Section 6. If a show or exhibition is cancelled, with less than twenty-four (24) hours notice to the commission, officials shall be paid one-third (1/3) the compensation required by this administrative regulation.

TODD J. NEAL, Chairman

APPROVED BY AGENCY: October 13, 1993
FILED WITH LRC: October 14, 1993 at 9 a.m.

GENERAL GOVERNMENT CABINET
Kentucky Athletic Commission
(As Amended)

201 KAR 27:020. Tickets.

RELATES TO: KRS 229.031
STATUTORY AUTHORITY: KRS 229.180
NECESSITY AND FUNCTION: In order to assure that the state receives its five (5) percent tax of the gross receipts from the sale of all tickets to a show [match] or exhibition, an administrative regulation is required to govern and control the sale of such tickets. KRS 229.180 states that in order to provide more supervision, the General Assembly intended the commission to have wider discretion than that ordinarily possessed by administrative agencies.

Section 1. All persons admitted to any show [match] or exhibition except members [representatives] of the commission[er], employees of the [Kentucky Athletic] commission, employees of the licensed promoter, officials, representatives of the press, and contestants shall be required to have a ticket. No cash may be accepted for admission by any representative of the promoter except the properly authorized ticket selling agent. All officials, employees, or members [other duly authorized representatives] of the [Kentucky Athletic] commission shall [must] be admitted to any professional show or exhibition [or amateur exhibition or match] upon showing the appropriate identification card [signed by the commissioner].

Section 2. Orders for all admission tickets [to be] purchased, printed, sold, given away or used by a club shall be submitted in writing [in duplicate] to the commission, upon specific request of the commission [or for his approval. If the order for such tickets is approved, a copy shall be retained by the commissioner for his files].

Section 3. All orders for admission tickets shall specify:
(1) Different color for each price class of admission ticket;
(2) Admission tickets to be numbered in consecutive order for each price class ticket; and
(3) Verified invoice [manifest] delivered by the printer [to the commissioner] for each order of tickets printed and delivered to the promoter.

Section 4. Complimentary tickets shall be of a [such] color and character as to make them readily distinguishable from paid admission tickets. The commission[er] may limit the number or otherwise restrict the use of **the** [such] tickets and [he] may require the payment of taxes on [all such] complimentary admission tickets. The [Kentucky Athletic] commission shall be entitled to receive twelve (12) complimentary reserved tickets upon request clearly marked "Not for Sale" to any professional boxing, kick boxing, elimination event or wrestling show [match] or exhibition conducted [and held] within this Commonwealth.

Section 5. A schedule of ticket prices shall [must] be posted conspicuously at the front of the ticket office and tickets shall not be sold for any prices other than the price printed on the face of the ticket [thereof].

Section 6. All admission tickets collected at the gate shall be deposited in a suitable lock box. The commission may request an audit of the tickets used for a show in order to validate the fees paid pursuant to KRS 229.031. [Said lock box shall not be opened at any time except in the presence and under the supervision of the commissioner or an employee of the Kentucky Athletic Commission.]

Section 7. Each purchaser of an admission ticket shall be given a stub which shall be redeemed by the promoter on presentation by the purchaser if [should] the show does not take place as published and announced.

TODD J. NEAL, Chairman
APPROVED BY AGENCY: October 13, 1993
FILED WITH LRC: October 14, 1993 at 9 a.m.

GENERAL GOVERNMENT CABINET
Kentucky Athletic Commission
(As Amended)

201 KAR 27:030. Contestants in boxing, kick boxing, and elimination events.

RELATES TO: KRS 229.081, 229.091(1)
STATUTORY AUTHORITY: KRS 229.180
NECESSITY AND FUNCTION: KRS 229.081 provides for all licensing of contestants for professional boxing, kick boxing and elimination events [wrestling matches and exhibitions]. KRS 229.091(1) provides that every licensee shall be subject to such administrative regulations as the commission prescribes.

Section 1. Contestants shall report to and be under the general supervision of the commissioner or employee of the [Kentucky Athletic] commission in attendance at the show, and shall be subject to any [reasonable] orders given by the commissioner or employee.

Section 2. Contestants shall produce one (1) form of identification. **A** [No] contestant shall **not** assume or use the name of another and shall not change his ring name nor be announced by name other than that which appears on his license except upon approval of the commissioner or employee of the commission.

Section 3. Contestants shall [must] be clean, neatly attired in proper ring attire and trunks of opponents shall be of distinguishing colors.

Section 4. [Boxers shall not use white trunks while engaged in a show and] Contestants shall not use during a match [show] a belt which contains any metal substance. **The** [Such] belt as is permissible shall not extend above the waistline of the contestant.

Section 5. Contestants shall wear shoes of soft material during a match [show] and **the** [such] shoes shall not be fitted with spikes, cleats, hard soles, or hard heels.

Section 6. A contestant, while engaged in a match [show], shall wear an abdominal guard or protective [protection] cup which has [s of such a type as have] the approval of the commissioner or employee of the [Kentucky Athletic] commission in attendance and which, in the contestant's own judgment, is [are] sufficient [protection] to withstand any blow which might injure the contestant.

Section 7. Whenever a contest is ended by reason of fouling or failure to give an honest exhibition of skill, as determined by the commissioner or an employee of the commission, the compensation of the offending contestant [so offending] shall be withheld by the club and [forfeited into the custody of the commissioner. Such forfeit] shall be disposed of as may be ordered by the commission.

Section 8. (1) The class weights permitted in boxing and kick boxing matches [bouts] shall be as follows:

CLASS	WEIGHT
Flyweight	to 112 lbs.
Bantamweight	to 118 lbs.
Jr. Featherweight	to 122 lbs.
Featherweight	to 126 lbs.
Jr. Lightweight	to 130 lbs.
Lightweight	to 135 lbs.
Jr. Welterweight	to 140 lbs.
Welterweight	to 147 lbs.
Jr. Middleweight	to 154 lbs.
Middleweight	to 160 lbs.
Light Heavyweight	to 175 lbs.
Cruiserweight	to 190 lbs.
Heavyweight	over 190 [~~175~~] lbs.

(2) Elimination events shall be divided into at least two (2) weight divisions. No open shows shall be permitted.

Section 9. Contestants in all shows held under the jurisdiction of the [~~Kentucky Athletic~~] commission shall weigh in stripped, at a time set by the commission [~~on the day of the contest or at another hour within eight (8) hours prior to entering the ring on the day of the contest, in the presence of his opponent for the bout~~]. The commissioner or an employee of the [~~Kentucky Athletic~~] commission and a representative of the promoter conducting the show [~~bout~~] shall be in attendance.

Section 10. On the day of the show [~~At the time of weighing in~~], a physical examination of each contestant [~~opponent~~] shall be made by the official physician. A record of each contestant's weight shall be recorded by the representative of the promoter and **the** [~~such~~] record shall also be filed with the [~~Kentucky Athletic~~] commission.

Section 11. A contestant shall immediately notify the promoter and the commission[~~er~~] if, as a result of illness or for any other reason, he is unable to participate in a show, in which he has entered into a contract to engage, and shall immediately file with the commission[~~er~~] a [~~reputable~~] physician's certificate verifying **the** [~~such~~] injury or illness, or [~~such~~] other verified evidence, as the commission[~~er~~] may require to establish valid reasons for his failure to participate. The commissioner may require a contestant to submit to an examination if deemed necessary to establish the true facts of the contestant's failure to participate.

Section 12. All matches in an elimination event shall be made by the commissioner or an employee of the commission. [~~The foregoing requirements shall not apply to any animal contestant, with the exception that all animal contestants shall be under the general supervision of the commissioner or employee of the Kentucky Athletic Commission in attendance at the show, and shall be subject to any reasonable orders given by the commissioner or employee.~~]

TODD J. NEAL, Chairman
APPROVED BY AGENCY: October 13, 1993
FILED WITH LRC: October 14, 1993 at 9 a.m.

GENERAL GOVERNMENT CABINET
Kentucky Athletic Commission
(As Amended)

201 KAR 27:040. Managers.

RELATES TO: KRS 229.081, 229.091(1)
STATUTORY AUTHORITY: KRS 229.180
NECESSITY AND FUNCTION: KRS 229.081 provides for the licensing of managers at professional boxing and kick boxing [~~and wrestling matches and exhibitions~~]. KRS 229.091(1) provides that every licensee shall be subject to such administrative regulations as the commission prescribes.

Section 1. Managers shall report to and be under the general supervision of the commissioner or employee of the [~~Kentucky Athletic~~] commission in attendance at the show. They shall be subject to any [~~reasonable~~] orders given by the commissioner or employee of the commission.

Section 2. Managers shall do business only with promoters, officials, and contestants licensed by the [~~Kentucky Athletic~~] commission who are in good standing and they shall act as managers only in shows that have been approved by the commission[~~er~~].

Section 3. Managers shall not act or attempt to act [~~in any way~~] for a contestant unless legally authorized to do so by **the** [~~said~~] contestant.

Section 4. Copies of written contracts between managers and contestants may be filed with the commissioner or employee of the commission as evidence of **the** [~~such~~] authority to act and shall [~~must~~] be filed if requested by the commissioner or employee of the commission.

TODD J. NEAL, Chairman
APPROVED BY AGENCY: October 13, 1993
FILED WITH LRC: October 14, 1993 at 9 a.m.

GENERAL GOVERNMENT CABINET
Kentucky Athletic Commission
(As Amended)

201 KAR 27:050. Announcers.

RELATES TO: KRS 229.171 [~~229.081, 229.091(1)~~]
STATUTORY AUTHORITY: KRS 229.180
NECESSITY AND FUNCTION: KRS 229.171 gives the Kentucky Athletic Commission the sole direction, management, control, and jurisdiction over all professional boxing, kick boxing, and elimination events held in the Commonwealth. It is therefore necessary to control the activities of some unlicensed participants in these shows. [~~KRS 229.081 provides for the licensing of announcers for professional boxing and wrestling matches and exhibition. KRS 229.091(1) provides that every licensee shall be subject to such regulations as the commission prescribes.~~]

Section 1. The announcer officiating at any show shall be governed by the law and administrative [~~rules and~~] regulations **promulgated** [~~adopted~~] by the [~~Kentucky Athletic~~] commission, and he shall be subject to any [~~reasonable~~] orders given by the commissioner or employee of the commission.

Section 2. The announcer shall have general supervision over all announcements made by the ringside or in the arena. He shall announce from the ring the name of contestants, their [~~correct~~] weight, decisions at the end of each match [~~bout~~], and such other matters as are necessary. No person other than the official announcer shall make announcements.

[~~Section 3. Before announcing the result of a bout, the announcer shall enter the ring and collect the score cards from the judges and the referee and shall immediately submit them for examination to an employee of the Kentucky Athletic Commission and then shall immediately announce the decision.~~]

Section 3. If a match [~~4. In the event a bout~~] is stopped before its scheduled termination, the announcer shall immediately confer with the referee and the commissioner or an employee of the [~~Kentucky Athletic~~] commission and then shall immediately announce the decision.

Section 4. [~~5.~~] The announcer shall not enter the ring during the actual progress of a match [~~bout~~].

Section 5. An announcer may be ejected from a match or excluded from further matches based on a violation of these administrative regulations.

TODD J. NEAL, Chairman
APPROVED BY AGENCY: October 13, 1993
FILED WITH LRC: October 14, 1993 at 9 a.m.

KENTUCKY HOUSING CORPORATION
(As Amended)

202 KAR 2:010. Affordable Housing Trust Fund.

RELATES TO: KRS Chapter 198A, 61.805 to 61.850
STATUTORY AUTHORITY: KRS 198A.720(11)
NECESSITY AND FUNCTION: KRS 198A.720 authorizes Kentucky Housing Corporation to administer the Affordable Housing Trust Fund by providing loans or grants for eligible activities, as established in KRS 198A.715(2), in order to create new sources of funding or to supplement existing sources of funding for the development of housing for very low income Kentuckians. This administrative regulation is necessary to establish additional criteria for qualifying for the loans and grants and to establish the procedures to be followed in applying for the loans and grants.

Section 1. Qualification Criteria. (1) Applications shall be prioritized based on the priorities established in KRS 198A.720(4).

(2) Applications shall be competitively ranked based on the following criteria[~~, not excluding other considerations~~]:

(a) Demonstrated need for proposed program;

(b) Combined effort of applicant and various agencies in developing and administering the program;

(c) Provision of housing and housing-related services;

(d) Willingness to serve those in greatest need;

(e) Amount of resources contributed from other sources;

(f) Geographic distribution; and

(g) Ability to provide long-term home ownership or rental affordability.

(3) Approval of applications shall be based on the numerical ranking received and the availability of funds.

Section 2. Notice of Funds Availability. (1) A public notice of funding availability shall be issued by Kentucky Housing Corporation to eligible applicants no later than January 1 and July 1 of each year.

(2) The deadline for application submission **shall** [~~will~~] be no sooner than thirty (30) days after the public notice of funding availability.

Section 3. Application Procedures. (1) To be considered for a loan or grant, eligible applicants shall complete and submit the Affordable Housing Trust Fund application dated September 7, 1993, which form is hereby incorporated by reference. The application may be obtained, inspected or copied at Kentucky Housing Corporation, 1231 Louisville Road, Frankfort, Kentucky 40601 between the hours of 8:30 a.m. and 5 p.m., Monday through Friday.

(2) Properly submitted and completed applications shall be approved or denied within sixty (60) days of their receipt by Kentucky Housing Corporation.

F. LYNN LUALLEN, Executive Director
APPROVED BY AGENCY: September 14, 1993
FILED WITH LRC: September 16, 1993 at 11 a.m.

KENTUCKY RIVER AUTHORITY
(As Amended)

420 KAR 1:010. Definitions.

RELATES TO: KRS 151.100 to 151.600, 151.700 to 151.730, 151.990, 223.400 to 223.460, 224.70, 224.73
STATUTORY AUTHORITY: KRS 151.710, 151.720, 151.725, 151.730
NECESSITY AND FUNCTION: KRS 151.700 through 151.730 authorize the Kentucky River Authority to manage the surface water and groundwater of the Kentucky River basin. The authority has the power and duty to develop and to implement programs relating to the locks and dams on the Kentucky River; to acquire, to sell and to lease property; to develop recreational areas; to issue revenue bonds; to assess fees for water use; to contract for services; to adopt administrative regulations protecting water in the Kentucky River basin; to develop and to implement comprehensive plans for protecting the water of the Kentucky River basin; and to collaborate with the Natural Resources and Environmental Protection Cabinet and other state agencies in coordinating Kentucky River basin water resource and water quality activities. This administrative regulation establishes definitions pertaining to those powers and duties.

Section 1. Definitions. [~~The definitions set forth in this administrative regulation describe terms used in this chapter. Terms not defined in this administrative regulation shall be deemed to be consistent with terms used in the statutes and administrative regulations administered by the cabinet. If not so defined or if the context requires, the terms shall have the meanings attributed by common use.~~]

(1) "Administrative services" means clerical assistance provided by the cabinet in accordance with KRS 151.710(10), including secretarial and bookkeeping assistance.

(2) "Annual report" means the report the authority submits annually to the Governor and to the Legislative Research Commission pursuant to KRS 151.710(12).

(3) "Best management practices" or "BMPs" means those practices which are effective and practical structural or nonstructural methods which prevent or reduce the movement of pollutants from the land to surface water or groundwater, or which otherwise protect surface water or groundwater from potential adverse effects of land use activities such as agricultural or silvicultural activities, stormwater run-off, spills or leaks, and land application or land disposal of waste.

(4) "Cabinet" means the Natural Resources and Environmental Protection Cabinet created pursuant to KRS 224.10-010.

(5) "County long-range water resource plan" means the county long-range water resource plan submitted by a county for the authority's review pursuant to KRS 151.720(9) and 420 KAR 1:030.

(6) "Discharge" or "discharge of a pollutant" means any addition of any pollutant or combination of pollutants to surface water or groundwater of the Kentucky River basin from any point source. This includes additions of pollutants into waters of the Kentucky River basin from surface run-off which is collected or channeled by man; discharges through pipes, sewers or other conveyances whether publicly or privately owned; and discharges through pipes, sewers, or other conveyances leading into privately or publicly owned treatment works.

(7) "Disposal" means the discharge, deposit, injection, dumping, spilling, leaking, or placing of any waste into or on any land or water so that the waste or any waste constituent may enter the environment

or be emitted into the air or discharged into water.

(8) "Diversion" means a nonconsumptive redirection of all or part of the flow of a stream.

(9) "Drought response plan" means the drought response plan for the Kentucky River basin developed by the authority pursuant to KRS 151.720(9) and 420 KAR 1:030.

(10) "Effluent limitations" means any restrictions or prohibitions established by **401 KAR Chapter 5.** [~~the authority, or by the cabinet if the authority fails to establish them, which include effluent limitations, standards of performance for new sources, and toxic effluent standards on quantities, rates, and concentrations of chemical, physical, biological, and other constituents which are discharged into water.~~]

(11) "Fee" means a water use fee for protection of the surface water and groundwater of the Kentucky River basin, paid to the authority by persons who use that water.

(12) "Floodplain" means the normally dry area or wetland adjoining a stream or lake that is inundated during a flood event.

(13) "Floodway" means that area of a stream or watercourse necessary to carry off flood water as determined by the cabinet or by the authority.

(14) "Gross withdrawal" means the amount of water withdrawn.

(15) "Groundwater" or "ground water" means all water which fills the natural openings under the earth's surface, including all underground watercourses, artesian basins, reservoirs, lakes, and other bodies of water below the earth's surface.

(16) "Kentucky River Authority" or "authority" means the Kentucky River Authority created pursuant to KRS 151.710.

(17) "Kentucky River basin" or "basin" means all geographic areas of the Commonwealth contained within the watershed of the Kentucky River and its tributaries, including surface water and groundwater, and delineated as hydrologic unit code 0510020 in the document entitled "Hydrologic Unit Map - 1974, State of Kentucky", published in 1974 and reprinted in 1988, and incorporated by reference in Section 2 of this administrative regulation.

(18) "Leakage" or "leak" means the amount of water lost due to leaks in a water supply or water distribution system after it has been withdrawn by the water supplier or purchased by the water supply distributor.

(19) "Long-range water resource plan" means the water supply plan described in 401 KAR 4:220, with the additions required by 420 KAR 1:030.

(20) "Mainstem Kentucky River" means the Kentucky River, including Pool 14, which extends from the North Fork of the Kentucky River at River Mile 261.6 above the confluence of Walkers Creek, the Middle Fork of the Kentucky River at River Mile 6.0 below the confluence of Coal Branch, and the South Fork of the Kentucky River at River Mile 4.0 below the confluence of Paw Paw Creek, to River Mile 0 at the confluence with the Ohio River at Carrollton.

(21) "Map of potential sources of water pollution" means the map of potential sources of contamination described in 401 KAR 4:220, Section 6 with the additions required by 420 KAR 1:030.

(22) "Net withdrawal" means the difference between the amount of water withdrawn for noncontact cooling water and the amount of that water discharged.

(23) "Noncontact cooling water" means surface water or groundwater withdrawn from the Kentucky River basin for the purpose of reducing the temperature of a product or equipment used in making a product, if the following conditions exist:

(a) The noncontact cooling water does not come into contact with the product;

(b)The noncontact cooling water is discharged in accordance with a Kentucky Pollutant Discharge Elimination System (KPDES) permit that identifies the water as noncontact or once-through cooling water;

(c) The noncontact cooling water is discharged in accordance with water quality standards;

(d) The noncontact cooling water is discharged within 300 linear feet of the withdrawal point or into the same pool of water; and

(e) Net withdrawal is no greater than ten (10) [~~twenty (20)~~] percent.

(24) "Nonpoint source pollution" means pollution caused by diffuse sources, including land run-off, atmospheric deposition, or percolation through soils and rocks.

(25) "Person" means an individual, trust, firm, joint stock company, corporation (including a government corporation), partnership, association, federal agency, state agency, city, commission, political subdivision of the Commonwealth, interstate body, estate, or other entity.

(26) "Point source" means any discernible, confined, and discrete conveyance, including but not limited to any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, vessel, or other floating craft, from which pollutants are or may be discharged. This term does not include return flows from irrigated agriculture.

(27) "Pollutant" means dredged spoil, solid waste, hazardous waste, special waste, incinerator residue, sewage, sewage sludge, garbage, chemical materials, biological materials, radioactive materials, heat, wrecked or discarded equipment, rock, sand, soil, industrial waste, municipal waste, silvicultural waste, agricultural waste, and any substance resulting from the development, processing, or recovery of any natural resource which may be discharged into water.

(28) "Project" means a project authorized by KRS 151.700 to 151.730 and approved by the authority, including staff and overhead.

(29) "Quarterly report" means the report the authority submits quarterly to the General Assembly's Committee on Appropriations and Revenue pursuant to KRS 151.720(14).

(30) "Revenue bond" or "bond" means a revenue bond described by KRS 151.720(5) and KRS 151.730.

(31) "Semipublic water supplier" means any water supply system that serves more than three (3) families, but is not a water supplier or distributor.

(32) "Seven (7) day, ten (10) year low flow" or "7Q10" means that minimum average flow which occurs for seven (7) consecutive days with a recurrence interval of ten (10) years.

(33) "Standard" or "water quality standard" means an administrative regulation adopted by the authority, or by the cabinet if the authority fails to adopt it, establishing the use to be made of a surface water or groundwater and the water quality criteria necessary to maintain and protect that use.

(34) "Stream" means a river, creek or channel, having well-defined banks, in which water flows for substantial periods of the year to drain a given area, or any lake or other body of water.

(35) "Surface waters" means those above-ground waters having well-defined banks and beds, either constantly or intermittently flowing; lakes and impounded waters; marshes and wetlands; and any subterranean waters flowing in well-defined channels and having a demonstrable hydrologic connection with the surface.

(36) "Tier I fee" means a fee:

(a) Funding watershed management projects of benefit to the entire watershed of the Kentucky River basin and funding the authority's general expenses;

(b) Set by the authority based on the authority's budget; and

(c) Paid by all persons who use surface water or groundwater of the Kentucky River basin.

(37) "Tier II fee" means a fee:

(a) Funding any project of benefit to a certain part of the Kentucky River basin;

(b) Set by the authority based on the authority's budget; and

(c) Paid by all persons who use surface water or groundwater of the Kentucky River basin and who derive a direct benefit from that project.

(38) "Transfer" means an interbasin diversion of surface waters or groundwaters to or from the Kentucky River basin.

(39) "Unified long-range water resource plan" or "unified plan" means the unified long-range water resource plan for the Kentucky River basin developed by the authority pursuant to KRS 151.720(9) and 420 KAR 1:030.

(40) "Use" or "using", if referring to the use of water in the Kentucky River basin described in KRS 151.720(5), means the withdrawal of surface water from the Kentucky River or its tributaries, the withdrawal of groundwater within the Kentucky River basin, the point source discharge of pollutants to the Kentucky River or its tributaries, the point source discharge of pollutants to groundwater within the Kentucky River basin, the use of surface water from the Kentucky River or its tributaries for generation of hydroelectric power, the diversion or transfer of waters in the Kentucky River basin, and the use of the Kentucky River or its tributaries for navigation or recreation. "Use" or "using" shall not apply to those facilities using water primarily for agricultural purposes.

(41) "Water" means all rivers, streams, creeks, lakes, ponds, impounding reservoirs, springs, wells, marshes and wetlands, and all other bodies of surface or underground water, natural or artificial, situated wholly or partly within or bordering upon the Kentucky River basin.

(42) "Water conservation" means methods and applications of passive and active water savings and reuse devices, components and processes to reduce demand for water supply.

(43) "Water pollution" means the alteration of the physical, thermal, chemical, biological, or radioactive properties of water in such a manner, condition, or quantity that will be detrimental to the public health or welfare, to animal or aquatic life or marine life, to the use of such waters as present or future sources of public water supply or to the use of such waters for recreational, commercial, industrial, agricultural, or other legitimate purposes.

(44) "Water resources map" means the water resources map described in 401 KAR 4:220, Section 6, and required by 420 KAR 1:030.

(45) "Water shortage emergency" means the authority's declaration that a significant number of citizens in the emergency area are served by water suppliers that are experiencing deficits in the amount of water available for use.

(46) "Water shortage response plan" means the water shortage response plan described by 401 KAR 4:220, Section 6 and required by 420 KAR 1:030.

(47) "Water shortage warning" means the authority's declaration that some water suppliers in the warning area are experiencing deficits in the amount of water available for use.

(48) "Water shortage watch" means the authority's declaration that hydrologic conditions exist in the watch area that indicate the potential for deficits in the amount of water available for use by water suppliers.

(49) "Water supplier" means any system that provides water to the public for human consumption, has at least fifteen (15) service connections or regularly serves an average of at least twenty-five (25) individuals daily at least sixty (60) days of the year, and withdraws more than fifty (50) percent of the water it distributes.

(50) "Water supply distributor" means any system that provides water to the public for human consumption, has at least fifteen (15) service connections or regularly serves an average of at least twenty-five (25) individuals daily at least sixty (60) days of the year, and depends on a water supplier to provide fifty (50) percent or more of the water it distributes.

(51) "Water supply plan" means the final plan document approved by the cabinet pursuant to KRS 151.110 through 151.118 and 401 KAR 4:220.

(52) "Water supply protection area" means the designated watershed of a surface water supply source, or the designated recharge area of a groundwater supply source, or a designated wellhead protection area.

(53) [~~"Water supply reservoir" means a water retaining structure with the ability to retain at least thirty (30) days of average water use at normal pool, used by a water supplier.~~

~~(54)~~] "Water supply source" means a particular site or classification of site where water is withdrawn.

(54) [~~(55)~~] "Watershed" means all the area from which all drainage passes a given point downstream.

(55) [~~(56)~~] "Wetlands" means land that has a predominance of hydric soils and that is inundated or saturated by surface or groundwaters at a frequency and duration sufficient to support, and that under normal circumstance does support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, floodplains and similar areas.

(56) [~~(57)~~] "Withdraw" or "withdrawal of water" means the actual removal or taking of water from any surface waters or groundwaters of the Kentucky River basin.

Section 2. Incorporation by Reference. The document entitled "Hydrologic Unit Map - 1974, State of Kentucky", published in 1974 and reprinted in 1988, is hereby incorporated by reference. It is available for public inspection and copying, subject to copyright law, at the office of the Kentucky River Authority, 107 Mero Street, Frankfort, Kentucky 40601, between the hours of 8 a.m. and 4:30 p.m., Mondays through Fridays, excluding state holidays.

THOMAS M. DORMAN, Chairman
APPROVED BY AGENCY: November 9, 1993
FILED WITH LRC: November 9, 1993 at 11 a.m.

KENTUCKY RIVER AUTHORITY
(As Amended)

420 KAR 1:020. Administrative procedures of the authority.

RELATES TO: KRS 151.100 to 151.600, 151.700 to 151.730, 151.990, 223.400 to 223.460, 224.70, 224.73

STATUTORY AUTHORITY: KRS 151.710, 151.720, 151.725, 151.730

NECESSITY AND FUNCTION: KRS 151.700 through 151.730 authorize the Kentucky River Authority to manage the surface water and groundwater of the Kentucky River basin. The authority has the power and duty to develop and to implement programs relating to the locks and dams on the Kentucky River; to acquire, to sell and to lease property; to develop recreational areas; to issue revenue bonds; to assess fees for water use; to contract for services; to adopt administrative regulations protecting waters in the Kentucky River basin; to develop and to implement comprehensive plans for protecting the water of the Kentucky River basin; and to collaborate with the Natural Resources and Environmental Protection Cabinet and other state agencies in coordinating Kentucky River basin water resource and water quality activities. This administrative regulation establishes administrative procedures employed by the authority in implementing those powers and duties.

Section 1. Election of Vice-chairman. In addition to electing a chairman as provided by KRS 151.710(6), the authority shall elect one (1) of its members as vice-chairman. The vice-chairman may act for the authority in the absence or unavailability of the chairman.

Section 2. Meetings of the Authority. Meetings of the authority shall be conducted in accordance with the Kentucky Open Meetings Law, KRS 61.805 through 61.850.

Section 3. Inspection of Public Records. (1) Public records of the authority shall be made available for public inspection in accordance with the Kentucky Open Records Act, KRS 61.870 through 61.884.

(2) The authority shall make available to a public library located in each county contained in whole or in part within the Kentucky River

basin copies of the following documents:

(a) The authority's quarterly and annual reports;

(b) The authority's draft and final unified long-range water resource plans;

(c) The authority's draft and final drought response plans;

(d) The authority's letter approving a county long-range water resource plan;

(e) A county's draft and final long-range water resource plans; and

(f) The authority's administrative regulations.

Section 4. Mailing List. The authority shall maintain a list of members of the public, including members of the media, to whom copies of the public notices described by this administrative regulation may be provided. Any person may request to be placed upon or removed from the authority's mailing list. The authority may periodically revise its list to remove the names of persons who do not respond to the authority's request to update the mailing list.

Section 5. Public Participation. (1) Scope and applicability. This section applies to the following activities:

(a) The authority's development of a drought response plan;

(b) The authority's development of a unified long-range water resource plan.

(2) Public notice.

(a) Before the authority prepares a draft drought response plan or a draft unified long-range water resource plan, it shall notify the public that it is seeking public participation in the preparation of those drafts. The authority shall notify the public by publishing a notice in the Lexington Herald-Leader and in a local newspaper serving each county located in whole or in part within the Kentucky River basin, and by mailing the notice to the county judge-executive of each county located in whole or in part within the Kentucky River basin. The notice shall schedule a public meeting or a series of public meetings.

(b) After the authority prepares a draft drought response plan or a draft unified long-range water resource plan, it shall notify the public by publishing a notice in the Lexington Herald-Leader and in a local newspaper serving each county located in whole or in part within the Kentucky River basin, and by mailing the notice to the county judge-executive of each county located in whole or in part within the Kentucky River basin. The public notice shall **comply with KRS 424.130, shall** state that a draft drought response plan or a draft unified long-range water resource plan has been prepared, that copies are available for inspection in accordance with the Kentucky Open Records Act, that copies have been delivered to local libraries, and that the public shall have thirty (30) days from the date of newspaper publication to comment and to request a public hearing.

(3) Public meeting. The authority shall hold a public meeting or a series of public meetings prior to preparing a draft drought response plan or a draft unified long-range water resource plan.

(4) Public comment period. There shall be thirty (30) days from the date **set in the** [ef] newspaper publication **pursuant to KRS 424.130** for the public to comment upon a draft drought response plan or a draft unified long-range water resource plan.

(5) Public hearing. If requested within the first fifteen (15) days of the thirty (30) day public comment period described in subsection (4) of this section, the authority shall conduct a public hearing before the close of the public comment period on the draft drought response plan or the draft unified long-range water resource plan. The public hearing shall be conducted in Frankfort unless the authority determines it is more appropriate to hold the public hearing in another county located within the Kentucky River basin. Any person may appear at the public hearing and offer written or oral comments. The authority may limit oral testimony to five (5) minutes or less per speaker.

(6) Consideration of public comments. The authority shall consider all oral and written comments received during the public comment period described in subsection (4) of this section. The authority may prepare a written response to those oral and written comments, and may disseminate copies of the response to commentors and to others requesting copies.

(7) Final action. The authority shall not take final action on a draft drought response plan or a draft unified long-range water supply plan until it has completed its consideration of all public comments. The authority shall publish notice that it has taken final action by publishing a notice in the Lexington Herald-Leader and in a local newspaper serving each county located in whole or in part within the Kentucky River basin, and by mailing the notice to the county judge-executive of each county located in whole or in part within the Kentucky River basin.

Section 6. Advisory Committees. (1) The authority may appoint advisory committees to assist and to advise the authority.

(2) In appointing advisory committees, the authority shall consider appointing representatives of the public; representatives of federal, state, county or municipal governments; representatives of water resource and water quality agencies; representatives of water-using industries; representatives of water utilities, representatives of groups interested in water-related issues; and representatives of labor and agriculture.

(3) Any person who wishes to serve on an advisory committee may contact the authority in writing and so request. The authority shall consider each request.

Section 7. Request for Authority Action. (1) Any person may request that the authority consider any matter within its jurisdiction. The request shall be made in writing to the chairman of the authority and shall be submitted at least thirty (30) days in advance of a meeting of the authority in order to be considered at that meeting.

(2) The chairman shall notify the remaining members of the authority of the request for consideration of the matter prior to the next meeting of the authority.

(3) The person making the request for consideration of a matter may appear before the authority at the next meeting and discuss that matter. The authority may limit the time spent on that person's presentation or in consideration of the matter.

(4) The authority may take final action at that meeting, defer final action to a later meeting, or decline to consider the matter.

THOMAS M. DORMAN, Chairman

APPROVED BY AGENCY: September 10, 1993

FILED WITH LRC: September 13, 1993 at 1 p.m.

COMPILER'S NOTE: When originally published in the Administrative Register, the Regulation Compiler's office omitted the word "not" in Section 3(4) of the following regulation, 781 KAR 1:040. This administrative regulation is being republished to show the correct version.

WORKFORCE DEVELOPMENT CABINET
Department of Vocational Rehabilitation
(Proposed Amendment)

781 KAR 1:040. Rehabilitation technology [~~engineering~~] services.

RELATES TO: KRS 151B.190, 29 USC 706(8)(A), 34 CFR 361.31(b)

STATUTORY AUTHORITY: KRS 151B.185, 151B.195

NECESSITY AND FUNCTION: KRS 151B.195 directs the Commissioner, Department of Vocational Rehabilitation to prescribe rules and regulations governing the services and administration of the

Department of Vocational Rehabilitation. This regulation prescribes when, and under what conditions, rehabilitation engineering services shall be provided, in order to distribute limited funds more equitably over the entire population of otherwise eligible clients.

Section 1. Definitions. (1) "Client" means an individual who has been determined by an appropriate state unit staff member to meet the basic conditions of eligibility for vocational rehabilitation services as defined in 34 CFR 361.31(b), which is adopted without change.

(2) "Applicant" means an individual who has signed a letter or document requesting vocational rehabilitation services and for whom the following minimum information has been furnished: name and address, disability, age and sex, date of referral, and source of referral.

(3) "Agency" or "department" means the Department of Vocational Rehabilitation, and its appropriate staff members who are authorized under state law to perform the functions of the state regarding the state plan and its supplement.

(4) "Commissioner" means Commissioner of the Department of Vocational Rehabilitation.

Section 2. Computer Hardware and Software. The Department of Vocational Rehabilitation shall not purchase computers, microcomputers, other hardware or software for the personal use of applicants or clients. The agency may consider the provision or upgrade of computer hardware and software when:

(1) The equipment is essential to compensate for the limitations caused by the disability;

(2) The equipment is required for the client to achieve a vocational objective of competitive employment;

(3) There are no comparable benefits available to acquire the hardware or software necessary to accomplish the vocational objective; and

(4) In addition, one (1) or more of the following criteria shall be met:

(a) The equipment is required for vocational preparation;

(b) The equipment is required by the job and no provision is made by the employer to supply the equipment; or

(c) The equipment will enable a client to become competitive with nondisabled employees performing the same duties.

Section 3. Vehicle Modification (General). (1) Modification of a van for a client who can be functional in an automobile shall be authorized only to the maximum cost of the automobile modification.

(2) The agency may provide van modifications for clients determined by the agency specialist of the Driver Evaluation/Vehicle Modification Program to be unable to transfer independently into and out of an automobile.

(3) Vehicle modifications shall be provided only on the recommendation of the agency specialist of the Driver Evaluation/Vehicle Modification Program.

(4) Individuals who are **not** clients of the agency in need of drive evaluation, driver training or vehicle modification may purchase evaluation services on a fee for service basis when all agency applicants and clients have been served.

(5) Vehicle modification shall be provided only after the client completes a driver evaluation and vehicle modification assessment by an agency specialist of the Driver Evaluation/Vehicle Modification Program.

(6) Vehicle modifications shall be inspected and approved by an agency specialist from the Driver Evaluation/Vehicle Modification Program before payment is made.

Section 4. Specific Modifications Costing Less than $1,000. Agency staff may approve modifications to a vehicle when the following conditions apply:

(1) Modifications is simple and is not related to overall vehicle engine or body condition;

(2) Modification is not of a substantial structural nature; and

(3) Maintenance records and overall condition of the vehicle can justify modification.

Section 5. Specific Vehicle Modifications Costing More Than $1,000. (1) Except as provided in subsection (2) of this section, vehicle modifications costing in excess of $1,000 shall be provided only for [~~those~~] clients whose vocational objective is competitive employment and who are within one (1) year of job placement.

(2) Vehicle modifications may be provided to individuals who are not within one (1) year of job placement if the division director of program services determines that documentation exists that the modification would result in a substantial cost savings to the department.

(3) Vehicle modifications costing in excess of $1,000 shall only be provided on new vehicles except as provided in this section.

(4) [~~(3)~~] The agency may approve vehicle modifications for older vehicles in excess of $1,000 when maintenance records and overall condition of the vehicle can justify the modification as attested by an agency specialist of the Driver Evaluation/Vehicle Modification Program. The modification must demonstrate cost savings to the agency.

Section 6. Upgrading and Repair of Vehicle Modification. (1) Vehicle modification upgrades and repair may be provided for a client when such upgrades are needed for obtaining or maintaining employment.

(2) Upgrading and repair of vehicle modification in excess of $1,000 shall require the approval of the Director of Field Services or a designee.

Section 7. Second Time Modifications. (1) Except as provided in this section, the agency shall provide only one (1) vehicle modification per client.

(2) The agency may approve a second time vehicle modification under the following conditions:

(a) The client has demonstrated a two (2) year continuous work history;

(b) The client's employer attests that the modification is needed to maintain employment.

Section 8. Vehicle Repair. (1) The agency shall not provide repair to vehicles.

(2) The agency shall not provide or repair any standard or optional automatic equipment. Equipment includes but is not limited to: power steering, power brakes, automatic transmission, air conditioning, tilt steering, etc.

Section 9. Property Modification. (1) Permanent, nonrecoverable modification to private homes, businesses or property is an allowable expenditure if [~~such is~~] necessary to effect vocational rehabilitation of the individual. The individual shall meet economic need qualifications. The counselor shall make every attempt to utilize recoverable, nonpermanent modifications if possible or cost effective.

(2) The agency may provide essential services necessary to alter or adapt the work situation to enable the client to obtain employment or to insure continuation of employment, including but not limited to the building of a permanent ramp for a wheelchair, modification of machinery to enable the individual to use that particular machine, or a specially designed safety device.

(3) Except as provided in this section, property modifications in excess of [~~over~~] $6,000 shall not be allowed.

(4) Property modifications in excess of $6,000 may be provided if the division director of program services determines that documentation exists that the modification would result in a substantial cost savings to the department.

SAM SERRAGLIO, Commissioner
APPROVED BY AGENCY: October 1, 1993
FILED WITH LRC: October 13, 1993 at 3 p.m.

PUBLIC PROTECTION AND REGULATION CABINET
Kentucky Racing Commission
(As Amended)

810 KAR 1:032. Breeders' Award Program.

RELATES TO: KRS 230.217
STATUTORY AUTHORITY: KRS 230.260(3), (6)
NECESSITY AND FUNCTION: KRS 230.217 requires the Commission to establish a Breeders' Award Program with criteria suitable to disburse the receipts from the Breeders' Award Fund as generated by the funding mechanism created by KRS 230.380.

Section 1. Definitions. (1) "Breeder" means the owner of the dam of a runner at the time the runner was foaled in Kentucky unless the dam was under a lease or foal-sharing agreement at the time of foaling. If there was a lease or foal-sharing agreement, the person that is specified by the lease or agreement shall be considered the breeder. For implementation of this subsection, the records of the Jockey Club **shall** [~~will~~] be used as the official records.

(2) "Purse" means a prize awarded on race day as a result of competing in a live race [~~with~~]in Kentucky:

(a) including:

1. [~~. Purse shall include~~] winnings paid by the track;

2. Entry fees;

3. Kentucky Thoroughbred Development supplements;

4. Corporate supplements; and

5. Breeders' Cup supplements, **excluding** [~~with the exception of~~] purses won in Breeders' Cup championship races; and

(b) Excluding bonus supplements **that are awarded as a result of multirace winnings.** [~~defined as awards resulting from multirace winnings. For implementation of this subsection, the records of the Jockey Club will be used as the official records.~~]

(3) "Runner" means a thoroughbred horse who is both foaled in Kentucky and sired by a Kentucky Thoroughbred Development Fund registered stallion which competes in races conducted in Kentucky. For implementation of this subsection relating to sires, the records of the Kentucky thoroughbred owners and breeders **shall** [~~will~~] be official.

(4) "Stallion" means the sire of a runner provided the stallion is registered no later than December 31 in the year the runner was bred with the Kentucky Thoroughbred Development Fund pursuant to the provisions of KRS 230.400(5)(a).

(5) "Stallion owner" means the owner of the sire of a runner when the breeding of the runner took place according to the records of the Jockey Club.

Section 2. Stallion and Dam Awards. The available Breeders' Award Funds shall be apportioned with eighty (80) percent being allocated to the breeders and twenty (20) percent being allocated to the owners of the stallions.

Section 3. Timing of Awards. (1) Disbursements from the Breeders' Award Fund shall be made as soon as is practicable after the end of each calendar year.

(2) Awards made in 1994 shall be based on purses according to Section 1 of this administrative regulation in the 1993 calendar year.

(3) For awards earned in 1993 and distributed in 1994, the calculation shall be restricted to purses of runners from the foal crop of 1991 who ran as two (2) year olds in 1993.

(4) For awards earned in 1994 and distributed in 1995, the calculation shall be restricted to purses of runners from the foal crops of 1991 and 1992.

(5) For awards distributed each year after 1995, the calculation shall include one (1) additional year's foal crop and allow for awards to one (1) additional age group of runners.

Section 4. Calculation. (1) Funds available in the state account as of December 31 in each year preceding the actual awards shall be apportioned according to the provisions of Section 2 of this administrative regulation.

(2) Records of purse winnings for all runners shall be obtained from the Jockey Club restricted to the runners' age groups scheduled to benefit from the awards according to Section 3 of this administrative regulation.

(3) The funds apportioned to breeders shall be awarded by:

(a) Assigning the individual runner's purses to the breeder if the runner was foaled in Kentucky and sired by a registered Kentucky stallion;

(b) Dividing the individual breeder's assigned winnings from each runner by the total of all assigned winnings to breeders from all runners; then

(c) Multiplying the ratio from paragraph (b) of this subsection times **the** [~~to~~] total to be awarded to breeders pursuant to the split in Section 2 of this administrative regulation. This product shall be awarded to the breeder.

(4) The funds apportioned to stallion owners shall be awarded by:

(a) Assigning the individual runner's purses to the stallion if the runner was sired by a registered Kentucky stallion and foaled in Kentucky;

(b) Dividing the individual stallion's assigned winnings by the total of all assigned winnings to registered Kentucky stallions; then

(c) Multiplying the ratio from subsection (3)(b) of this section times **the** [~~to~~] total to be awarded to stallion owners pursuant to the split in Section 2 of this administrative regulation. This product shall be awarded to the stallion owner.

(5) All awards shall be given to the breeder or stallion owner as defined in Section 1 of this administrative regulation.

(6) Each individual award as a result of each calculation required by subsections (3)(c) and (4)(c) of this section **shall** [~~will~~] be reduced by five (5) dollars to cover postage and processing.

Section 5. Application Requirements. (1)**(a)** After the awards are calculated, the recipients of the awards **shall** [~~will~~] be notified according to last known addresses on file with the Jockey Club, Kentucky Thoroughbred Owners and Breeders, or the Kentucky Racing Commission.

(b) Each potential recipient **shall** [~~will~~] be required to return an application for the award that certifies they are the rightful beneficiary to the award and certifies their taxpayer ID number or Social Security number.

(2) Awards due recipients that cannot be located **shall** [~~will~~] lapse to the Breeders' Award Fund for distribution in the following year. Failure to return the application required by subsection (1) of this section within thirty (30) days of the mailing date **shall** [~~will~~] result in forfeiting any award.

(3) Any contested awards shall be decided by the Breeders' Award Committee. Any appeal from the committee's ruling shall be heard by the hearing officer who shall present findings of fact, conclusions of law, and a recommended order to the Kentucky Racing Commission. If the commission determines a correctable error has occurred, the commission may use available funds in the Breeders' Award Fund to correct an error.

Section 6. Material Incorporated by Reference. (1) "Application for an Award from the Breeders' Award Fund (Rev 12/1/93)" is incorporated by reference.

(2) This form may be inspected, copied, or obtained from the Kentucky Racing Commission, 4063 Iron Works Pike, Building B,

Lexington, Kentucky 40511, 8 a.m. to 4:30 p.m., Monday through Friday.

WAYNE G. LYSTER, III, Chairman
APPROVED BY AGENCY: October 1, 1993
FILED WITH LRC: October 8, 1993 at 1 p.m.

PUBLIC PROTECTION AND REGULATION CABINET
Kentucky Racing Commission
(As Amended)

811 KAR 1:015. Race officials.

RELATES TO: KRS 230.240(1) [230.630(1), (3), 230.640(2), 230.660, 230.700, 230.720]
STATUTORY AUTHORITY: KRS 230.240(1), 230.260(3), 230.310 [230.630(3), (4), (7)]
NECESSITY AND FUNCTION: To regulate conditions under which harness racing shall be conducted in Kentucky. The function of this regulation is to set out the required officials, their functions and duties.

Section 1. Officials Required. (1) In every race, there shall be:
(a) A presiding judge;
(b) Two (2) associate judges;
(c) Except as provided in subsection (2) of this section, [and] not less than two (2) patrol judges;
(d) A racing secretary;
(3) A starter;
(f) A clerk of the course; and
(g)1. Three (3) timers; or
2. One (1) timer and an approved electric timing device.
(2) If [In the event] a patrol car is used:
(a) One (1) associate judge may ride in the car; and
(b) [in which case] The patrol judges may be eliminated.

Section 2. (1) An official shall [All officials must] be licensed and approved by the commission.
(2) [No race official.] With the exception of the timer, prior to consideration by the commission for appointment as a race official, a person shall:
(a) Have [will be considered for approval unless he or she has] attended a United States Trotting Association Officials School; and
(b) [or other school designated by the commission and has] Satisfactorily passed a written [and/]or oral examination given by the [at the conclusion of such] school.

Section 3. (1) If a license is required, a track that permits an unlicensed person to officiate shall be fined an amount not exceeding $250 for each day the unlicensed person officiates.
(2) An unlicensed person who officiates shall be fined an amount not to exceed $250 for each day he officiates. [Any track permitting an unlicensed person to officiate when a license is required shall be fined not exceeding $250 for each day such unlicensed person officiates. Any person officiating without being licensed shall be fined not exceeding $250 for each day he acts as such an official.]

Section 4. Officials at Extended Meetings. (1) The following officials shall not serve at an extended pari-mutuel meeting without a valid commission license:
(a) [No] Presiding judge;
(b) Associate judge;
(c) Starter;
(d) Race secretary;
(e) Barrier judge;
(f) Patrol judge;
(g) Clerk of the course; or
(h) Paddock judge.
(2) The holder of a pari-mutuel license may officiate at all meetings.
(3) At a pari-mutuel meeting, an official who acts as a judge shall not serve as a race secretary or clerk of the course.
(4) A licensed official shall not officiate at a pari-mutuel meeting if he is directly or indirectly the owner, or has a direct or indirect financial interest in a participating horse.
(5) A refusal to grant a license to a person may be reviewed by the commission. [shall be qualified to serve as such at an extended pari-mutuel meeting without a valid commission license. Holders of pari-mutuel licenses are authorized to officiate at all meetings. No official acting as judge at a pari-mutuel meeting shall serve as race secretary or clerk of the course at such meeting. No licensed official shall be qualified to act as such at any pari-mutuel meeting where he is the owner or otherwise interested in the ownership of any horse participating at such meeting. Any refusal to grant a license to a person may be reviewed by the Kentucky [Harness] Racing Commission.]

Section 5. Disqualification to Act as Official. (1) A person shall be disqualified from acting in an official capacity in a race if he:
(a) Is under suspension, expulsion, or other disqualification; or
(b) Has a bet on the race; or
(c) Has an interest in:
1. A bet on the race; or
2. A horse engaged in the race.
(2)(a) If a person is disqualified, he shall notify the management.
(b) The commission shall appoint a substitute. [A person under suspension, expulsion or other disqualification, or who has any interest in or any bet on a race or has an interest in any of the horses engaged therein, is disqualified from acting in any official capacity in that race. In the event of such disqualification the management shall be notified by the disqualified person and shall appoint a substitute. Any person who violates this restriction shall be fined, suspended or expelled.]

Section 6. Suspension or Revocation of Official's License. An official may be fined, suspended or removed for:
(1) Incompetence;
(2) Failure to follow or enforce administrative regulations; or
(3) The consumption of alcohol within four (4) hours prior to the time he starts work as an official. [An official may be fined, suspended or removed at any time for incompetence, failure to follow or enforce rules, or any conduct detrimental to the sport including drinking within four (4) hours prior to the time he starts work as an official.]

Section 7. Ban on Owning or Dealing in Horses. (1) An employee of a track whose duties include the classification of horses shall not, directly or indirectly:
(a) Be the owner of a horse racing at a meeting; or
(b) Participate financially in the purchase or sale of a horse racing at a meeting.
(2) A person who violates the provisions of this section shall be suspended. [No employee of any track whose duties include the classification of horses shall directly or indirectly be the owner of any horse racing at such meeting, nor shall he participate financially directly or indirectly in the purchase or sale of any horse racing at such meeting. Any person violating this rule shall be suspended.]

Section 8. Location of Judge's Stand. (1) The judge's stand shall be located and constructed so as to afford an unobstructed view of the entire track.

(2) Nothing that would obscure or otherwise impede an official's vision of any portion of a track during a race shall be permitted on the track.

(3) A violation of the provisions of this section shall be:

(a) Fined an amount not to exceed $500; and

(b) Immediately suspended. [~~The judge's stand shall be so located and constructed as to afford to the officials an unobstructed view of the entire track and no obstruction shall be permitted upon the track, or the centerfield which shall obscure the officials' vision of any portion of the track during the race. Any violation of this section shall subject the track to a fine not exceeding $500 and immediate suspension.~~]

Section 9. Judge's Stand Occupants. (1) From fifteen (15) minutes before the first race until fifteen (15) minutes after the last race, the occupants of the judge's stand shall be limited to the following:

(a) Judges;

(b) Clerk of the course;

(c) Secretary;

(d) Starter;

(e) Timers;

(f) Official announcer;

(g) Runner who posts the photo finish;

(h) Officials of the commission; and

(i) Other persons specifically authorized by the commission.

(2) A track that violates the provisions of this section shall be fined an amount not to exceed $300. [~~None but the judges, the clerk of the course, the secretary, starter and timers, official announcer, runner that posts the photo finish, and officials of the commission, shall be allowed in the judge's stand from fifteen (15) minutes before the first race until fifteen (15) minutes after the last race unless authorized by the commission. Any track violating this rule shall be fined not to exceed $300.~~]

Section 10. Improper Acts by an Official. A judge or an official shall be suspended, expelled, or fined an amount not to exceed $500, if he is guilty of:

(1) A violation of:

(a) A statute for which a penalty is not provided by statute; or

(b) An administrative regulation governing harness racing; or

(2) Uses insulting language or engages in other improper conduct. [~~If any person acting as judge or an official shall be guilty of using insulting language to an owner, driver, or other person, or be guilty of other improper conduct, he shall be fined not exceeding $500, or be suspended or expelled.~~]

Section 11. Presiding Judge. The presiding judge shall:

(1) Supervise the persons specified in this subsection: [~~Have supervision to see that the rules of this commission are followed over the following officials:~~]

(a) Associate judges;

(b) Patrol judges;

(c) Starters;

(d) Paddock judges;

(e) Finish wire judge;

(f) Clerk of the course;

(g) Timers;

(h) Charters;

(i) Racing secretary;

(j) Official announcer; and

(k) [~~Any~~] Other licensed personnel directly responsible for conducting the racing program.

(2) Notify owners, trainers, drivers and grooms of penalties imposed.

(3) Submit a detailed written report [~~in writing~~] to the commission of [~~,~~] violations of the rules by a track, its officers or race officials[~~, giving detailed information thereof~~].

(4) Make [~~such~~] other reports [~~as~~] required by the commission.

(5) Sign each sheet of the judge's book, verifying the correctness of the record.

(6) Be responsible for the maintenance of the records of the meeting and [~~the~~] forwarding them [~~thereof~~] to the commission.

(7) If the presiding judge does not comply with the administrative regulations of the commission, he:

(a) Shall be suspended; and

(b) May be denied a license for the following year. [~~Failure of the presiding judge to see that the rules of the commission are complied with may be grounds for suspension and may be grounds for denial of a license for the subsequent year.~~]

Section 12. Authority and Procedure of Judges. A presiding judge shall: [~~The judges shall have the authority while presiding to:~~]

(1) Levy fines and penalties, as provided by applicable statute and administrative regulation. [~~Inflict fines and penalties, as prescribed by these rules.~~]

(2) Determine [~~all~~] questions of fact relating to the race.

(3) Decide any differences between parties to the race, or any contingent matter which shall arise, that [~~such as~~] are not otherwise provided for in this administrative regulation [~~these rules~~].

(4)(a) In case of fraud, declare pools and bets "off".

(b) An appeal from the decision of a presiding judge in a case of fraud shall not be permitted.

(c) A decision with respect to pools and bets shall be:

1. Made by the presiding judge at the conclusion of the race;

2. Based upon the:

a. Observation of the presiding judge; and

b. Facts determined upon immediate investigation.

(d) After the official placing at the conclusion of the heat or dash, a reversal or change of decision shall not affect the distribution of betting pools made on the official placing.

(e) If pools and bets are declared "off" for fraud, a party that is guilty of fraud shall be suspended and expelled. [~~Declare pools and bets "off" in case of fraud, no appeal to be allowed from their decision in that respect. All pools and bets follow the decision of the judges. Such a decision in respect to pools and bets shall be made at the conclusion of the race upon the observation of the judges and upon the facts as an immediate investigation shall develop. A reversal or change of decision after the official placing at the conclusion of the heat or dash shall not affect the distribution of betting pools made upon such official placing. When pools and bets are declared off for fraud, the guilty parties shall be fined, suspended or expelled.~~]

(5)(a) Control the horses, drivers, and assistants.

(b) Punish drivers or assistants who fail to obey their orders or the provisions of administrative regulations, by:

1. A fine not exceeding $100; or

2. Suspension; or

3. Expulsion.

(c) A presiding judge shall strictly enforce penalties prescribed by administrative regulations.

(d) A track shall not:

1. Rescind or modify a fine imposed by a presiding judge;

2. Review an order of suspension or expulsion; or

3. Interfere with a presiding judge with the performance of his duties. [~~Control the horses, drivers, and assistants and punish by a fine not exceeding $100 or by suspension or expulsion, any such person who shall fail to obey their orders or the rules. In no case shall there be any compromise or change on the part of the judges or members of punishment prescribed in the rules, but the same shall be strictly enforced. Tracks shall not remove or modify any fine imposed by the judges of a race, review any order of suspension, expulsion, or interfere with the judges performing their duties.~~]

(6)(a) Examine under oath all parties connected with a race as to

any wrong or complaint.

(b) The judges may compel by written notice the appearance of any person whose testimony is necessary to the proper conduct of a hearing.

(c) Failure to attend shall be a violation of this administrative regulation [~~these rules~~] and shall be penalized as provided in subsection (5) of this section.

(7) Consider complaints of foul only from the patrols, owners, trainers or drivers in the race [~~and no other~~].

(8) Make [~~such~~] decisions in the public interest that are required by extraordinary circumstances not covered by administrative [~~rules and~~] regulations of the commission.

(9) The judges shall declare a dash or heat of a race no contest if the track is thrown into darkness during the progress of a race because of a failure of electricity.

Section 13. Judges' Duties. A presiding judge shall exclude from the race a horse that in his opinion is improperly equipped, dangerous, or unfit to race, including sick, weak, and extremely lame horses.

(1)(a) A horse shall not race:

1. With a tube in its throat;

2. If it does not have unimpaired vision in at least (1) eye;

3. If it is infected with Equine Infectious Anemia, or is a carrier thereof.

(b) A horse that is a bleeder may race under recognized medication for the bleeding condition, if the:

1. Condition and medication is certified to the commission by the commission veterinarian, or a veterinarian licensed by the commission prior to the race; and

2. Horse is approved for racing by the presiding judge.

(c) If a horse bleeds while being raced under medication, it shall not race again, with or without medication, until it is cured and approved for racing by the commission.

(2) A presiding judge shall investigate an:

(a) Apparent or possible interference, or other violation of 811 KAR 1:075, Section 1, whether or not a complaint has been made by a driver;

(b) Act of cruelty to a race horse that is seen by, or reported to, him by a member during a meeting at which he officiates;

(c) If a judge finds that an act of cruelty has been committed, he shall:

1. Suspend or fine the offender in an amount not to exceed $500; and

2. Submit a written report of his findings and actions within ten (10) days to the commission;

(d) The chairman of the commission, or the designated representative of the commission:

1. Shall have the same authority conferred upon judges by the provisions of this subsection; and

2. May impose a penalty for an act of cruelty or neglect of a horse committed by a member, whether the act was performed on or off the premises of a race track;

(3)(a) A presiding judge shall conduct an investigation of an accident to determine its cause on the day of a race or immediately thereafter;

(b) At the time of an accident the:

1. Inquiry signed shall be posted; and

2. Race shall not be declared official until the presiding judge has conferred with the patrol judge;

(4) A presiding judge shall closely observe the performance of the drivers and the horses in order to ascertain if violations of 811 KAR 1:075 occur;

(5) A presiding judge shall exhaust all means to safeguard the contestants and the public.

Section 14. Hearing. (1) Before a penalty shall be imposed, a hearing at a designated time shall be granted.

(2)(a) All three (3) judges shall be present, if possible.

(b) At all judges' hearings, the presiding judge and at least one (1) associate judge shall be present.

(3)(a) The judges may impose the penalties prescribed by the administrative regulations of the commission.

(b) A penalty notice shall state:

1. The exact reason why the penalty is being imposed; and

2. A summary of the statute or administrative regulation that was violated.

(c) A penalty imposed on a driver may be reported on the reverse side of his driver's license by the presiding judge.

(4)(a) If a judge believes that a person has violated an administrative regulation or statute and has left the grounds and cannot be contacted, he shall:

1. Conduct an investigation; and

2. Send a detailed report to the commission.

(b) Based upon the judge's report, the commission may impose a penalty not to exceed ten (10) days without granting a hearing.

(c) A hearing shall be conducted prior to the imposition of a penalty in excess of ten (10) days.

(5)(a) A judge shall submit, in writing, to the commission, a list of witnesses questioned at a hearing, and their testimony.

(b) Testimony shall be recorded by:

1. Written, signed statement; or

2. Tape recorders; or

3. Court reporter's transcript.

(6)(a) The judges shall not make a decision until all witnesses called by the judges and the person who is the subject of a hearing have testified.

(b) Upon request, a person charged with a violation of a statute or administrative regulation shall be given until 12 p.m. of the following day to prepare his defense. [~~It shall be the duty of the judges to:~~

~~(1) Exclude from the race any horse that in their opinion is improperly equipped, dangerous or unfit to race, which shall include sick, weak and extremely lame horses. No horse shall race with a tube in its throat. No horse shall race unless it has unimpaired vision in at least one (1) eye and no horse infected with Equine Infectious Anemia or a carrier thereof, shall race. Horses that are bleeders may race under recognized medication for said bleeding condition provided that said condition and the type of medication is certified to the commission by the commission veterinarian or a veterinarian licensed by the commission prior to the race and said horse is approved for racing by the presiding judge. In the event the horse bleeds while being raced under medication, said horse shall not again race with or without medication until it is cured and approved for racing by the commission.~~

~~(2) Investigate any apparent or possible interference, or other violation of 811 KAR 1:075, Section 1, whether or not complaint has been made by the driver.~~

~~(3) Investigate any act of cruelty seen by them or reported to them by any member towards a race horse during a meeting at which they officiate. If the judges find that such an act has been committed, they shall suspend or fine the offending member not to exceed $500 and submit a written report within ten (10) days of their findings and action to the commission. The chairman of the commission or the designated representative of the commission shall have all the authority conferred upon the judges by this section, and in addition may order an investigation and a hearing and impose a penalty for any act of cruelty or neglect of a horse committed by any member whether on or off the premises of any race track.~~

~~(4) Immediately thereafter or on the day of the race conduct an investigation of any accidents to determine the cause thereof, and the judges shall make all accidents a matter of record in the judge's book and completely fill out an accident report. At the time of the accident,~~

~~the inquiry sign shall be posted and the race shall not be declared official until the presiding judge has conferred with the patrol judge.~~

~~(5) Observe closely performance of the drivers and the horses to ascertain if there are any violations of 811 KAR 1:075, particularly interference, helping, or inconsistent racing and exhaust all means possible to safeguard the contestants and the public.~~

~~(6) Grant a hearing at a designated time before a penalty may be imposed upon any party. All three (3) judges should be present if possible, and at least the presiding judge and one (1) associate judge must be present at all judges' hearings. The judges may inflict the penalties prescribed by rules and regulations of the commission.~~

~~(a) All penalty notices will carry the exact reason why the penalty has been imposed together with a summary of the rule or regulation violated. All penalties imposed on any driver may be recorded on the reverse side of his driver's license by the presiding judge.~~

~~(b) In the event the judges believe that a person has committed a rule or regulation violation and has left the grounds and they are unable to contact him, and hold a hearing thereon, they may make an investigation and send a detailed written report to the commission. The commission may impose a penalty not to exceed ten (10) days without a hearing based upon the report of the judges. No penalty in excess of ten (10) days shall be imposed before a hearing is granted.~~

~~(c) It shall be the duty of the judges to submit in writing a complete list of all witnesses questioned by them at any hearing, which list of witnesses, along with the testimony of such witnesses, shall be forwarded to the commission.~~

~~(d) The testimony of all witnesses questioned by the judges shall be recorded by one (1) of the following methods: written, signed statements, tape recorders or court reporter's transcript.~~

~~(e) No decision shall be made by the judges in such cases until all of the witnesses called by the judges and the person so required to appear before the judges have given their testimony. Any person charged with a rule or regulation violation shall be given at least until 12 noon of the following day to prepare his defense if he so requests.~~

~~(7) It shall be the duty of the judges to declare a dash or heat of a race no contest in the event the track is thrown into darkness during the progress of a race by failure of electricity.~~]

Section 15. [~~14.~~] Judges' Procedure. The judges shall:

(1) Be in the stand:

(a) Fifteen (15) minutes before the race;

(b) For ten (10) minutes after the first race; and

(c) Whenever the horses are upon the track.

(2) Observe the preliminary warming up of horses and scoring, noting:

(a) Behavior of horses;

(b) Lameness;

(c) Equipment;

(d) Conduct of the drivers;

(e) Changes in odds at pari-mutuel meetings; and

(f) Unusual incidents pertaining to horses or drivers participating in races.

(3)(a) Have the bell rung, or give other notice, at least ten (10) minutes before the race or heat. The judges may punish a driver who fails to obey this summons by:

1. A fine not to exceed $100; and

2. Having his horse ruled out and considered drawn.

(4)(a) Designate one (1) of themselves to lock the pari-mutuel machines immediately upon the horse reaching the official starting point.

(b) The presiding judge shall:

1. Designate the post time for each race; and

2. Call the horses at a time sufficient to preclude excessive delay after the completion of two (2) scores.

(5)(a) Be in communication with the patrol judges, by use of patrol phones, from the time the starter picks up the horses until the finish of the race.

(b) A patrol judge who witnesses a violation of statute or administrative regulation shall:

1. Report the violation; and

2. Submit a written report on the violation.

(c) At least one (1) judge shall observe the drivers throughout the stretch, and specifically note:

1. Changing course;

2. Interference;

3. Improper use of whips;

4. Breaks; and

5. Failure to contest the race to the finish.

(6) Display the photo sign:

(a) If:

1. The order of finish among the contending horses is less than a half-length; or

2. A contending horse is on a break at the finish; and

(b) After the photo:

1. The photo has been examined;

2. A decision made;

3. Checked by the presiding judge; and

4. Posted for public inspection.

(7) The judges shall decide the order of finish if:

(a) The photo finish camera suffers electrical or mechanical failure; or

(b) A distorted, deceptive, or otherwise inadequate picture is developed.

(8)(a) A horse shall be examined by the state veterinarian if it falls, runs loose and uncontrolled:

1. During warm up;

2. Prior to the race; or

3. Going to the post.

(b) If the state veterinarian determines that the horse is unfit, the presiding judge shall order the horse scratched. [~~It shall be the procedure of the judges to:~~

~~(1) Be in the stand fifteen (15) minutes before the first race and remain in the stand for ten (10) minutes after the last race, and at all times when the horses are upon the track.~~

~~(2) Observe the preliminary warming up of horses and scoring, noting behavior of horses, lameness, equipment, conduct of the drivers, changes in odds at pari-mutuel meetings and any unusual incidents pertaining to horses or drivers participating in races.~~

~~(3) Have the bell rung or give other notice at least ten (10) minutes before the race or heat. Any driver failing to obey this summons may be punished by a fine not exceeding $100 and his horse may be ruled out by the judges and considered drawn.~~

~~(4) Designate one (1) of their members to lock the pari mutuel machines immediately upon the horses reaching the official starting point. The presiding judge shall designate the post time for each race and the horses shall be called at such time as to preclude excessive delay after the completion of two (2) scores.~~

~~(5) Be in communication with the patrol judges, by use of patrol phones, from the time the starter picks up the horses until the finish of the race. Any violation or near violation of the rules or regulations shall be reported by the patrol judge witnessing the incident and a written record made of same. At least one (1) judge shall observe the drivers throughout the stretch specifically noting changing course, interference, improper use of whips, breaks, and failure to contest the race to the finish.~~

~~(6) Post the objection sign, or inquiry sign, on the odds board in the case of a complaint or possible rule or regulation violation, and immediately notify the announcer of the objection and the horse or horses involved. As soon as the judges have made a decision, the objection sign shall be removed, the correct placing displayed, and the "official" sign flashed. In all instances the judges shall post the order of finish and the "official" sign as soon as they have made their decision.~~

~~(7) Display the photo sign if the order of finish among the~~

~~contending horses is less than half length or a contending horse is on a break at the finish. After the photo has been examined and a decision made, a copy or copies shall be made, checked by the presiding judge, and posted for public inspection. In the event of an electrical or mechanical failure of the photo finish camera, of if a distorted, deceptive, or otherwise inadequate picture is developed, the judges shall decide the order of finish and such decision shall be final.~~

~~(8) Should a horse fall, run loose and uncontrolled, during warm up, prior to the race or going to the post, the horse shall be examined by the state veterinarian to determine whether the horse is fit to race. If the veterinarian determines that the horse is unfit the presiding judge shall order the horse scratched.]~~

Section 16. [~~15.~~] Patrol Judges. **(1) At the discretion of the judges, patrol judges may be appointed by the track.**

(2) Appointment of patrol judges shall require the approval of the presiding judge.

(3) Patrol judges shall be supervised by the presiding judge.

(4)(a) At least two (2) patrol judges shall be employed at:

1. Extended pari-mutuel meetings; and

2. Other meetings conducting one (1) or more races with a purse value of $5,000 or more.

(b) If there is a patrol car, only one (1) patrol judge shall be required.

(5) Patrol judges shall phone or go the judge's stand to report fouls and other improper conduct.

(6) The result of a heat or dash shall not be announced until the reports of the patrols have been received. [~~At the discretion of the judges, patrol may be appointed by the track but such patrols shall be approved by the presiding judge and work under his direction. At extended pari-mutuel meetings and at other meetings conducting one (1) or more races with a purse value of $5,000 or over, at least two (2) patrol judges shall be employed. It shall be their duty to phone or repair to the judge's stand and report all fouls and improper conduct. The result of a heat or dash shall not be announced until sufficient time has elapsed to receive the reports of the patrols. Where there is a patrol car, only one (1) patrol judge shall be required.~~]

Section 17. [~~16.~~] Incapacitated Official. **(1)(a) In cases of unavoidable emergency, such as the absence or incapacitation of a licensed official, the track management shall appoint a substitute official.**

(b) The appointment of a substitute official shall require approval by the commission.

(2) If a substitute official serves for more than three (3) days, he shall apply to the commission for a license. [~~If any licensed official is absent or incapacitated, the track management, subject to commission approval, must appoint a substitute at such meeting. Notice of such temporary appointment shall be given immediately to the office of this commission. If such official acts for more than three (3) days, he shall apply for a commission license in that capacity. This power may only be used in cases of unavoidable emergencies.~~]

[~~Section 17. Starter Appointment. Starter shall be designated by the track, subject to the approval of this commission. Such officials must be licensed as starters by this commission.~~

~~Section 18. Starter; Authority. The starter shall be in the stand or starting gate fifteen (15) minutes before the first race. He shall have control over the horses and authority to assess fines and/or suspend drivers for any violation of the rules and regulations from the formation of the parade until the word "go" is given. He may assist in placing the horses when requested by the judges to do so. He shall notify the judges and the drivers of penalties imposed by him. His services shall be paid for by the track employing him. An assistant starter must be available at all times.~~]

Section 18. "Starter." (1) Subject to the approval of the commission, the starter shall be:

(a) Designated by the track; and

(b) Licensed as a starter by the commission.

(2) The starter shall be in the stand or starting gate fifteen (15) minutes before the first race.

(3) The starter: shall have control over the horses.

(4)(a) From the formation of the parade until the word "go" is given, the starter may assess fines and suspend drivers for a violation of statute or administrative regulation.

(b) He shall notify the judges and the drivers of penalties imposed by him.

(5) If requested by the judges, he may assist in placing the horses.

(6) An assistant starter shall be available at all times.

Section 19. Clerk Duties; Clerk of the Course. The clerk of the course shall:

(1) At request of judges assist in drawing positions.

(2) Keep the judge's book and record therein:

(a) All horses entered and their eligibility certificate numbers.

(b) Names of owners, and drivers and drivers' license numbers.

(c) The charter lines at pari-mutuel meetings.

(d) At all race meetings, the money won by the horse at that track.

(e) [~~(d)~~] Note drawn or ruled out horses.

(f) [~~(e)~~] Record time in minutes, seconds, and fifths of seconds.

(g) [~~(f)~~] Check eligibility certificates before the race.

(h) [~~, and~~] After the race [~~shall~~] enter all information provided for thereon, including the horse's position in the race if it was charted.

(i) [~~(g)~~] Verify the correctness of the judge's book, including race time, placing and money winnings, **and** reasons for disqualification, if any.

(j) Verify [~~, and see~~] that the book is properly signed.

(k) [~~(h)~~] Forward the judge's book charts and marked programs to **the** [~~this~~] commission from all extended pari-mutuel meetings the day following each racing day.

(l) [~~(i)~~] Notify owners and drivers of penalties assessed by the officials.

(3) Upon request [~~may~~] assist judges in placing horses.

(4) After the race, return the eligibility certificate to **the** owner of the horse or his representative when requested.

[~~(5) Failure to comply with any part of this rule and make the above listed entries legible, clear and accurate, may subject either the clerk or the track, or both, to a fine not to exceed $100 for each violation.~~]

Section 20. Timers. (1) **If an electronic or electric timing device is used, it shall be a device approved by the commission.**

(2) All time shall be announced and recorded in fifths of seconds.

(3)(a) If an electronic or electric timing device is used, there shall be one (1) timer in the judge's or timer's stand.

(b) If an electronic or electric timing device is not used, there shall be three (3) timers in the judge's or timer's stand.

(4) The chief timer shall verify the correctness of the record by signing the judge's book for each race . [~~At each race there shall be three (3) timers in the judge's or timer's stand except when an electric timing device approved by the commission is used, in which event there shall be one (1) timer. The chief timer shall sign the judge's book for each race verifying the correctness of the record. All time shall be announced and recorded in fifths of seconds. All tracks licensed by the commission shall use an approved electronic or electric timing device.~~]

(2)**(a)** The timers shall be in the stand fifteen (15) minutes before

the first heat or dash is to be contested.

(b) They shall start their watches when the first horse leaves the point from which the distance of the race is measured.

(c) The time of the leading horse at the quarter, half, three-quarters, and the finish shall be taken.

(d) If odd distances are raced, the fractions shall be noted accordingly.

Section 21. Paddock Judge. (1) Under the direction and supervision of the presiding judge, the paddock judge **shall be in** [~~will have~~] complete charge of [~~all~~] paddock activities as **specified** [~~outlined~~] in 811 KAR 1:010, Section 10.

(2) The paddock judge shall be subject to the approval of this commission.

(3) The paddock judge **shall be** [~~is~~] responsible for:

(a) [~~(1)~~] Getting the fields on the track for post parades in accordance with the schedule given to him by the presiding judge;

(b) [~~(2)~~] Inspection of horses for changes in equipment, broken or faulty equipment, head numbers or saddle pads;

(c) [~~(3)~~] Supervision of paddock gate men**; and**

(d) [~~(4)~~] Proper check in and check out of horses and drivers. Check the identification of all horses coming into the paddock including the tattoo number.

(4) The presiding judge shall:

(a) Be the director of the activities of the paddock farrier;

(b) Immediately notify the presiding judge of anything that could in any way change, delay, or otherwise affect the racing program;

(c) Report to the presiding judge cruelty to a horse that he has observed;

(d) Insure that only properly authorized persons are permitted in the paddock;

(e) Notify the presiding judge of a change of racing equipment or shoes before the race;

(f) Inspect and supervise the maintenance of emergency equipment kept in the paddock; and

(g) Notify judges of trainers and groomers who leave the paddock in an emergency.

[~~(5) Director of the activities of the paddock farrier.~~

~~(6) The paddock judge will immediately notify the presiding judge of anything that could in any way change, delay or otherwise affect the racing program. The paddock judge will report any cruelty to any horse that he observes to the presiding judge.~~

~~(7) The paddock judge will see that only properly authorized persons are permitted in the paddock and any violation of this rule may result in a fine, suspension or expulsion.~~

~~(8) Notify the presiding judge of any change of racing equipment or shoes before the race.~~

~~(9) Inspect and supervise the maintenance of emergency equipment kept in the paddock.~~

~~(10) Notify judges of all trainers and grooms who leave the paddock in an emergency.~~]

Section 22. Identifier. **(1) At all extended pari-mutuel meetings an association shall employ an identifier licensed by the commission and United States Trotting Association.**

(2) The identifier shall:

(a) Check the identification of all horses coming into the paddock, including the tattoo number, color, and any markings;

(b) Be under the immediate supervision of the paddock judge, and the general supervision of the presiding judge.

(3)(a) The identifier shall immediately report to the paddock judge a discrepancy that is detected in the tattoo number, color, or markings of a horse.

(b) The paddock judge shall immediately notify the presiding judge of the discrepancy. [~~At all extended pari-mutuel meetings the association shall employ an identifier licensed by the commission, whose duty it shall be to check the identification of all horses coming into the paddock, to include the tattoo number, color, and any markings. The identifier shall be under the immediate supervision of the paddock judge and the general supervision of the presiding judge. Any discrepancy detected in the tattoo number, color, or markings of a horse shall be reported immediately to the paddock judge, who shall in turn report same forthwith to the presiding judge. The identifier must be licensed by the USTA.~~]

Section 23. Program Director. **(1) Subject to the approval of the commission, each extended pari-mutuel track shall designate a program director.**

(2) A person shall be permitted to act as a program director if he demonstrates he is capable of furnishing accurate and complete past performance information to the general public.

(3) The program director shall furnish accurate and complete past performance information to the general public. [~~Each extended pari-mutuel track shall designate a program director. Such program director shall be subject to the approval of this commission.~~

~~(1) It shall be the responsibility of the program director to furnish complete and accurate past performance information.~~

~~(2) No person shall be permitted to act as a program director unless he is capable of furnishing accurate and complete past performance information to the general public.~~]

Section 24. Duties of Patrol Judges. (1) The patrol judges shall observe all activity on the race track in their area at all times during the racing program.

(2) They shall immediately report to the presiding judge:

(a) Any action on the track which could improperly affect the result of a race.

(b) Every violation of the **statutes and administrative regulations governing** racing [~~rules and regulations~~].

(c) Every violation of the rules of decorum.

(d) The lameness or unfitness of any horse.

(e) Any lack of proper racing equipment.

(3) [~~(2)~~] The patrol judges shall[~~, furthermore~~]:

(a) Be in constant communication with the judges during the course of every race**;**

(b) [~~and shall~~] immediately advise the judges of every rule violation, improper act or unusual happening which occurs at their station.

(c) [~~(b)~~] Submit individual daily reports of their observations of the racing to the presiding judge**; and**

(d) [~~(c)~~] When directed by the presiding judge**,** [~~shall~~] attend hearings or inquiries on violations and testify thereat under oath.

Section 25. Licensed Charter. (1) **At all extended pari-mutuel meetings and grand circuit meetings, races shall be charted by a licensed charter hired by the track.** [~~At all extended pari-mutuel meetings and grand circuit meetings, the charting of races is mandatory and the track shall employ a licensed charter to fulfill the requirements of this section.~~]

(2) The charter shall be subject to the approval of this commission, and shall be licensed by the **United States Trotting Association** [~~USTA~~].

Section 26. **(1) Equipment changes shall be cleared through the paddock judge.**

(2) The paddock shall call the judges to obtain permission for equipment changes. [~~All equipment changes shall be cleared through the paddock judge who will call the judges for the necessary permission.~~]

Section 27. Duties of the Race Secretary. **The race secretary of each association shall be licensed and approved by the commission. The race secretary shall:**

(1) Receive and safeguard the eligibility certificates of all horses competing at the race track, or stabled on grounds owned or cared for by an association and to return them to the owner of a horse or his representative upon its departure from the grounds.

(2) Be familiar with the age, class, and competitive ability of horses racing at the track.

(3) Classify and reclassify horses in accordance with the provisions of applicable administrative regulations.

(4) List horses in the categories for which they qualify, and insure that the lists are current and properly displayed in the room in which the declaration box is located for examination by horsemen and others.

(5) Provide for the listing of horses in the daily program.

(6) Verify the information contained in entry blanks and declarations.

(7) Select the horses to start and the also eligible horses from the declarations in accordance with the provisions of applicable administrative regulations.

(8) Examine nominations and declarations in early closing events, late closing and stake events, to verify the eligibility of all declarations and nominations and to compile lists of them for publication. [~~The race secretary of each association must be licensed and approved by the commission and it shall be his duty:~~

~~(1) To receive and keep safe the eligibility certificates of all horses competing at the race track or stabled on grounds owned or cared for by any association and to return same to the owner of a horse or his representative upon their departure from the grounds.~~

~~(2) To be familiar with the age, class, and competitive ability of all horses racing at the track.~~

~~(3) To classify and reclassify horses in accordance with the rules.~~

~~(4) To list horses in the categories for which they qualify and to cause such lists to be kept current and to be properly displayed in the room in which the declaration box is located for examination by horsemen and others.~~

~~(5) To provide for the listing of horses in the daily program; to examine all entry blanks and declarations to verify all information set forth therein; to select the horses to start and the also eligible horses from the declarations in accordance with the rules governing these functions.~~

~~(6) To examine nominations and declarations in early closing events, late closing and stake events, to verify the eligibility of all declarations and nominations and to compile lists thereof for publication.~~]

Section 28. Commission Supervisors of Pari-mutuel Betting. (1) The commission shall employ supervisors with accounting experience.

(2) Supervisors shall ascertain whether the proper amounts have been paid from pari-mutuel pools to the betting public, the association, and the Commonwealth, by checking, auditing and filing with the commission verified reports.

(3) The reports shall account for daily pari-mutuel handle distribution and attendance for each preceding racing day.

(4) A final report shall be filed at the conclusion of each race meeting in the Commonwealth.

(5) The daily report shall show for each race:

(a) Number of horses started;

(b) Number of betting interests;

(c) Total money wagered in each betting pool;

(d) Refunds, if any, for each day;

(e) The sum of all betting pools, and total refunds;

(f) Total pari-mutuel handle for the comparable racing day for the preceding year;

(g) Cumulative total and daily average pari-mutuel handle for the race meeting;

(h) Amount of state pari-mutuel tax due;

(i) Taxable admissions, tax exempt admissions, total admissions;

(j) Temperature, weather and track conditions;

(k) Post time of first race;

(l) Program purses, distance and conditions of each race; and

(m) Any minus pools resulting with explanation.

(6) Within thirty (30) days after the close of a race meeting, the commission supervisors of pari-mutuel shall submit to the commission a final verified report providing a summary recapitulation of the daily reports for each race meeting.

(7) The commission supervisors of pari-mutuel betting or their representative shall have access to all association books, records, and pari-mutuel equipment. [~~(1) The commission shall employ supervisors with accounting experience who shall be responsible for ascertaining whether the proper amounts have been paid from pari-mutuel pools to the betting public, to the association, and to the Commonwealth, by checking, auditing and filing with the commission verified reports accounting for daily pari-mutuel handle distribution and attendance for each preceding racing day and a final report at the conclusion of each race meeting in the Commonwealth.~~

~~(2) Such daily reports shall show:~~

~~(a) For each race: number of horses started, number of betting interests, total money wagered in each betting pool, and refunds, if any, for each day. The sum of all betting pools, and total refunds also, total pari-mutuel handle for the comparable racing day for the preceding year, and cumulative total and daily average pari-mutuel handle for the race meeting.~~

~~(b) Amount of state pari-mutuel tax due; taxable admissions, tax exempt admissions, total admissions; temperature, weather and track conditions, post time of first race; program purses, distance and conditions of each race; any minus pools resulting with explanation.~~

~~(3) The commission supervisors of pari-mutuel betting shall submit to the commission on or before thirty (30) days after the close of each race meeting a final verified report giving in summary form a recapitulation of the daily reports for each race meeting and such other information as the commission may require.~~

~~(4) The commission supervisors of pari-mutuel betting or their representative shall have access to all association books, records, and pari-mutuel equipment for checking accuracy of same.~~]

WAYNE G. LYSTER, III, Chairman
APPROVED BY AGENCY: July 13, 1993
FILED WITH LRC: July 15, 1993 at 11 a.m.

PUBLIC PROTECTION AND REGULATION CABINET
Kentucky Racing Commission
(As Amended)

811 KAR 1:055. Declaration to start; drawing horses.

RELATES TO: KRS 230.630(1), (3), 230.640
STATUTORY AUTHORITY: KRS 230.630(3), (4), (7)
NECESSITY AND FUNCTION: To regulate conditions under which harness racing shall be conducted in Kentucky. The function of this regulation is to regulate declarations to start and [;] drawing horses.

Section 1. Declaration. (1)(a) Extended pari-mutuel meetings. The declaration time shall be 9 a.m., unless:

1. Otherwise specified in the conditions; or

2. Approved in writing by the commission three (3) days prior to the day of the race.

(b) Other meetings. If another time is not specified in the conditions, starters shall be declared in at 10 a.m.

(2) A horse shall not be declared to start in more than one (1)

race on a racing day.

(3) Time used. The time when declarations close shall be:

(a) For extended pari-mutuel meetings, the time in use at the meeting; and

(b) For other meetings, standard time. [~~At extended pari-mutuel meetings. Unless otherwise specified in the conditions, or approved in writing by the commission three (3) days prior to the day of the race omitting Sundays, the declaration time shall be 9 a.m.~~

~~(2) Declaration time at other meetings. At all other meetings starters must be declared in at 10 a.m. unless another time is specified in the conditions.~~

~~(3) No horse shall be declared to start in more than one (1) race on any one (1) racing day.~~

~~(4) Timed used. In order to avoid confusion and misunderstanding, the time when declarations close will be considered to be standard time, except the time in use at an extended pari-mutuel meeting shall govern that meeting.~~]

(4) [~~(5)~~] Declaration box. The management shall provide a locked box with an aperture through which declarations shall be deposited.

(5) [~~(6)~~] Responsibility for declaration box. The presiding judge shall be in charge of the declaration box.

(6) [~~(7)~~] Search for declarations by presiding judge before opening box. [~~Just~~] Prior to opening of the box at extended pari-mutuel meetings where futurities, stakes, early closing or late closing events are on the program, the presiding judge shall:

(a) Check with the race secretary to ascertain if any declarations by mail, telegraph, or otherwise, are in the office and not deposited in the entry box; and

(b) [~~he shall~~] see that they are declared and drawn in the proper event.

(7) [~~(8)~~] Opening of declaration box. At the time specified the presiding judge shall unlock the box, assort the declarations found therein and immediately draw the positions in the presence of such owners or their representatives, as may appear.

(8) [~~(9)~~] Entry box and drawing of horses at extended pari-mutuel meetings.

(a) The entry box shall be opened by the presiding judge at the advertised time.

(b) [~~and~~] The presiding judge **shall ensure** [~~will be responsible to see~~] that at least one (1) horseman or an official representative of the **horseman** [~~horsemen~~] is present. **An** [~~No~~] owner or agent for a horse with a declaration in the entry box shall **not** be denied the privilege of being present.

(c) Under the supervision of the presiding judge, all entries shall be listed, the eligibility verified, preference ascertained, starters selected and post positions drawn.

(d) If it is necessary to reopen any race, public announcement shall be made at least twice and the box reopened to a definite time.

(9) [~~(10)~~] Drawing of post positions for second heat in races of more than one (1) dash or heat at pari-mutuel meetings. In races of a duration of more than one (1) dash or heat at pari-mutuel meetings, the judges may draw post positions from the stand for succeeding dashes or heats.

(10) [~~(11)~~] Declarations by mail, telegraph or telephone.

(a) Declarations by mail, telegraph, or telephone actually received and evidence of which is deposited in the box before the time specified to declare in, shall be drawn in the same manner as the others. **The** [~~Such~~] drawings shall be final.

(b) Mail, telephone and telegraph declarations **shall** [~~must~~] state the:

1. Name and address of the owner or lessee;
2. [~~the~~] Name, color, sex, sire and dam of the horse;
3. [~~the~~] Name of the driver and his colors;
4. [~~the~~] Date and place of last start;
5. [~~a~~] Current summary, including the number of starts, first, seconds, thirds, earnings and best winning time for the current year; and
6. [~~the~~] Event or events in which the horse is to be entered.

(11) [~~(12)~~] Effect of failure to declare on time. **If** [~~When~~] a track requires a horse to be declared at a stated time, failure to declare [~~as required~~] shall be considered a withdrawal from the event.

(12) [~~(13)~~] Drawings of horses after declaration.

(a) After declaration to start has been made, **a** [~~no~~] horse shall **not** be drawn **without** [~~except by~~] permission of the judges.

(b) Any horse eligible to start in a second, third, or fourth heat of a race shall not be drawn without the permission of the judges.

(c) A fine, not to exceed $500, or suspension, may be imposed for drawing a horse without permission.

(d) [~~,~~] The penalty **shall be assessed** [~~to apply~~] to both the horse and the party who violates the regulation.

(13) [~~(14)~~] Horses omitted through error.

(a) Except as provided in this subsection, a drawing shall be final.

(b) If there is conclusive evidence that a horse, properly declared other than by telephone, was omitted from the race through error of a track, its agent or employee, the horse may be added to the race and given the outside post position.

(c) For pari-mutuel meetings, the provisions of this subsection shall apply if the error is discovered prior to the publication of the official program. [~~Such drawings shall be final unless there is conclusive evidence that a horse properly declared, other than by telephone, was omitted from the race through error of a track or its agent or employee in which event the horse may be added to this race but given the outside post position. This shall not apply at pari-mutuel meetings unless the error is discovered prior to the publication of the official program.~~]

Section 2. Qualifying Races. At [~~all~~] extended pari-mutuel meetings declarations for overnight events shall be governed by the following:

(1)(a) Within two (2) weeks of being declared in, a horse that has not raced previously at the gait chosen shall:

1. Go a qualifying race under the supervision of a judge holding a presiding or associate judge's license for pari-mutuel meetings; and

2. Acquire at least one (1) charted line by a licensed charter.

(b) Time and beaten lengths shall be determined by a standard photo finish.

(2)(a) The provisions of subsection (1) of this section shall apply to a horse that does not show a charted line for:

1. The previous season; or

2. Within its last six (6) starts.

(b) Uncharted races contested in heats, of more than one (1) dash, and consolidate according to subsection (4) of this section shall be considered one (1) start.

(3)(a) The provisions of subsection (2) of this section shall not apply if a horse:

1. Has raced at a charted meeting during the current season; and

2. Gone to meetings at which the races are not charted.

(b) The information from the uncharted races may be:

1. Summarized, including each start; and

2. Consolidated in favor of charted lines.

[~~(1) Within two (2) weeks of being declared in, a horse that has not raced previously at the gait chosen must go a qualifying race under the supervision of a judge holding a presiding or associate judge's license for pari-mutuel meetings and acquire at least one (1) charted line by a licensed charter. In order to provide complete and accurate chart information on time and beaten lengths a standard photo finish shall be in use.~~

~~(2) A horse that does not show a charted line for the previous season, or a charted line within its last six (6) starts, must go a qualifying race as set forth in subsection (1) of this section. Uncharted races contested in heats or more than one (1) dash and consolidated~~

~~according to subsection (4) of this section will be considered one (1) start.~~

~~(3) When a horse has raced at a charted meeting during the current season, then gone to meetings where the races are not charted, the information from the uncharted races may be summarized, including each start, and consolidated in favor of charted lines and the requirements of subsection (2) of this section would then not apply.~~]

(4) **If the race is not at least one (1) mile,** the consolidated line shall carry date, place, time, driver, finish, track condition and distance [~~if race is not at one (1) mile~~].

(5)(a) The judges may require **a** [~~any~~] horse that has been on the steward's list to go a qualifying race.

(b) If a horse has raced in individual time not meeting the qualifying standards for that class of horse, he may be required to go a qualifying race.

(6)**(a) Except as provided by paragraph (b) of this subsection, if adequate competition is not available for a qualifying race, the judges may permit a fast horse to qualify by a timed workout that is consistent with the time of the races in which the horse will compete.**

(b) A horse shall qualify in a qualifying race if it is on the steward's list for:

1. Breaks; or

2. Refusing to come to the gate. [~~The judges may permit a fast horse to qualify by means of a timed workout consistent with the time of the races in which he will compete in the event adequate competition is not available for a qualifying race. However, a horse that is on the steward's list for breaks or refusing to come to the gate must qualify in a qualifying race.~~]

(7) **Qualifying races shall be:**

(a) Held at least one (1) week prior to the opening of a meeting of ten (10) days or more; and

(b) Scheduled twice a week through the last week of the meeting. [~~To enable a horse to qualify, qualifying races should be held at least one (1) full week prior to the opening of any meeting of ten (10) days or more and shall be scheduled at least twice a week. Qualifying races shall also be scheduled twice a week during the meeting and through the last week of the meeting.~~]

(8)**(a) A race to qualify drivers and horse shall be charted, timed and recorded.**

(b) A race to qualify only drivers shall not be required to be charted, timed and recorded. [~~Where a race is conducted for the purpose of qualifying drivers and not horses, the race need not be charted, timed or recorded. This subsection is not applicable to races qualifying both drivers and horses.~~]

(9)**(a) Except as provided in paragraph (b) of this subsection, if a horse takes a win record in a qualifying race, the record shall be prefaced with the letter "Q".**

(b)1. The record shall not be prefaced with the letter "Q" if, immediately prior to or following the race, the horse has been submitted to an approved urine, saliva, or blood test.

2. The presiding judge shall report the test on the judge's sheet. [~~If a horse takes a win race record in a qualifying race, such record must be prefaced with the letter "Q" wherever it appears, except in a case where, immediately prior to or following the race, the horse taking the record has been submitted to an approved urine, saliva or blood test. It will be the responsibility of the presiding judge to report the test on the judges' sheet.~~]

(10) **Before it is permitted to start in a race with pari-mutuel wagering, a horse that fails to race at a charted meeting within thirty (30) days after having started shall:**

(a) Start in a charted race, or a qualifying race; and

(b) Meet the standards of the meeting. [~~Any horse that fails to race at a charted meeting within thirty (30) days after having started, shall start in a charted race or a qualifying race and meet the standards of the meeting before being allowed to start in a race with pari-mutuel wagering.~~]

Section 3. Coupled Entries. (1)**(a) Except as provided by the provisions of this section, two (2) or more horses shall be coupled as an "entry" if they are:**

1. Owned or trained by the same person; or

2. Trained in the same stable by the same management.

(b) A wager on one (1) of the horses coupled as an "entry" shall be a wager on all horses in the "entry".

(2)(a) If a trainer enters two (2) or more horses, under bona fide separate ownerships or the same ownership, in the events specified in paragraph (b) of this subsection, the horses may race as separate betting entries if:

1. The association has requested they be permitted to race as separate betting entries; and

2. The judges approve the request.

(b) The events to which the provisions of this subsection apply shall be a stake, early closing, futurity, free-for-all, or other special event.

(c) The fact that the horses are trained by the same person shall be stated prominently in the program.

(d) If the race is split in two (2) or more divisions:

1. Horses in an "entry" shall be seeded insofar as possible, in the following order, by:

a. Owners;

b. Trainers;

c. Stables.

(e) The divisions in which they compete and their post positions shall be drawn by lot.

(f) Elimination heats also shall be governed by the provisions of paragraphs (d) and (e) of this subsection.

(3) The presiding judge shall be responsible for coupling horses.

(4)(a) If it is necessary to protect the public interest, horses that are separately owned or trained may be coupled for pari-mutuel wagering.

(b) If this occurs, entries shall not be rejected.

(5) If an owner, lessor, or lessee, has a vested interest in another horse in the same race, it shall constitute an entry. [~~When the starters in a race include two (2) or more horses owned or trained by the same person, or trained in the same stable or by the same management, they shall be coupled as an "entry" and a wager on one (1) horse in the "entry" shall be a wager on all horses in the "entry." Provided, however, that when a trainer enters two (2) or more horses in a stake, early closing, futurity, free for all or other special event under bona fide separate ownerships or same ownership, the said horses may, at the request of the association and with the approval of the judges [commission], be permitted to race as separate betting entries. The fact that such horses are trained by the same person shall be indicated prominently in the program. If the race is split in two (2) or more divisions, horses in an "entry" shall be seeded insofar as possible, first by owners, then by trainers, then by stables; but the divisions in which they compete and their post positions shall be drawn by lot. The above provision shall also apply to elimination heats.~~

~~(2) The presiding judge shall be responsible for coupling horses. In addition to the foregoing, horses separately owned or trained may be coupled as an entry where it is necessary to do so to protect the public interest for the purpose of pari mutuel wagering only. However, where this is done, entries may not be rejected.~~

~~(3) If an owner, lessor, or lessee has a vested interest in another horse in the same race, it shall constitute an entry.~~]

Section 4. Also Eligibles. Not more than two (2) horses may be drawn as also eligibles for a race.

(2) [~~and~~] Their positions shall be drawn along with the starters in the race.

(3) If one (1) or more horses are excused by the judges, the also eligible horse shall:

(a) In handicap races in which the handicap is the same, take the place of the horse that it replaces;

(b) In handicap races in which the handicap is different, take the position on the outside of the horses with a similar handicap; and

(c) In other races, take the post position drawn by the horse it replaces. [~~In the event one (1) or more horses are excused by the judges, the also eligible horse or horses shall race and take the post position drawn by the horse that it replaces, except in handicap races. In handicap races the also eligible horse shall take the place of the horse that it replaces in the event that the handicap is the same. In the event the handicap is different, the also eligible horse shall take the position on the outside of horses with a similar handicap.~~]

(4) A [~~No~~] horse shall not [~~may~~] be added to a race as an also eligible unless the horse was drawn [~~as such~~] at the time declarations closed.

(5)(a) A [~~No~~] horse shall not [~~may~~] be barred from a race to which it is otherwise eligible by reason of its preference due to the fact that it has been drawn as an also eligible. A horse moved into the race from the also eligible list shall not [~~cannot~~] be drawn without the [~~except by~~] permission of the judges.

(b) [~~, but~~] The owner or trainer of such a horse shall be notified that the horse is to race.

(c) The horse [~~and it~~] shall be posted at the race secretary's office.

(6) [~~All~~] Horses on the also eligible list that are [~~and~~] not moved into race by 9 a.m. on the day of the race shall be released.

Section 5. Preference. (1)(a) Preference shall be given in all overnight events according to a horse's last previous purse race during the current year.

(b) The preference date on a horse that has drawn to race and been scratched is the date of the race from which he was scratched.

(2) If [~~When~~] a horse is racing for the first time in the current year, the date of the first declaration shall be considered its last race date, and preference shall be applied accordingly.

(3)(a) If an error has been made in determining or posting a preference date, and the [~~said~~] error deprives an eligible horse of an opportunity to race, the trainer involved shall report the error to the racing secretary within one (1) hour of the announcement of the draw.

(b) If [~~in fact~~] a preference date error has occurred, the race shall [~~will~~] be redrawn.

Section 6. Steward's List. (1)(a) A horse may be placed on a steward's list by the presiding judge if it is unfit to race because it is:

1. Dangerous;
2. Unmanageable;
3. Sick;
4. Lame; or
5. Unable to show a performance to qualify for races at the meeting.

(b) The owner or trainer shall be notified in writing of this action, and the specific item listed in paragraph (a) of this subsection upon which the action is based.

(c) Declaration on a horse placed on a steward's list shall be refused.

(d) If a hose is placed on a steward's list, the clerk of the course shall make a note on the eligibility certificate of the horse stating the:

1. Date it was placed on the steward's list;
2. The reason it was placed on the steward's list; and
3. If the horse has been removed from the steward's list, the date of its removal. [~~A horse that is unfit to race because he is dangerous, unmanageable, sick, lame, unable to show a performance to qualify for races at the meeting, or otherwise unfit to race at the meeting may be placed on a "steward's list" by the presiding judge, and declarations on said horse shall be refused, but the owner or trainer shall be notified in writing of such action and the reason as set forth above shall be clearly stated on the notice. When any horse is placed on the steward's list, the clerk of the course shall make a note on the eligibility certificate of such horse, showing the date the horse was put on the steward's list, the reason therefor and the date of removal if the horse has been removed.~~]

(2)(a) A presiding judge or other official at a nonextended meeting shall not remove from the steward's list and accept as an entry a horse that:

1. Had been placed on a steward's list; and
2. Because he is a dangerous or unmanageable horse, has not been removed from the steward's list.

(b) A nonextended meeting may refuse declarations on a horse that has been placed on a steward's list and not removed therefrom. [~~No presiding judge or other official at a nonextended meeting shall have the power to remove from the steward's list and accept as an entry any horse which has been placed on a steward's list and not subsequently removed therefrom for the reason that he is a dangerous or unmanageable horse. Such meetings may refuse declarations on any horse that has been placed on the steward's list and has not been removed therefrom.~~]

(3) A horse scratched from a race because of lameness or sickness shall [~~may~~] not enter another race for at least three (3) days from the date of the race from which the horse was scratched.

Section 7. Driver. (1) Declarations shall state who shall drive the horse and give the driver's colors.

(2) A driver shall not [~~Drivers may~~] be changed after [~~until~~] 9 a.m. of the day preceding the race, [~~after which no driver may be changed~~] without the permission of the judges and a showing of [~~for~~] good cause.

(3) If [~~When~~] a nominator starts two (2) or more horses, the judges shall approve or disapprove the second and third drivers.

Section 8. (1) [~~It shall be the duty of~~] The presiding judge shall [~~to~~] call a meeting of all horsemen on the grounds before the opening of an extended pari-mutuel meeting for the election of a horseman [~~purpose of their electing a member~~] and an alternate to represent them on matters relating to the withdrawal of horses due to bad track or weather conditions.

(2)(a) If [~~In case of questionable~~] track conditions are questionable due to weather, the presiding judge shall call a meeting of a committee consisting of an agent of the track member, the [~~duly~~] elected representative of the horsemen and himself.

(b) [~~(3)~~] Upon unanimous decision by the [~~this~~] committee [~~of three (3)~~] that track conditions are safe for racing, [~~no~~] unpermitted withdrawals shall not [~~may~~] be made.

(4)(a) An entrant may scratch his horse if:

1. A decision by the committee is not unanimous; and
2. He has posted ten (10) percent of the purse to be raced for.

(b) If [~~Any decision other than unanimous by this committee will allow any entrant to scratch his horse or horses after posting ten (10) percent of the purse to be raced for. In the event~~] sufficient withdrawals are received to cause the field to be less than six (6), [~~then~~] the track member shall have the right to postpone [~~of postponement of~~] an early closing event or stake and cancel [~~cancellation~~] of an overnight event.

(5)(a) The money posted pursuant to subsection (4) of this section shall be forwarded to the commission.

(b) The commission shall determine whether a withdrawal was for good cause.

(c) The money shall be:

1. Retained as a fine, if the commission determines that the withdrawal was not for good cause; or

2. Refunded, if the commission determines that the withdrawal was for good cause. [~~Said money posted shall be forwarded to the commission and shall be retained as a fine, or refunded to the individual upon the decision of the commission as to whether the withdrawal was for good cause.~~]

(6) **The procedures established by this section govern** [~~The above procedure applies~~] only [~~to~~] the withdrawal of horses that have been properly declared in and does not relate to postponement which is covered in 811 KAR 1:060.

WAYNE G. LYSTER, III, Chairman
APPROVED BY AGENCY: July 13, 1993
FILED WITH LRC: July 15, 1993 at 11 a.m.

PUBLIC PROTECTION AND REGULATION CABINET
Department of Housing, Buildings and Construction
Division of Building Codes Enforcement
(As Amended)

815 KAR 7:090. Kentucky Building Code - 1994 Edition.

RELATES TO: KRS Chapter 198B
STATUTORY AUTHORITY: KRS 198B.040(7), 198B.050
NECESSITY AND FUNCTION: The Kentucky Board of Housing, Buildings and Construction is required by KRS 198B.040(7) to adopt and promulgate a mandatory uniform state building code, based on a model code, which establishes standards for construction of buildings in the state. This administrative regulation adopts the BOCA National Building Code/1993, Twelfth Edition, Chapters 1 through 35 with modifications, thereby establishing the Kentucky Building Code basic provisions relating to construction, including general building limitations, special use and occupancy, light, ventilation and sound transmission control, means of egress, structural and foundation loads and stresses, acceptable materials and tests, fire resistive construction and fire protection systems, safety during building operations, mechanical systems, energy conservation, electrical systems and accessibility to physically disabled persons. This administrative regulation includes the substance of 815 KAR 7:010, 815 KAR 7:025 and 815 KAR 7:060, which are being repealed.

Section 1. Adoption of Building Code and Definitions. (1) Adoption of the model code. The "BOCA National Building Code/1993," Twelfth Edition, is hereby incorporated by reference with specific additions, deletions and changes set forth in this administrative regulation.

(a) It is published by Building Officials and Code Administrators International, Inc., 4051 West Flossmoor Road, Country Club Hills, Illinois 60477.

(b) Copies are available at the Department of Housing, Buildings and Construction, The 127 Building, 1047 U.S. Highway 127 South, Suite 1, Frankfort, Kentucky, between 8 a.m. and 4:30 p.m., Monday through Friday.

(2) Definitions. The following definitions apply to this administrative regulation and Chapter 2 of the building code adopted by reference in this administrative regulation shall be amended to include these definitions:

(a) "Bed and breakfast establishment" see subsection 310.2.

(b) "Board of Housing" or "board" means the Kentucky Board of Housing, Buildings and Construction.

(c) "BOCA" means Building Officials and Code Administrators International, Inc.

(d) "Building" as defined by KRS 198B.010(4).

(e) "Chapter" means a chapter of the "BOCA National Building Code/1993", Twelfth Edition, Chapters 1 through 35, published by Building Officials and Code Administrators International, Inc., 4051 West Flossmoor Road, Country Club Hills, Illinois 60477.

(f) "Code official" or "official" means an inspector certified by the department in accordance with 815 KAR 7:070 and designated by the department or by a local government as an enforcement official for the Kentucky Building Code pursuant to KRS Chapter 198B.

(g) "Commissioner" as defined by KRS 198B.010(11).

(h) "Department" as defined by KRS 198B.010(13).

(i) "Farm" means property located outside the corporate limits of a municipality on at least ten (10) acres and having a bona fide agricultural or horticultural use as defined by KRS 132.010(9) and (10) and qualified by and registered with the property valuation administrator in that county.

(j) "Fire code official" means the State Fire Marshal, fire chief or other enforcement officer designated by the appointing authority of the jurisdiction for the enforcement of the provisions of KRS 227.300 and the Kentucky Standards of Safety (Fire Prevention Code) as set forth in 815 KAR Chapter 10 of the Kentucky administrative regulations.

(k) "Industrialized building system" or "building system" as defined in KRS 198B.010(18) and shall apply to buildings of any size or use, all or any component parts of which are of closed construction made from precast concrete panels or precut wood sections fabricated to individual specifications in an off-site manufacturing facility and assembled in accordance with the manufacturer's instructions.

(l) "KAR" means Kentucky administrative regulations.

(m) "KBC" means the Kentucky Building Code as established in this chapter.

(n) "Kentucky standards of safety" means the Kentucky administrative regulations established by the Commissioner of the Department of Housing, Buildings and Construction pursuant to KRS 227.300 to serve as the fire prevention code for existing buildings as well as a supplement to this code, where applicable.

(o) "KRS" means Kentucky revised statutes.

(p) "Manufactured/mobile home" means a factory-built structure on a permanent chassis designed to be used as a dwelling and which is regulated by the federal government and the State Fire Marshal. These homes are required to carry a "HUD" seal applied by the manufacturer**, if manufactured after 1976**.

(q) "Modular home" means an industrialized building system designed to be used as a residence which is not a manufactured **or mobile** home [~~and does not carry a "HUD" seal~~].

(r) "Ordinary repair" means any nonstructural reconstruction or renewal of any part of an existing building for the purpose of its maintenance, or decoration, and shall include, but not be limited to, the replacement or installation of nonstructural components of the building such as roofing, siding, windows, storm windows, insulation, drywall or lath and plaster, or any other replacement, in kind, that does not alter the structural integrity, alter the occupancy or use of the building, or affect, by rearrangement, exitways and means of egress; but shall not include additions to, or alteration of, or relocation of any standpipe, water supply, sewer, drainage, gas, soil, waste, vent or similar piping, electric wiring or mechanical equipment including furnaces and hot water heaters or other work affecting public health or safety.

(s) "Person" means a person, partnership, corporation or other legal entity.

(t) "Single family dwelling" means a single unit providing complete independent living facilities for one (1) or more persons including permanent provisions for living, sleeping, eating, cooking and sanitation, and which shall not be connected to any other unit or building.

(u) "Trade-name or brand-name home" means a single structure home made of precut or prefabricated panels, sections or individual pieces which are sold or prefabricated under a name that identifies both the manufacturer and a particular type of structure that the manufacturer makes, and which are assembled on a permanent foundation by conventional home building and electrical and plumbing installation techniques.

Section 2. Chapter 1, Administration. Amend Chapter 1 of the

BOCA National Building Code/1993 by making the following additions, deletions or changes:

(1) Amend the following subsections of Section 101, Scope, to read:

(a) Amend subsection 101.1 to read: "101.1, Title: This Chapter shall supersede all other conflicting administration provisions which may be referenced by this code and these regulations shall be known as the Kentucky Building Code, hereafter referred to as "this code."

(b) Amend subsection 101.2 to read as follows: "101.2 Scope: The provisions of this code shall apply, as specified in this code, to the following:"

1. "101.2.1 New construction: The construction, use and occupancy of buildings and structures;

2. 101.2.2 Existing buildings: Alterations and additions to buildings and structures; and

3. 101.2.3 Appurtenances: Appurtenances to buildings and structures; whether hereafter erected or, where expressly stated in this code, existing; and whether on land, over water, or on water, permanently moored to land, and substantially a land structure."

(c) Amend subsection 101.3 to read: "101.3 Single-family dwellings: All single family dwellings shall comply with this section."

1. "101.3.1 All single family dwellings (R-4) shall comply fully with the National Electrical Code requirements."

2. "101.3.2 Modular homes and other trade-name or brand-name homes shall comply with all the requirements of this code. Exceptions:

a. Manufactured/mobile homes.

b. Farm dwellings.

c. Site built homes which are not trade-name or brand-name homes, unless local ordinance requires compliance, in which case Section 310.6 allows the builder to elect to build in accordance with this code or the CABO One and Two Family Dwelling Code listed in Chapter 35."

3. "101.3.3 Other codes applicable: The National Electrical Code shall apply to all manufactured/mobile homes exterior service hookups and the State Plumbing Code shall apply to the exterior water and sewer lines of nonfarm manufactured/mobile homes."

(d) Amend subsection 101.4 to read: "101.4 Intent: The KBC's intent shall be to secure public safety, health and welfare affected by building construction quality, through structural strength, adequate means of egress, light and ventilation, electrical systems, plumbing, energy, boiler safety, accessibility for persons with physical disabilities, life safety from hazards of fire and explosion and other disasters and, in general, to secure safety to life and property from all hazards incident to the removal, design, erection, repair or occupancy of buildings. It shall also be the intent of this code to avoid duplicative plan review and inspection of new construction and to maintain one (1) set of administrative regulations with the requirements relating to the construction of buildings in the state to enable builders, owners and code officials to be adequately informed."

(e) Create a new subsection, 101.5 Other regulations, to read: "101.5 Other regulations: Other local or state law shall be consulted to determine the existence of other powers given to the code official, such as those related to demolition or authority over unsafe structures unless a change of use as required by Chapter 34 is made or proposed. This code shall not be cited as authority for upgrading existing structures which are not under construction."

(f) Create a new subsection, 101.6 Fire safety authority, to read: "101.6 Fire safety authority: The State Fire Marshal and the local fire code official shall continue to be the authority having jurisdiction for enforcement of the Kentucky Standards of Safety (Fire Prevention Code) in existing buildings not regulated by this code, and for continued fire safety maintenance in buildings constructed and approved under this code."

(g) Create a new subsection, 101.7 Accessibility, to read: "101.7 Accessibility: Facilities and buildings required by KRS 198B.270 to be accessible to persons with physical disabilities shall comply with Chapter 11 of this code."

(h) Create a new subsection, 101.8 Accepted engineering practice, to read: "101.8 Accepted engineering practice: In the absence of provisions not specifically contained in this code or final decisions of the appeals board, the specifications and standards listed in Chapter 35 shall be deemed to represent accepted engineering practice with respect to materials, equipment, system or method of construction as specified and shall be required acceptable where and as referred to by a specific section of the code."

(2) Amend the following subsections of Section 102, Applicability, to read:

(a) Amend subsection 102.1 General, to read: "102.1 General: The provisions of this code shall apply to all matters affecting or relating to buildings and structures as set forth in subsection 101.2 and 101.3. The construction, alteration, addition and change of occupancy of buildings shall comply with this code."

(b) Amend subsection 102.2 to read: "102.2 Existing Structures: The legal use and occupancy of any structure existing on the date of adoption of this code or for which it has been approved, may be continued without change, except as is specifically covered in this code and deemed necessary by the code official for the general safety and welfare of the occupants and the public, or as may be required by the State Fire Marshal under the Kentucky Standards of Safety (Fire Prevention Code), or an existing structures code adopted by and enforced under authority of a local ordinance. Application of the code to existing buildings shall apply as required by subsection 3401.1 when alterations, additions or changes of occupancy as set forth in Chapter 34 of this code are proposed or occur."

(c) Create a new subsection, 102.2.1 Moved structures, to read: "102.2.1 Moved structures: Buildings and structures moved into or within the Commonwealth shall comply with the provisions of this code for new buildings and structures and shall not be used or occupied until the certificate of occupancy has been issued by the code official."

(d) Amend subsection 102.3 to read: "102.3 Alternative regulations: A structural, fire or sanitary safety building requirement necessary for the safety of the occupants and which is not specifically covered by this code, shall be determined by other administrative regulations of the department or other applicable law."

(e) Amend subsection 102.4 to read: "102.4 Referenced standards: The standards referenced in this code and listed in Chapter 35 shall be considered part of the requirements of this code to the prescribed extent of each reference. If differences occur between provisions of this code and referenced standards, the provisions of this code shall apply, and newer editions of referenced standards may be used to meet the intent of the code in lieu of the adopted edition."

(f) Create a new subsection, 102.5 Violation, to read: "102.5 Violation: A person who violates a provision of this administrative regulation or any other provision of this code shall be subject to the penalties in Section 116 of this code."

(3) Amend Section 103, Validity, by retitling it "Ordinary Repairs and Maintenance" and amend subsection 103.1 as follows:

(a) "103.1 Repairs: Ordinary repairs to structures may be made without application or notice to the code official. Ordinary repairs shall not include:

1. The cutting away of any wall or partition;

2. The removal or cutting of any structural beam or bearing support;

3. The removal or change of any required means of egress;

4. Rearrangement of parts of a structure affecting the exit; or requirements."

(b) Amend subsection 103.2 to read: "103.2 Maintenance: All buildings and structures, both existing and new, shall be maintained in a safe and sanitary condition. Service equipment, means of egress, devices and safeguards required by this code or a previous code in a building or structure, shall be maintained in good working order."

(c) Amend subsection 103.3 to read: "103.3 Owner responsibility:

The owner or the owner's designated agent shall be responsible for the safe and sanitary maintenance of the building or structure and its means of egress facilities at all times."

(d) Create a new subsection, 103.4 Housekeeping inspections, to read as follows: "103.4 Housekeeping inspections: Periodic inspections of existing uses and occupancies shall be made by legally authorized fire code, health and other designated lawful officials to insure maintenance of equipment and good housekeeping conditions."

(e) Create a new subsection, 103.5 Nonstructural repairs, to read as follows: "103.5 Nonstructural repairs: Nonstructural alterations or repairs which do not adversely affect a structural member having a required fire resistance rating may be made with the same materials of which the structure was constructed."

(4) Amend Section 104 and retitle to "Department of Building Inspection" and amend subsection 104.1 as follows:

(a) Amend subsection 104.1 to read: "104.1 Building code official: Each local government shall employ or otherwise provide for a certified level II code official, certified electrical inspector and other code enforcement personnel necessary to enforce this code within its jurisdiction. The department shall be responsible for the enforcement of this code as it pertains to the buildings assigned to it by law."

(b) Amend subsection 104.2 to read: "104.2 Appointment: Local building code officials shall be appointed by the chief appointing authority for the respective jurisdiction and shall meet the qualifications for the position which may be established by the appointing authority, in addition to the requirements for certification of Kentucky building code inspectors set forth in 815 KAR 7:070."

(c) Amend subsection 104.4 to read: "104.4 Retention of records: The building code official shall keep official records of applications received, permits and certificates issued, fees collected, reports of inspections and notices and orders issued. These records shall be retained in accordance with state retention regulations promulgated by the Kentucky Department of Libraries and Archives pursuant to KRS 171.450."

(d) Amend subsection 104.5 to read: "104.5 Building size includes firewall: To determine plan review jurisdiction and the necessity for design professionals, the calculation of the total square footage and occupant load for any project shall include areas on both sides of firewalls."

(e) Amend subsection 104.7 to read: "104.7 Official records: Official records shall be kept of all business and activities of the various local building departments or state building departments specified in this code, and all of these records shall be open to the public for inspection at all appropriate times under the terms and conditions of KRS Chapter 61."

(5) Amend Section 105, Duties and Powers of the Code Official, as follows:

(a) Amend subsection 105.1 to read as follows: "105.1 ~~[.1]~~ Local Jurisdiction: The local building code official shall be responsible for the examination and approval of plans and specifications and the inspections necessary to determine compliance for buildings as listed in this section and the determination of jurisdiction shall be based upon occupant load calculations in accordance with Section 1008.0 of this code."

1. "105.1.1 In storage, residential or utility occupancies: The local code official shall be responsible for the examination and approval of plans and specifications and the inspections necessary to determine compliance for all buildings classified as storage, residential, miscellaneous or utility occupancies as long as the buildings do not exceed three (3) stories in height or 20,000 square feet (1860 m^2) of floor area."

2. "105.1.2 In assembly, business or mercantile occupancies: The local code official shall be responsible for the examination and approval of plans and specifications and the inspections necessary to determine compliance for all buildings classified as assembly, business or mercantile occupancies having a capacity which does not exceed 100 persons."

3. "105.1.3 In churches: The local code official shall be responsible for the examination and approval of plans and specifications and the inspections necessary to determine compliance for all churches having a capacity of 400 or less persons and 6,000 square feet (558 m^2) or less of total floor area."

4. "105.1.4 In factory or industrial occupancies: The local code official shall be responsible for the examination and approval of plans and specifications and the inspections necessary to determine compliance for all buildings classified as factory or industrial occupancies having a capacity which does not exceed 100 persons."

5. "105.1.5 State Buildings Exempt: Buildings owned by the Commonwealth shall not be subject to local plan review, inspection or approval, regardless of size, occupant load or occupancy classification."

(b) Amend subsection 105.2 to read: "105.2 State Jurisdiction: It shall be the responsibility of the department to review construction documents, issue permits, make inspections and to determine compliance with this code for the buildings listed below."

1. "105.2.1 Buildings classified as assembly occupancies having a capacity in excess of 100 persons, except churches having a capacity of 400 or less persons and 6,000 or less square feet of total floor area."

2. "105.2.2 Buildings classified as educational, institutional, high hazard, frozen food locker plants or industrialized building systems, regardless of occupancy size or occupancy classification."

3. "105.2.3 Buildings classified as business and mercantile occupancies having a capacity in excess of 100 persons."

4. "105.2.4 Buildings classified as industrial and factory occupancies having a capacity in excess of 100 persons."

5. "105.2.5 All other buildings containing in excess of three (3) stories or 20,000 square feet of floor area."

6. "105.2.6 All buildings owned by the Commonwealth regardless of occupancy classification or size."

(c) Amend subsection 105.4 to read: "105.4 Preemptive authority: The board may withdraw or preempt authority for plan review and inspection for code compliance under this code from a local building department if it finds, upon petition of the department, that the local inspection agency is not adequately performing any portion of its program, allowing the department to preempt that portion of a local program."

(d) Amend subsection 105.5 to read as follows: "105.5 Identification: The building code official and authorized representatives shall carry proper identification of their respective office for the purpose of inspecting buildings and premises and the performance of duties under this code."

(e) Amend subsection 105.6 to read as follows: "105.6 Rulemaking authority: By means of the board's appeals procedures, the board may issue interpretations which shall be binding upon the appellee and the building code official and the building code official shall implement the provisions of this code to secure its intent as determined by the board."

(f) Amend subsection 105.7 to read as follows: "105.7 Additional responsibility: A local government may petition the department for additional plan review responsibility in accordance with KRS 198B.060(5) and (6)."

(g) Amend subsection 105.8 to read as follows: "105.8 Required inspections: The code official having jurisdiction shall make all the required inspections, or he may accept reports of inspection by authoritative and recognized services or individuals. Inspection reports shall be in writing and certified by a responsible officer of an authoritative service or by the responsible individual."

(6) Amend Section 106, Approval, as follows: Create a new subsection, 106.5 Supporting data, to read: "106.5 Supporting data: Building code officials may accept supporting data from the following sources to assist them in their determinations:

(a) Duly authenticated research reports from BOCA; or

(b) From other approved authenticated sources for materials or

assemblies proposed for use which are not specifically provided for in this code."

(7) Amend Section 107, Application for Permit, as follows:

(a) Amend subsection 107.1 to read: "107.1 Permit application: An application shall be submitted to the code official for the following activities and these activities shall not commence without a permit being issued in accordance with Section 108.0:

1. Construct or alter a structure;

2. Construct an addition or change of occupancy as prescribed by Chapter 34 of this code; or

3. The installation or alteration of equipment required by this code.

(b) Amend subsection 107.1.1 to read: "107.1.1 Repairs Exception: Application or notice to the code official is not required for ordinary repairs."

(c) Amend subsection 107.2 to read: "107.2 Form of application: The application for a permit shall be submitted to the code official, in writing, and shall be accompanied by the required fee, as prescribed in Section 112."

(d) Amend subsection 107.3 to read as follows: "107.3 By whom application is made: Application for a permit shall be made by the owner or lessee of the building or structure, or the agent of either, or by the licensed engineer or architect employed in connection with the proposed work. If the application is made by a person other than the owner in fee, it shall be accompanied by a verified written statement by the person making the application that the proposed work is authorized by the owner in fee and that the applicant is authorized to make application. The full names and addresses of the owner, lessee, applicant and of the responsible officers, if the owner or lessee is a corporate body, shall be stated in the application."

(e) Amend subsection 107.4 to read: "107.4 Description of work. The application shall contain:

1. A general description of the proposed work;

2. The location of the proposed work;

3. The use and occupancy of all parts of the building or structure and of all portions of the site or lot not covered by the building or structure;

4. Provision for special inspections required by Section 1705; and

5. Any additional information required by the code official."

(f) Amend subsection 107.5 to read: "107.5 Construction documents: The application for the permit shall be accompanied by two (2) sets of construction documents drawn to scale with sufficient clarity and detail dimensions to show the nature and character of the work to be performed. The building code official shall cooperate with the fire code official by allowing the fire code official to review all construction documents. Any recommendations made by the fire code official relating to fire safety in construction of a building shall be considered by the building code official and he shall report his decision to the fire code official. If quality of materials is essential for conformity to this code, specific information shall be given to establish the quality of the materials. This code shall not be cited or the term "legal" or its equivalent shall not be used as a substitute for specific information requested. The building code official may waive the requirement for filing construction documents if the work involved is of a minor nature."

(g) Amend subsection 107.6 to read as follows: "107.6 Site survey and site plan required: A copy of the site survey bearing the signature and seal of a Kentucky Registered Land Surveyor shall be submitted for all new buildings or additions; except that the code official may, in his discretion, accept other proof of location."

1. "107.6.1 Site plan: A site plan shall be filed showing, to scale, the size and location of the new construction and all existing structures on the site, the distances from lot lines, the established street grades and the proposed finished grades. The site plan shall be drawn in accordance with the accurate boundary line survey."

2. "107.6.2 Change in site plan: A lot shall not be changed, increased or diminished in area from that shown on the official plot site plan unless a revised plan showing the changes, accompanied by the necessary affidavit of owner or applicant, shall have been filed and approved. Exception: The revised plan shall not be required if the change is caused by reason of an official street opening, street widening or other public improvement."

(h) Amend subsection 107.7 to read: "107.7 Engineering details: The code official may require adequate details of structural, mechanical and electrical work, including computations, stress diagrams and other essential technical data to be filed. All engineering plans and computations shall bear the signature of the responsible design professional. Construction documents for buildings more than two (2) stories in height shall indicate how the required structural and fire resistance rating integrity shall be maintained and where penetrations will be made for electrical, mechanical, plumbing and communication conduits, pipes and systems."

(i) Amend subsection 107.9 to read: "107.9 Time limitation of application: An application for permit for any proposed work shall be considered abandoned six (6) months after the date of filing if a permit has not been issued. The code official shall grant one (1) or more extensions of time for additional periods not exceeding ninety (90) days each if there is reasonable cause."

(8) Amend Section 108 as follows:

(a) Amend subsection 108.1 to read as follows: "108.1 Action on application: The code official shall examine or cause to be examined all applications for permits and amendments thereto within a reasonable time after filing. If the application or the construction documents do not conform to the requirements of all pertinent laws, the code official shall reject such application in writing, stating the reasons therefor. If the code official is satisfied that the proposed work conforms to the requirements of this code and all laws and ordinances applicable thereto, the code official shall issue a permit therefor as soon as practical, but no later than thirty (30) days."

(b) Amend subsection 108.3 to read as follows: "108.3 Previous approvals: This code shall not require changes in the construction documents, construction or designated use group of a building for which a lawful permit has been issued or otherwise lawfully authorized by approved construction documents, if substantial construction on the project has commenced within one (1) year from the date the permit was issued."

(c) Amend subsection 108.9 to read as follows: "108.9 Notification of changes: The code official shall be notified prior to any construction which does not comply with the building code requirements of the previously approved construction documents."

(d) Create a new subsection, 108.10 Local permit limitation, to read: "108.10 Local permit limitation: Local permits shall not be issued for the construction of buildings subject to state plan review jurisdiction under Section 105.2 until the department has approved construction to begin."

(9) Adopt Section 109, Temporary Structures, in its entirety.

(10) Amend Section 110, by retitling it, Proof of Insurance, and amending subsections as follows:

(a) Amend subsection 110.1 to read: "110.1 Compliance with law: The issuance of a building permit shall be contingent upon presentation of an affidavit to the effect that all contractors and subcontractors employed or that will be employed in the construction, alteration or repair under the permit will be in compliance with Kentucky law relating to worker's compensation and unemployment insurance."

(b) Amend subsection 110.2 to read: "110.2 General applicability: Compliance with this section may be achieved by having an affidavit of general applicability for all permits to be taken during the life of the construction company on file in the office of the code official issuing the permit. The affidavit shall state that the contractor and all persons working in association with that contractor comply, or will comply, with the worker's compensation and unemployment insurance laws."

(c) Delete subsection 110.3 in its entirety.

(11) Amend Section 111, Conditions of Permit, by amending or creating the subsections as follows:

(a) Amend subsection 111.1 to read: "111.1 Payment of fees: A permit shall not be issued until the fees have been paid as prescribed by Section 112 of this code."

(b) Amend subsection 111.2 to read: "111.2 Compliance with code: The permit shall be a license to proceed with the work and shall not be construed as authority to violate, cancel or set aside any of the provisions of this code, except as specifically stipulated by modification or legally granted variation as described in the application or permit."

(c) Amend subsection 111.4 to read: "111.4 Compliance with site plan and zoning: All new work shall be located strictly in accordance with the approved plot plan and any local ordinances governing the location of the building."

(12) Amend Section 112, Fees, by amending, creating or deleting subsections as follows:

(a) Amend subsection 112.1 to read: "112.1 General: A permit to begin work for new construction, alteration, removal or other building operations shall not be issued until the fees prescribed by law shall have been paid to the department, if applicable, and to the local building department. If an amendment to a permit necessitates an additional fee because of an increase in the estimated cost of the work involved, the permit shall not be approved until the additional fee has been paid."

(b) Amend subsection 112.2 to read: "112.2 Special fees: Payment of fees for construction, alteration or removal, and for all work done in connection with or concurrently with the work contemplated by a building permit shall not relieve the applicant or holder of the permit from the payment of other fees that may be prescribed by law or ordinance for water taps, sewer connections, electrical permits, erection of signs and display structures, marquees or other appurtenant structures, or fees of inspections or certificates of occupancy or other privileges or requirements established by law."

(c) Amend subsection 112.3, New construction and alterations, to read: "112.3 New construction and alterations: The fees for plan examination, building permit and inspections shall be as prescribed in subsection 112.3.1 or 112.3.2, as applicable."

1. Amend subsection 112.3.1, State jurisdiction, to read: "112.3.1 State Jurisdiction: The fees for plan review and inspection and other functions performed by the Commonwealth of Kentucky, Department of Housing, Buildings and Construction shall be paid in accordance with 815 KAR 7:013."

2. "112.3.2 Local jurisdiction: Each local government shall adopt its own schedule of reasonable fees for building permits and the performance of functions under this code. The fees shall be designed to fully cover the cost of the service performed but shall not exceed the cost of the service performed."

(d) Delete subsection 112.5 in its entirety.

(13) Amend Section 113, Inspection, by amending or creating subsections as follows:

(a) Amend subsection 113.1 to read: "113.1 Preliminary inspection: Before issuing a permit, the appropriate code official shall examine or cause to be examined all buildings, structures and sites on which construction has began or for which an application has been filed for a permit to construct, enlarge, alter, repair, remove, or change the use as required by Chapter 34. Construction shall not begin until a local code official has issued a permit for construction and an official representing the department has issued a letter releasing the construction documents for construction (if the department has plan review responsibility)."

(b) Amend subsection 113.2 to read: "113.2 Required inspections: After issuing a building or construction permit, the building code official shall conduct periodic inspections during the critical construction phase and upon completion of the work for which a permit has been issued. A record of all examinations, inspections and violations of this code shall be maintained in accordance with the Kentucky Records and Retention Plan. The owner shall provide for special inspections in accordance with section 1705."

1. "113.2.1 Plant inspection: Where required by the provisions of this code or by the approved rules, materials or assemblies shall be inspected at the point of manufacturer or fabrication in accordance with Section 1703.3."

2. "113.2.2 Off-site construction: In-plant inspections in production and manufacturing facilities for industrialized building systems as well as on-site inspection shall be conducted by the department or its authorized agent. The local code official shall be responsible for inspection of these systems for zoning, water supply and sewage disposal, and other applicable local ordinance purposes."

3. "113.2.3 Trade-name dwelling inspections: Inspections for code compliance of trade-name or brand-name homes shall be the responsibility of the local code official."

4. "113.2.4 On-site construction: On-site construction related to modular home installations may be permitted and inspected by the local code official having jurisdiction."

(c) Amend subsection 113.3 to read: "113.3 Final inspection: Upon completion of the building, the owner or agent of the facility shall request a final inspection. The code official shall set a time for the inspection and notify the owner or agent. If substantial compliance with the approved construction documents and permit has been achieved, a certificate of occupancy shall be issued, as described in Section 118 of this code. If compliance has not been achieved, violations of the approved construction documents and permit shall be noted and immediately communicated to the owner, agent or other person holding the permit and the fire code official. It shall be the owner's responsibility to fulfill any compliance deficiencies noted."

(d) Create a new subsection, 113.6 Fire code official inspections, to read: "113.6 Fire code official inspections: The building code official shall cooperate with the fire code official by allowing the fire code official to inspect all buildings during construction. Recommendations made by the fire code official relating to fire safety in construction of a building shall be considered by the building code official, and if a certificate of occupancy is issued contrary to the written recommendations, the building code official shall give written notification of his decision to the fire code official at once."

(14) Amend Section 114, Professional Architectural and Engineering Services, by amending or creating subsections as follows:

(a) Amend subsection 114.1, General, to read: "114.1 General: All design for new construction, alteration, repair, expansion, addition or modification work involving the practice of professional architecture or engineering, as defined by KRS Chapters 322 and 323, shall be prepared by Kentucky-licensed professional architects or engineers and all construction documents required for a building permit application for the work shall bear the required signature and seals of the design professionals, as required by law."

(b) Amend subsection 114.2 to read: "114.2 Special inspections: Special inspections shall be made as required by and in accordance with Section 1705."

1. "114.2.1 Seismic Design: Special inspections shall be a requirement for buildings subject to seismic design under Section 1705."

2. "114.2.2 Fees and costs: Fees and costs related to the performance of special inspections by professional services shall be borne by the owner."

3. "114.2.3 Code assurances: If construction on a building began prior to approval by the code official or the construction does not conform to the approved construction documents or the standards required by the code, the building code official may require special inspections and reports if necessary to assure safety."

(15) Adopt Section 115, Workmanship, in its entirety.

(16) Amend Section 116, Violations, by amending or creating subsections as follows:

(a) "116.4 Violation Penalties: A person who violates a provision of this code or fails to comply with the requirements of this code or a person who erects, constructs, alters or repairs a building or structure in violation of an approved construction document or proper direction

of the code official or of a permit or certificate issued under the provisions of this code, shall be subject to the penalties provided by KRS 198B.990 and other applicable law."

(b) "116.5 Abatement of violation: The department or any local agency enforcing the uniform state building code may obtain injunctive relief from any court of competent jurisdiction to enjoin the offering for sale, delivery, use, occupancy or construction of any building on which construction was begun after the effective date of said code, upon an affidavit of the department or the local government agency specifying the manner in which the construction, or, if a building existed prior to the effective date of said code, the reconstruction, alteration, repair or conversion does not conform to the requirements of this code."

(c) Create a new subsection, 116.6 **[~~1~~]** Hindering an inspection, to read: "116.6 Hindering an inspection: A person shall not hinder an inspector enforcing the provisions of this code in the performance of the inspector's lawful duties under this chapter."

(17) Amend Section 117 by amending the following subsection: "117.2 Unlawful continuance: A person who shall continue work in or about the structure after having been served with a stop-work order, except the work that person is directed to perform to remove a violation or unsafe condition, shall be liable to a fine of not less than ten (10) dollars nor more than $1,000. Each day constituting a separate offense, as required by KRS 198B.990."

(18) Amend Section 118 by amending or creating subsections as follows:

(a) Amend subsection 118.4 to read: "118.4 Certificate Information: If a building or structure is entitled to a certificate, the building code official shall issue a certificate of occupancy within ten (10) days after written application. The certificate shall certify compliance with the provisions of this code and the purpose for which any portion of the building or structure may be used. The certificate of occupancy shall specify the following information:

1. The edition of the code under which the permit was issued;
2. The use group, in accordance with the provisions of Chapter 3;
3. The type of construction, as defined in Chapter 6, and
4. Special stipulations, restrictions or conditions, if any."

(b) Create a new subsection, 118.5 **[6]** Approval of service equipment, to read: "118.5 **[6]** Approval of service equipment: If the installation, extension, alteration or repair of an elevator, moving stairway, mechanical equipment, refrigeration, air-conditioning or ventilating apparatus, plumbing, gas piping, electrical wiring, heating system or other equipment are controlled by the provisions of this code, this equipment shall not be used until a certificate of approval has been issued by the code official or other agency having jurisdiction."

(19) Amend Section 119 by retitling it "CHR Regulated Buildings" and by amending or deleting subsections as follows:

(a) Amend subsection 119.1 to read: "119.1 Hospitals, Nursing Homes and Other Institutional (I-2) Facilities: Hospitals, nursing homes and other institutional (I-2) facilities licensed by the Cabinet for Human Resources and inspected under contract with the Cabinet for Human Resources by the Department of Housing, Buildings and Construction shall comply with the Institutional Use Group requirements specified in Chapter 4, including specific references to other sections of this code, and the applicable provisions of the Life Safety Code listed in Chapter 35."

(b) Amend subsection 119.2 to read: "119.2 Day Care Centers: Day care centers and other similar care facilities licensed by the Cabinet for Human Resources which comply with the provisions of NFPA Pamphlet #101 (Life Safety Code) listed in Chapter 35 as approved by the State Fire Marshal shall be deemed to satisfy the life safety requirements of this code."

(c) Delete subsections 119.3 through 119.6 in their entirety.

(20) Amend Section 120, Emergency Measures, by amending subsections as follows:

(a) Amend subsection 120.1 to read: "120.1 Vacating structures: If, in the opinion of the code official, during construction on a building for which a permit is required, there is actual and immediate danger of failure or collapse of a building or structure or a portion of a building or structure which would endanger life or if a building or structure or a portion of a building or structure has fallen and life is endangered by occupation of the building or structure, the code official shall be authorized and empowered to order and require the inmates and occupants to vacate the building or structure. The code official shall cause to be posted at each entrance to the building a notice reading as follows: "This Structure is Unsafe and its Use or Occupancy has been Prohibited by the Code Official." It shall be unlawful for any person to enter the building or structure except for the purpose of making the required repairs or of demolishing the building or structure."

(b) Amend subsection 120.2 to read: "120.2 Temporary safeguards: If, in the opinion of the code official, there is actual and immediate danger of collapse or failure of a building or structure (over which the code official has jurisdiction) which would endanger life, pursuant to KRS Chapter 198B and this code, the code official shall cause the necessary work or special inspection to be performed to render the building or structure or any portion of the building or structure temporarily safe, whether or not the legal procedures described herein have been instituted."

(c) Delete subsections 120.4 through 120.6.2 in their entirety.

(21) Amend and retitle Section 121 as "Local Board of Appeal," and amend or create subsections as follows:

(a) Amend subsection 121.1 to read as follows: "121.1 Local Appeals Board: Local appeals boards may be appointed to hear appeals from the decisions of the local code official in accordance with the provisions of subsections 121.1.1 through 121.4."

(b) Create a new subsection, 121.1.1 Appointment, to read: "121.1.1 Appointment: The mayor or county judge executive of a local government which is enforcing the Kentucky Building Code may, upon approval of the local legislative body, appoint a local appeals board, consisting of at least five (5) technically qualified persons with professional experience related to the building industry, three (3) of which shall not be employees of the local government, to hear appeals from the decisions of the local code official regarding building code requirements."

(c) Create a new subsection, 121.1.2 Cooperative agreements, to read: "121.1.2 Cooperative agreements: Local governments which are enforcing the Kentucky Building Code may cooperate with each other and provide a local appeals board and shall adhere to the provisions of KRS Chapter 65 when entering into a cooperative agreement."

(d) Create a new subsection, 121.1.3 Disqualification of member, to read: "121.1.3 Disqualification of member: Local code officials or employees of a local inspection department shall not sit on a local appeals board if the board is hearing an appeal to a decision rendered by the local department. A member of a local appeals board shall not hear an appeal in a case in which the member has a financial interest."

(e) Create a new subsection, 121.1.4 Right to appeal, to read: "121.1.4 Right to appeal: Any party to a decision by the local code official may appeal that decision to the local appeals board. Upon receipt of an appeal from a qualified party, the local appeals board shall convene a hearing to consider the appeal within fifteen (15) days of receipt."

(f) Amend subsection 121.2 to read: "121.2 Notice of meeting: All parties to the appeal shall be notified of the time and place of the hearing by letter sent by certified mail no later than ten (10) days prior to the date of the hearing."

(g) Amend subsection 121.3 to read: "121.3 Board decision: The local appeals board shall render a decision within five (5) working days after the hearing. The board may uphold, amend or reverse the decision of the local building code official, and there shall be no appeal from the decision of the local appeals board other than by

appeal to the Board of Housing, Buildings and Construction."

(h) Delete subsections 121.2.1, 121.2.2, 121.2.3, **121.2.4,** 121.2.5, 121.2.6, 121.5, 121.6.1, 121.6.2 and 121.7 in their entirety.

(22) Create a new Section 122, State Board of Appeals, and subsections 122.1 through 122.8 to read as follows:

(a) "122.1 General: All appeals from the decisions of building code officials shall be conducted in accordance with the appeals provisions of KRS 198B.070. Where a local appeals board exists, a party must first appeal to the local board when aggrieved by a decision of the local building code official. The board shall further hear appeals directly from a party aggrieved by the decision of an agent of the department."

(b) "122.2 Appeal by fire code official: Decisions rendered by the building code official with respect to enforcement of the Kentucky Building Code on any building may be appealed by the local fire code official of the jurisdiction if the fire code official is aggrieved by that decision."

(c) "122.3 Method of appeal: Application for appeal may be made when it is claimed in writing that the true intent of this code or the rules legally adopted thereunder have been incorrectly interpreted, the provisions of this code do not fully apply, or an equally good or better form of construction can be used, or that the code official has refused to grant a modification to the provisions of this code covering the manner of construction or material to be used in the erection, alteration or repair of a building or structure."

(d) "122.4 Application procedure: Appeals to the board shall be in writing and shall be address to the Commissioner of Housing, Buildings and Construction, The 127 Building, 1047 U.S. 127 South, Suite #1, Frankfort, KY 40601; Attention: Appeals Board. The appeal shall include citations of those provisions of the Kentucky Building Code which are at issue, an explanation of why the decision of the state building code official or local building code official relative to those provisions is being contested and a copy of the decision rendered by the local appeals board, if any."

(e) "122.5 Investigation of appeal: The commissioner shall immediately notify the board or the five (5) member committee authorized by the board when an appeal is received. The commissioner or a designated employee of the department shall then investigate the evidence pertaining to the appeal and, based upon the resulted of the investigation, make recommendations to the board or committee on the disposition of the case in question."

(f) "122.6 Employee deferral: Employees of the department shall not investigate or make recommendations on an appeal to his or her own decision, but shall defer in this case to employees who are not party to the decision which led to the appeal."

(g) "122.7 Investigative authority: In conducting an investigation, the commissioner or the designated representatives, acting for the department, shall have the authority to administer oaths and affirmations, issue subpoenas authorized by law, rule upon offers of proof and receive relevant evidence, take or cause depositions to be taken, regulate the course of any hearings they may schedule, and hold conferences for the settlement or simplification of the issue by consent of the parties."

(h) "122.8 Duration of investigation: The commissioner shall cause the investigation to be completed and forwarded with written recommendation to the board within thirty (30) days after receiving an appeal."

(23) Create a new Section 123, Posting Structures, and subsection 123.1 to read as follows: "123.1 Posting: All signs required by this code to be posted shall be furnished by the owner and shall be of a permanent design. The signs shall not be removed or defaced and, if lost, removed or defaced, shall be immediately replaced."

(24) Create a new Section 124, Effective Dates, and subsection 124.1 to read as follows: "124.1 General: Until July 1, 1994, the department shall accept plans in compliance with the requirements of either the 1990 edition of the BOCA National Building Code or the 1993 edition, together with any Kentucky amendments thereto. Effective July 1, 1994, all plans shall be designed to conform to this code."

Section 3. Chapter 3, Use or Occupancy. Amend Chapter 3 of the BOCA National Building Code/1993 by making the following additions, deletions or changes:

(1) Add a new subsection 303.5.1 to read as follows: "303.5.1 Incidental Uses: Gymnasiums, Sunday school spaces, multipurpose rooms, libraries and fellowship halls located within or attached to a Use Group A-4 occupancy shall be considered **an A-4 Use Group [~~educational~~]** for purposes of determining height and area limitations of Table 503."

(2) Amend section 305, Educational Use Group, to read as follows:

(a) "305.1 General: All buildings and structures, or parts thereof, other than those used for business training or vocational training, which are used by more than five (5) persons at one time for educational purposes including, among others, schools, academies, colleges and universities, shall be classified as Use Group E. Educational type uses with a total occupant load of less than fifty (50) shall be classified as Use Group B. School buildings, or parts thereof, used for business training or vocational training shall be classified in the same use group as the business or vocation taught."

(b) "305.1.1 Day Care Centers: Any licensed facility which is not classified as I-1 or I-2 and which provides care for thirteen (13) or more children or other persons for less than twenty-four (24) hours per day shall be classified as Use Group E. Licensed facilities providing for care of less than twelve (12) persons shall be inspected by the State Fire Marshal under the Life Safety Code listed in Chapter 35."

(c) Create a new subsection, 305.3 Incidental Uses, to read: "305.3 Incidental Uses: Gymnasiums, vocational shops, multipurpose rooms, libraries and cafeterias located within or attached to an educational occupancy shall be considered educational for purposes of determining height and area limitations of Table 503."

(3) Amend Section 307.0, High-hazard Use Groups, by creating a new subsection 307.1.2 to read as follows: "307.1.2 Referenced Codes: The fire code official shall have exclusive jurisdiction for code enforcement of the storage, handling, processing and transportation of flammable and combustible liquids and other hazardous materials pursuant to 815 KAR 10:040 (the Kentucky Fire Prevention Code); and fees for the installation and alteration of tanks and piping systems shall be paid in accordance with subsection 112.3.1."

(4) Delete subsection 308.3.1, Child Care Facility, in its entirety.

(5) Amend Section 310.0, Residential Use Groups, as follows:

(a) Amend subsection 310.2, Definitions, as follows:

1. Create a definition for "Bed and breakfast establishment" to read: "Bed and breakfast establishment: A building occupied as a one (1) family dwelling unit, but which also has additional guest rooms or suites which are used, rented or hired-out to be occupied or which are occupied for sleeping purposes by persons not members of the single-family unit. The building shall be known as either a bed and breakfast inn or a bed and breakfast home."

2. Delete the definition of "Multiple single family dwelling" in its entirety.

3. Amend the definition of "Multiple-family dwelling" to read: "Multiple-family dwelling: A building or portion thereof containing more than two (2) dwelling units."

(b) Create a new subsection, 310.3.1, Bed and breakfast Inns, to read: "310.3.1 Bed and Breakfast Inn: A bed and breakfast establishment having six (6) or more guest rooms or suites shall comply with the requirements of this code applicable to Use Group R-1."

(c) Amend subsection 310.4, Use Group R-2 Structures, to read as follows: "310.4 Use Group R-2 structures: This use group shall include all multiple-family dwellings having two (2) or more dwelling units sharing a common means of egress and shall also include all boarding houses and similar buildings arranged for shelter and

sleeping accommodations in which the occupants are primarily not transient in nature."

(d) Amend subsection 310.5, Use Group R-3 structures, to read as follows: "310.5 **Use Group R-3 structures.** This use group shall include all buildings arranged for occupancy as one (1) or two (2) family dwelling units, including not more than five (5) lodgers or boarders per family and multiple family dwellings where each unit has an independent means of egress. (See Section 709.0)"

(e) Delete Exceptions 1 and 2 of subsection 310.5 in their entirety.

(f) Amend the language and retitle subsection 310.5.1 as "Bed and breakfast establishments" to read as follows: "310.5.1 Bed and breakfast home: A bed and breakfast establishment having five (5) or less guest rooms or suites shall comply with the requirements of this code applicable to Use Group R-3 and with subsection 423.1."

(g) Amend subsection 310.6, Use Group R-4 Structures, to read as follows: "310.6 Use Group R-4 structures: This use group shall include all detached one (1) or two (2)family dwellings not more than three (3) stories in height, and their accessory structures as indicated in the One (1) and Two (2) Family Dwelling Code listed in Chapter 35. All of these structures shall be designed and built in accordance with the requirements of this code for a Use Group R-3 structure, or with the requirements of the One (1) and Two (2) Family Dwelling Code listed in Chapter 35, except that the requirements of the State Plumbing Code (See Chapter 29) shall supersede those conflicting requirements of the One (1) and Two (2) Family Dwelling Code. Choice of the construction code shall be made by the permit applicant at the time of plans submission. Exception #4 of Section 1010.4, Emergency Escape, may be used to determine minimum size of egress windows under this code or the One and Two Family Dwelling Code."

(6) Add a new subsection 313.4 to read as follows: "313.4 Use Groups A-4 and E: Subsections 305.1 and 305.3 shall supersede requirements for certain uses in A-4 and E."

Section 4. Chapter 4, Special Use and Occupancy. Amend Chapter 4 of the BOCA National Building Code/1993 by making the following additions, deletions or changes:

(1) Amend subsection 409.1 to read as follows: "409.1 General: All occupancies in Use Group I-2 shall comply with the provisions of the NFiPA 101 Life Safety Code referenced in Chapter 35. In addition, the following sections of this code shall apply: Table 503 (Area Limitations Only), Sections 412.0, 506.0, 507.0, 705.0, 706.0, 707.0, 708.0, 713.1.2, 710.4, 710.5, 713.0, 714.0, 715.0, 719.0, 720.0, 721.0, 722.0, 806.0, 807.0, 1005.7, 1014.12.1, 1017.2.1, 1017.6, 1027.0, 1211.2, 1511.0, Chapter 6 and Chapters 11 through 34."

(2) Delete subsections 409.2 through 409.5.1 in their entirety.

(3) Amend subsection 412.7 to read as follows: "412.7 Standpipes: A wet standpipe system in accordance with Section 914.0 shall be provided and equipped with one and one-half (1 1/2) inch hose connections on each side of a legitimate stage. Exception: Where the building or area is equipped throughout with an automatic sprinkler system, the hose connections that are supplied from the automatic sprinkler system shall have a water supply of not less than that required by NFiPA 13 listed in Chapter 35."

(4) Amend section 421.0, Swimming Pools, as follow:

(a) Amend the first paragraph of subsection 421.6.1, Water Treatment, to read as follows: "421.6.1 Water treatment: Public swimming pools are regulated by the Cabinet for Human Resources, Department for Health Services, for purposes of water distribution and treatment systems and the proper operation and maintenance of all pool facilities. See 902 KAR 10:120, Kentucky Public Swimming and Bathing Facilities Regulation."

(b) Delete subsections 421.5.3 and 421.6.2 in their entirety.

(c) Amend subsection 421.9 to read as follows: "421.9 Enclosures for public and private swimming pools: Public and private swimming pools shall be provided with an enclosure surrounding the pool area. The enclosure shall meet the provisions of Sections 421.9.1 through 421.9.3."

(d) Delete section 421.10, Enclosures for private swimming pools, spas and hot tubs, in its entirety.

(5) Create a new Section, 422.0 Day Care Centers, to read as follows:

(a) "422.1 Scope: The provisions of this section shall apply to buildings or structures or portions thereof required to be licensed as a day care center which are classified in Chapter 3 under Use Group E. Except as specifically modified by subsections 422.1 through 422.12, day care centers shall meet all applicable provisions of this code. Exception: Day care centers caring for less than thirteen (13) persons are not regulated by this section."

(b) "422.2 Type of construction: The minimum type of construction required by this code shall be modified as indicated in Table 422.2.

(c) "422.2.1 Client load: The client load established for any floor or floors shall be computed at a rate of one (1) person for each thirty-five (35) square feet of net floor area occupied by the persons being cared for, who shall otherwise be referred to in this code as 'clients.'"

TABLE 422.2

Type of Construction	Age Group	Area Limitations	Number of Stories[b] 1	2	3	4 & over
1A (443)	0 & Up	Not Limited	x	x	x	x[c]
1B (332)	0 & Up	Not Limited	x	x	x	x[c]
2A (222)	0 & Up	34,200	x	x	x	x[c]
2B (111)	0 & Up	22,500	x	x+	NP	NP
2C (000)	0 & Up	14,400	x	x+	NP	NP
3A (211)	0-3	19,800	x	x+	NP	NP
	3 & Up	19,800[d]	x	x	x+	NP
3B[a] (200)	0-3	14,400	x	x+	NP	NP
	3 & Up	14,400[d]	x	x	NP	NP
4 (2HH)	0 & Up	21,600	x	x+	NP	NP
5A (111)	0-3	15,300	x	x+	NP	NP
	3 & Up	15,300[d]	x	x	x+	NP
5B[a] (000)	0-3	7,200	x	x+	NP	NP
	3& Up	7,200[d]	x	x	NP	NP

x: Permitted Construction Type

NP: Not Permitted

x+: Permitted if entire building is protected throughout by an approved automatic sprinkler system.

Note a: This construction type permitted when client load is 100 or less and no less than one (1) layer of one-half (1/2) inch drywall or plaster is attached to walls and ceiling. Any fire ratings characteristic for construction type shall still be applicable.

Note b: Centers shall not be located above the heights indicated for the type of construction.

Note c: In buildings over five (5) stories above ground level, areas of refuge shall be provided for occupants of day care centers by horizontal exits complying with Section **1019.0** **[~~815~~]** of this code.

Note d: A letter from owner/operator shall be submitted documenting the age ranges of the clients that will occupy the floors above the first story."

(d) "422.3 Mixed Use: Where centers are located in a building containing another occupancy, the occupancy shall be separated by a minimum one (1) hour fire separation assembly. Exceptions:

1. In assembly occupancies used primarily for worship.

2. Centers in apartment buildings.

a. If the two (2) required exit accesses from the center enters the same corridor as the apartment occupancy, the exit accesses shall be separated in the corridor by a smoke barrier having not less than a one (1) hour fire resistance rating. The smoke barrier shall be so

located that there is an exit on each side.

b. The door in the smoke barrier shall be not less than thirty-six (36) inches wide.

c. The door assembly in the smoke barrier shall have at least twenty (20) minutes and shall be self-closing or automatic closing in accordance with Section 716.5.1."

(e) "422.3.1 Accessory Uses: Any heating equipment in spaces occupied by children shall be provided with partitions, screens, or other means to protect children under six (6) years of age from hot surfaces and open flames."

(f) "422.4 Egress: Each floor occupied by clients shall have not less than two (2) remote exits. A mezzanine shall be considered a floor for the purpose of this section."

(g) "422.4.1 Story below exit discharge: The story below the level of exit discharge may be used for a day care center in buildings in any type construction other than Type 2C, 3B or 5B when the following conditions are met:

a. For up to thirty (30) clients, there shall be two (2) remote exits. One (1) exit shall discharge directly outside and the vertical travel to grade shall not exceed eight (8) feet.

b. For over thirty (30) clients, a minimum of two (2) exits shall be provided to the outside, one (1) of which shall exit at ground level. Exceptions:

1. The exit directly to ground level is not required if all exits are protected in accordance with Section 1014.11. Smoke detectors shall be provided in that story and the story of discharge.

2. The exit directly to ground level is not required if one (1) exit complies with Exception #1 and sprinklers, installed in accordance with subsections 906.2.1 or 906.2.2, are used in that story and the story of exit discharge."

(h) "422.4.2 Length of travel: Travel distance:

a. Between any room door intended as exit access and an exit shall not exceed 100 feet;

b. Between any point in a room and an exit shall not exceed 150 feet;

c. Between any point in a sleeping room or suite and an exit access door of that room or suite shall not exceed fifty (50) feet. Exception: The travel distance in (a) and (b) above may be increased by fifty (50) feet in buildings protected throughout by an approved supervised automatic sprinkler system."

(i) "422.4.3 Corridor width: The minimum width of exit access corridors shall be forty-four (44) inches. Exceptions:

1. Thirty-six (36) inches where serving an occupant load of fifty (50) or less.

2. The width required for capacity as determined by Section 1009.0."

(j) "422.4.4 Interior corridors: All corridors shall be one (1) hour fire resistance rated. The corridor walls shall comply with Section 711.0. Exceptions:

1. This corridor protection shall not be required when all classrooms served by the corridors have at least one (1) door directly to the outside or to an exterior balcony constructed in accordance with section 1011.5.

2. As allowed by section 1011.4."

(k) "422.4.5 Special features:

1. Every closet door latch shall be such that children can open the door from inside the closet.

2. Every bathroom door lock shall be designed to permit openings of the locked door from the outside in an emergency."

(l) "422.5 Protection from hazards: Cooking appliances and food preparation areas shall be protected in accordance with Sections 422.5.1 through 422.5.3."

(m) "422.5.1 Commercial cooking appliance: When a day care center has commercial cooking appliances such as ranges, deep fryers or griddles, both of the following shall apply:

1. The kitchen or room in which the appliance is located shall be enclosed by nonfire rated walls and ceiling designed to resist the passage of smoke. Pass through openings and door openings shall be equipped with an assembly which will screen possible flash fires from view.

2. All cooking appliances shall be protected by a commercial exhaust system designed and installed in accordance with the Mechanical Code listed in Chapter 35."

(n) "422.5.2 Domestic cooking appliance: When a day care center has a domestic range with food preparation which does not produce grease laden vapors, one (1) of the following shall apply:

1. The kitchen or room in which the appliance is located shall be enclosed by a one (1) hour fire partition constructed in accordance with Section 711.0. A commercial range hood exhaust and suppression system is not required in this situation; or

2. The kitchen or room in which the appliance is located shall comply with Section 422.5.1, Parts 1 and 2."

(o) "422.5.3 Nongrease producing cooking appliances: Day care centers using nongrease generating cooking appliances such as microwave ovens, wall ovens and crock pots, shall locate these appliances so as not to be accessible to the clients."

(p) "422.6 Interior finish: All walls and ceilings shall have a Class I or Class II finish rating in accordance with ASTM E-84 listed in Chapter 35."

(q) "422.6.1 Floor finish: All floor coverings within a corridor and exit shall be Class I or Class II in accordance with ASTM E-648 listed in Chapter 35."

(r) "422.7 Fire protective signaling system: A manual fire alarm system shall be provided throughout all day care centers regulated by Section 422.0. Exceptions:

1. Day care centers housed in one (1) room.

2. Day care centers with a calculated client occupant load less than fifty (50)."

(s) "422.8 Automatic fire detection system: Smoke detection systems shall be installed in the following locations:

1. On the ceiling in front of the doors to stairways;

2 At no greater than thirty (30) foot spacing in the corridors of all floors containing the center; and

3. In lounges, recreation areas and sleeping rooms in the center. Exceptions:

1. Centers housed in one (1) room.

2. Hand-wired single-station smoke detectors may be installed if they can be heard throughout the center."

(t) "422.9 Fire protection system supervision: The fire suppression system and alarm system shall transmit alarm and trouble signals to an approved central-station system, proprietary system or remote-station system. Exception: Centers with not more than 100 client calculated occupant load."

(u) "422.10 Fire extinguishers: Class "B" extinguishers shall be provided in any food preparation room. Class "A: extinguishers shall be installed throughout the center in accordance with NFiPA 10 listed in Chapter 35."

(v) "422.11 Barrier-free design: Centers having a client load calculated pursuant to subsection 422.4.3 which exceeds 100 shall meet the requirements of Chapter 11 for accessibility."

(w) "422.12 Engineers/architects law: Construction documents for centers having a client load calculated pursuant to subsection 422.4.3 which exceeds 100 shall bear the seal and signature of a Kentucky licensed architect and engineer."

(6) Create a new Section 423.0, Bed and Breakfast Establishments, as follows: "423.1 Bed and Breakfast Homes: In addition to the requirements of Section 310.5.1, Bed and Breakfast homes shall comply with the following conditions:

(a) All hallways and means of egress serving guest rooms shall be permanently illuminated and emergency lighting shall be provided.

(b) The maximum overnight guest occupant load shall be ten (10) and it shall be posted.

(c) Interconnected smoke detectors shall be provided in accordance with subsections 919.3.2, 919.4 and 919.5.

(d) Each door between guest sleeping rooms and main egress hallway or corridor shall be equipped with an approved self-closing device.

(e) There shall be two (2) remote exits to the outside from the ground floor.

(2) 423.2 Bed and Breakfast Inns: Bed and Breakfast Inns shall comply with section 310.3.1."

Section 5. Chapter 5, General Building Limitations. Amend Chapter 5 of the BOCA National Building Code/1993 by making the following additions, deletions or changes:

(1) Amend subsection 506.2 to read as follows: "506.2 Street frontage increase: Where a building or structure has more than twenty-five (25) percent of the building perimeter fronting on a street or other unoccupied space, the area limitations specified in Table 503 shall be increased two (2) percent for each one (1) percent of the excess footage. The unoccupied space shall be on the same lot or dedicated for public use and shall not be less than thirty (30) feet (9144 mm) in width."

(2) Create subsection 506.2.1 to read as follows: "506.2.1 Fire lane access increase: Where the perimeter of a building or structure qualifies for the street frontage increase of Section 506.2 and the unoccupied space is connected to a street by a continuous paved roadway to serve as a fire lane not less than eighteen (18) feet wide, the area limitations specified in Table 503 shall be increased an additional one (1) percent for each one (1) percent of the excess frontage and roadway."

Section 6. Chapter 6, Types of Construction. Amend Chapter 6 of the BOCA National Building Code/1993 by making the following additions, deletions or changes:

(1) Amend Table 602, Fire Resistance Ratings of Structure Elements (In Hours), as follows:

(a) Create a footnote to read as follows: "Note m. The fire partitions and floor/ceiling assembly ratings in R-2 buildings may be reduced to one half (1/2) hour if all dwelling units are not more than one (1) story above the lowest level of exit discharge and not more than one (1) story below the highest level of exit discharge of exits serving the dwelling unit and if equipped with an NFiPA 13D sprinkler system listed in Chapter 35."

(b) Amend the notation under "Dwelling unit separations" in column "Structure element" within Table 602 to read as follows: "(Sections 711, 713 and Notes f, j and m)."

(2) Amend subsection 602.4.3 to read as follows: "602.4.3 Combustible pipe: Combustible pipe shall be permitted in all use groups and construction types where approved by Chapters 28 and 29 of this code."

Section 7. Chapter 7, Fire Resistant Materials and Construction. Amend Chapter 7 of the BOCA National Building Code/1993 by making the following additions, deletions, or changes:

(1) Amend subsection 713.4, Penetration protection, by creating an additional exception to read as follows: "4. In all buildings of Use Group R-2, vertical noncombustible ducts shall not be required to have a one-hour enclosure if the following conditions exist:

(a) The cross-sectional area does not exceed thirty-five (35) square inches (22581 mm^2); and

(b) The duct does not penetrate more than three (3) floors; and

(c) The duct does not serve more than one (1) dwelling unit and shall not join other ducts except above the top level for the purpose of utilizing a single roof penetration; and

(d) These ducts shall be restricted for use as a bathroom or kitchen exhaust and combustion air supply and relief."

(2) Amend subsection 720.7.2.1, Use Group R, by creating an additional exception to read as follows: "6. When dwelling unit separation walls are constructed to the underside of a fire-resistance rated roof/ceiling assembly or to a ceiling with sixty (60) minute finish rating, the attic draftstopping complying with subsection 720.7.2.2 (i.e., horizontal draftstopped areas not exceeding 3,000 square feet) shall be deemed equivalent."

Section 8. Amend Chapter 8, Interior Finishes, of the BOCA National Building Code/1993 by deleting subsections 807.2.1, 807.2.2 and 807.2.3 in their entirety.

Section 9. Chapter 9, Fire Protection Systems. Amend Chapter 9 of the BOCA National Building Code/1993 by making the following additions, deletions or changes:

(1) Amend section 904.0, Fire Suppression Systems, as follows:

(a) Amend subsection 904.2 to read as follows: "904.2 Use Groups A-1 and A-3: Where a Use Group A-1 or A-3 fire area exceeds 12,000 square feet (1116m^2) in area, an automatic fire suppression system shall be provided as follows:

1. Throughout the entire story or floor level where the A-1 or A-3 Use Group is located;

2. Throughout all stories and floor levels below the A-1 or A-3 Use Group; and

3. Throughout all intervening stories and floor levels between the A-1 or A-3 Use Group and the highest level of exit discharge that serves Use Group A-1 or A-3 fire areas, including the highest level of exit discharge. Exceptions:

a. Auditorium areas of Use Group A-1 or A-3 where the main auditorium floor is at the level of exit discharge of the main entrance.

b. Participant sport areas of Use Group A-3 where the main floor of the participant sport area is at the level of exit discharge of the main entrance.

(b) Delete subsection 904.4, Use Group E, in its entirety.

(c) Amend subsection 904.6, Use Group I, by deleting the exception.

(d) Amend subsection 904.9 to read as follows: "904.9 Use Group R-2: An automatic fire suppression system shall be provided throughout all buildings with an occupancy in Use Group R-2 in accordance with Sections 906.2.1, 906.2.2 or 906.2.3. Exceptions:

1. Two (2) story buildings with basement. Use Group R-2 buildings (apartments, condominiums, dormitories, etc.) where all dwelling units are not more than one (1) story above the lowest level of exit discharge and not more than one (1) story below the highest level of exit discharge of exits serving the dwelling unit (i.e., two (2)story building with a basement).

2. Existing buildings. R-2 buildings that exceed two (2) stories above grade but which do not have more than six (6) dwelling units. This exception shall not apply to buildings constructed after the effective date of this code."

(2) Amend subsection 906.2.3 to read as follows: "906.2.3 NFiPA 13D Systems. A sprinkler system in accordance with NFiPA 13D listed in Chapter 35 shall be permitted in the following occupancies:

(a) In buildings of Use Group R-2 if all dwelling units are not more than one (1) story above the lowest level of exit discharge and not more than one (1) story below the highest level of exit discharge of exits serving the dwelling unit (i.e., two (2) story building with a basement).

(b) In existing buildings of Use Group R-2 that exceed two (2) stories above grade but have no more than six (6) dwelling units. This shall not apply to buildings constructed after January 1, 1991."

(3) Amend subsection 907.6.3, Domestic connection, to read as follows: "907.6.3 Domestic connection: Two (2) check (one (1) way) valves, one (1) of which may be an alarm check valve, shall be provided at the point where the suppression system piping is connected to the domestic water piping. Shutoff valves shall not be permitted in the suppression system piping. Water supply shall be controlled by the riser control valve to the domestic water piping. Exception: Shutoff valves in the sprinkler system piping are permitted if the valves are supervised in accordance with Section 923.0."

(4) Amend Subsection 914.2.4 to read as follows: "914.2.4

Stages: Standpipe systems shall be installed in legitimate stages in accordance with Section 412.7."

(5) Amend Section 916.0, Yard Hydrants, to read as follows:

(a) "916.1 Private hydrants: Fire hydrants installed on private property as a part of a private fire protection system shall be located so as to meet the requirements of National Fire Protection Association (NFiPA) Pamphlet #24 listed in Chapter 35. Yard hydrant installation shall be coordinated with the local fire code officials who shall not make recommendations which exceed the requirements of National Fire Protection Association (NFiPA) Pamphlet #24. Yard hydrants shall not be installed on a water main less than six (6) inches in diameter."

(b) Create a new subsection 916.2 to read as follows: "916.2 Public hydrants: Public hydrants not covered by National Fire Protection Association (NFiPA) Pamphlet #24 listed in Chapter 35 shall conform to the standards of the administrative authority of the jurisdiction as provided for by local ordinance."

(6) Amend Section 917.0, Fire Protective Signaling Systems, as follows:

(a) Amend subsection 917.4.1, Use Group A-4 or E, by creating an additional exception to read as follows: "Exception 2. Church buildings which do not exceed 10,000 square feet and in which single station smoke detectors are installed as follows:

1. Smoke detectors may be single station and wired in series so as to sound alarm in sanctuary.

2. Smoke detectors shall be installed in fellowship hall and more hazardous areas such as furnace rooms, mechanical rooms and storage rooms, but shall not be required in Sunday School Classrooms.

3. Detector spacing shall be thirty (30) feet on center in corridors and 900 square feet per detector in open spaces, or in accordance with the manufacturer's specifications."

(b) Amend subsection 917.8.1 to read as follows: "917.8.1 Visible alarms: See Chapter 11 for alarm requirements for visual impairment in buildings and facilities required to be accessible to persons with physical disabilities."

Section 10. Chapter 10, Means of Egress. Amend Chapter 10 of the BOCA National Building Code/1993 by making the following additions, deletions or changes:

(1) Amend subsection 1005.3, Protruding objects, to read as follows: "1005.3 Protruding objects: See Chapter 11 for buildings and facilities required to be accessible to persons with physical disabilities."

(2) Create a new subsection 1006.3.2 to read as follows: "1006.3.2 Protection of egress: A required means of egress shall not discharge directly into a vehicular path unless guards are provided to protect vehicles from hitting the exit door in its outward opened position and to direct pedestrians in a path running parallel to the vehicular path. The guards shall prevent the exit door from being blocked by movable objects such as dumpsters or parked vehicles."

(3) Amend Section 1007.0, Accessible Means of Egress, as follows:

(a) Amend subsection 1007.1 to read: "1007.1 Accessible Means of Egress: See Chapter 11 for buildings and facilities required to be accessible to persons with physical disabilities."

(b) Delete subsections 1007.2 through 1007.6 in their entirety.

(4) Amend Table 1008.1.2, Maximum Floor Area Allowances Per Occupant, by adding a notation to Industrial areas to read as follows: "Note: Use a value of 200 gross for purposes of determining jurisdiction under subsections 105.1 and 105.2, design professional seal requirements, and Chapter 11, accessibility."

(5) Amend Section 1010.0, Number of Exits as follows:

(a) Amend Table 1010.3, Buildings with One (1) Exit, by creating a footnote for Use Group R-2 for two (2) story structures to read as follows: "Note e. When equipped with an NFiPA 13D sprinkler system listed in Chapter 35, the travel distance shall be increased to seventy-five (75) feet and the number of dwelling units per floor shall be increased to eight (8), but not more than four (4) units shall share a single exit."

(b) Amend subsection 1010.4, Emergency Escape, by adding two (2) additional exceptions to read as follows:

1. "4. Egress windows located on the first and second stories in multiple family dwellings (R-2 and R-3 Use Groups) and one (1) and two (2) family dwellings may have a minimum net clear opening height dimension of twenty-two (22) inches and a minimum width dimension of twenty (20) inches; and the net clear opening area may be reduced to not less than four (4) square feet. The minimum total glazed area shall be five (5) square feet in the case of a ground floor window and not less than five and seven-tenths (5.7) square feet in the case of a second story window. (This exception applies only if the sash frames can be readily broken or removed.)"

2. "5. An outside window or exterior door for emergency escape shall not be required in R-2 occupancies when all dwelling units are not more than one (1) story above the lowest level of exit discharge and not more than one (1) story below the highest level of exit discharge of exits serving the dwelling unit and when equipped with an NFiPA 13D sprinkler system listed in Chapter 35."

(6) Amend Section 1011.0, Exit Access Passageways and Corridors, as follows:

(a) Amend Table 1011.4, Corridor Fire Resistance Rating, by creating a footnote for Use Group I-1,R to read as follows: " Note e. In R-2 occupancies when all dwelling units are not more than one (1) story above the lowest level of exit discharge and not more than one (1) story below the highest level of exit discharge of exits serving the dwelling unit and when equipped with an NFiPA 13D sprinkler system listed in Chapter 35, the required fire resistance rating shall be one-half (1/2) hour."

(b) Amend the Exception to 1011.4.1, Corridor walls as separation walls, to read as follows: "Exception: Tenant separation and dwelling unit separation walls which are also corridor walls shall not be required to have a fire resistance rating greater than that required by Table 1011.4 where the building is equipped throughout with an automatic sprinkler system in accordance with Sections 906.2.1, 906.2.2 or 906.2.3, as applicable."

(7) Amend Section 1014.0, Stairways, as follows:

(a) Amend subsection 1014.6.1, Profile, to read as follows: "1014.6.1 Tread nosing: See Chapter 11 for buildings and facilities required to be accessible to persons with physical disabilities."

(b) Amend subsection 1014.11.4, Exit signs, to read as follows: "1014.11.4 Exit signs: See Chapter 11 for buildings and facilities required to be accessible to persons with physical disabilities."

(c) Amend subsection 1014.12, Exterior Stairways, to read as follows: "1014.12 Exterior stairways: Exterior stairways shall have openings on at least one (1) side facing an outer court, yard or public way. The openings shall have an aggregate width of not less than twenty (20) percent of the stairway perimeter and an aggregate area on each level of not less than twelve (12) percent of the total perimeter wall area of each level. Exterior stairways shall not be accepted as an exit in the following cases:

1. Buildings of Use Group I-2 which exceed four (4) stories or fifty (50) feet in height.

2. Floors that exceed five (5) stories or sixty-five (65) feet in height above the level of exit discharge."

(8) Amend Section 1016.0, Ramps, as follows:

(a) Amend subsection 1016.2.3, Restrictions, to read as follows: "1016.2.3 Restrictions: Means of egress ramps shall not reduce in width in the direction of egress travel. Projections into the required ramp and landing width are prohibited except at and below handrail height where, at each handrail, the projections shall not exceed three and one-half (3 1/2) inches (89 mm) into the required width. See Chapter 11 for door opening limitations in buildings and facilities required to be accessible to persons with physical disabilities."

(b) Amend subsection 1016.3, Maximum slope, to read as follows:

"1016.3, Maximum slope: The maximum slope of means of egress ramps shall be one (1) unit vertical in eight (8) units horizontal (1:8); except ramps required in accordance with Chapter 11 for persons with physical disabilities, in which case the maximum slope shall be: one (1) unit vertical in eight (8) units horizontal (1:8) if the rise is limited to three (3) inches (76 mm); one (1) unit vertical in ten (10) units horizontal (1:10) if the rise is limited to six (6) inches (152 mm); or one (1) unit vertical in twelve (12) units horizontal (1:12) otherwise."

(c) Amend subsection 1016.4, Landings, to read as follows: "1016.4 Landings: Ramp slopes of one (1) **unit** vertical **[~~unit~~]** in twelve (12) units horizontal (1:12) or steeper shall have landings at the top, bottom, all points of turning, entrance, exit and at doors. See Chapter 11 for maximum vertical rise limitations for buildings and facilities required to be accessible to persons with physical disabilities. The maximum slope of landings shall be one (1) unit vertical in forty-eight (48) units horizontal (1:48). The least dimension of a landing shall not be less than the required width of the ramp except that the landing dimension in the direction of travel is not required to exceed four (4) feet (1219 mm) where the travel from one (1) ramp to the next ramp is a straight run. Exception: Aisles in areas of Use Group A shall comply with Section 1012.0."

(d) Amend subsection 1016.5.1, Drop-offs, to read as follows: "1016.5.1 Drop-offs: See Chapter 11 for buildings and facilities required to be accessible to persons with physical disabilities."

(e) Amend subsection 1016.6.1, Surface, to read as follows: "1016.6.1 Surface: See Chapter 11 for buildings and facilities required to be accessible to persons with physical disabilities."

(f) Amend subsection 1016.6.2, Exterior ramps, to read as follows: "1016.6.2 Exterior ramps: See Chapter 11 for buildings and facilities required to be accessible to persons with physical disabilities."

(9) Amend Section 1017.0, Means of Egress Doorways, as follows:

(a) Amend subsection 1017.1.1, Floor surface, to read as follows: "1017.1.1 Floor surface: The floor surface on both sides of a door shall be at the same elevation. The floor surface over which the door swings shall be at the same elevation as the floor level at the threshold and shall extend from the door in the closed position a distance equal to the door width. Exception: This requirement shall not apply to:

1. Exterior doors, as provided for in Section 1005.6, which are not on an accessible route.

2. Variations in elevation due to differences in finish materials, but not more than one-half (1/2) inch (13 mm). See Chapter 11 for additional requirements on thresholds in buildings and facilities required to be accessible to persons with physical disabilities."

(b) Amend subsection 1017.2.3, Door arrangement, to read as follows: "1017.2.3 Door arrangement: See Chapter 11 for buildings and facilities required to be accessible to persons with physical disabilities."

(c) Amend Section 1017.4, Door hardware, to read as follows: "1017.4 Door hardware: All means of egress doors shall be of a side-swinging type. All doors shall swing in the direction of egress where serving an occupant load of fifty (50) or more persons or where serving a high-hazard occupancy. The opening force for interior side-swinging doors without closers shall not exceed a five (5) pound (24 N) force. For all other side-swinging, sliding and folding doors, the door latch shall release when subjected to a fifteen (15) pound (73 N) force. The door shall be set in motion when subjected to a thirty (30) pound (146 N) force. The door shall swing to a full-open position when subjected to a fifteen (15) pound (73 N) force. Forces shall be applied to the latch side. See Chapter 11 for additional requirements for door operation in buildings and facilities required to be accessible to persons with physical disabilities. Exceptions:

1. Doors to private garages, factory and storage areas with an occupant load of ten (10) or less.

2. Horizontal sliding-type doors complying with Section 410.4.2 shall be permitted in a means of egress in occupancies in Use Group I-3.

3. Doors within or serving a single dwelling unit which are not required to be accessible by Chapter 11, are not required to be provided with lever-handled operating devices.

4. Revolving doors conforming to Section 1018.0.

5. Horizontal sliding doors complying with subsection 1017.4.4 shall be permitted in a means of egress in areas of refuge as described in **Section 1111.0 [~~subsection 1007.5~~]** and areas, other than high-hazard occupancies, that serve an occupant load of less than fifty (50).

6. Horizontal sliding doors complying with subsection 1017.4.3."

(d) Amend subsection 1017.4.2, Panic Hardware, as follows:

1. Amend the first sentence to read as follows: "All doors equipped with latching or locking devices in buildings of Use Groups A and E or portions of buildings used for assembly or educational purposes and serving rooms or spaces with an occupant load greater than 100 shall be equipped with approved panic hardware."

2. Create an exception to subsection 1017.4.2 to read as follows: "Exception: Panic hardware for Use Group A-3 shall not be required for principal entrance/exit doors if:

a. They are free-swinging; and

b. The calculated occupant load does not exceed 150; and

c. The latch/lock device is a thumb latch/lock or a key operated lock device in which the key cannot be removed from the side from which egress is to be made when it is locked."

(e) Amend subsection 1017.4.3 by adding the following language to the end of the existing subsection: "Horizontal sliding doors complying with this section shall be permitted. A sign shall be placed on the egress side of the door in a conspicuous location which reads, "In case of emergency, push to open." The sign shall be in letters not less than two (2) inches high and mounted approximately sixty (60) inches above the finished floor."

(f) Amend subsection 1018.5, Adjacent area, to read as follows: "1018.5 Adjacent area: See Chapter 11 for buildings and facilities required to be accessible to persons with physical disabilities."

Section 11. Chapter 11, Accessibility. Amend Chapter 11 of the BOCA National Building Code/1993 by making the following additions, deletions or changes:

(1)(a) Amend subsection 1101.1 to read: "1101.1 Scope: The provisions of this chapter shall control the design and construction of facilities for accessibility for persons with disabilities. Facilities that comply with this chapter and the Americans with Disability Act Accessibility Guidelines for Buildings and Facilities listed in Chapter 35 and hereafter referred to as "ADAAG", shall be considered accessible."

(b) Amend subsection 1101.2 to read: "1101.2 Accessible means of egress: Spaces that are required to be accessible shall be provided with accessible means of egress as required in Section 1111.0."

(c) Create a new subsection 1101.3 to read as follows: "1101.3 Preschool, day care and elementary school modifications: The standards set forth in "Recommendations for Accessibility to serve Physically Handicapped Children in Elementary Schools" dated March, 1986; or "Recommendations for Accessibility Guidelines for Children's Environs" shall be used for providing accessibility for children with disabilities in lieu of the listed dimensions and heights identified in this Chapter. These documents are available through the Access Board, Suite 1000, 1331 F Street, NW, Washington, DC 20004-1111. Copies are also available at the Department of Housing, Buildings and Construction, The 127 Building, 1047 U.S. Highway 127 South, Suite #1, Frankfort, Kentucky, between 8 a.m. and 4:30 p.m., Monday through Friday."

(2) Amend Section 1102.0, Definitions, as follows:

(a) Under the definition of "Accessible" delete the reference to "CABO A117.1 listed in Chapter 35" and replace it with "ADAAG".

(b) Amend the definition of "Facility" by adding the following language to the end of the present definition: "and associated equipment, roads, walks, passageways and parking lots."

(c) Delete the definition of "Physically disabled person" in its entirety.

(3) Amend Section 1103.0, Applicability, as follows:

(a) Amend subsection 1103.1 to read as follows: "1103.1 New Buildings: All new buildings and facilities, including temporary structures, their associated sites and facilities, shall be accessible to persons with disabilities including but not limited to occupants, employees, students, spectators, participants and visitors. Exceptions:

1. Accessibility is not required in buildings and facilities, or portions thereof, to the extent permitted by this chapter and ADAAG.

2. Areas where work cannot reasonably be performed by persons having a severe impairment (mobility, sight or hearing) are not required to have the specific features providing accessibility to such persons.

3. Buildings and structures exempted by KRS 198B.260.

4. Use Group U.

5. Temporary structures, sites and equipment directly associated with the construction process, such as construction site trailers, scaffolding, bridging or material hoists."

(b) Amend subsection 1103.2 to read as follows: "1103.2 Standard: Details, dimensions and construction specifications for items required by this section shall comply with ADAAG."

(c) Create a new subsection, 1103.3 to read as follows: "1103.3 Alterations and additions to existing buildings: Alterations, repairs and additions may be made to any structure without requiring other areas of the existing structure to comply with this chapter; provided that such new work conforms to that of a new structure and the work does not result in decreased accessibility or usability of a building or facility. Exception: Primary function alterations as required by the owner pursuant to subsection 1110.2."

(4) Create a new subsection, 1104.4 to read as follows: "1104.4 Protruding objects: Walking surfaces, including walks, halls, corridors, aisles and passageways shall be protected from protruding objects as required by Section 4.4 of ADAAG."

(5) Amend subsection 1105.1 to read as follows: "1105.1 Required: Where parking is provided, accessible parking spaces shall comply with ADAAG except as required by subsections 1105.2 and 1105.3."

(6) Amend subsection 1105.2 to read as follows: "1105.2 Multifamily dwellings: Assigned parking spaces shall be provided for apartments occupied by a resident with a disability in accordance with Section 13(4)(a) of ADAAG."

(7) Amend subsection 1105.4 to read as follows: "1105.4 Van spaces: One (1) in every eight (8) accessible parking spaces, but not less than one (1) shall be marked van accessible."

(8) Amend subsection 1106.1 by deleting the reference to "CABO A117.1 listed in Chapter 35" and replacing it with "ADAAG".

(9) Amend subsection 1106.2 by deleting the reference to "CABO A117.1 listed in Chapter 35" and replacing it with "ADAAG".

(10) Amend subsection 1107.2.2 to read as follows: "1107.2.2 Listening systems: Concert and lecture halls, playhouses and movie theaters, meeting rooms and other areas where audible communications are integral to the use of the space shall provide for assistive listening equipment, devices or systems as required by Section 4.1.3(19)(b) of ADAAG."

(11) Amend subsection 1107.2.3 as follows:

(a) Add the following language at the end of the present subsection: "as required by Section 4.1.3(19(a) of ADAAG."

(b) Add an exception to read as follows: "Exception: Accessible viewing positions may be clustered for bleachers, balconies, and other areas having sight lines that require slopes of greater than five (5) percent. Equivalent accessible viewing positions may be located on levels having accessible egress."

(12) Amend Table 1107.2.3 to read as follows:

WHEELCHAIR SPACES REQUIRED IN ASSEMBLY AREAS

Capacity of seating in assembly spaces	Number of required wheelchair spaces
4 to 25	1
26 to 50	2
51 to 300	4
301 to 500	6
over 500	6 plus 1 for each 100 over 500

(13) Amend subsection 1107.2.4 to read as follows:

(a) "1107.2.4 Dining areas, restaurants and cafeterias: In dining areas of occupancies in Use Groups A-2 and A-3, the total floor area allotted for seating and tables shall be accessible."

(b) Amend Exception number 2 of subsection 1107.2.4 to read as follows: "2. In buildings without elevators, an accessible route to a mezzanine dining area is not required, provided that the mezzanine contains less than thirty-three (33) percent of the total area and the same services are provided in the accessible area."

(c) Create an additional exception to read as follows: "4. Knee clearances and table heights shall comply with Section 4.32 of ADAAG."

(14) Amend subsection 1107.3.2 as follows:

(a) Amend the first paragraph to read as follows: "In nursing homes and long-term care facilities of Use Group I-2, at least fifty (50) percent, but not less than one (1), of the patient sleeping rooms and their bathing and toilet facilities shall be accessible."

(b) In the fourth paragraph, delete the reference to "CABO A117.1 listed in Chapter 35" and replace it with "Sections 4.6.6 and 6.2 of ADAAG."

(c) Create an additional paragraph to read as follows: "All public use areas are required to be designed and constructed to be accessible."

(15) Amend subsection 1107.3.3 to read as follows: "1107.3.3 Use Group I-3: Occupancies in Use Group I-3 (detention and correctional facilities) shall comply with Section 12 of ADAAG."

(16) Create a new subsection, 1107.3.4, to read as follows: "1107.3.4 Alterations: Alterations to facilities listed in Use Groups I-1 or I-2 shall comply with Section 6.1(4) of ADAAG."

(17) Amend subsection 1107.4 as follows:

(a) "1107.4 Use Group R: Occupancies in Use Group R shall provide for accessible features in accordance with Sections 1107.4.1 through 1107.4.5."

(b) Amend subsection 1107.4.1 as follows: "1107.4.1 Accessible guestrooms: In occupancies in Use Group R-1 containing six (6) or more guestrooms, Section 9 of ADAAG shall apply and not less than one (1) accessible guestroom for the first twenty-five (25) guestrooms shall be provided. In hotels with more than fifty (50) guestrooms, roll-in type showers shall be provided in one-half (1/2), but not less than one (1), of the required accessible guestrooms."

(c) Amend subsection 1107.4.2 as follows: "1107.4.2 Accessible dwelling units: In multifamily dwellings of Use Group R-2 and R-3 containing at least twenty-five (25) dwelling units, a minimum of one (1) in twenty-five (25) of the dwelling units shall be accessible in accordance with subsection 1107.4.3 of this section. All dwelling units on a site shall be considered to determine the total number of dwelling units and the required number of accessible units. All rooms and spaces available to the general public and all such spaces available for the use of the residents serving accessible dwelling units shall be accessible. Exceptions:

1. In buildings without elevators, multistory dwelling units are not required to be accessible.

2. Recreational facilities in accordance with Section 1107.4.4.

3. Buildings in which all units on the ground floor or all units where an elevator is provided are adaptable pursuant to KRS 334.360(11)-(13)."

(d) Amend subsection 1107.4.3 to read as follows: "1107.4.3 Minimum requirements for multifamily dwellings: A required accessible dwelling unit shall be on an accessible route and shall have accessible elements and spaces complying with Sections 13.3.2 and 13.4 of ADAAG."

(e) Amend subsection 1107.4.4 to read as follows: "1107.4.4 Recreational facilities: Where recreational facilities are provided serving accessible or adaptable dwelling units in occupancies in Use Groups R-2 or R-3, twenty-five (25) percent but not less than one (1) of each type in each group of such facilities shall be accessible. All recreational facilities of each type on a site shall be considered to determine the total number of each type which are required to be accessible."

(f) Create a new subsection, 1107.4.5, to read as follows: "1107.4.5 Dispersement of elements: Dwelling units shall be dispersed throughout the facility in accordance with Section 13.2.2 of ADAAG."

(g) Create a new subsection, 1107.4.5.1, to read as follows: "1107.4.5.1 Minimum number: When dwelling units are altered in an existing facility, one (1) in twenty-five (25), but not less than one (1), of the dwelling units altered shall comply with the requirements of Sections 13.3, 13.4 and 14.5 of ADAAG for each alteration until the number of accessible dwelling units in each facility equals the number required to be accessible by subsection 1107.4.2 of this section."

(h) Create a new subsection, 1107.4.5.2, to read as follows: "1107.4.5.2 Dispersion: When existing dwelling units are altered and are required to be accessible, they shall be dispersed according to Section 13.2.2 of ADAAG, to the maximum extent feasible."

(18) Create a new subsection, 1107.5, to read as follows: "1107.5 Judicial, legislative and regulatory facilities: Judicial, legislative and regulatory facilities shall comply with Section 11 of ADAAG."

(19) Create a new subsection, 1107.6, to read as follows: "1107.6 Libraries: Libraries shall comply with Section 8 of ADAAG."

(20) Amend subsection 1108.2 as follows: "1108.2 Toilet and bathing facilities: Toilet rooms and bathing facilities shall be accessible and shall be on an accessible route. At least one (1) of each type fixture or element in each accessible toilet room and bathing facility shall be accessible.

(21) Amend subsection 1108.2.1 by deleting the reference to CABO A117.1 and replacing it with "ADAAG".

(22) Amend subsection 1108.3 to read as follows: "1108.3 Accessible elevators: All passenger elevators shall conform to ADAAG listed in Chapter 35."

(23) Amend subsection 1108.4 to read as follows: "1108.4 Drinking fountains: At least fifty (50) percent of drinking fountains, but not less than one (1), provided on every floor shall be accessible, as required by Section 4.1.3(10) of ADAAG."

(24) Amend subsection 1108.5 by deleting the reference to CABO A117.1 and replacing it with "ADAAG".

(25) Amend subsection 1108.6 to read as follows: "1108.6 Fixed or built-in seating or tables: Where fixed or built-in seating or tables are provided, at least five (5) percent, but not less than one (1), shall be accessible and be distributed throughout the facility, as required by Section 4.32 of ADAAG."

(26) Amend subsection 1108.7 to read as follows: "1108.7 Customer service facilities: Customer service facilities shall comply with Sections 1108.7.1 through 1108.7.3 according to the dimensions set forth in Sections 7.2 and 7.3 of ADAAG."

(27) Amend subsection 1108.7.1 to read as follows: "1108.7.1 Dressing and fitting rooms: Where dressing or fitting rooms are provided, at least five (5) percent, but not less than one (1), in each group of rooms serving distinct and different functions shall be accessible and on an accessible route and shall comply with Section 4.35 of ADAAG."

(28) Amend subsection 1108.8 to read as follows: "1108.8 Controls, operating mechanisms and hardware: Controls, operating mechanisms and hardware, including switches that control lighting, ventilation or electrical outlets, in accessible spaces, along accessible routes or as parts of accessible elements, shall be accessible as required by Section 4.27 of ADAAG."

(29) Create a new subsection 1108.9 to read as follows: "1108.9 Specification for tread nosing: Interior and exterior stairs which connect levels that are not connected by an elevator, ramp or other accessible means of travel shall not have open risers and shall comply with Section 4.9 of ADAAG. Exception: Solid risers are not required for stairways serving dwelling units which are not required to be accessible in accordance with Section 1107.4.2, provided that the opening between treads does not permit the passage of a sphere with a diameter of four (4) inches (102 mm)."

(30) Create a new subsection 1108.10 to read as follows: "1108.10 Exit signs: Each door to an enclosed exit stairway shall be equipped with tactile signage reading "Exit" complying with ADAAG and installed on the side of the door from which egress is to be made."

(31) Create a new subsection 1108.11 to read as follows: "1108.11 Door arrangement: The space between doors in series shall not be less than seven (7) feet (2134 mm) as measured when the doors are in the closed position. Exception: Power-operated doors and occupancies in Use Group I-1 and R-3."

(32) Create a new subsection 1108.12 to read as follows: "1108.12 Thresholds at doorways: Thresholds at doorways shall not exceed three-fourths (3/4) inch (19 mm) in height above the finished floor surface for exterior residential sliding doors or one-half (1/2) inch (13 mm) for all other doors. Raised thresholds and floor level changes greater than one-quarter (1/4) inch (6 mm) at doorways shall be beveled with a slope not greater than one (1) unit vertical in two (2) units horizontal (1:2)."

(33) Amend subsection 1109.2 as follows: "1109.2 Signs: Signs which designate permanent rooms and spaces shall comply with Sections 4.30, 30.4, 30.5 and 30.6 of ADAAG. Required accessible elements shall be identified by the International Symbol of Accessibility at the following locations:

(a) Accessible parking spaces required by Section 1105.1.

(b) Accessible passenger loading zones.

(c) Accessible areas of refuge required by Section **1111.2** [~~1007.5.4~~].

(d) Accessible toilet and bathing units.

(e) Accessible entrances."

(34) Create a new subsection 1109.3 to read as follows: "1109.3 Visible alarms: Visible alarm-indicating appliances shall be provided in public and common areas of all buildings and areas of buildings housing the hearing impaired in accordance with Section 913 of this code and Section 4.28.3 of ADAAG. Private offices, storage areas, mechanical rooms and other similar unoccupied spaces are exempt."

(35) Amend subsection 1110.2 as follows: "1110.2 Alterations: Each element or space of a building or facility that is altered shall comply with these provisions, unless technically infeasible. Where full compliance is technically infeasible, the element or space shall be made accessible to the fullest extent to which it is not technically infeasible."

(36) Amend subsection 1110.2.1 as follows: "1110.2.1 Alterations affecting an area containing a primary function: Where an alteration affects the usability of, or access to, an area containing a primary function, an accessible route to the primary function area shall be provided. The accessible route to the primary function area shall include any restrooms, drinking fountains and telephones serving the primary function area."

(37) Create a new subsection, 1110.2.1.1, to read as follows: "1110.2.1.1. Owner responsibility: The owner of the building shall be responsible to determine the primary function and compliance with subsection 1110.2.1 and may make any additional alterations the owner may deem necessary, if any."

(38) Amend paragraph 1 of subsection 1110.2.2 to read as follows: "1. Where it is technically infeasible to alter existing toilet

rooms or bathing facilities to be accessible, at least one (1) accessible unisex toilet/bathroom shall be provided and shall be located on the same floor and in the same area as the existing toilet/bathrooms. Each unisex toilet/bathroom shall contain one (1) accessible water closet complying with Section 4.16 of ADAAG and lavatory complying with Section 4.19 of ADAAG, and the door shall be lockable from within the room."

(39) Delete subsections 1110.3 and 1110.4 in their entirety.

(40) Create a new Section, 1111.0, Accessible Means of Egress, to read as follows:

(a) "1111.1 New construction: In new construction, all spaces required to have an accessible means of egress by Section 4.1.3(9) of ADAAG shall comply with this section and applicable requirements of ADAAG."

(b) "1111.2 Area of Rescue Assistance: Areas of rescue assistance shall be provided as required by Section 4.3.11 of ADAAG."

(c) "1111.3 Drop-offs: The sides of ramps and landings with a drop-off shall have a curb with a minimum four (4) inch (102 mm) height above the walking surface or shall be provided with a guardrail."

(d) "1111.4 Surface: For all slopes exceeding one (1) unit vertical in twenty (20) units horizontal (1:20) and where the use is such as to involve danger of slipping, the ramp shall be surfaced with approved slip-resistant materials."

(e) "1111.5 Exterior ramps: Exterior ramps and landings shall be designed and constructed to prevent water from accumulating on the walking surface and shall comply with Section 4.8 of ADAAG."

(f) "1111.6 Adjacent area: Each revolving door shall have a conforming side-hinged swinging door."

(39) Create a new section, 1112.0 Accessible Telephones, to read as follows: "1112.1 If telephones are provided, they shall comply with Section 4.31 of ADAAG."

Section 12. Chapter 12, Interior Environment. Amend Chapter 12 of the BOCA National Building Code/1993 by making the following additions, deletions or changes:

(1) Create a new subsection 1203.2 to read as follows: "1203.2 Alternative Mechanical System: HVAC systems in occupancies reviewed under NFiPA 101 pursuant to Section 119.1 of this code shall be installed in accordance with NFiPA 90A or NFiPA 90B in lieu of the mechanical code listed in Chapter 35."

(2) Amend subsection 1204.1.3, Furred Ceilings, by adding the following exception: "Exception: In Use Group R-3 basement recreation rooms, a furred ceiling height of six feet and eight inches (6'8") around the ducts may be made in the soffit area only for structural beams and mechanicals. The two-thirds (2/3) area requirements listed in this section shall still be met."

(3) Amend subsection 1210.3 to read as follows: "1210.3 Alternative mechanical ventilation: Enclosed attic, rafter and crawl spaces and other uninhabited spaces such as unfinished basements, which are not ventilated as herein required, shall be equipped with a mechanical ventilation system conforming to the requirements of Section M-1606 of the mechanical code listed in Chapter 35."

Section 13. Chapter 13, Energy Conservation. Amend Chapter 13 of the BOCA National Building Code/1993 by making the following additions, deletions or changes:

(1) Amend subsection 1304.2 to read as follows: "1304.2 Documentation: Proposed alternative designs, submitted as requests for an exception to the standard design criteria, shall be accompanied by an energy analysis."

(2) Delete Sections 1306.0, 1307.0 and 1308.0 in their entirety.

Section 14. Chapter 14, Exterior Wall Coverings, of the BOCA National Building Code/1993 is hereby adopted in its entirety.

Section 15. Chapter 15, Roofs and Roof Structures. Amend Chapter 15 of the BOCA National Building Code/1993 by making the following additions, deletions or changes:

(1) Amend subsection 1512.2 to read as follows: "1512.2 Structural and construction loads: The roof covering system and the material and equipment loads that will be encountered during installation of the roof covering system shall not exceed the capacity of the structural roof components."

Section 16. Chapter 16, Structural Loads. Amend Chapter 16 of the BOCA National Building Code/1993 by creating a new subsection 1601.2 to read as follows:

(1) "1601.2 Certificate of compliance: Design compliance with the provisions of this Chapter and Chapter 18 shall be satisfied when certification of an architect or engineer registered in Kentucky to that effect is placed on drawings submitted to the building code official, unless the code official shall notify the designer that a specific code violation exists."

(2) Amend subsection 1612.1.3 to read as follows: "1612.1.3 Seismic ground acceleration table: The effective peak velocity-related acceleration (A_v) and the effective peak acceleration (A_a) shall be determined from Table 1612. For the application of the formulas in Sections 1612.4 and 1612.5 which incorporate the effective peak acceleration coefficient (A_a), the value of A_a shall be determined from Table 1612."

(3) Delete Figures 1612.1.3(1) and (2) in their entirety.

(4) Create Table 1612 as follows:

TABLE 1612

EARTHQUAKE RISK ZONE #1 A_v/A_a <0.10

Design Coefficient values: $A_v = 0.07$ (unless noted, A_v/A_a)
$A_a = 0.05$

Adair	Elliott	Laurel 09/06	Oldham
Allen	Estill 09/05	Lawrence 09/05	Owen
Anderson	Fayette	Lee 09/05	Owsley 09/05
Barren	Fleming	Leslie 09/09	Pendleton
Bath	Floyd 09/08	Lewis	Perry 09/09
Boone	Franklin	Lincoln 09/05	Pike 09/09
Bourbon	Gallatin	Logan 09/06	Powell
Boyd	Garrard	Madison	Pulaski 09/06
Boyle	Grant	Magoffin 09/05	Robertson
Bracken	Grayson 09/05	Marion	Rockcastle 09/05
Breathitt 09/05	Green	Martin 09/05	Rowan
Breckinridge 09/05	Greenup	Mason	Russell 09/05
Bullitt	Hancock 09/07	Meade 09/05	Scott
Butler 09/06	Hardin	Menifee	Shelby
Campbell	Harrison	Mercer	Simpson 05/06
Carroll	Hart	Metcalfe	Spencer
Carter	Henry	Monroe 09/05	Taylor
Casey 09/05	Jackson 09/05	Montgomery	Todd 09/07
Christian 09/09	Jefferson	Morgan 09/05	Trimble
Clark	Jessamine	Muhlenberg 09/08	Warren
Clay 09/08	Johnson 09/05	McCreary 09/08	Washington
Clinton 09/06	Kenton	McLean 09/09	Wayne 09/07
Cumberland 09/05	Knott 09/08	Nelson	Whitley 09/09
Daviess 09/09	Knox 09/09	Nicholas	Wolfe 09/05
Edmonson	Larue	Ohio 09/07	Woodford

EARTHQUAKE RISK ZONE #2 $A_v/A_a \geq 0.10$ but < 0.15
Design Coefficient Values: A_v & $A_a = 0.10$ (unless noted, A_v/A_a)

Bell	Crittenden 14/14	Hopkins 11/11	Trigg 13/12
Caldwall 12/12	Harlan	Letcher	Union 14/13
Calloway 14/14	Henderson 12/11	Lyon 14/13	Webster 12/12

EARTHQUAKE RISK ZONE #3 $A_v/A_a \geq 1.5$ but ≤ 2.0

Design Coefficient Values A_v & A_a = 0.20 (unless noted, A_v/A_a)		Design Coefficient Values A_v & A_a = 0.15 (unless noted, A_v/A_a)	
Ballard[22/22]	Fulton[25/25]	Graves[18/18]	Marshall[16/15]
Carlisle[22/22]	Hickman[23/23]	Livington[15/16]	McCracken[19/19]

(5) Amend subsection 1612.6 to read as follows: "1612.6 Architectural, mechanical and electrical components and systems: All components and systems, including sprinkler systems, in buildings shall be designed and constructed to resist seismic forces determined in accordance with this section. Exceptions:

(a) Architectural components in buildings assigned to Seismic Performance Category A are exempt from the requirements of this section.

(b) Mechanical and electrical components and systems in buildings assigned to Seismic Performance Category A or B are exempt from the requirements of this section.

(c) Architectural, mechanical and electrical components and systems in buildings that are assigned to Seismic Performance Category B or C, are in Seismic Hazard Exposure Group 1 buildings, and have a performance criteria factor of 0.5, are exempt from the requirements of this section.

(d) Elevator components and systems in buildings assigned to Seismic Performance Category A or B are exempt from the requirements of this section. Elevator components and systems in buildings that are assigned to Seismic Performance Category C and are in seismic Hazard Exposure Group 1 buildings, are exempt from the requirements of this section.

(e) Buildings located in Risk Zone 1 as shown in Table 1612."

Section 17. Chapter 17, Structural Tests and Inspections. Amend Chapter 17 of the BOCA National Building Code/1993 by amending subsection 1705.1 to read as follows: "1705.1 General: The owner shall provide special inspections as required by this section. The special inspections required by subsections 1705.1 through 1705.12 shall apply to seismic related construction only and this section shall not be mandatory for any other permit or construction. The special inspectors shall be provided by the owner and shall be qualified and approved for the inspection of the work described herein. Exceptions:

(1) Special inspections are not required for work of a minor nature or when warranted by conditions approved by the building official.

(2) Special inspections are not required for building components unless the design involves the practice of professional engineering or architecture as defined by KRS Chapters 322 and 323.

(3) Special inspections are not required for buildings of Use Group R-3 or R-4.

(4) Buildings located in Risk Zone 1, which are not required to be designed by a design professional."

Section 18. Chapter 18, Foundations and Retaining Walls. Amend Chapter 18 of the BOCA National Building Code/1993 by making the following additions, deletions or changes:

(1) Create subsection 1801.2, Certificate of Compliance, to read as follows: "1801.2 Certificate of Compliance: Design compliance with the provisions of this Chapter and Chapter 16 shall be satisfied when certification of an architect or engineer registered in Kentucky to that effect is placed on drawings submitted to the building code official, unless the code official shall notify the design professional that a specific code violation exists."

(2) Amend subsection 1806.1 to read as follows: "1806.1 Frost Protection: Except when erected upon solid rock or otherwise protected from frost, foundation walls, piers and other permanent supports of all buildings and structures larger than 100 square feet (9.30 m^2) in area or ten (10) feet (3048 mm) in height shall extend below the frost line of the locality, **or** to a minimum depth of twenty-four (24) inches, or whichever is deeper, and spread footings of adequate size shall be provided if necessary to distribute properly the load within the allowable bearing value of the soil. Alternatively, the structures shall be supported on piles if solid earth or rock is not available. Footings shall not be founded on frozen soils unless the frozen condition is of a permanent character."

Section 19. Chapter 19, Concrete, of the BOCA National Building Code/1993 is hereby adopted in its entirety.

Section 20. Chapter 20, Lightweight Metals, of the BOCA National Building Code/1993 is hereby adopted in its entirety.

Section 21. Chapter 21, Masonry, of the BOCA National Building Code/1993 is hereby adopted in its entirety.

Section 22. Chapter 22, Steel, of the BOCA National Building Code/1993 is hereby adopted in its entirety.

Section 23. Chapter 23, Wood, of the BOCA National Building Code/1993 is hereby adopted in its entirety.

Section 24. Chapter 24, Glass and Glazing. Amend Chapter 24 of the BOCA National Building Code/1993 by making the following additions, deletions or changes:

(1) Create a new subsection 2401.1.1 to read as follows: "2401.1.1 Labeling requirements: Each light of safety glazing material manufactured, distributed, imported, or sold for use in hazardous locations or installed in a location within the Commonwealth of Kentucky shall be permanently labeled by etching, sandblasting or firing ceramic material on the safety glazing material. The label shall identify the labeler, whether manufacturer, fabricator or installer, and the nominal thickness and the type of safety glazing material and the fact that said material meets the test requirements of American National Standards Institute, Inc. (ANSI) Standard Z-97.1 listed in Chapter 35. The label shall be legible and visible after installation. Safety glazing labeling shall not be used on materials other than safety glazing materials."

(2) Amend Paragraph 7.4 of subsection 2405.2, Specific Hazardous Locations, to read as follows: "7.4. The finished floor or walking surface within thirty-six (36) inches (915 mm) on both sides of the glazing."

Section 25. Chapter 25, Gypsum and Plaster, of the BOCA National Building Code/1993 is hereby adopted in its entirety.

Section 26. Chapter 26, Plastic, of the BOCA National Building Code/1993 is hereby adopted in its entirety.

Section 27. Chapter 27, Electric Wiring, Equipment and Systems. Amend Chapter 27 of the BOCA National Building Code/1993 by making the following additions, deletions or changes:

(1) Amend Section 2701.0, General, as follows:

(a) Amend subsection 2701.1, Scope, by adding the following sentence: "Tentative Interim Amendments issued to NFiPA 70 and accepted by the department shall be permitted to be used for interpretations of NFiPA 70."

(b) Create a new subsection 2701.5 to read as follows: "2701.5 Electrical inspections: Inspections conducted to determine compliance with the National Electrical Code shall be conducted by a certified electrical inspector in accordance with Kentucky administrative regulation 815 KAR 35:015."

(2) Delete subsections 2702.2(5), 2702.3, 2703.3 and 2703.4 in their entirety.

(3) In subsections 2704.1, 2704.3, and 2705.1 delete the words "code official" and insert in lieu thereof the words "certified electrical inspector."

Section 28. Chapter 28, Mechanical Systems. Amend Chapter 28 of the BOCA National Building Code/1993 by making the following additions, deletions or changes:

(1) Amend Section 2801.0, General, as follows:

(a) Amend subsection 2801.2 to read as follows: "2801.2 Mechanical Code: Except as required by Section 2813, all mechanical equipment and systems which are not covered by sections 2801.3 or 2801.4 shall be installed in accordance with provisions of the mechanical code listed in Chapter 35."

(b) Create a new subsection 2801.2.1 to read as follows: "2801.2.1 Mechanical ventilation alternative: Mechanical ventilating systems may be designed in accordance with the provisions of ASHRAE Standard 62-1989 listed in Chapter 35 as an equivalent alternative to the Mechanical Code listed in Chapter 35."

(c) Create a new subsection 2801.2.2 to read as follows: "2801.2.2 Design of mechanical systems: The building code official may use the actual occupant load in lieu of Table 1008.1.2 in the design of mechanical ventilating systems. This applies to both the BOCA National Mechanical Code/1993 and ASHRAE 62-1989."

(d) Create a new subsection 2801.3 to read as follows: "2801.3 Boilers: All boilers, pressure vessels and associated pressure piping shall meet the standards for construction, installation and inspection as set forth in 815 KAR Chapter 15, Kentucky administrative regulations."

(e) Create a new subsection 2801.4 to read as follows: "2801.4 Unfired Pressure Vessels. All unfired pressure vessels shall meet the standards set forth in Section VIII of the 1983 Edition of the American Society of Mechanical Engineers (ASME) Boiler and Pressure Vessel Code, American National Standards Institute, Inc./American Society of Mechanical Engineers (ANSI/ASME) BPV-VIII-1, as required by Kentucky boiler administrative regulations set forth in 815 KAR Chapter 15, Kentucky administrative regulations."

(2) Create a new Section 2812.0 entitled "Range Hoods" to read as follows:

(a) "2812.1 Range Hoods. Range hoods in kitchen exhaust systems shall comply with the requirements of the Mechanical Code listed in Chapter 35. The bottom edge of the hood shall be located at a height of not more than four (4) feet above the cooking surface."

(b) "2812.2 Commercial exhaust system not required: In churches and in other occupancies where the range is merely a convenience for occasional use and where there is minimal or nonexistent grease laden vapors, commercial exhaust systems shall not be required."

(3) Create a new Section 2813.0 entitled "Superseding Provisions for Mechanical Ventilation" to read as follows:

(a) "2813.1 The Mechanical Code listed in Chapter 35 is hereby amended by Sections 2813.1 through 2813.3.2.1 of this code and supersede any conflicting provisions of Sections M-1604 and M-1605 of that Mechanical Code."

(b) "2813.2 Mechanical ventilation."

1. "2813.2.1 Ventilation system: Mechanical ventilation shall be provided by a method of supply air and return or exhaust air. The amount of supply air shall be approximately equal to the amount of return and exhaust air. The system shall not be prohibited from producing a negative or positive pressure. The air distribution system shall be designed and installed in accordance with Section 3 of the Mechanical Code."

2. "2813.2.2 Ventilation rate: The minimum amount of air required shall be determined in accordance with Table 2813.2 based on the occupancy of the space and the occupant load or other parameter as stated therein. The occupant load utilized for design of the ventilation system shall not be less than the estimated maximum occupant load."

3. "Table 2813.2

REQUIRED MECHANICAL VENTILATION AIR

Occupancy classification	Required ventilation air (cfm[d] per person, unless otherwise indicated)
Assembly	
Food services:	
Bars and cocktail lounges	50
Cafeterias, fast food	35
Dining rooms	35
Kitchens	30[a]
Museums	
Exhibit halls	35
Warehouses	10
Public (meeting) facilities	
Assembly rooms	35
Ballrooms	35
Casinos	35
Conference rooms	35
Lobbies	15
Sports and amusement facilities	
Billiard rooms and game rooms	35
Bowling centers (seating areas)	35
Playing floors, gymnasiums, ice arenas	20
Ramps, foyers and lobbies	10
Spectator area	35
Swimming pools and deck areas	0.5 cfm per square foot[b]
Tennis, squash and handball courts (indoor)	20
Theaters	
Auditoriums	35
Lobbies, foyers and lounges	35
Projection booths	20[b]
Stages, TV and mobile studios	10
Ticket booths	20
Transportation (terminals)	
Waiting rooms, ticket and baggage areas, corridors and gate areas	35
Business	
Banks (see offices)	
Vaults	5
Barber, beauty and health services	
Barber shops	35
Beauty shops (hair dressers)	35
Reducing salons	25
Sauna baths, steam rooms	5
Offices	
Conference rooms	35
Duplicating and printing rooms	0.5 cfm per square foot
Office space	20
Waiting rooms	35
Photo studios	
Camera rooms, stages	5
Darkrooms	20

Research institutes	
Animal rooms	40
Darkrooms, spectroscopy rooms	20
Laboratories	35
Laboratories, radioisotope, chemically and biologically toxic	35[b]
Veterinary hospitals	
Kennels, stalls	35[a]
Operating rooms	35[a]
Reception rooms	35
Educational	
Schools	
Auditoriums	35
Classrooms	25
Gymnasiums	20
Laboratories	10
Libraries	7
Lunchrooms, dining halls	35
Music rooms	35
Training shops	35
Factory and industrial	
Working areas	35[c]
Institutional	
Correctional facilities	
Day rooms, activity spaces	1 air change per hour
Group homes	
Bedrooms	30 cfm per room
General living area	50 cfm per room
Kitchens	30[a]
Hospitals, nursing and convalescent homes	
Autopsy rooms	12 air changes per hour[b]
Delivery rooms, trauma rooms	15 air changes per hour
Laboratories	6 air changes per hour
Operating rooms	15 air changes per hour
Patient rooms	2 air changes per hour
Pharmacy, medication rooms	4 air changes per hour
Physical therapy areas and treatment rooms	6 air changes per hour
Recovery and intensive care rooms	6 air changes per hour
Soiled utility rooms, janitor closets	10 air changes per hour
Mercantile	
General	
Sales floors and showrooms	25
Dressing rooms	25
Malls	10
Shipping areas	15
Storage areas	25
Warehouses	10
Special shops	
Automotive service stations	1.5 cfm per square foot
Pet shops	1 cfm per square foot
Florists	25
Supermarkets	
Meat processing rooms	5[a]
Residential	
Dwelling units	
All other rooms	10 cfm per room
Bedrooms	10 cfm per room
General living areas	10 cfm per room
Kitchens	100 cfm per room[a]
Hotels, motels	
Bedrooms (single, double)	30 cfm per room
Living rooms (suites)	50 cfm per room
Storage	
Repair garages, public garages (enclosed)	1.5 cfm per square foot
Warehouses	10
Special areas	
Elevators	15
Exits and corridors	0.02 cfm per square foot
Lockers and dressing rooms	35[a]
Public bathrooms	75 cfm per water closet or urinal[a]
Nonpublic bathrooms	50 cfm per water closet or urinal[a]
Utility rooms	0.02 cfm per square foot

Note a: Recirculation shall be in accordance with Section 2813.3 except that nonpublic bathrooms in Use Groups R-2 and R-3 with a bathtub or shower shall not be recirculated and shall be mechanically exhausted.

Note b: Mechanical Exhaust required (see subsection 2813.3.1).

Note c: Spaces maintained at temperatures below fifty (50) degrees F. (ten (10) degrees C.) are not covered by these requirements unless the occupancy is continuous. Ventilation from adjoining spaces and infiltration is permitted.

Note d: 1 cfm = 0.0004719 m^3/s; 1 cfm/ft^2 = 0.00507 m^3/s - m^2."

(c) "2813.3 Recirculation."

1. "2813.3.1 Sixty-seven (67) percent recirculation: Not more than sixty-seven (67) percent of the required ventilation air specified shall be permitted to be recirculated, when the concentration of particulates is less than specified in Table 2813.3. Air in excess of the required ventilation air shall be permitted to be completely recirculated. Air shall not be recirculated to another dwelling unit or occupancy of dissimilar use."

2. "Table 2813.3

MAXIMUM ALLOWABLE CONTAMINANT CONCENTRATIONS FOR VENTILATION AIR

Contaminant	Annual average (arithmetic mean) $\mu g/m^3$	Short-term level (not to be exceeded more than once a year $\mu g/m^3$	Averaging Period (hours)
Particulates	60	150	24
Sulfur oxides	80	400	24
Carbon monoxide	20,000	30,000	8
Photochemical oxidant	100	500	1
Hydrocarbons (not including methane)	1,800	4,000	3
Nitrogen oxides	200	500	24
Odor	Essentially unobjectionable[a]		

Note a: Judged unobjectionable by sixty (60) percent of a panel

of ten (10) untrained subjects."

3. "2813.3.1.1 Eighty-five (85) percent recirculation: Not more than eighty-five (85) percent of the required ventilation air shall be permitted to be recirculated when the system is also equipped with effective absorption or filtering equipment so that the condition of the air supplied to the room or space is within the equality limitations of Table 2813.2."

4. "2813.3.2 Exhaust required: All rooms and areas having air with dust particles sufficiently light enough to float in the air, heat, odors, fumes, spray, gas or smoke in such quantities as to be irritating or injurious to health or safety, and rooms or areas as indicated by Footnote b in Table 2813.2, shall have the air exhausted to the outdoors in accordance with Section M-1606.0."

5. "2813.3.2.1 Swimming pool area recirculation: Return air from a swimming pool and deck area shall be permitted to be recirculated in accordance with Section 2813.2 of this code and Section M-1604 of the Mechanical Code when such air is dehumidified to maintain the relative humidity of the area at sixty (60) percent or less. The return air shall only be recirculated to the area from which it was removed."

Section 29. Chapter 29, Plumbing Systems. Amend Chapter 29 of the BOCA National Building Code/1993 by deleting sections 2901.1 through 2908.3.3 in their entirety and insert the following: "2901.1 Scope: The design and installation of all plumbing systems, including sanitary and storm water sewage disposal in buildings shall comply with the requirements of Chapter 318 of the Kentucky revised statutes and the Kentucky State Plumbing Code as set out in 815 KAR Chapter 20, Kentucky administrative regulations. Copies are available from the Kentucky Division of Plumbing, The 127 Building, 1047 U.S. Highway 127 South, Suite 1, Frankfort, Kentucky 40601."

Section 30. Chapter 30, Elevators and Conveying Systems. Amend Chapter 30 of the BOCA National Building Code/1993 by making the following additions, deletions or changes:

(1) Amend subsection 3004.4.1 to read as follows: "3004.4.1 Periodic inspection intervals: Periodic inspections shall be made at intervals of not more than twelve (12) months for all passenger elevators, manlifts and escalators."

(2) Amend subsection 3005.4 to read as follows: "3005.4 Posting certificates of compliance: The owner or lessee shall post the last issued certificate of compliance in a conspicuous place on the elevator, available to the building official."

(3) Amend subsection 3006.3, Accessible Elevators, to read as follows: "3006.3 Accessible elevators: See Chapter 11 for buildings and facilities required to be accessible to persons with physical disabilities."

(4) Amend Section 3007.0, Hoistway Enclosures and Venting, as follows:

(a) [~~(b)~~] Create a new subsection 3007.3.1 to read as follows: "3007.3.1 Mechanical ventilation: Mechanical ventilation shall be allowed in buildings other than Use Groups R-1, R-2, I-1, I-2 and similar uses with overnight sleeping quarters if outside exposure for the required vents is not possible. Mechanical ventilation shall conform to Chapter 28 of this code."

(b) [~~(a)~~] Amend subsection 3007.4 to read as follows: "3007.4 Location of vents: Vents shall be located at the top of the hoistway, and shall open either directly to the outer air or through noncombustible ducts to the outer air. Holes in the machine room floors for the passage of ropes, cables or other moving elevator equipment shall be limited so as not to provide greater than two (2) inches (51 mm) of clearance on all sides."

(c) Amend subsection 3007.5 to read as follows: "3007.5 Area of vents: Except as provided for herein, the area of the vents shall not be less than three and one-half (3 1/2) percent of the area of the hoistway nor less than three (3) square feet (0.28 m^2) for each elevator car, and not less than three and one-half (3 1/2) percent nor less than one-half (1/2) square foot (0.047 m^2) for each dumbwaiter car in the hoistway, whichever is greater. Of the total required vent area, not less than one-third (1/3) shall be of the permanently open type unless all vents activate upon detection of smoke from any of the elevator lobby smoke detectors. Where mechanical ventilation conforming to the mechanical code listed in Chapter 35 provides equivalent venting, the required vent area shall be reduced if compliance with subsection 3007.3.1 [~~4.1~~] is met."

(5) Create a new section 3014.0 entitled "Vertical Chairlifts and Wheelchair Lifts" to read as follows: "3014.1 General. Except as herein provided, inclined stairway chairlifts and inclined and vertical wheelchair lifts shall conform to the requirements of ASME A17.1 listed in Chapter 35. Exception: Vertical wheelchair lifts may have a travel distance not to exceed twenty-three (23) feet and penetrate a floor subject to the following additional requirements.

(a) The platform shall be fully enclosed on the top and any side which is not used as an exit or entrance. Enclosures shall conform to the requirements of ASME A17.1 listed in Chapter 35.

(b) The runway shall be fully enclosed from the floor to the ceiling on all floors conforming with the requirements of Section 3008.0.

(c) All runway entrances shall be protected by a door of unperforated construction conforming to the requirements of Section 3011.0.

(d) All runway entrance doors shall be equipped with approved interlocks conforming to the requirements of ASME A17.1 listed in Chapter 35."

(6) Create a new section 3015.0 entitled "Machine Rooms and Related Construction for Passenger and Freight Elevators and Dumbwaiters" to read as follows: "3015.1 General: The construction of machine rooms and related construction for passenger and freight elevators and dumbwaiters shall be protected from the weather, and shall be enclosed with fire resistive enclosures. Enclosures and access doors thereto shall have a fire endurance at least equal to that required to the hoistway enclosure in Table 602."

Section 31. Chapter 31, Special Construction. Amend Chapter 31 of the BOCA National Building Code/1993 by making the following additions, deletions or changes:

(1) Delete Section 3102, Signs, in its entirety.

(2) Amend the first sentence in subsection 3106.1 to read: "An exterior pedestrian enclosed walkway that connects buildings shall comply with this section."

(3) Create a new subsection of 3107.1 to read as follows: "3107.1.1 Approval of plans: Plans showing compliance with this section shall be submitted to the Kentucky Division of Water pursuant to KRS 151.250 and 260. Approval of plans by or through that agency together with their final approval of construction shall constitute compliance with these sections."

Section 32. Chapter 32, Construction in the Public Right-of-way, of the BOCA National Building Code/1993 is hereby adopted in its entirety.

Section 33. Chapter 33, Site Work, Demolition and Construction, of the BOCA National Building Code/1993 is hereby adopted in its entirety.

Section 34. Chapter 34, Existing Structures. Amend Chapter 34 of the BOCA National Building Code/1993 by making the following additions, deletions or changes:

(1) Amend subsection 3401.2 to read as follows: "3401.2 Maintenance and repairs: All equipment, systems, devices and safeguards required by this code or by a previous statute or code for the structure or premises when erected or altered, shall be maintained in good working order. The requirements of this chapter shall not provide the basis for removal or abrogation of fire protection and safety systems and devices in existing structures."

(2) Amend subsection 3401.3 to read as follows: "3401.3 Periodic

testing: The owner shall be responsible for periodic tests and inspections of all equipment where required by this code."

(3) Delete subsection 3402.8, Lead-based paint, in its entirety.

(4) Amend subsection 3403.1 to read as follows: "3403.1 Compliance: An addition to a structure shall conform to the requirements for a new structure without requiring the existing structure to comply with the requirements of this code for new structures except as required by subsection 102.2 and the addition shall not result in an increase in hazard to the occupants in the existing structure, the addition or the building as a whole. Any existing structure plus additions shall not exceed the height and area requirements of Section 503.0, even if a fire wall separates the existing portion from the addition. Existing fire areas increased by the addition shall comply with Chapter 9. Any alterations made to the existing structure shall comply with the requirements of this chapter and Chapter 1."

(5) Amend subsection 3404.2 to read as follows: "3404.2 Requirements: An alteration to any structure shall conform to the code requirements for a new structure and shall not result in an increase in hazard to the occupants in the existing structure or the building as a whole. Portions of the structure not altered and not adversely affected by the alteration and the unaltered portion which does not create a hazard for the area under alteration are not required to comply with the code requirements for a new structure. If a hazard to the altered or unaltered portion is created, the requirements for new structures shall apply as required by subsection 102.2."

(6) Amend subsection 3405.1 to read as follows: "3405.1 Approval: A change shall not be made in the use of a structure which creates the potential of a greater hazard to the public because of increased structural or fire loading or inadequate exits for the number of occupants without approval of the building code official. If the building code official determines that the structure meets the intent of the provisions of this code for new structures under the proposed new use and occupancy and the proposed change shall not result in any greater hazard to public safety or welfare, the building code official shall approve the change. In making this decision, the building official may require a written opinion from a design professional and the State Fire Marshal."

(7) Amend subsection 3406.1 to read as follows: "3406.1 Compliance: The restoration or renovation of a building on a federal, state or local historic register solely to return the building to its original design shall not require the remainder of the building to comply with this code, except for changes of occupancy or alterations governed by Section 3404.2 or 3405.1."

(8) Amend subsection 3408.2 to read as follows: "3408.2 Applicability: Structures existing prior to August 15, 1982, in which there is work involving additions, alterations or changes of occupancy, shall be made to conform to the requirements of this section or the provisions of Sections 3403.0 through 3407.0. The provisions in Section 3408.2.1 through 3408.2.5 shall apply to existing occupancies that will continue to be, or are proposed to be, in Use Groups A, B, E, F, M, R and S. These provisions shall not apply to buildings with occupancies in Use Group H or I."

Section 35. Chapter 35, Referenced Standards. Amend Chapter 35 of the BOCA National Building Code/1993 by making the following additions, deletions or changes:

(1) Add the following reference: "ADAAG - 36 CFR, Part 118, July 26, 1992 and Federal Register, Volume 57, Number 245, Monday, December 21, 1992."

(2) Add the following standards under "ASHRAE": "15-92, Mechanical Refrigeration Systems" and "62-89, Ventilation for Acceptable Indoor Air Quality."

(3) Amend the reference to Safety Code for Elevators and Escalators under "ASME" to read "A17.1-1990 with the exception of rule 102.2(c)(4)."

(4) Amend the reference to the BOCA National Fire Prevention Code 1993 under "BOCA" by adding the following language: "The Kentucky Standards of Safety (815 KAR 10:040 - Fire Prevention Code) as amended by the Kentucky Department of Housing, Buildings and Construction."

(5) Amend the reference to the BOCA National Mechanical Code 1993 under "BOCA" by adding "with the exception of Table M-1604.3, Sections 1604.1, 1604.2, 1604.3 and 1604.6, as amended in Chapter 28 of this code, Section 2813."

(6) Amend the following CABO standard by changing the edition date to "1992": "CABO Model Energy Code-92."

(7) [~~Amend the following NFiPA standards by changing the edition date to "1992": "#54 and #58."~~

~~(8)~~] Amend the following NFiPA standards by changing the edition date to "1993": "#30; #30A; #65; #72; #651 and #664."

(8) [~~(9)~~] Delete the following NFiPA standards from Chapter 35: "#71; #72E and #74."

(9) [~~(10)~~] Add the following NFiPA standards to Chapter 35:

(a) "#54-92".

(b) "$58-92".

(c)][~~(a)~~] "#79-87 Electrical Standard for Industrial Machinery".

(d) [~~(b)~~] "#101-85 Life Safety Code."

(11) Add the following language and list of National Fire Protection Association (NFiPA) Pamphlets to Chapter 35:

"These National Fire Protection Association (NFiPA) Pamphlets are listed for use in fire suppression design and installation only if referenced in a specific code required by this code.

Aircraft hangars	# 409
Pyroxylin plastics	# 40C
Laboratories	# 45
Fireworks	# 1124
L P gas storage	# 58
General storage	# 231
Rubber tire storage	# 231D
Baled cotton storage	# 231E
Rolled paper storage	# 231F
Rangehoods	# 96
Computer rooms	# 75
Archives and record centers	# 232AM
L P gas storage and handling	# 59A
Code for the manufacture and storage of aerosol products	# 30B
Installation of closed-head foam water sprinkler systems	# 16A
Fur storage	# 81
Cooling towers	# 214
Marinas and boatyards	# 303
Racetrack stables	# 150
Clean rooms	# 318
Oven	# 86
Protection of records	# 232"

Section 36. 815 KAR 7:010, 815 KAR 7:025 and 815 KAR 7:060 are hereby repealed.

CHARLES A. COTTON, Commissioner
EDWARD J. HOLMES, Secretary
APPROVED BY AGENCY: September 23, 1993
FILED WITH LRC: October 11, 1993 at 3 p.m.

CABINET FOR HUMAN RESOURCES
Department for Health Services
(As Amended)

901 KAR 5:020. Delayed birth registration.

RELATES TO: KRS Chapter 213
STATUTORY AUTHORITY: KRS 194.050, 211.090, 213.056
NECESSITY AND FUNCTION: KRS Chapter 213 relating to Vital Statistics directs the Cabinet for Human Resources to register all births that occur in Kentucky. The purpose of this administrative regulation is to provide a uniform procedure for registering births which were not reported [~~by the attending physician or midwife~~] at the time of birth.

Section 1. Definitions. [~~As used in this regulation~~] "Delayed birth registration" means the registration of a [~~child's~~] nonrecorded birth after the time prescribed by KRS 213.046 [~~213.050~~].

Section 2. Delayed Birth Registration. (1) A delayed birth certificate prepared by an institution or bearing the bona fide signature of the [~~attending~~] physician or midwife shall be accepted by the State Registrar [~~Director~~] of Vital Statistics for registration if filed before the child is seven (7) years old.

(2) If [~~In the event that~~] a birth did not occur in an institution, the [~~attending~~] physician or midwife is deceased or otherwise not available, or if there was no professional attendant at the birth, the birth certificate shall be accepted for registration if **it meets the following criteria. It is:**

(a) Completed [~~filled out~~] by a parent or nearest living relative;

(b) [~~and the facts stated therein are~~] Supported by the affidavit of the parent or nearest living relative; and

(c) Supported by a document **that:**

1. Was established more than one (1) year prior to the date of the application; and

2. Reflects the date of birth, place of birth, and name of the parents. [~~which reflects the date of birth, place of birth, and parents name and was established one (1) year or more prior to the date of application [and a document and by the affidavit of a nonrelative of legal age].~~]

(2) Any birth certificate presented for registration [~~No birth certificate shall be accepted for registration if presented for registration~~] more than seven (7) years after birth occurred shall be [~~unless the certificate is~~] prepared on [~~a special delayed~~] form VS-B-5, "Delayed Certificate of Birth and Affidavits" (11/91). This form is incorporated by reference and may be viewed or obtained at the Office of Vital Statistics, 275 East Main Street, Frankfort, Kentucky, 40621, between the hours of 8 a.m. and 4:30 p.m., Monday through Friday. Facts stated therein shall be supported by:

(a) The affidavit of a parent or nearest living relative of legal age no less than [~~at least~~] ten (10) years older than the applicant;

(b) The affidavit of a nonrelative of legal age no less than [~~at least~~] ten (10) years older than the applicant; and

(c) One (1) document which was established no less than [~~item of documentary evidence at least~~] ten (10) years prior to the date of application [~~old~~] showing the date of birth, place of birth and names of parents. [~~Provided, however, that~~] If the individual [~~person,~~] whose birth is to be recorded is between the ages of seven (7) and seventeen (17) the document shall be established no less than [~~documentary evidence in support thereof need be only~~] three (3) years prior to the date of application [~~old~~] and [~~provided further that~~] if the affidavits required in paragraphs (a) and (b) of this subsection are not obtainable a[~~n acceptable~~] document shall [~~may~~] be substituted for each affidavit.

(d) Acceptable documents for paragraph (c) of this subsection may include:

1. [~~Items of documentary evidence may be:~~] Insurance policies; [~~policy,~~]

2. Census, hospital, school or church records; [~~, baptismal certificate,~~]

3. Marriage application forms; and

4. Military records. [~~or other documents deemed acceptable by the Director of Vital Statistics.~~]

RICE C. LEACH, Commissioner
FONTAINE BANKS, JR., Secretary
APPROVED BY AGENCY: August 19, 1993
FILED WITH LRC: October 4, 1993 at 2 p.m.

CABINET FOR HUMAN RESOURCES
Department for Health Services
(As Amended)

901 KAR 5:070. Certificate of birth amended.

RELATES TO: KRS Chapter 213
STATUTORY AUTHORITY: KRS 194.050, 211.090, 213.121 [~~Chapter 213, HB 64 as enacted by the 1990 General Assembly~~]
NECESSITY AND FUNCTION: KRS Chapter 213 relating to Vital Statistics authorizes the Cabinet for Human Resources to regulate the registration of births in Kentucky. The purpose of this administrative regulation is to provide for uniform procedures for changing birth certificates of children born to mothers who are not married [~~out of wedlock~~] where a paternity affidavit is executed or where paternity is established by law or when a request is received to amend or correct an item on the birth certificate and who may apply for the change or amendment.

Section 1. Paternity Affidavits. Paternity affidavits executed in accordance with KRS 213.046, 213.049, 213.071 or 213.121 may [~~Chapter 213 shall~~] be on one (1) of the following forms:

(1) If no father is designated on the birth certificate, the form VS-8 shall be used to declare paternity at any time after the birth certificate has been registered and filed.

(2) If the mother is unmarried at the time of the birth, the form VS-8B shall be completed at the request of both natural parents at the time of birth. This form shall accompany the birth certificate at the time of registration and filing.

(3) If the mother is married the form VS-8C shall be used to delete a legally named father from the birth certificate and affirm and acknowledge the natural father.

(4) Paternity forms VS-8, "Declaration of Paternity" (2/91); VS-8B, "Paternity Affidavit" (7/92); and VS-8C, "Three (3)-way Paternity Affidavit" (7/90); are incorporated by reference and may be viewed or obtained at the Office of Vital Statistics, 275 E. Main Street, Frankfort, KY 40621, Monday through Friday, 8 a.m. to 4:30 p.m. [~~a special declaration of paternity form provided by the cabinet and shall be signed by both natural parents.~~]

Section 2. Amendment or Issuance of New Certificate. When paternity has been established for a child born [~~out of wedlock~~] in Kentucky to a mother who is not married, the State Registrar of Vital Statistics shall amend the original certificate of birth or prepare a new certificate of birth.

Section 3. Amendment of Obvious Errors on Birth Certificate. Amendment of obvious errors, transposition of letters of common knowledge or omissions on the birth certificate, shall [~~may~~] be made by the State Registrar within one (1) year after the date of birth either upon [~~request of registrant,~~] observation, query, or request of parents [~~if the applicant is under eighteen (10) years of age~~], legal guardian or individual [~~persons~~] responsible for filing the birth certificate.

Section 4. Amendment of Name. [~~Unless otherwise provided in these regulations or in KRS Chapter 213,~~] A change of name ordered by a court of competent jurisdiction shall be [~~is~~] required to change the name as shown on the birth certificate, unless the registrant, parents, legal guardian, or individual responsible for filing the birth certificate presents documentation [~~documentary evidence~~] that the name was incorrectly recorded at the time of registration of the birth and meets the requirements in Section 8 of this administrative regulation.

Section 5. Amendment of Date of Birth. The date of birth shall only be changed with a court order from a court of competent jurisdiction, unless proof is shown that the error occurred upon the original filing of the birth certificate by the individual responsible for filing the birth certificate.

Section 6. All Other Amendments. All other amendments to the birth certificate shall be supported by an affidavit or:

(1) If the registrant is eighteen (18) years of age or older, a document established [~~and/or documentary evidence which is~~] five (5) years prior to the date of the amendment [~~old~~] and **which** supports the alleged facts;

(2) If the registrant is [~~eighteen (18) years or older and three (3) years if the registrant is~~] between the ages of seven (7) and seventeen (17), **a document established three (3) years prior to the date of the amendment and which supports the alleged facts; or**

(3) [~~and one (1) year~~] If the registrant is between the ages of three (3) and six (6), **a document established one (1) year prior to the date of the amendment and which supports the alleged facts.**

Section 7. Amendment of the Same Item More Than Once. Once an amendment of an item is recorded on the birth certificate, that item shall not be amended again except upon receipt of a court order from a court of competent jurisdiction.

Section 8. Who May Apply to Amend a Certificate of Birth. To amend a certificate of birth, **the** application shall be made by **the:**

(1) [~~a~~] Parent or legal guardian, if the registrant is under age eighteen (18);

(2) [~~the~~] Registrant, **if the registrant** is eighteen (18) years of age or over; or

(3) [~~the~~] Individual responsible for filing the birth certificate.

RICE C. LEACH, Commissioner
FONTAINE BANKS, JR., Secretary
APPROVED BY AGENCY: August 19, 1993
FILED WITH LRC: October 4, 1993 at 2 p.m.

CABINET FOR HUMAN RESOURCES
Department for Health Services
Division of Local Health
(As Amended)

902 KAR 10:020. Frozen food locker plants.

RELATES TO: KRS Chapter 221
STATUTORY AUTHORITY: KRS 194.050, 211.090
NECESSITY AND FUNCTION: KRS Chapter 221 authorizes the Cabinet for Human Resources to regulate frozen food locker plants. The purpose of this administrative regulation is to provide uniform requirements for the regulation of frozen food locker plants [~~in Kentucky~~].

[~~Section 1. Citation of Regulation. This regulation may be cited as the "Kentucky Frozen Food Locker Regulation."~~]

Section 1. [~~2.~~] Plan Review of Future Construction. No person shall construct, remodel or extensively alter [~~the construction of~~] any frozen food locker plant until the plans and specifications [~~in triplicate~~] have first been submitted to the [~~cabinet, through the appropriate~~] local health department, and approved in writing.

Section 2. [~~3.~~] Display of Licenses. Frozen food locker plant licenses issued by the cabinet [~~under the provisions of KRS Chapter 221~~] shall be displayed in a conspicuous place in the plant.

Section 3. [~~4.~~] Construction [~~and Sanitation~~] Requirements. (1) [~~Construction requirements of~~] Walls, ceilings and floors.

(a) [~~The~~] Side walls and ceilings of every frozen food locker plant shall be [~~so~~] constructed of smooth surfaces and [~~that they can easily be~~] kept clean.

(b) Each [~~Every~~] building, room or enclosure [~~occupied or~~] used for the preparation, manufacture, packing, storage, freezing, sale or distribution of food [~~in frozen food locker plants~~] shall have an impermeable floor [~~made of material~~] that can be flushed and washed clean with water.

(2) Ventilation. All frozen food locker plants shall be adequately ventilated excluding areas devoted exclusively to refrigeration.

(3) Lighting.

(a) All working surfaces shall be provided with at least twenty (20) foot-candles of [~~nonglare~~] artificial light.

(b) [~~The~~] Storage rooms including those under refrigeration shall have at least ten (10) foot-candles of artificial light, measured at a distance of thirty (30) inches from the floor.

(c) [~~All~~] Light fixtures in rooms under refrigeration shall be provided with vapor-proof globes.

(4) Water supply. All frozen food locker plants shall be supplied with adequate hot and cold running water under pressure from a source approved by the Natural Resources and Environmental Protection Cabinet pursuant to administrative regulations 401 KAR Chapter 8.

(5) Lavatory and toilet facilities.

(a) Adequate, conveniently located, lavatory and toilet facilities [~~that comply with the sanitary requirements relating thereto promulgated by the Cabinet for Human Resources~~] shall be provided for employees.

(b) Toilet facilities including rooms and fixtures shall be kept in a clean condition and in good repair.

(c) Toilet tissue, cleansers, single service towels or hand drying devices and covered waste receptacles shall be provided.

(6) Construction of utensils and equipment. [~~All~~] Utensils and equipment used in the processing of food shall be nontoxic, constructed [~~of such construction so as~~] to be easily cleanable, [~~cleaned~~] and kept in good repair. Utensils containing or plated with cadmium or lead shall not be used [~~except that solder of low lead content may be used for jointing~~].

(7) Cleaning and bactericidal treatment [~~of utensils and equipment~~]. [~~All~~] Utensils and equipment shall be subjected to [~~the~~] cleaning and bactericidal treatment [~~provided by regulations relating thereto promulgated by the cabinet~~].

(8) Plumbing. All plumbing shall be installed in accordance with the state Plumbing Code, KRS Chapter 318.

(9) Waste disposal. Garbage, trash, sewage and other wastes shall be disposed of in an approved manner [~~in accordance with the regulations of the cabinet, and the Natural Resources and Environmental Protection Cabinet~~].

Section 4. [~~5.~~] Refrigeration Controls. (1) The refrigeration system for a frozen food locker plant shall be equipped with:

(a) Accurate and automatic [~~reliable~~] controls [~~and shall be~~] of adequate capacity to provide under extreme conditions of outside temperatures and under peak load conditions [~~in the normal operations of the plant~~] for the [~~automatic~~] maintenance of uniform safe

temperatures in [~~the various~~] refrigerated rooms.

(b) [~~An~~] Accurate self-recording or self-registering thermometer shall be provided in the locker room.

(c) [~~The~~] Temperature records of [~~these~~] thermometers shall be kept at the plant and shall be preserved for at least one (1) year from the date of the recording. The thermometer in the locker room shall be placed in a position where it may be readily observed by the patrons. [~~Temperatures shall be maintained in conformity with the provisions of KRS 221.080.~~]

(2) Recording thermometers [~~in use at all frozen food locker plants~~] shall:

(a) Continually record temperatures in [~~such~~] plants for a period of not less than seven (7) days;

(b) Be enclosed in moisture-proof cases, permanently fastened to a substantial wall in the vestibule or waiting room; and

(c) Be installed in **[**~~such~~**]** a manner as to be visible at all times.

(3) Recording [~~The~~] instrument shall [~~must~~] be kept locked at all times except **if** **[**~~when~~**]** changing recording dials or charts, inking, or repairing. Charts shall:

(a) Be changed once each week;

(b) Be properly dated so as to indicate the period for which temperatures were recorded;

(c) Be signed by the operators; and

(d) Be made available for inspection for at least one (1) year.

(4) [~~(3)~~] The sensitive bulb used to determine temperatures shall be located in the locker room and installed [~~in such a manner as~~] to insure efficient and proper operation at all times. The bulb shall not be placed directly in front of any door or blower.

(5) If [~~(4) When~~] more than one (1) room or one (1) section of lockers is maintained in a frozen food plant, which rooms or sections of lockers are refrigerated independently of each other, a sensitive bulb properly connected to an accurate recording thermometer shall be installed in each room or section of lockers [~~in such a manner as~~] to provide [~~give~~] accurate recordings or temperatures in each [~~such~~] room or section of lockers.

Section 5. [~~6.~~] Storage and Handling of Food. (1) [~~No~~] Food shall not be placed in a locker for storage unless it has been inspected by the operator and sharp-frozen for preservation so rapidly that ice crystals formed are too small to rupture the cells and natural juices and flavor are preserved.

(2) The lockers in any plant shall be [~~so~~] constructed [~~as~~] to protect the contents from contamination, or deterioration[~~, or injury~~]. Lockers with perforated bottoms shall be provided with a suitable unperforated liner or tray.

(3) All meats to be frozen or stored shall be wrapped in paper or other material which meets the requirements of the Code of Federal Regulations, Title 21, Food and Drug Administration Chapter 1, Subpart B, Substances for Use Only as Components of Paper and Paperboard which is incorporated by reference. Copies may be examined at the Office of the Commissioner, Department for Health Services, 275 East Main Street, Frankfort, Kentucky 40621, Monday through Friday, between the hours of 8 a.m. and 4:30 p.m. [~~wrapping material suitable for wrapping meats that are to be frozen or stored.~~] All fruits and vegetables shall be wrapped or packed before they are placed in a locker. Each wrapped portion shall be marked or stamped with the correct locker number and the date of wrapping.

(4) [~~When the operator comes into the custody or possession of~~] Fresh carcass meats [~~they~~] shall be identified with a suitable tag or stamp. [~~If the~~] Meats that are not clean [~~they~~] shall be washed with cold water and [~~or otherwise suitably~~] cleaned or rejected. If accepted, the carcass shall be placed in the chill room, [~~sufficiently~~] long enough to lose body heat.

(5) In applying marks directly to meats or other food products, the operator shall use only nontoxic ink or other harmless substances.

(6) Before being frozen, vegetables shall be cleaned, [~~blanched if required, and immediately cooled with cold water~~] and packed in [~~suitable~~] containers for freezing.

(7) Before being frozen, fruit shall be cleaned and packed in [~~suitable~~] containers for freezing.

(8) All fish shall be promptly washed with clean water, wrapped, frozen and marked with the date and the [~~patron's~~] locker number.

(9) Foods not intended for human consumption, shall be stored in a room or locker specifically set apart for that purpose. Nonconsumable [~~Such~~] foods shall not be stored in the chill room, aging room, sharp-freeze room or locker room of any frozen food locker plant where foods intended for human consumption are stored.

(10) Patrons shall not be permitted to handle meats or foods, other than their own [~~(unless specifically authorized by the owner)~~] which are stored in the chill room, or are in the process of preparation or freezing for storage.

(11) Foods stored shall be protected from filth, flies, dust, dirt, insects, vermin and other contamination. No food shall be stored in a [~~such condition or~~] manner as to cause [~~injury to, or~~] deterioration of food in adjacent lockers.

(12) **If** **[**~~Whenever~~**]** refrigeration coils or plates are located directly above a patron's locker, they shall be defrosted [~~in such a manner~~] so that contents of the locker are not contaminated.

(13) Patrons renting lockers, who are directly or indirectly engaged in the selling of food, shall declare this fact to the operator, and suitable entry shall be made on the operator's record.

Section 6. [~~7.~~] Employee Health and Cleanliness. (1) Frozen food locker plant operators shall not permit any person who has a communicable [~~skin~~] disease or is a carrier of a communicable disease, or who is suffering from any infected wound, to work in any physical contact with food [~~capacity~~] in a frozen food locker plant or a branch frozen food locker plant.

(2) Every person employed in a frozen food locker plant and engaged in direct physical contact with the food during its preparation, processing or storage, shall be clean in person and wear clean washable outer garments and suitable head coverings, which are to be used only for that purpose.

Section 7. [~~8.~~] Miscellaneous Requirements. (1) All frozen food locker plants shall be provided with adequate lockers or dressing rooms for employees separate and apart from any room in which food is prepared, processed, chilled, frozen or stored.

(2) Tobacco shall not be used in any room where food is processed or stored.

(3) No room used for the preparation, processing, storage, display or sale of foods shall be used as a living or sleeping room.

(4) No dogs, cats or other animals shall be permitted in a frozen food locker plant.

(5) Any plant using a toxic gas refrigerant shall have at least one (1) gas mask of a type approved by the National Institute of Occupational Safety and Health [~~cabinet~~] and shall have the gas mask placed where it will be readily accessible.

Section 8. Enforcement Procedures. (1) The frozen food locker license shall be suspended immediately upon notice to the holder without a hearing **if** **[**~~when~~**]** the local health department has reason to believe that an imminent health hazard exists. In **this** **[**~~such~~**]** event, the permit holder may request a hearing. If requested a hearing shall be granted within seven (7) days of receipt of request.

(2) In all other instances of violation of the provisions of this administrative regulation the local health department shall serve the holder of the frozen food locker license a written notice specifying the violations and afford the license holder a reasonable opportunity to correct same.

(3) **If** **[**~~Whenever~~**]** a frozen food locker license holder has failed to comply with any written notice issued under the provisions of this administrative regulation the local health department may suspend the license.

(4) The holder of the frozen food locker license shall be notified in writing that the license shall be suspended at the end of ten (10) days following service of **the** [~~such~~] notice unless a request for a hearing is made to the local health department within the ten (10) day period.

(5) Any person whose license has been suspended may make a request in writing for reinstatement of the license.

RICE C. LEACH, Commissioner
FONTAINE BANKS, JR., Secretary
APPROVED BY AGENCY: August 23, 1993
FILED WITH LRC: October 1, 1993 at 10 a.m.

CABINET FOR HUMAN RESOURCES
Department for Health Services
Division of Local Health
(As Amended)

902 KAR 45:005. Retail food code.

RELATES TO: KRS 217.005 to 217.215, 217.992, 21 CFR Chapter 1, Subparts B, D, Subchapter B, Part 170 [~~219.011 to 219.081, 219.991(1)~~]

STATUTORY AUTHORITY: KRS 194.050, 211.090, 219.031, 21 CFR Chapter 1, Subparts B, D, Subchapter B, Part 170

NECESSITY AND FUNCTION: [~~Senate Bill 30 of the 1990 General Assembly combines food service requirements of KRS 219.011 to 219.081 with~~] KRS 217.005 to 217.215 and 217.992(4)[~~; the Kentucky Food, Drug and Cosmetic Act. This act~~] authorizes the Cabinet for Human Resources to regulate food service establishments and retail food stores [~~in Kentucky~~]. The function of this administrative regulation is to establish a uniform code for the regulation of all food service establishments and retail food stores [~~within the Commonwealth of Kentucky~~] for the purpose of protecting the public health.

Section 1. Definitions. [~~As used in this administrative regulation:~~]

(1) "Adulterated food and food products" means any food or food product adulterated as provided by KRS 217.025 [~~of the Kentucky Food, Drug and Cosmetic Act~~].

(2) "Approved" means acceptable to the cabinet based on determination as to conformance with appropriate standards and good public health practices.

(3) "Chemical preservative" means any chemical that, **if** [~~when~~] added to a food, tends to prevent or retard deterioration thereof, but does not include common salt, sugars, vinegars, spices, or oils extracted from spices, substances added to food by direct exposure thereof to wood smoke, or chemicals applied for their insecticidal or herbicidal properties.

(4) "Closed" means without openings large enough for the entrance of insects. An opening of one-sixteenth (1/16) inch or less is closed.

(5) "Corrosion-resistant material" means those materials that maintain their original surface characteristics under prolonged influence of the food to be contacted, the normal use of cleaning compounds and bactericidal solutions and other conditions of the use environment.

(6) "Easily cleanable" means that surfaces are readily accessible and made of **a** [~~such~~] material and finish and so fabricated that residue may be effectively removed by normal cleaning methods.

(7) "Employee" means the permit holder, individuals having supervisory or management duties and any other person working in a food handling establishment.

(8) "Equipment" means stoves, ranges, hoods, ovens (including microwave), cookers, bins, conveyor belts, refrigerators, freezers, mixers, grinders, saws, sinks, tables, display cases, meat blocks, wrapping machines, scales, check-out counters, vehicles and similar items.

(9) "Food contact surfaces" means those surfaces with which food may come in contact, and those surfaces that drain onto surfaces that may come in contact with food.

(10) "Hermetically sealed container" means a container which is designed and intended to be secure against the entry of microorganisms and to maintain the commercial sterility of its contents after processing.

(11) "Kitchenware" means all multiuse utensils other than tableware used in the storage, preparation, conveying or serving of food.

(12) "Liquid waste" means the discarded fluid discharge from any fixture, appliance, area or appurtenance.

(13) "Misbranded food and food products" means any food or food product misbranded as provided by KRS 217.035 [~~of the Kentucky Food, Drug and Cosmetic Act~~].

(14) "Mobile food unit" means a food service establishment that is designed to be readily movable.

(15) "Packaged" means bottled, canned, cartoned, or securely wrapped at a food processing establishment.

(16) "Package" means any container or wrapping in which any food is enclosed for use in the delivery or display to retail purchasers, but does not include: shipping containers or outer wrappings used by retailers to ship or deliver any food to retail customers if **the** [~~such~~] containers and wrappings bear no printed matter pertaining to any particular commodity; containers used for tray pack displays in retail establishments; transparent wrappers or containers which do not bear written, printed, or graphic matter obscuring the label information, and any other exemption granted pursuant to the 21 USC 341 to 345 [~~Federal Food, Drug and Cosmetic Act~~].

(17) "Perishable food" means food of **a** [~~such~~] type or in **a** [~~such~~] condition or physical state that it may spoil or otherwise become unfit for human consumption.

(18) "Pesticides" includes pesticides, insecticides, fungicides, herbicides, and rodenticides as defined in KRS 217B.040(2).

(19) "Potentially hazardous food" means any food or ingredient, natural or synthetic:

(a) In a form capable of supporting the:

1. Rapid and progressive growth of infectious or toxigenic microorganisms; or

2. Slower growth of Clostridium botulinium.

(b) Of animal origin, either raw or heat treated; and

(c) Of plant origin which:

1. Has been treated; or

2. Is raw seed sprouts.

(d) The following are excluded:

1. Air dried hard boiled eggs with shells intact;

2. Food with water activity (aw) value of 0.85 or less;

3. Food with a hydrogen ion concentration (pH) level of four and six-tenths (4.6) or below;

4. Food in unopened hermetically sealed containers that have been commercially processed to achieve and maintain commercial sterility under conditions of nonrefrigerated storage and distribution; and

5. Food for which laboratory evidence demonstrates that rapid and progressive growth of infectious and toxigenic microorganisms or the slower growth of Clostridium botulinium cannot occur.

(20) "Pushcart" means a nonself-propelled vehicle limited to serving nonpotentially hazardous foods or commissary-wrapped food maintained at safe temperatures or limited to the preparation and serving of frankfurters.

(21) "Reconstituted" means dehydrated food products combined with water or other liquids.

(22) "Safe temperature" means, **if** [~~when~~] considering potentially hazardous food, food temperature of forty-five (45) degrees Fahrenheit or below and 140 degrees Fahrenheit or above, except for frozen food, which should be stored at zero degrees Fahrenheit, or less.

(23) "Sanitization" means effective bactericidal treatment by a process that provides enough accumulative heat or concentration of chemicals for enough time to reduce the bacterial count, including pathogens, to a safe level on utensils and equipment.

(24) "Sealed" means free of cracks or other openings which permit the entry or passage of moisture.

(25) "Seasonal restricted food concession" means any food service establishment which operates for not longer than eight (8) consecutive months in one (1) year; and shall prepare and serve only nonpotentially hazardous foods, except that plain frankfurters with bread and nachos with cheese sauce may be served. It shall not include concessions or establishments which serve only prepackaged, snack type nonpotentially hazardous foods.

(26) "Shellfish" means clams, mussels, or oysters.

(27) [~~(26)~~] "Sewage" means liquid waste containing fecal material or organic material from garbage grinders.

(28) [~~(27)~~] "Single-service articles" means cups, containers, lids, closures, plates, knives, forks, spoons, stirrers, paddles, straws, napkins, wrapping material including bags, toothpicks and similar articles which are designed for one (1) time, one (1) person use and then discarded.

(29) [~~(28)~~] "Tableware" means all multiuse eating and drinking utensils.

(30) [~~(29)~~] "Utensil" means any food-contact implement used in the storage, preparation, transportation, dispensing, service or sale of food.

(31) [~~(30)~~] "Warewashing" means the cleaning and sanitizing of food-contact surfaces of equipment and utensils such as kitchenware and tableware.

(32) [~~(31)~~] "Wholesome" means in sound condition, clean, free from adulteration, and otherwise suitable for use as human food.

Section 2. Applicability. The requirements of this administrative regulation are applicable to all food service establishments, retail food stores, or a combination of both within the same establishment, as defined by KRS 217.015[~~, located within the Commonwealth of Kentucky~~].

Section 3. Application for Permit to Operate. (1) Any person desiring to operate a food service establishment; [~~or~~] a retail food store; or a seasonal restricted food concession shall make written application for a permit on form DFS-200 [~~208~~] provided by the cabinet. This form is incorporated by reference and may be viewed at the Department for Health Services, 275 East Main Street, Frankfort, Kentucky 40621, between the hours of 8 a.m. and 4:30 p.m., Monday through Friday.

(2) If the application is for a retail food store and food service combined operation in one (1) establishment under one (1) ownership, the application shall:

(a) Designate: "retail food and food service combination".

(b) Include the name and address of the applicant;

(c) The location and type of the proposed food service establishment; and

(d) The signature of the applicant.

(3) If the application is for a temporary food service establishment, it shall also include the dates of the proposed operation.

(4) Prior to approval of an application for permit, the cabinet shall:

(a) Inspect the proposed food service establishment to determine compliance with the provisions of this administrative regulation; and

(b) Issue a permit to the applicant if the inspection reveals that the proposed food service establishment complies with the requirements of this administrative regulation.

Section 4. Food Supplies. (1) Food shall be wholesome and free from spoilage, filth, or other contamination and shall be safe for human consumption. Food shall be obtained from sources that comply with all applicable federal and state laws relating to food and food labeling. The use of food and food products canned, prepared or processed in the home is prohibited.

(2) Fluid milk and fluid milk products used or served shall be pasteurized and shall meet the Grade A quality standards as established by law and regulation. Dry milk and milk products shall be made from pasteurized milk and milk products.

(3) All shellfish, fresh or frozen shall be packed in nonreturnable packages identified with the name and address of the original shell stock processor, shucker-packer, or repacker, and the interstate certification number issued according to law. Shell stock and shucked shellfish shall be kept in the container in which they were received until they are used. Each container of unshucked shell stock (oysters, mussels, clams) shall be identified by an attached tag that states the name and address of the original shell stock processor, the kind and quantity of shell stock, and the interstate certification number issued by the state or foreign shellfish control agency and shall comply with applicable cabinet administrative regulations. Shellstock source information shall be maintained on the container until it is empty and then shall be kept on file at the establishment for ninety (90) days.

(4) Only clean whole eggs, with shell intact and without cracks or checks, or pasteurized liquid or pasteurized dry egg or egg products shall be used; except that hard-boiled peeled eggs, commercially prepared and packaged, may be used.

(5) All meat and meat products, poultry and poultry products shall have been inspected and passed for wholesomeness under an official governmental regulatory program.

(6) All fish and fish products shall be from approved sources that comply with all applicable federal and state laws relating to food and food labeling.

Section 5. Food Protection. (1) Food shall be protected while being stored, prepared, displayed, served, or transported from potential contamination including dust, insects, rodents, unclean equipment and utensils, unnecessary handling, coughs and sneezes, flooding, drainage and overhead leakage or condensation. The temperature of potentially hazardous foods shall be forty-five (45) degrees Fahrenheit or below or 140 degrees Fahrenheit or above at all times, except during necessary periods of preparation and service. Shell eggs shall be stored at forty-five (45) [~~sixty (60)~~] degrees Fahrenheit or below.

(2) Precluding unsafe additives. Food shall be protected against contamination resulting from the addition of unsafe or unapproved food or color additives other than those specified in the Code of Federal Regulations, Title 21, Food and Drug Administration Subchapter B, Part 170 - Food Additives.

(3) Spoiled, damaged, returned or detained food items shall be segregated from other foods pending final disposition. A designated area shall be established for temporarily holding returned and damaged food items awaiting disposition. The area shall be marked or identified as, "Not for sale or consumption".

(4) In the event of fire, flood, power outage, water cutoff, or similar catastrophic event that might result in the contamination of food, or that might prevent potentially hazardous foods from being held at required temperatures, the person in charge shall immediately contact the cabinet. Upon receiving notice of this occurrence, the cabinet shall take whatever action that it deems appropriate to protect the public health.

Section 6. Food Storage. (1) Food, whether raw or prepared, if removed from the container or package in which it was obtained, shall be stored in a clean covered container except during necessary periods of preparation or service. Container covers shall be impervious and nonabsorbent, except that linens or napkins may be used for lining or covering bread or roll containers. Solid cuts of meat shall be protected by being covered in storage, except that quarters or sides of meat may be hung uncovered on clean sanitized hooks if no food product is stored beneath the meat.

(2) Containers of food shall be stored a minimum of six (6) inches above the floor in a manner that protects the food from splash and other contamination, and that permits easy cleaning of the storage area, except that:

(a) Metal pressurized beverage containers, and cased food packaged in cans, glass or other waterproof containers need not be elevated **if** [~~when~~] the food container is not exposed to floor moisture;

(b) Containers may be stored on dollies, racks or pallets, provided **the** [~~such~~] equipment is easily movable.

(3) Food or containers of food shall not be stored under exposed sewer or nonpotable water lines, except for automatic fire protection sprinkler heads. Food shall not be stored in toilet rooms or toilet room vestibules.

(4) Food not subject to further washing or cooking before serving shall be stored in a way that protects it against contamination from food requiring washing or cooking. Food shall be stored in [~~such~~] a way that protects it from cross-contamination.

(5) Packaged food shall not be stored in contact with water or undrained ice. Wrapped sandwiches shall not be stored in direct contact with ice or water.

(6) Unless its identity is unmistakable, bulk food such as cooking oil, syrup, salt, sugar, flour, meal and similar products, not stored in the container or package in which it was obtained shall be stored in a container identifying the food by common name.

(7) Enough conveniently located refrigeration facilities or effectively insulated facilities shall be provided to assure the maintenance of potentially hazardous food at the required temperature of forty-five (45) degrees Fahrenheit or below during storage. Each mechanically refrigerated facility storing potentially hazardous foods shall be provided with a numerically scaled indicating thermometer, accurate to plus or minus three (3) degrees Fahrenheit located to measure the air temperature in the warmest part of the facility and located to be easily readable. Recording thermometers accurate to plus or minus three (3) degrees Fahrenheit may be used in lieu of indicating thermometers.

(8) The temperature of potentially hazardous foods requiring refrigeration shall be forty-five (45) degrees Fahrenheit or below except during necessary periods of preparation.

(9) Frozen foods shall be kept frozen and should be stored at a temperature of zero degrees Fahrenheit or below.

(10) Ice intended for human consumption shall not be used as a medium for cooling stored food, food containers, or food utensils, except that **the** [~~such~~] ice may be used for cooling tubes conveying beverages or beverage ingredients to a dispenser head, provided: tubes, cold plates and etc., are kept clean, in good repair, and are constructed from approved materials. Ice used for cooling and maintaining cold temperatures of stored food and food containers shall not be used for human consumption.

(11) Enough conveniently located hot food storage facilities shall be provided to assure the maintenance of potentially hazardous food at the required temperature of 140 degrees Fahrenheit or above during storage. Each hot food facility storing potentially hazardous foods shall be provided with a numerically scaled indicating thermometer accurate to plus or minus three (3) degrees Fahrenheit located to measure the air temperature in the coolest part of the facility and located to be easily readable. Recording thermometers, accurate to plus or minus three (3) degrees Fahrenheit, may be used in lieu of indicating thermometers. Where it is impractical to install thermometers on equipment such as bainmaries, steam tables, steam kettles, heat lamps, cal-rod units, or insulated food transport carriers, a product thermometer accurate to within plus or minus three (3) degrees Fahrenheit shall be readily available and used by the establishment personnel to check internal food temperatures.

(12) The internal temperature of potentially hazardous foods requiring hot storage shall be 140 degrees Fahrenheit or above except during necessary periods of preparation and **the** [~~such~~] hot potentially hazardous foods to be transported shall be held at an internal temperature of 140 degrees Fahrenheit at all times during transportation.

Section 7. Food Preparation. (1) Food shall be prepared with the least possible manual contact, using suitable utensils, and on surfaces that prior to use have been cleaned, rinsed and sanitized to prevent cross-contamination.

(2) Raw fruits and raw vegetables shall be washed thoroughly before being cooked or served; this requirement shall not apply to whole, uncut fruits and raw vegetables for sale in retail food stores.

(3) Potentially hazardous foods requiring cooking shall be cooked to heat all parts of the food to a temperature of at least 140 degrees Fahrenheit prior to being placed in steam tables or other hot storage facilities except that:

(a) Poultry, poultry stuffings, and stuffed meats shall be cooked to heat all parts of the food to at least 165 degrees Fahrenheit with no interruption of the cooking process.

(b) Raw pork and products containing raw pork shall be cooked to heat all parts of the food to at least 150 degrees Fahrenheit.

(c) Rare roast beef shall be cooked to an internal temperature of at least 130 degrees Fahrenheit, and rare beef steak shall be cooked to a temperature of 130 degrees Fahrenheit unless otherwise ordered by the immediate customer.

(4) Reconstituted dry milk and dry milk products may be used in instant desserts and whipped products, or for cooking and baking purposes.

(5) Liquid, frozen, dry eggs and egg products shall be used only for cooking and baking purposes.

(6) Potentially hazardous foods that were cooked and then refrigerated shall be reheated rapidly to 165 degrees Fahrenheit or higher throughout before being served or before being placed in a hot food storage facility. Steam tables, bainmaries, warmers, and other hot food holding facilities are prohibited for the rapid reheating of potentially hazardous foods.

(7) Nondairy creaming, whitening, or whipping agents may be reconstituted on the premises only when they will be stored in sanitized, covered containers not exceeding one (1) gallon in capacity and cooled to forty-five (45) degrees Fahrenheit or below.

(8) Metal stem-type numerically scaled indicating thermometers accurate to plus or minus three (3) degrees Fahrenheit shall be provided and used to assure attainment of proper internal cooking temperatures of all potentially hazardous foods.

(9) Potentially hazardous foods shall be thawed:

(a) In refrigerated units in a way that the temperature of the food does not exceed forty-five (45) degrees Fahrenheit; or

(b) Under potable running water of a temperature of seventy (70) degrees Fahrenheit or below, with sufficient water velocity to agitate and float off loose food particles into the overflow; or

(c) In a microwave oven only **if** [~~when~~] the food will be immediately transferred to conventional cooking facilities as part of a continuous cooking process or **if** [~~when~~] the entire, uninterrupted cooking process takes place in the microwave oven; or

(d) As part of the conventional cooking process.

Section 8. Food Display and Service. (1) Potentially hazardous foods shall be kept at a temperature of forty-five (45) degrees Fahrenheit or lower or at a temperature of 140 degrees Fahrenheit or higher during display and service.

(2) Food, except raw fruits and vegetables, on display shall be protected from consumer contamination by the use of package overwrapping; counter service line or salad bar food guards; display cases; or other effective means.

(3) Reuse of soiled tableware by self-service consumers returning to the service area for additional food is prohibited. Beverage cups and glasses are exempt from this requirement if the refilling process is contamination free. Clean tableware shall be made available and a sign shall be posted in self-service food area to inform customers

of this requirement.

(4) Suitable utensils shall be used by employees or provided for consumers self-service to avoid unnecessary contact with food. Between uses during service, utensils shall be:

(a) Stored in food containers with the food they are being used to serve; or

(b) Stored clean and dry; or

(c) Stored in running water; or

(d) In the case of dispensing utensils and malt collars used in serving frozen desserts, stored either in a running water dipper well, or clean and dry.

(5) Ice for consumer use shall be dispensed only with scoops, tongs, or other ice-dispensing utensils by either employees or self-service or through automatic self-service ice-dispensing equipment. Between uses during service, ice-dispensing utensils and ice receptacles shall be stored in a way that protects them from contamination.

(6) Sugar, condiments, seasonings, and dressings for self-service use shall be provided only in individual packages or from dispensers or containers that protect their contents.

(7) Milk and milk products for drinking purposes shall be provided to the consumer in an unopened, commercially filled package not exceeding one (1) pint in capacity, or served from an approved bulk milk dispenser. **If** **[~~When~~]** a bulk dispenser for milk or milk products is not available and portions of less than one-half (1/2) pint are required for mixed drinks, cereal, or dessert service, milk and milk products may be poured from a commercially filled container of not more than one-half (1/2) gallon capacity.

(8) Cream, half and half, or nondairy creamers or whitening agents shall be provided in an individual service container, protected pour-type pitcher or drawn from a refrigerated dispenser designed for **that** **[~~such~~]** service; milk, cream, half-and-half or nondairy creamers in unopened commercially filled containers may be sold without restriction as to container size in retail food stores.

(9) Once served to a consumer, individual portions of food shall not be served again. Packaged food, other than potentially hazardous food, that is still packaged and is still wholesome, may be re-served.

Section 9. Food Transportation. During transportation, food and food utensils shall be in covered containers or completely wrapped or packaged so as to be protected from contamination. During transportation, including transportation to another location for service or catering operations, food shall meet the requirements of this administrative regulation relating to protection and storage of food. Cold, potentially hazardous foods shall be maintained at forty-five (45) degrees Fahrenheit or below during transportation.

Section 10. Employee Health. No person, while infected with a disease in a communicable form that can be transmitted by foods or who is a carrier of organisms that cause **[~~such~~]** a disease or while afflicted with a boil, an infected wound, or an acute respiratory infection, shall work in a food service establishment, except as noted in Section 39 **[~~38~~]** of this administrative regulation.

Section 11. (1) Personal Cleanliness. Employees shall thoroughly wash their hands and the exposed portions of their arms with soap or detergent and warm water before starting work, during work as often as is necessary to keep them clean, and after smoking, eating, drinking or using the toilet. Employees shall keep their fingernails clean and trimmed.

(2) Hand washing shall take place at a hand-washing lavatory or designated service sink and not at food preparation sink or at a warewashing sink.

Section 12. Clothing. (1) The outer clothing of all employees shall be clean and suitable for the task to be performed.

(2) Hairnets, hats, scarfs, or similar hair coverings that effectively restrain head and facial hair shall be required for all employees working in food preparation areas. Employees working in other areas of establishments shall arrange their hair to prevent the contamination of food, equipment and utensils.

Section 13. Employee Practices. (1) Employees shall eat food, drink, or use tobacco only in designated areas. **The** **[~~Such an~~]** area shall not be designated if consuming food there might result in contamination of other food, equipment, utensils, or other items needing protection.

(2) Employees shall handle soiled tableware in a way that minimizes contamination of their hands.

(3) Employees shall maintain a high degree of personal cleanliness and shall conform to good hygienic practices.

(4) Employees shall remove all insecure jewelry, and during periods **if** **[~~when~~]** food is manipulated by hand, remove from hands any jewelry that cannot be adequately sanitized.

Section 14. Equipment and Utensils Materials. (1) Multiuse equipment and utensils shall be made and repaired with safe materials, including finishing materials; shall be corrosion resistant and shall be nonabsorbent; and shall be smooth, easily cleanable, and durable under conditions of normal use. Singleservice articles shall be made from clean, sanitary, safe materials. Equipment, utensils and single-service articles shall not impart odors, color or taste, nor contribute to the contamination of food.

(2) If soft solder or hard solder (silver solder) is used, it shall be composed of safe materials and be corrosion resistant.

(3) Hard maple or equivalently nonabsorbent materials that meet the general requirements set forth in subsection (1) of this section may be used for cutting blocks, cutting boards, salad bowls, bakers' tables, and wooden paddles in confectionery operations for pressure scraping kettles **if** **[~~when~~]** manually preparing confections at a process temperature of 230 degrees Fahrenheit or above. The use of wood as a food-contact surface under other circumstances is prohibited, except in the case of single service articles such as chopsticks, coffee stirrers, ice cream spoons and similar articles.

(4) Safe plastic or safe rubber or safe rubber-like materials that are resistant under normal conditions of use to scratching, scoring, decomposition, crazing, chipping, and distortion, that are of sufficient weight and thickness to permit cleaning and sanitizing by normal dishwashing methods, and which meet the general requirements set forth in subsection (1) of this section are permitted for repeated use. The use of equipment and utensils made of materials not meeting the requirements of this section is prohibited.

(5) Mollusk and crustacea shells may be used only once as a serving container. Further reuse of **the** **[~~such~~]** shells for food service is prohibited.

Section 15. Equipment and Utensils Design and Fabrication. (1) All equipment and utensils, including plastic ware, shall be designed and fabricated for durability under conditions of normal use and shall be resistant to denting, buckling, pitting, chipping, and crazing. Food-contact surfaces shall be easily cleanable, smooth, and free of breaks, open seams, cracks, chips, pits, and similar imperfections, and free of difficult to clean internal corners and crevices. Cast iron may be used as a food-contact surface only if the surface is heated, such as in grills and skillets. Threads shall be designed to facilitate cleaning; ordinary "V" type threads are prohibited, except that in equipment, such as ice makers or hot oil cooking equipment and hot oil filtering systems, the use of **[~~such~~]** threads shall be minimized.

(2) Equipment containing bearings and gears requiring unsafe lubricants shall be designed and constructed so that the lubricant cannot leak, drip, or be forced into food or onto food-contact surfaces. Only safe lubricants shall be used on equipment designed to receive lubrication of bearings and gears on or within food-contact surfaces.

(3) Sinks, dish tables, and drain boards shall be self-draining.

(4) Unless designed for in-place cleaning, food-contact surfaces shall be accessible for cleaning and inspection:

(a) Without being disassembled; or

(b) By disassembling without the use of tools; or

(c) By easy disassembling with the use of only simple tools kept available near the equipment, such as a mallet, a screwdriver, or an open-end wrench.

(5) Pipes, tubes, valves, and lines contacting food and intended for in-place cleaning shall be so designed and fabricated that:

(a) Cleaning and sanitizing solutions can be circulated throughout a fixed system using an effective cleaning and sanitizing regimen; and

(b) Cleaning and sanitizing solutions will contact all interior food-contact surfaces; and

(c) The system is self-draining or capable of being completely evacuated.

(6) Thermometers required for immersion into food or cooking media shall be of metal stem-type construction, numerically scaled, and accurate to plus or minus three (3) degrees Fahrenheit.

(7) Surfaces of equipment not intended for contact with food, but which are exposed to splash or food debris or which otherwise require frequent cleaning, shall be designed and fabricated so as to be smooth, washable, free of unnecessary ledges, projections, or crevices, and readily accessible for cleaning, and shall be of **a** **[~~such~~]** material and in **[~~such~~]** repair **[~~as~~]** to be easily maintained in a clean and sanitary condition.

(8) Ventilation hoods and devices shall be designed to prevent grease or condensate from dripping into food or onto food-contact surfaces. Filters where used, shall be readily removable for cleaning and replacement.

Section 16. Equipment Installation and Location. (1) Equipment, including ice makers and ice storage equipment, shall not be located under exposed sewer lines, nonpotable water lines, stairwells or other sources of contamination. This prohibition does not apply to automatic fire protection sprinkler heads.

(2) Equipment that is placed on tables or counters, unless portable, shall be sealed to the table or counter or mounted on legs at least four (4) inches high and shall be installed to facilitate the cleaning of the equipment and adjacent areas.

(3) Equipment is portable within the meaning of subsection (2) of this section if:

(a) It is small and light enough to be moved easily by one (1) person; and

(b) It has no utility connection, or has a utility connection that disconnects quickly, or has a flexible utility connection line of sufficient length to permit the equipment to be moved for easy cleaning.

(4) Floor mounted equipment, unless readily movable, shall be:

(a) Sealed to the floor; or

(b) Installed on raised platforms of concrete or other smooth masonry in a way that prevents liquids or debris from seeping or settling underneath, between, or behind the equipment in spaces that are not fully open for cleaning and inspection; or

(c) Elevated on legs at least six (6) inches off the floor, except that vertically mounted floor mixers may be elevated as little as four (4) inches off the floor if no part of the floor under the mixer is more than six (6) inches from cleaning access. Unless sufficient space is provided for easy cleaning between and behind each unit of floor mounted equipment, the space between it and adjoining equipment units and between it and adjacent walls shall be closed or, if exposed to seepage, the equipment shall be sealed to the adjoining equipment or adjacent walls.

(5) Aisles and working spaces between units of equipment and between equipment and walls should be unobstructed and of sufficient width to permit employees to perform their duties readily without contamination of food or food-contact surfaces by clothing or personal contact.

(6) Equipment which was installed prior to the effective date of this administrative regulation and which does not meet fully all of the requirements of this section, shall be deemed acceptable, if it is in good repair, capable of being maintained in a sanitary condition and the food-contact surfaces are nontoxic. **[~~Such~~]** Equipment shall be so located and installed as to enable reasonable compliance with the requirements of this section.

Section 17. Equipment and Utensil Cleaning and Sanitization. (1) Tableware shall be cleaned and sanitized after each use.

(2) Kitchenware and food-contact surfaces of equipment used in the preparation, service, display or storage of potentially hazardous foods shall be cleaned and sanitized after each use and following any interruption of operations during which time contamination may have occurred.

(3) Where equipment and utensils are used for the preparation of potentially hazardous foods on a continuous or production line basis, utensils and the food-contact surfaces of equipment shall be cleaned and sanitized at intervals throughout the day on a schedule based on food temperature, type of food, and amount of food particle accumulation.

(4) The food-contact surfaces of grills, griddles, and similar cooking devices and the cavities and door seals of microwave ovens shall be cleaned at least once a day, except that this shall not apply to hot oil cooking and filtering devices and systems. Food-contact surfaces of all cooking equipment shall be kept free of encrusted grease deposits and other accumulated soil.

(5) Nonfood contact surfaces of equipment shall be cleaned as often as is necessary to keep the equipment free of accumulation of dust, dirt, food particles, and other debris.

(6) Cloths used during service for wiping food spills on food-contact surfaces shall be clean, dry, and used for no other purpose. Moist cloths used for wiping food-contact surfaces of equipment shall be clean and rinsed frequently or stored in one (1) of the sanitizing solutions permitted by subsection (7)(a) of this section. Moist cloths, or sponges, used for cleaning nonfood-contact surfaces shall be clean and used for no other purpose. These cloths shall be rinsed frequently or stored in one (1) of the sanitizing solutions permitted by subsection (7)(a) of this section.

(7) **If** **[~~When~~]** manual cleaning and sanitizing is used, sinks shall be cleaned prior to use. Equipment and utensils shall be preflushed or prescraped and, when necessary, presoaked to remove gross food particles and soil. Equipment and utensils shall be thoroughly washed in a hot detergent solution at a temperature of at least ninety-five (95) degrees Fahrenheit in the first compartment, rinsed in the second compartment and shall be sanitized in the third compartment according to one (1) of the methods included in paragraph (a)1 through 4 of this subsection.

(a) All tableware and the food-contact surfaces of all other equipment and utensils shall be sanitized by:

1. Immersion for at least one-half (1/2) minute in clean, hot water of a temperature of at least 170 degrees Fahrenheit; or

2. Immersion for at least one (1) minute in a clean solution containing at least fifty (50) parts per million of available chlorine as a hypochlorite and having a temperature of at least seventy- five (75) degrees Fahrenheit; or

3. Immersion for at least one (1) minute in a clean solution containing at least twelve and five-tenths (12.5) parts per million of available iodine and having a pH not higher than five (5.0) and having a temperature of at least seventy-five (75) degrees Fahrenheit; or

4. Immersion in a clean solution containing other chemical sanitizing agents approved by the department that will provide the equivalent bactericidal effect of a solution containing at least fifty (50) parts per million of available chlorine as a hypochlorite at a temperature of at least seventy-five (75) degrees Fahrenheit for one (1) minute; or

5. Treatment with steam free from harmful materials or additives

in the case of equipment too large to sanitize by immersion, but in which steam can be confined; or

6. Rinsing, spraying, or swabbing with a chemical sanitizing solution of at least twice the strength required for that particular sanitizing solution under subsection (7)(a)4 of this section **if** ~~[when]~~ used for immersion sanitization in the case of equipment too large to sanitize by immersion.

(b) **If** ~~[When]~~ chemicals are used for sanitization, they shall not have concentrations higher than the maximum permitted under the Code of Federal Regulations, Title 21, Food and Drug Administration Chapter 1, Subpart "B", Substances Utilized to Control the Growth of Microorganisms, Section 178.1010 Sanitizing Solutions, and a test kit or other device that accurately measures the parts per million concentration of the solution shall be provided and used.

(c) A three (3) compartment sink shall be used if cleaning and sanitization of equipment or utensils is done manually; retail food establishments that were operating with a valid and effective permit prior to the effective date of this administrative regulation not having a three (3) compartment sink that can demonstrate an acceptable procedure for cleaning and sanitizing equipment and utensils may be exempt from this requirement by the cabinet. Sinks shall be large enough to permit the complete immersion of the equipment and utensils and each compartment of the sink shall be supplied with hot and cold potable running water. Suitable equipment shall be made available if cleaning and sanitizing cannot be accomplished by immersion. Those retail food stores that do not cut, process or package any foods, but purchase and offer for sale only prepackaged foods shall not be required to provide a three (3) compartment sink.

(d) Dish tables or drain boards of adequate size shall be provided for proper handling of soiled utensils prior to washing and for cleaned utensils following sanitizing and shall be located so as not to interfere with the proper use of the warewashing facilities.

(e) **If** ~~[When]~~ hot water is used for sanitizing, the following facilities shall be provided and used:

1. An integral heating device or fixture installed in or under the sanitizing compartment of the sink capable of maintaining the water at a temperature of at least 170 degrees Fahrenheit; and

2. A numerically scaled indicating thermometer accurate to plus or minus three (3) degrees Fahrenheit convenient to the sink that can be used for frequent checks of water temperature; and

3. Dish baskets of **a** ~~[such]~~ size and design to permit complete immersion of the tableware, kitchenware, and equipment in the hot water.

(8) **If** ~~[When]~~ mechanical cleaning and sanitizing is used, cleaning and sanitizing may be done by spray-type or immersion warewashing machines or by any other type of machine or device if it is demonstrated that it thoroughly cleans and sanitizes equipment and utensils. ~~[Such]~~ Machines and devices shall be properly installed and maintained in good repair. Automatic detergent dispensers and wetting agent dispensers, if any, shall be properly installed and maintained.

(a) The pressure of water supplied to spray-type warewashing machines shall be not less than fifteen (15) or more than twenty-five (25) pounds per square inch measured in the water line immediately adjacent to the machine. A suitable gauge cock shall be provided immediately upstream from the final rinse sprays to permit checking the flow pressure of the final rinse water.

(b) Easily readable numerically scaled indicating thermometers accurate to plus or minus three (3) degrees Fahrenheit shall be provided that indicate the temperature of the water in each tank of the machine and the temperature of the final rinse water as it enters the manifold.

(c) Rinse water tanks shall be so protected by baffles or other effective means as to minimize the entry of wash water into the rinse water. Conveyors in warewashing machines shall be accurately timed to assure proper exposure times in wash and rinse cycles as determined by specifications attached to the machines.

(d) Drain boards shall be of adequate size for the proper handling of soiled utensils prior to washing and of cleaned utensils following sanitization and shall be so located and constructed as not to interfere with the proper use of the warewashing facilities.

(e) Equipment and utensils shall be flushed or scraped and, when necessary, soaked to remove gross food particles and soil prior to their being cleaned in a warewashing machine. After flushing, scraping, or soaking, equipment and utensils shall be placed in racks, trays, or baskets, or on conveyors, in a way that food-contact surfaces are subject to the unobstructed application of detergent wash and clean rinse waters and that permits free draining. Clean rinse water shall remove particulate matter and detergent residues. All warewashing machines shall be thoroughly cleaned at least once a day or more often **if** ~~[when]~~ necessary to maintain them in a satisfactory operating condition.

(9) **If** ~~[When]~~ chemicals are used for sanitization, they shall be automatically dispensed in ~~[such]~~ concentration and for ~~[such]~~ a period of time as to provide effective bactericidal treatment of equipment and utensils. Wash water shall be kept clean. In machines using chemicals for sanitization (single-tank, stationary-rack, door-type machines, and spray-type glass washers), the temperature of the wash water shall be not less than 120 degrees Fahrenheit. The sanitizing rinse water shall be not less than seventy-five (75) degrees Fahrenheit nor less than the temperature specified by the machine manufacturer.

(10) Where machines using hot water sanitization are used, wash waters and pumped rinse waters shall be kept clean. Water shall be maintained at not less than the temperatures stated in paragraphs (a) to (e) of this subsection; existing machines not fully meeting the requirements of this subsection may be acceptable, if capable of meeting **the** ~~[such]~~ time and temperature requirements as are acceptable by the cabinet. Wash and pumped rinse temperatures shall be measured in the respective tanks, and final rinse temperatures shall be measured at the manifold.

(a) Single tank, stationary rack, dual temperature machine:

1. Wash temperature: 150 degrees Fahrenheit.
2. Final rinse temperature: 180 degrees Fahrenheit.

(b) Single tank, stationary rack, single temperature machine:

1. Wash temperature: 165 degrees Fahrenheit.
2. Final rinse temperature: 165 degrees Fahrenheit.

(c) Single tank, conveyor machine:

1. Wash temperature: 160 degrees Fahrenheit.
2. Final rinse temperature: 180 degrees Fahrenheit.

(d) Multiple tank, conveyor machine:

1. Wash temperature: 150 degrees Fahrenheit.
2. Pumped rinse temperature: 160 degrees Fahrenheit.
3. Final rinse temperature: 180 degrees Fahrenheit.

(e) Single tank, pot, pan, and utensil washer (either stationary or moving rack):

1. Wash temperature: 140 degrees Fahrenheit.
2. Final rinse temperature: 180 degrees Fahrenheit.

(11) All equipment and utensils shall be air-dried.

Section 18. Equipment and Utensil Storage. (1) Cleaned and sanitized equipment and utensils shall be handled in a way that protects them from contamination. Spoons, knives, and forks shall be touched only by their handles. Cups, glasses, and bowls shall be handled without contact with inside surfaces or with surfaces that contact the user's mouth.

(2) Cleaned and sanitized utensils and movable equipment shall be stored at least six (6) inches above the floor in a clean, dry location in a way that protects them from contamination by splash, dust and other means. The food-contact surfaces of fixed equipment shall also be protected from contamination. Equipment and utensils shall not be placed under exposed sewer or nonpotable water lines. This requirement does not apply to automatic fire protection sprinkler heads.

(a) Utensils shall be air-dried before being stored or shall be stored in a self-draining position on suitably located racks.

(b) Wherever practical, stored utensils shall be covered or inverted. Facilities for the storage of spoons, knives, and forks shall be provided and shall be designed to present the handle to the employee or consumer.

(3) If presetting is practiced, all unprotected, unused, preset tableware shall be collected for washing and sanitizing after the meal period; and after any place at a table is occupied.

(4) Single-service articles shall be stored at least six (6) inches above the floor in closed cartons or containers which protect them from contamination.

(a) Single-service articles shall be commercially packaged for individual use or shall be available to the consumer from a dispenser in a way that prevents contamination of surfaces that may contact food or the user's mouth. Handling of single-service articles in bulk shall be conducted in a way that protects them from contamination. Storage shall not be in toilet rooms or vestibules of toilet rooms nor under nonpotable water lines or exposed sewer lines.

(b) Single-service articles shall be used only once.

Section 19. Sanitary Facilities and Controls. (1)(a) The water supply shall be potable, adequate, and from an approved public supply of a municipality or water district, if available.

(b) If a public water supply of a municipality or a water district is not available, the supply for the establishment shall be developed and approved pursuant to applicable requirements of the Cabinet for Natural Resources and Environmental Protection administrative regulations 401 KAR Chapter 8.

(c) If a public water supply of a municipality or water district becomes available, connections shall be made to it and the private supply shall be discontinued.

(d) Retail food stores holding a valid and effective permit prior to the effective date of this administrative regulation shall not be required to have hot and cold running water if:

1. Only prepackaged foods are sold; or

2. Cutting and slicing is limited to ready-to-eat, cold-cut foods, and performed in a sanitary manner complying with this administrative regulation.

(e) Hot and cold running water under pressure shall be provided in all areas where food is prepared, or equipment, utensils or containers are washed.

(f) Steam used in contact with food or food-contact surfaces shall be free from any materials or additives other than those specified in the Code of Federal Regulations, Title 21, Food and Drug Administration Chapter 1, Subpart "D", Specific Usage Additives Section 173.310 Boiler Water Additives.

(2) Bottled and packaged potable water shall be obtained from a source that complies with all applicable laws and regulations and shall be handled and stored in a way that protects it from contamination. Bottled and packaged water shall be dispensed from the original containers.

(3) All potable water not provided directly by pipe to the food service establishment from the source shall be transported in a bulk water transport system and shall be delivered to a closed water system. Both of these systems shall be constructed of approved materials and operated pursuant to applicable laws and regulations.

Section 20. Sewage. All sewage shall be disposed of into a public sewerage system, if available. If a public sewerage system is not available, disposal shall be made into a private system designed, constructed and operated pursuant to the requirements of the Cabinet for Natural Resources and Environmental Protection administrative regulations 401 KAR Chapter 5 or [~~and~~] the Cabinet for Human Resources administrative regulations 902 KAR Chapter 10; if a public sewerage system becomes available, connections shall be made thereto and the private sewerage system shall be disconnected. Only nonwater- carried disposal methods which have been approved by the cabinet for temporary use shall be used [~~and operation of such facilities shall be in conformance with applicable state laws and regulations~~].

Section 21. Plumbing. (1) All plumbing shall be sized, installed, and maintained pursuant to the State Plumbing Code, KRS Chapter 318. There shall be no cross-connection between the safe water supply and any unsafe or questionable water supply, or source of pollution through which the safe water supply might become contaminated. All reservoir-type and other produce foggers or misters shall be operated, maintained, and cleaned in a manner consistent with the manufacturer's most recent specifications.

(2) A nonpotable water system is permitted only for purposes such as air-conditioning and fire protection and only if the system is installed pursuant to applicable state laws and administrative regulations and the nonpotable water does not contact, directly or indirectly, food, potable water, equipment that contacts food, or utensils. The piping of any nonpotable water system shall be durably identified so that it is readily distinguishable from piping that carries potable water.

(3) The potable water system shall be installed to preclude the possibility of backflow. Devices to protect against backflow and backsiphonage shall be installed at all fixtures and equipment wherever backflow or backsiphonage may occur. A hose shall not be attached to a faucet unless a backflow prevention device is installed.

(4) If used, grease traps shall be located to be easily accessible for cleaning.

(5) Except for properly trapped open sinks, there shall be no direct connection between the sewage system and any drains originating from equipment in which food, portable equipment or utensils are placed.

Section 22. Toilet Facilities. (1) In existing food service establishments, adequate toilet facilities shall be provided and shall be so located as to be readily accessible to employees at all times. In new establishments, or establishments that are extensively altered, toilet facilities shall be provided pursuant to the requirements of the State Plumbing Code, KRS Chapter 318.

(2) Toilets and urinals shall be designed to be easily cleanable.

(3) Toilet room doors shall be solid, tight fitting, and self- closing, and shall be closed except during cleaning or maintenance. Doors may be louvered if installed pursuant to the State Fire Marshal's administrative regulations.

(4) Toilet facilities, including vestibules, if any, shall be kept clean and in good repair and free of objectionable odors. A supply of toilet tissue shall be provided at each toilet at all times. Easily cleanable receptacles shall be provided for waste materials, and the receptacles in toilet rooms used by women shall be covered.

Section 23. Lavatory Facilities. (1) Lavatories shall be installed pursuant to the State Plumbing Code and shall be equipped with hot and cold running water or running water tempered by means of a mixing valve or combination faucet. Steam mixing valves are prohibited. Hand cleansing soap or detergent, and approved sanitary towels or other approved hand drying devices are to be conveniently located at each lavatory. If disposable towels are used, waste receptacles shall be located near the lavatory. Common towels are prohibited.

(2) Lavatories shall be located within or immediately adjacent to all toilet rooms. In all new establishments, and establishments which are extensively altered, lavatories shall be conveniently located within the food preparation area and warewashing area. Sinks used for food preparation or for washing equipment or utensils shall not be used for hand washing.

(3) Lavatories, soap dispensers, and hand drying devices and all related facilities shall be kept clean and in good repair.

Section 24. Garbage and Refuse. (1) Garbage and refuse shall be kept in durable insect-proof and rodent-proof containers that are leak-proof and do not absorb liquids. Plastic bags and wet-strength paper bags may be used to line these containers, and may be used for storage inside the food service establishment **if** **[~~when~~]** protected from insects and rodents.

(2) Containers, compactors, and compactor systems shall be easily cleanable, shall be provided with tight-fitting lids, doors, or covers, and shall be kept covered **if** **[~~when~~]** not in actual use. Drain plugs, where required, shall be in place at all times, except during cleaning.

(3) There shall be a sufficient number of containers to hold all the garbage and refuse that accumulates.

(4) After being emptied, each container shall be thoroughly cleaned on the inside and outside in a way that does not contaminate food, equipment, utensils, or food-preparation areas. In new establishments, suitable facilities, including hot water and detergent, shall be provided and used for washing containers.

(5) The garbage and refuse on the premises shall be stored in a place inaccessible to insects and rodents. Outside storage of plastic bags or wet-strength paper bags or baled units containing garbage or refuse is prohibited. Cardboard or other packaging material not containing garbage or food wastes need not be stored in covered containers.

(6) Garbage or refuse storage rooms, if used, shall be constructed of easily cleanable, nonabsorbent, washable materials, shall be kept clean, shall be insect-proof and rodent- proof, and shall be large enough to store the garbage and refuse containers that accumulate.

(7) Outside storage areas or enclosures shall be large enough to store the garbage and refuse containers that accumulate and shall be kept clean. Garbage and refuse containers and compactor systems located outside shall be stored on or above a smooth surface of nonabsorbent material, such as concrete or machine-laid asphalt, that is kept clean and maintained in good repair.

(8) Garbage and refuse shall be disposed of often enough to prevent the development of odor and the attraction of insects and rodents.

(9) Where garbage or refuse is burned on the premises, it shall be done by controlled incineration that prevents the escape of particulate matter pursuant to [~~applicable~~] administrative regulations 401 KAR Chapter 63 of the Cabinet for Natural Resources and Environmental Protection. Areas around incineration facilities shall be kept clean and orderly.

(10) Nonsewage liquid waste shall be disposed of in a manner that will not create a public health nuisance.

Section 25. Insect and Rodent Control. (1) Effective measures intended to eliminate the presence of rodents and flies, roaches, and other insects on the premises shall be utilized. The premises shall be kept in **a** **[~~such~~]** condition as to prevent the harborage or feeding of insects or rodents.

(2) Openings to the outside shall be effectively protected against the entrance of rodents and shall be protected against the entrance of insects by tight-fitting, self-closing doors, closed windows, screening, controlled air currents, or other means. Screen doors shall be self-closing, and screens for windows, doors, skylights, transoms, and other openings to the outside shall be tight-fitting and free of breaks. Screening material shall not be less than sixteen (16) mesh to one (1) inch.

Section 26. Construction and Maintenance of Physical Facilities. (1) The floors of all food preparation, food storage, and utensil-washing areas, and the floors of all walk-in refrigerators, dressing rooms, locker rooms, and toilet rooms and vestibules shall be constructed of smooth, durable materials such as sealed concrete, terrazzo, ceramic tile, durable grades of linoleum or plastic, or tight wood impregnated with plastic, and shall be maintained in good repair.

(2) Carpeting, if used, shall be properly installed, easily cleanable and maintained in good repair. Carpeting is prohibited in toilet rooms, food preparation areas, and in warewashing areas where it would be exposed to large amounts of grease and water.

(3) Sawdust, wood shavings, peanut hulls, or similar material on the floors in food processing areas is prohibited.

(4) Properly installed floor drains shall be provided in floors that are water flushed for cleaning or that receive discharge of water or other fluid waste from equipment. **[~~Such~~]** Floors shall be constructed of sealed concrete, terrazzo, ceramic tile, or similar material graded to drain all parts of the floor.

(5) The floor of each walk-in refrigerator shall be graded to drain all parts of the floor to the outside through a waste pipe, doorway, or other opening, or equipped with a floor drain.

(6) Mats and duckboards shall be of nonabsorbent, grease resistant materials and of **a** **[~~such~~]** size, materials, design, and construction as to facilitate their being easily cleaned. Duckboards shall not be used as storage racks.

(7) In all new establishments utilizing concrete, terrazzo, ceramic tile or similar material, and where water flush cleaning methods are used, junctures of walls with floors shall be coved and sealed. In all other cases, the junctures between the walls and floors shall not present an open seam of more than one 1/32 of an inch.

(8) Utility service lines and pipes shall not be unnecessarily exposed on floors in food preparation and warewashing areas and in toilet rooms. Exposed lines and pipes shall be installed in a way that does not obstruct or prevent cleaning.

(9) Walls and ceilings, including doors, windows, skylights, and similar closures, shall be maintained in good repair.

(10) The walls, including nonsupporting partitions, wall coverings, and ceilings of all food preparation and warewashing areas and of toilet rooms shall be smooth, nonabsorbent, and easily cleanable. The use of rough or unfinished building materials such as brick, concrete blocks, wooden beams, or shingles is prohibited in those locations except by special plan approval by the cabinet.

(11) Studs, joists, and rafters shall not be exposed in walk-in refrigerators, food preparation areas, warewashing areas and in toilet rooms except by special plan approval by the cabinet.

(12) Utility service lines and pipes shall not be unnecessarily exposed on walls or ceilings in food preparation and warewashing areas and in toilet rooms. Exposed lines and pipes shall be installed in a way that does not obstruct or prevent cleaning.

(13) Light fixtures, vent covers, wall-mounted fans, decorative materials, and similar equipment attached to walls and ceilings shall be easily cleanable and shall be maintained in good repair.

(14) Covering material such as sheet metal, linoleum, vinyl, and similar materials shall be easily cleanable and nonabsorbent and shall be attached and sealed to the wall and ceiling surfaces so as to leave no open spaces or cracks.

(15) Concrete or pumice blocks used for interior wall construction shall be finished and sealed to provide an easily cleanable surface.

Section 27. Cleaning Physical Facilities. Floors, mats, duckboards, walls, ceilings, and attached equipment and decorative materials shall be kept clean. Only dustless methods of cleaning floors and walls shall be used, such as vacuum cleaning, wet cleaning, or the use of dust-arresting sweeping compounds with push brooms. All cleaning of floors and walls, except emergency cleaning of floors, shall be done during periods **if** **[~~when~~]** the least amount of food is exposed, such as after closing or between meals. In new establishments, or establishments that are extensively altered, readily accessible service sinks or curbed cleaning facilities shall be provided.

Section 28. Lighting. (1) At least thirty (30) foot-candles of natural or artificial light shall be provided to all working surfaces and to all

other surfaces and equipment in food preparation, warewashing, and hand washing areas, and in toilet rooms. At least twenty (20) foot-candles of light at a distance of thirty (30) inches from the floor shall be provided in all walk-in refrigerators, food storage areas and dining and entry areas, except that this requirement applies to dining areas only during cleaning operations.

(2) Shielding to protect against broken glass falling into food shall be provided for all artificial lighting fixtures located over, by, or within food storage, preparation, service and display facilities and facilities where utensils and equipment are cleaned and stored. Shatter proof bulbs may be approved by the cabinet without further shielding. Heat lamps shall be protected by a shield surrounding and extending beyond the bulb, leaving only the face of the bulb exposed.

Section 29. Ventilation. (1) All rooms shall have sufficient ventilation to keep them free of excessive heat, steam, condensation, vapors, smoke and fumes. Ventilation systems shall be installed and operated according to applicable state laws and administrative regulations and, **if** ~~[when]~~ vented to the outside, shall not create an unsightly, harmful, or unlawful discharge.

(2) Rooms, including toilet room areas, and equipment, from which aerosols, obnoxious odors, or noxious fumes or vapors may originate shall be vented effectively to the outside.

(3) Intake air ducts, if any, shall be designed and maintained to prevent the entrance of dust, dirt, insects and other contaminating materials.

Section 30. Dressing Areas and Lockers. (1) If employees routinely change clothes within the establishment, areas shall be designated for that purpose. Those areas shall not be located in areas used for food preparation, storage, or service or for warewashing or storage, except that a storage room containing only completely packaged food may be so designated.

(2) Enough lockers or other suitable facilities shall be provided and used for the storage of employees' clothing and other belongings. If dressing areas are designated, the lockers or other facilities shall be located within those areas.

Section 31. Poisonous or Toxic Materials. (1) Only those poisonous or toxic materials required to maintain the establishment in a sanitary condition or required for sanitization of equipment or utensils shall be present in retail food establishments.

(2) Containers of poisonous or toxic materials, including insecticides and rodenticides, shall be prominently and distinctly labeled pursuant to the requirements of applicable law.

(3) Insecticides and rodenticides shall be stored in cabinets or in similar physically separated compartments or facilities used for no other purpose.

(4) Working containers used for storing cleaners and sanitizers taken from bulk supplies shall be identified with the common name of the material.

(5) Poisonous or toxic materials stored or displayed for retail sale shall be separated by spacing or partitioning from, and not stored above, food, single service articles or single use articles intended for use with food.

(6) Detergents, sanitizers, related cleaning or drying agents, caustics, acids, polishes, lubricants and other chemicals shall not be stored above or intermingled with food equipment, utensils, single service articles, single use articles intended for use with food, except that: this requirement does not prohibit the convenient location and availability of cleaning and sanitizing agents at warewashing facilities.

(7) Bactericides, cleaning compounds, or other compounds intended for use on food-contact surfaces shall not be used in a way that leaves a toxic residue on **the** ~~[such]~~ surfaces, or in a way that constitutes a hazard to employees or other persons.

(8) Poisonous or toxic materials shall not be used in a way that contaminates food, equipment, or utensils, nor in a way that constitutes a hazard to employees or other persons nor in a way other than in full compliance with the manufacturer's labeling. All pesticides and other materials whose label has a "warning" statement or displays the "skull and crossbones" and any other hazardous product that may be designated by the cabinet shall be handled and bagged separately at checkout counters.

(9) Personal medications shall not be stored in food storage, preparation, or service areas.

(10) First aid supplies shall be stored in a way that prevents them from contaminating food and food contact surfaces.

Section 32. Premises. (1) Retail food establishments and all parts of the property used in connection with operation of the establishment shall be kept free of litter.

(2) The walking and driving surfaces of all exterior areas of the establishment shall be surfaced with concrete or asphalt or with gravel or similar material effectively treated to facilitate maintenance and to minimize dust. These surfaces shall be drained and shall be kept clean.

(3) Only articles necessary to the operation and maintenance of the establishment shall be stored on the premises.

(4) The traffic of unnecessary persons through the food preparation and warewashing areas and the presence in those areas of persons not authorized to be there by the permit holder or person in charge is prohibited.

(5) No operation of a food service establishment shall be conducted in any room used as living or sleeping quarters. A solid self-closing door shall separate food service operations from any living or sleeping area.

(6) No laundry operation shall be conducted, except that linens, uniforms and aprons used in the establishment may be laundered on the premises separate from food preparation and service areas.

(7) Clean cloths and napkins shall be stored in a clean place and protected from contamination until used. Nonabsorbent containers or washable laundry bags shall be provided and damp or soiled linens and cloths shall be kept in them until removed for laundering.

(8) Maintenance and cleaning materials and equipment shall be maintained and stored in a way that does not contaminate food, utensils, equipment, or linen storage.

(9) Live animals, including birds and turtles, shall be excluded from all food service establishments and from areas adjacent to serving areas that are under the control of the permit holder. The exclusion does not apply to edible crustacea, shellfish, or fish, nor to fish in aquariums. Escorted police patrol dogs or guide dogs accompanying blind or other persons with physical limitations shall be permitted in dining areas.

Section 33. Mobile Food Units or Pushcarts. (1) Mobile units or pushcarts shall comply with the requirements of this administrative regulation, except as ~~[otherwise]~~ provided in this subsection and in subsection (2) of this section. The cabinet may impose additional requirements to protect against health hazards related to the conduct of the establishment as a mobile or pushcart operation, may prohibit the sale of some or all potentially hazardous foods, and **if** ~~[when]~~ no health hazard will result, may waive or modify requirements of this administrative regulation relating to physical facilities, except those requirements of subsections (4) and (5) of this section and Sections 34 and 35 of this administrative regulation.

(2) A mobile unit or pushcart that serves only food that was prepared, packaged in individual servings, transported, and stored under conditions meeting the requirements of this administrative regulation or beverages that are not potentially hazardous and are dispensed from protected equipment need not comply with requirements of this administrative regulation pertaining to the necessity of water and sewage systems nor to those requirements pertaining to the cleaning and sanitization of equipment and utensils if the required equipment for cleaning and sanitization exists at its commissary;

however, frankfurters may be prepared and served from these units or pushcarts.

(3) Mobile food units or pushcarts shall provide only single-service articles for use by the consumer.

(4) A mobile food unit requiring a water system shall have a potable water system under pressure. The system shall be of sufficient capacity to furnish enough hot and cold water for food preparation, utensil cleaning and sanitization, and hand washing, pursuant to the requirements of this administrative regulation. The water inlet shall be located in **[~~such~~]** a position that it will not be contaminated by waste discharge, road dust, oil, or grease, and it shall be provided with a transition connection of a size or type that will prevent its use for any other service. All water distribution pipes or tubing shall be constructed and installed according to the State Plumbing Code, KRS Chapter 318.

(5) If liquid waste results from operation of a mobile food unit it shall be stored in permanently installed retention tanks that are at least 100 percent larger than the water supply tank. Liquid waste shall not be discharged from the retention tank **if [~~when~~]** the mobile food unit is in motion. All connections on the vehicle for servicing mobile food unit waste disposal facilities shall be of a different size or type than those used for supplying potable water to the food unit. The waste connection shall be located below the water connection to preclude contamination of the potable water system.

Section 34. Commissary. (1) Mobile food units or pushcarts shall operate from a commissary or other fixed food service establishment that is constructed and operated in compliance with this administrative regulation; mobile food units equipped with a potable water supply system under pressure, liquid waste system retention tanks, sinks, lavatories, etc., shall not be required to operate from a commissary or other fixed food service establishment.

(2) Mobile retail food stores that sell only prepackaged, commercially prepared, sealed, and protected ready-to-eat foods, shall not be required to operate from a fixed retail food establishment.

Section 35. Mobile Food Unit or Pushcart Servicing Area and Operations. (1) Potable water servicing equipment shall be stored and handled in a way that protects, the water and equipment from contamination.

(2) The mobile food unit liquid waste retention tank, where used, shall be thoroughly flushed and drained during the servicing operation. The flushing and draining area for liquid wastes shall be separate from the area used for loading and unloading of food and related supplies. All sewage and waste matter shall be disposed of into a public sewerage system, if available. In the event a public sewerage system is not available, disposal shall be made into a private system designed, constructed and operated pursuant to the requirements of the Cabinet for Natural Resources and Environmental Protection administrative regulations 401 KAR Chapter 5 and the Cabinet for Human Resources administrative regulations 902 KAR Chapter 10; if a public sewerage system becomes available, connection shall be made thereto and the establishment sewerage system shall be disconnected.

Section 36. Temporary Food Service Establishment. (1) A temporary food service establishment shall comply with the requirements of this administrative regulation, except as otherwise provided in this section. The cabinet may impose additional requirements to protect against health hazards related to the conduct of the temporary food service establishment, may prohibit the sale of some or all potentially hazardous foods, and **if [~~when~~]** no health hazard will result, may waive or modify requirements of this administrative regulation, except those requirements of subsections (2) to (10) of this section.

(2) Only those potentially hazardous foods requiring limited preparation, such as hamburgers and frankfurters, which require seasoning and cooking, shall be prepared or served. The preparation or service of other potentially hazardous foods, including pastries filled with cream or synthetic cream, custards, and similar products, and salads or sandwiches containing meat, poultry, eggs, or fish is prohibited. This prohibition does not apply, however, to any potentially hazardous food that is obtained in individual servings, is stored at a temperature of forty-five (45) degrees Fahrenheit or below, or at a temperature of 140 degrees Fahrenheit or above, and is served directly in the unopened container in which it was packaged.

(3) Ice that is consumed or that contacts food shall have been made under conditions meeting the requirements of this administrative regulation. The ice shall be obtained only in chipped, crushed, or cubed form and in single-use food grade plastic or wet-strength paper bags filled and sealed at the point of manufacture. The ice shall be held in these bags until used, and **if [~~when~~]** used, it shall be dispensed in a way that protects it from contamination.

(4) Equipment shall be located and installed in a way that facilitates cleaning the establishment and that prevents food contamination. Food-contact surfaces of equipment shall be protected from contamination by consumers and other contaminating agents. Where necessary to prevent contamination, effective shields for **the [~~such~~]** equipment shall be provided.

(5) Enough potable water shall be available in the establishment for cleaning and sanitizing utensils and equipment and for hand washing. Enough hot water for these purposes shall be provided.

(6) The storage of packaged food in contact with water or undrained ice is prohibited, except that cans or bottles of nonpotentially hazardous beverages may be **stored if [~~so stored when~~]** the water contains at least fifty (50) parts per million of available chlorine and is changed often enough to keep both the water and containers clean.

(7) Liquid waste shall be disposed of in **[~~such~~]** a manner as not to create a public health hazard or nuisance.

(8) A facility shall be provided for employee hand washing. Where water under pressure is unavailable, **the [~~such~~]** facility shall consist of a pan, warm water, hand cleanser, and individual paper towels.

(9) Floors shall be made of concrete, tight wood, asphalt, or other similar cleanable material, except that dirt or gravel floors may be used if graded to preclude the accumulation of liquids and covered with removable, cleanable platforms or duckboards.

(10) Walls and ceilings of food preparation areas shall be constructed in a way that prevents the entrance of insects. Ceilings shall be made of wood, canvas, or other material that protects the interior of the establishment from the weather. Screening material used for walls shall be at least sixteen (16) mesh to the inch. Counter service openings shall not be larger than is necessary for the particular operation conducted. **If [~~When~~]** flies are prevalent, counter-service openings shall be provided with tight-fitting solid or screened doors or windows or shall be provided with fans installed and operated to restrict the entrance of flying insects. Doors and windows, if any, shall be kept closed, except when food is being served.

Section 37. Seasonal Restricted Food Concessions. (1) A seasonal restricted food concession shall comply with the requirements of this administrative regulation except as otherwise provided in this section. **If [~~When~~]** no health hazard will result, the cabinet may waive or modify requirements of this administrative regulation except those requirements of subsections (2) to (14) of this section.

(2) Only nonpotentially hazardous foods shall be prepared and served by seasonal restricted food concessions except that plain frankfurters may be served with bread. Frankfurters may be heated by steaming or boiling; grilling shall be prohibited. Nachos with cheese sauce may be served. Seasonal restricted food concessions shall provide only single service articles for use by consumers. Condiments such as catsup, mustard, and relish shall be obtained from approved commercially prepared sources and shall be provided in individually prepackaged portions or dispensed from protected

pump or squeeze-type dispensers only. The preparation or service of meat or artificial meat sauces shall be prohibited. The use of food or food products canned, prepared or processed in the home is prohibited.

(3) Reconstitutable products or ingredients which contain milk or egg components shall have been made from pasteurized products. Cheese sauce for nachos shall be obtained from commercially approved sources.

(4) Flavorings made from concentrate shall not be formulated or mixed in the home; preparation shall be accomplished in the seasonal restricted food concession or other permitted retail food establishment.

(5) Equipment and utensil cleaning and sanitization. Cleaning and sanitizing of food equipment and utensils shall be accomplished in a manner that complies with applicable requirements of Section 17 of this administrative regulation. In seasonal restricted concessions where running water and sewerage are impracticable and where only the use of basic utensils such as knives, tongs, or scoops is necessary, utensil washing facilities shall consist of three (3) containers sufficiently large enough for immersion of the utensils requiring washing; the first for hot detergent wash, the second for clean rinse, and the third for a sanitizing rinse. The cleaning and sanitizing of flavoring containers and equipment in the home or other nonpermitted location shall be prohibited.

(6) Equipment and utensil storage. All cleaned and sanitized utensils and equipment in a seasonal restricted food concession shall be stored and handled consistent with requirements of Section 18 of this administrative regulation.

(7) Sanitary facilities and controls.

(a) If running water is available it shall be potable, adequate and from a supply approved pursuant to the requirements of the Cabinet for Natural Resources and Environmental Protection administrative regulations 401 KAR Chapter 8.

(b) All water not provided by pipe to the establishment shall be obtained from an approved source, shall be potable, shall be transported in protected food grade bulk containers and shall be of sufficient quantity for the operation. Hot water, at least ninety-five (95) degrees Fahrenheit, shall be provided for utensil and hand washing. An insulated container may be used. A push button or turn spout shall be provided through which potable water may be drawn from the storage container for hand and utensil washing.

(8) Liquid waste. All nonsewage liquid shall be collected and disposed of in accordance with applicable requirements of Section 24 of this administrative regulation.

(9) Plumbing and toilet facilities.

(a) All plumbing shall comply with applicable provisions of the State Plumbing Code, KRS Chapter 318.

(b) Sanitary toilet facilities shall be provided for employees and shall comply with the requirements of the State Plumbing Code, KRS Chapter 318, and Section 22 of this administrative regulation; provided that where an approved sewage system with running water is impracticable, commercial type portable toilet facilities shall be provided for employees and shall be serviced and maintained in a sanitary manner.

(c) Written permission shall be obtained and made available for health authority review, for use of convenient toilet facilities **if** ~~[when]~~ not owned by the seasonal restricted food concession operator.

(10) Hand washing facilities.

(a) Where running water is impracticable an ample supply of water, as described in **subsection (7) of this section** ~~[Section 7 of this administrative regulation]~~, shall be provided for washing hands. Wastewater shall be collected and disposed of in a manner that will not create a public health nuisance.

(b) **If** ~~[When]~~ a seasonal restricted food concession is located adjacent or connected to a facility with existing approved water and sewerage facilities properly plumbed hand-washing facilities shall be provided conveniently located for employees where the operation requires manual contact with food.

(11) Garbage and refuse. Garbage and refuse shall be collected, stored and disposed of in accordance with the requirements of Section 24 of this administrative regulation.

(12) Construction, maintenance, and cleaning of physical facilities.

(a) Construction, maintenance and cleaning shall be carried out in accordance with applicable requirements of Sections 26 and 27 of this administrative regulation except as provided in paragraphs (b) and (c) of this subsection.

(b) Seasonal restricted food concessions which are located in open-air areas shall be completely enclosed or equipped with an eighteen (18) inch maximum high service opening that is either self-closing or equipped with an air current to preclude the entry of flying insects when prevalent.

(c) Floors shall be made of concrete, tightwood, asphalt, or other similar cleanable material; gravel or dirt floors shall be prohibited.

(13) Plan review. **If** ~~[When]~~ a seasonal restricted food concession is constructed or extensively remodeled, or **if** ~~[when]~~ an existing structure is converted for use as a seasonal restricted food concession, appropriate plans with specifications for **the** ~~[such]~~ construction, remodeling or alteration showing size, location, type of interior wall, ceiling and floor construction including the method of outer opening protection shall be submitted to the cabinet for review and approval before construction is begun.

(14) Inspection frequency. The cabinet shall inspect each seasonal restricted food concession at the time of initial permit issuance and at least once during each eight (8) month period of operation thereafter, with as many additional inspections and reinspections as necessary.

Section 38. ~~[37.]~~ Plan Review of Future Construction. When a retail food establishment is hereafter constructed or extensively remodeled, or plumbing relocated, or additional plumbing added, or when an existing structure is converted for use as a retail establishment, properly prepared plans and specifications for ~~[such]~~ construction, remodeling, or alteration, showing layout, arrangements, size, location and type of facilities and a plumbing riser diagram shall be submitted to the cabinet for approval before ~~[such]~~ work is begun.

Section 39. ~~[38.]~~ Procedure **If** ~~[When]~~ Infection is Suspected. **If** ~~[When]~~ the cabinet has reasonable cause to suspect possibility of disease transmission from any food service establishment employee, it may secure a morbidity history of the suspected employee or make any other investigation as may be indicated and shall take appropriate action. The cabinet may require any or all of the following measures:

(1) The immediate exclusion of the employee from all food service establishments;

(2) The immediate closing of the food service establishment concerned until, in the opinion of the cabinet, no further danger of disease outbreak exists;

(3) Restriction of the employee's services to some area of the establishment where there would be no danger of transmitting disease;

(4) Adequate medical and laboratory examinations of the employee, of other employees, and of the body discharges of ~~[such]~~ employees.

Section 40. ~~[39.]~~ Food Caterers Must Display Permit Number. Each catering kitchen or similar food service establishment shall have posted in letters at least three (3) inches high the establishment's permit number clearly visible on vehicle(s) used in transporting foods. A copy of the establishment's permit to operate shall also be carried in each vehicle at all times. The permit number shall be declared in all forms of advertisements or promotional materials used by food service catering establishments.

Section 41. ~~[40.]~~ Enforcement Provisions. (1) **If** ~~[Whenever]~~ the

cabinet has substantial reason to believe that an imminent public health hazard exists, or **if** [~~whenever~~] the permit holder or an authorized agent [~~thereof~~] has interfered with the cabinet in the performance of its duties, after its agents have duly and officially identified themselves, or if an inspection of an establishment reveals a rating score of less than sixty (60), the permit shall be suspended immediately upon notice to the permit holder without a hearing. In **this** [~~such~~] event, the permit holder may request a hearing on form DFS-212. This form is incorporated by reference and may be viewed at the Department for Health Services, 275 East Main Street, Frankfort, Kentucky 40621, between the hours of 8 a.m. and 4:30 p.m., Monday through Friday [~~217~~]. A hearing shall be granted as soon as practical, or in any event not to exceed seven (7) days.

(2) In all other instances of violation of the provisions of this administrative regulation the cabinet shall serve upon the holder of the permit a written notice specifying the violations and afford the holder a reasonable opportunity to correct same. **If** [~~Whenever~~] a permit holder or operator has failed to comply with any written notice issued under the provisions of this administrative regulation, the cabinet may suspend the permit. The permit holder or operator shall be notified in writing that the permit shall be suspended at the end of ten (10) days following service of **the** [~~such~~] notice, unless a written request for a hearing is filed with the cabinet, by the permit holder, within **the** [~~such~~] ten (10) day period. Where there is a combination food service and retail food store, permit suspension shall apply only to the operation in violation of requirements.

(3) Any person whose permit has been suspended may, at any time, make application on form DFS-215 for a reinspection for the purpose of reinstatement of the permit. This form is incorporated by reference and may be viewed at the Department for Health Services, 275 East Main Street, Frankfort, Kentucky 40621, between the hours of 8 a.m. and 4:30 p.m., Monday through Friday. Within seven (7) days following receipt of a written request, including a statement signed by the applicant that in his opinion the conditions causing suspension of the permit have been corrected, the cabinet shall make a reinspection. If the reinspection reveals that the conditions causing suspension of the permit have been corrected, the permit shall be reinstated.

(4) For serious or repeated violations of any of the requirements of this administrative regulation, or for interference with the cabinet in the performance of its duties, the permit may be permanently revoked after an opportunity for a hearing has been provided by the cabinet. Prior to **this** [~~such~~] action, the cabinet shall notify the permit holder in writing, stating the reasons for which the permit is subject to revocation and advising that the permit shall be permanently revoked at the end of ten (10) days following service of **the** [~~such~~] notice, unless a request for a hearing is filed with the cabinet, by the permit holder, within **the** [~~such~~] ten (10) day period. A permit may be suspended for cause pending its revocation or a hearing relative thereto.

(5) Notices provided for under this administrative regulation shall be deemed to have been properly served **if** [~~when~~] the original of the inspection report form or other notice has been delivered personally to the permit holder or person in charge, or **the** [~~such~~] notice has been sent by registered or certified mail, return receipt requested, to the last known address of the permit holder.

(6) The hearings provided for in this administrative regulation shall be conducted by the cabinet at a time and place designated by it. An appellant may examine the record of evidence in support of the action of the cabinet. During the hearing, an appellant may be represented by counsel, may cross-examine witnesses and may offer evidence in his behalf. Based upon the record of **the** [~~such~~] hearing, the cabinet shall make a finding and shall sustain, modify, or rescind any official notice or order considered in the hearing. A transcript of the hearing need not be made unless the interested party assumes the costs [~~thereof~~] and a request is made [~~therefor~~] at the time a hearing is requested.

(7) At least once every six (6) months, the cabinet shall inspect each establishment and shall make as many additional inspections and reinspections as are necessary for the enforcement of this administrative regulation. Retail food stores offering only prepackaged foods for sale shall be inspected at least once each twelve (12) months, with as many additional inspections and reinspections as necessary. Seasonal restricted food concessions shall be inspected at least once during the eight (8) month permitted period of operation each year.

(8) **If** [~~Whenever~~] an inspection is made of an establishment, the findings shall be recorded on inspection report form DFS-208, provided for that purpose, and shall constitute a written notice to the permit holder. This form is incorporated by reference and may be viewed at the Department for Health Services, 275 East Main Street, Frankfort, Kentucky 40621, between the hours of 8 a.m. and 4:30 p.m., Monday through Friday. The original of the inspection report shall be furnished to the permit holder or person in charge. The inspection report form shall summarize the requirements of this administrative regulation and shall set forth a weighted point value for each requirement. The rating score of the establishment shall be the total of the weighted point value for all violations, subtracted from 100.

(9) The inspection report form shall specify a specific and reasonable period of time for the correction of the violations found, and correction of the violations shall be accomplished within the period specified, pursuant to the following provisions:

(a) **If** [~~When~~] the rating score of the establishment is eighty-five (85) or more, all violations of one (1) or two (2) point weighted items shall be corrected as soon as possible, but in any event, by the time of the next routine inspection.

(b) **If** [~~When~~] the rating score of the establishment is at least seventy (70) but not more than eighty-four (84), all violations of one (1) or two (2) point weighted items shall be corrected as soon as possible, but in any event, within a period not to exceed thirty (30) days.

(c) Regardless of the rating score of the establishment, all violations of four (4) or five (5) point weighted items shall be corrected within a time specified by the cabinet but in any event, not to exceed ten (10) days.

(d) **If** [~~When~~] the rating score of the establishment is less than seventy (70), the establishment shall be issued a notice of intent to suspend the permit. The permit shall be suspended within ten (10) days after receipt of **the** [~~such~~] notice unless a written request for a hearing is filed with the cabinet, by the permit holder, within such ten (10) day period.

(e) In the case of temporary food service establishments, all violations shall be corrected within a specified period of time not to exceed twenty-four (24) hours. If violations are not so corrected, the permit shall be immediately suspended. In **this** [~~such~~] event the permit holder may request a hearing which shall be granted as soon as practical.

(f) The report of inspection shall state that failure to comply with any time limits for corrections may result in suspension of permit and that an opportunity for appeal from any notice or inspection findings will be provided if a written request for hearing is filed within ten (10) days. If a request for hearing is received, a hearing shall be held at a time and place designated by the cabinet.

(g) **If** [~~Whenever~~] a food service establishment is required under the provisions of this administrative regulation to cease operations, it shall not resume operations until [~~such time as~~] a reinspection determines that conditions responsible for the requirement to cease operations no longer exist. Opportunity for reinspection shall be offered within a reasonable time, but in no event to exceed seven (7) days.

Section 42. [~~41.~~] Examination and Detention of Foods. The cabinet may examine and collect samples of foods as often as necessary for the enforcement of this administrative regulation. The cabinet shall, upon written notice to the permit holder or authorized

agent specifying the reason therefor, place under quarantine any food which it has probable cause to believe is adulterated or misbranded within the meaning of the Kentucky Food, Drug and Cosmetic Act, KRS 217.005 to 217.215 and 217.992.

Section 43. [~~42.~~] The provisions of this administrative regulation shall apply to both food service establishments and retail food stores, unless otherwise specified.

RICE C. LEACH, Commissioner
FONTAINE BANKS, JR., Secretary
APPROVED BY AGENCY: September 20, 1993
FILED WITH LRC: October 1, 1993 at 10 a.m.

CABINET FOR HUMAN RESOURCES
Department for Health Services
Division of Local Health
(As Amended)

902 KAR 45:020. Shellfish.

RELATES TO: KRS Chapter 217 [~~217.005 to 217.215, 217.992~~]
STATUTORY AUTHORITY: KRS 194.050, 217.125 [~~211.090~~]
NECESSITY AND FUNCTION: [~~The Kentucky Food, Drug and Cosmetic Act,~~] KRS Chapter 217 [~~217.005 to 217.215 and 217.992~~] authorizes the Cabinet for Human Resources to protect the public against the adulteration and misbranding of foods. The purpose of this administrative regulation is to establish uniform sanitary standards and permit requirements for shellfish repacking, and to establish uniform standards of identity for shellfish and frozen raw breaded shrimp.

[~~Section 1. Citation of Regulation. This regulation may be cited as the "State Shellfish Regulation."~~]

Section 1. [~~2.~~] Definitions. [~~The following definitions shall apply in the interpretation and enforcement of this regulation:~~]

(1) "Shellfish" means clams, mussels, or oysters.

(2) "Shell oysters" means live oysters of any of the species, Ostrea virginica, Ostrea gigas, Ostrea lurida, in the shell, that [~~which~~], after removal from their beds, have not been floated or otherwise held under conditions that [~~which~~] result in the addition of water.

(3) [~~(2)~~] "Shrimp" means the tail portion of [~~properly~~] prepared shrimp of commercial species.

(4) [~~(3)~~] "Thoroughly drained" means one of the following:

(a) The oysters are drained on a strainer or skimmer that [~~which~~] has an area of not less than 300 square inches per gallon of oysters, drained, and has perforations of at least one-fourth (1/4) of an inch in diameter and not more than one and one-fourth (1 1/4) inches apart, or perforations of equivalent areas and distribution. The oysters are distributed evenly over the draining surface of the skimmer and drained for not less than five (5) minutes; or

(b) The oysters are drained by any method other than that prescribed by paragraph (a) of this subsection whereby liquid from the oysters is removed so that **if** [~~when~~] the oysters are tested within fifteen (15) minutes after packing by draining a representative gallon of oysters on a skimmer of the dimensions and in the manner described in paragraph (a) of this subsection for two (2) minutes, not more than five (5) percent of liquid by weight is removed by [~~such~~] draining.

Section 2. [~~3.~~] Shellfish Repacking Plant Permit. (1) No person, firm or corporation shall repack shucked or raw oysters [~~in Kentucky~~] unless a permit to repack has been issued by the cabinet [~~in accordance with the provisions of this regulation~~].

(2) Any person desiring to operate a shellfish packing establishment shall make written application for a permit to operate on Form DFS-200 provided by the cabinet which is incorporated by reference and may be obtained at the commissioner's office, Department for Health Services, 275 East Main Street, Frankfort, Kentucky 40621, Monday through Friday between the hours of 8 a.m. and 4:30 p.m. [~~An application for a permit shall be made in writing to the cabinet before operation commences and shall include the usual business name, business and mailing address, name or names and titles of responsible officers or owners, a filing of the label to be used on the final package, and a statement as to the proposed records to be kept.~~]

(3) The permit issued by the cabinet shall list the name, address, certificate number, classification and shall expire December 31, following date issued [~~expiration date of the permit~~].

(4) A permit issued to a repacker shall not be transferable as to person or place [~~and shall be reapplied for prior to expiration date~~].

[~~(5) The permit may be revoked at any time for violation of any requirement of this regulation or any other public health law or regulation.~~]

Section 3. [~~4.~~] Submission of Plans. Plans for an oyster repacking plant shall be submitted for approval to the [~~cabinet in triplicate through the~~] local health department [~~in accordance with applicable regulations of the cabinet~~].

Section 4. [~~5.~~] Shellfish Repacking Plant Sanitation Requirements. (1) Plant arrangements. The repacking establishment shall be [~~so located as to be~~] free of contaminating surroundings and shall not be subject to flooding.

(a) Repacking room shall be [~~separate and~~] of sufficient size to permit sanitary handling of the oysters and thorough cleaning of equipment.

(b) A separate room or rooms or lockers, shall be provided for storing employees' street clothing, aprons, gloves, and personal articles.

(2) Floors. The floors shall be:

(a) Constructed of concrete or other material impervious to water; [~~and shall be~~]

(b) Graded to drain;

(c) [~~quickly and be~~] Free from cracks and uneven surfaces that interfere with proper cleaning or drainage; and

(d) [~~be~~] Maintained in good repair [~~condition~~].

(3) Walls and ceilings. The interior surface of rooms in which shellfish are repacked, or in which utensils are washed shall be smooth, washable, light colored and kept in good repair.

(4) Fly control measures. All outer openings to the toilet and wash rooms, repacking rooms, utensil cleaning and storage rooms, and locker rooms shall be effectively screened during the season **if** [~~when~~] flies are present, unless other effective means are provided for preventing the entrance of flies.

(a) Effective in-plant fly control measures shall be used to kill or capture flies which may enter the plant despite the screening.

(b) All interior doors or other openings into the repacking room shall be screened **if** [~~whenever~~] necessary to keep the packing room free of flies.

(5) Lighting.

(a) At least thirty (30) foot-candles of [~~Adequate~~] light shall be provided on [~~in~~] all working surfaces and at least twenty (20) foot-candles in all storage rooms.

(b) Light bulbs, fixtures, skylights or other glass suspended over exposed food in any step of preparation shall be of the safety type or otherwise protected to prevent food contamination in case of breakage.

(6) Heating and ventilation. Working rooms shall be ventilated and shall be heated **if** [~~when~~] necessary.

(7) Water supply. The water supply shall be potable, adequate and from an approved source pursuant to applicable requirements of

the Cabinet for Natural Resources and Environmental Protection administrative regulations 401 KAR Chapter 8. [~~easily accessible, adequate and of safe, sanitary quality.~~]

(8) Plumbing and related facilities. Plumbing shall be installed in compliance with the State Plumbing Code, KRS Chapter 318. Lavatories with water shall be so located that their use by repacking plant personnel can be readily assessable [~~observed~~]. Conveniently located toilets shall be provided.

(9) Sewage disposal. Sewage shall be discharged into public sewers, if available. Where private sewage disposal systems must be utilized, they shall be constructed, operated and maintained according to the requirements of 902 KAR 10:085 [~~the Natural Resources and Environmental Protection Cabinet~~].

(10) Rodent control. Shellfish repacking plants shall be free from rodents.

(11) Construction of utensils and equipment.

(a) The food-product zone of utensils and equipment, including that used for ice handling, shall be made of smooth, corrosion resistant, impervious, nontoxic material which will not readily disintegrate or crack;

(b) Utensils and equipment shall be constructed [~~as~~] to be easily cleaned; and

(c) Shall be kept in good repair.

(12) General cleanliness.

(a) Premises shall be kept clean and free of litter and rubbish.

(b) Miscellaneous and unused equipment and articles which are not necessary to plant operations shall not be stored in rooms used for repacking or food storage.

(c) No domestic animal or fowl shall be permitted in a shellfish repacking plant.

(d) The repacking portions of the plant, if [~~when~~] in operation, shall be restricted to the handling of shellfish.

(e) Unauthorized persons shall be excluded from the plant.

(13) Cleaning of buildings and equipment.

(a) Floors, equipment, and [~~if necessary the~~] walls of the repacking room shall be cleaned within two (2) hours after the day's operations have ceased. Windows and skylights shall be kept clean.

(b) [~~All~~] Equipment, utensils and work surfaces shall be cleaned by scrubbing with water and detergent and rinsing with potable water within two (2) hours after the day's operations have ceased.

(14) Bactericidal treatment of utensils and equipment.

(a) [~~All~~] Utensils and equipment in the repacking room which come in contact with shucked shellfish shall be subjected to an effective bactericidal process at the end of each day's operation.

(b) [~~Large~~] Equipment which may [~~might~~] be contaminated before use shall be cleaned at the end of each day's operation, and shall be subjected to effective bactericidal treatment immediately before use.

(c) Returnable shipping containers, if used, shall be subjected to an effective bactericidal treatment process on the day they are used, and [~~are~~] protected against contamination until filled.

(15) Storage of equipment. Equipment and utensils which have been cleaned and given bactericidal treatment shall be stored so as to be protected against contamination.

(16) Source of shellfish. All shellfish shall be obtained from a source certified by the state of origin or the Food and Drug Administration [~~approved by the cabinet~~]. Shellfish shall be obtained from certified waters and harvesting areas certified by state of origin or the Food and Drug Administration [~~approved areas~~] and shall be properly identified and received from a shellfish shipper currently listed on the United States Public Health Service's Interstate Shellfish Shipper's List.

(17) Handling of single-service containers. [~~All~~] Single-service containers shall be stored and handled in a sanitary manner and [~~when necessary,~~] shall be given bactericidal treatment immediately prior to filling.

(18) Packing of shucked shellfish.

(a) Shucked shellfish shall be packed without exposing them to contamination.

(b) Shucked shellfish shall be packed and shipped in clean, single-service containers made of impervious materials and [~~so~~] sealed that tampering can be detected.

(c) Each individual package of fresh or frozen shellfish shall have permanently recorded on the package or label, so as to be easily visible, the packers', repackers', or distributors' name and address, and the packers' or repackers' certificate number preceded by the abbreviated name of the state.

(d) Containers holding one (1) gallon or more shellfish shall have the identification on the container wall, unless the cover becomes an integral part of the container during the sealing process. Packages of frozen shellfish shall show the date or code of repacking.

(19) Refrigeration of shucked shellfish. Shucked shellfish shall be kept at a temperature of forty-five (45) degrees Fahrenheit or less during repacking.

(20) Ice. Ice shall be obtained from a source [~~specifically~~] approved by the cabinet pursuant to KRS Chapter 217, and shall be stored and handled in a [~~clean~~] manner that does not result in contamination.

(21) Records. Complete and accurate records shall be kept by every shellfish repacker.

(22) Health of personnel. Any person known to be infected with any disease in a communicable form, or to be a carrier of any disease which can be transmitted through the handling of shellfish, or who has an infected wound or open lesion on any exposed portion of his body, shall be restricted to areas of [~~excluded from~~] the repacking plant where there would be no danger of transmitting disease. [~~An owner or manager who has reason to suspect that any employee has contracted a communicable disease shall immediately notify the cabinet. Pending appropriate action by the cabinet, said employee shall be excluded from the plant. The management shall designate a reliable individual to be accountable for compliance with the requirements of this regulation having to do with plant and personnel cleanliness.~~]

(23) Cleanliness of employees.

(a) Employees shall wash their hands with soap and water before beginning work and again after each interruption.

(b) Any person who handles shucked shellfish shall wear a clean apron or coat.

(c) Employees shall not use tobacco in any form in the rooms in which shellfish are repacked.

Section 5. [~~6.~~] Bacteriological Criteria for Shellfish. The following bacteriological criteria shall be applicable for all edible species of fresh and frozen shellfish at the wholesale market level.

(1) Shellfish having a fecal coliform density of not more than 230 most probable number (MPN) per 100 grams [~~and thirty-five (35) degrees Centigrade~~] or a standard plate count of not more than 500,000 per gram shall be considered satisfactory.

(2) Shellfish having a fecal coliform density of more than 230 most probable number (MPN) per 100 grams [~~and/or thirty-five (35) degrees Centigrade~~] or a standard plate count of more than 500,000 per gram shall be quarantined and disposed of [~~considered conditional and may be subject to rejection by the cabinet~~].

Section 6. [~~7.~~] Handling and Sale of Shellfish. (1) No oysters, clams, scallops or other shellfish shall be sold or offered for sale unless [~~such shellfish shall have been produced and shipped in conformity with the regulations of the state in which they were grown or packed, and unless~~] the shipment is [~~shall have been~~] accompanied by tag, label, or other mark showing that shipper has been [~~duly~~] certified by the state where the [~~in which his~~] plant is operated[~~, such certification having been approved by the United States Public Health Service for shipment in interstate commerce~~].

(2) All shippers, reshippers, packers and wholesalers shall keep an accurate record[~~, subject to inspection by proper officials,~~] of all

lots received, shipped and sold. All retailers shall keep an accurate record[~~, subject to inspection by proper officials,~~] of all lots received.

(3) Shell oysters and clams shall be handled at a temperature below fifty (50) degrees Fahrenheit, but above freezing temperature.

(4) Shell oysters and clams shall be [~~have been~~] shipped in clean barrels, [~~or~~] sacks, or shipping containers plainly marked with the name, address and identification mark of the shipper.

(5) Shucked oysters shall be [~~have been~~] packed in containers sealed in a [~~such~~] manner that any tampering is easily discernible, and shall be marked with the name and address and identification mark of shipper or packer. All shipping containers shall have been washed and sterilized [~~by an approved method~~] before being filled.

(6) For refrigeration of shucked shellfish, outside containers shall be provided for ice, and no ice or other foreign substance shall be allowed in contact with the shellfish. Shucked shellfish shall be kept at a temperature of forty-five (45) degrees Fahrenheit or below, from the time it leaves the shipper until the time it reaches the consumer. Frozen shellfish shall be held at zero degrees Fahrenheit or less.

(7) All shucked stock received by wholesalers or retailers shall be kept in the original containers, except [~~such~~] shucked shellfish that are repacked by a certified repacker.

[~~Section 8. Canned Wet-Pack Shrimp and Canned Dry-Pack Shrimp in Nontransparent Containers; Fill of Container; Label Statement of Substandard Fill. (1) The standard of fill of nontransparent containers for canned wet-pack shrimp is a fill such that the cutout weight of shrimp taken from each can is not less than sixty-four (64) percent of the water capacity of the container, and, for canned dry-pack shrimp (except that packed in the nontransparent cylindrical container which is two and eleven-sixteenths (2-11/16) inches in diameter and four (4) inches in height), is a fill such that the cutout weight of shrimp taken from each can is not less than sixty (60) percent of the water capacity of the container. The standard of fill for canned dry-pack shrimp packed in the nontransparent cylindrical container which is two and eleven-sixteenths (2-11/16) inches in diameter and four (4) inches in height is a cutout weight of not less than six and one-half (6-1/2) avoirdupois ounces of shrimp for each container.~~

~~(2) Cutout weight is determined by the following method: keep the unopened canned shrimp container at a temperature of not less than sixty-eight (68) degrees Fahrenheit nor more than ninety-five (95) degrees Fahrenheit for at least twelve (12) hours immediately preceding the determination. After opening, tilt the container so as to distribute the shrimp evenly over the meshes of a circular sieve which has been previously weighed. The diameter of the sieve is eight (8) inches if the quantity of the contents of the container is less than three (3) pounds, and twelve (12) inches if such quantity is three (3) pounds or more. The bottom of the sieve is woven wire cloth which complies with the specifications for such cloth set forth under "2380 Micron (No. 8)" in Table 1 of "Standard Specifications for Sieves," published March 1, 1940, in L. C. 584 of the United States Department of Commerce, National Bureau of Standards. Without shifting the material on the sieve, so incline the sieve as to facilitate drainage. Two (2) minutes from the time drainage begins, weigh the sieve and the drained shrimp. The weight so found, less the weight of the sieve, shall be considered to be the cutout weight of the shrimp.~~

~~(3) If canned wet-pack shrimp or canned dry-pack shrimp, in nontransparent containers, falls below the applicable standard of fill of container prescribed in subsection (1) of this section, the label shall bear the general statement of substandard fill.~~]

Section 7. [~~9.~~] Canned Oysters; Identity; Label Statement of Optional Ingredients. (1) Canned oysters shall be [~~is~~] the food prepared from one (1) or any mixture of two (2) or all of the forms of oysters specified in subsection (2) of this section, and a packing medium of water, or the watery liquid draining from oysters before or during processing, or a mixture of [~~such~~] liquid and water. The food may be seasoned with salt. It is sealed in containers and [~~so~~] processed by heat as to prevent spoilage.

(2) The forms of oysters referred to in subsection (1) of this section are prepared from oysters that [~~which~~] have been removed from their shells and washed and which may be steamed while in the shell or steamed or blanched or both after removal therefrom and are as follows:

(a) Whole oysters with [~~such~~] broken pieces of oysters as normally occur in removing oysters from their shells, washing, and packing.

(b) Pieces of oysters obtained by segregating pieces of oysters broken in shucking, washing, or packing whole oysters.

(c) Cut oysters obtained by cutting whole oysters.

(3) If [~~When~~] the form of oysters specified in subsection (2)(a) of this section is used, the name of the food is "Oysters" or "Cove Oysters," if of the species Ostrea virginica: "Oysters" or "Pacific Oysters," if of the species Ostrea gigas; "Oysters" or "Olympia Oysters," if of the species Ostrea lurida.

(a) If [~~When~~] the form of oysters specified in subsection (2)(b) of this section is used, the name of the food is "Pieces of ____," the blank being filled in with the name "Oysters" or "Cove Oysters," if of the species Ostrea virginica; "Oysters" or "Pacific Oysters," if of the species Ostrea gigas; "Oysters" or "Olympia Oysters," if of the species Ostrea lurida.

(b) If [~~When~~] the form of oysters specified in subsection (2)(c) of this section is used, the name of the food is "Cut _____," the blank being filled in with the name "Oysters" or "Cove Oysters," if of the species Ostrea virginica; "Oysters" or "Pacific Oysters," if of the species Ostrea gigas; "Oysters" or "Olympia Oysters," if of the species Ostrea lurida.

(c) In case a mixture of two (2) or all [~~such~~] forms of oysters are [~~is~~] used, the name is a combination of the names specified in this [~~sub~~]section of the forms of oysters used, arranged in order of their predominance by weight.

Section 8. [~~10.~~] Canned Oysters: Fill of Container; Label Statement of Substandard Fill. (1) The standard [~~of~~] fill of container for canned oysters shall be [~~is a fill such that~~] the drained weight of oysters taken from each container and shall [~~is~~] not be less than fifty-nine (59) percent of the water capacity of the container.

(2) Drained weight is determined by the following method:

(a) Keep the unopened canned oyster container at a temperature of not less than sixty-eight (68) degrees Fahrenheit or more than ninety-five (95) degrees Fahrenheit for at least twelve (12) hours immediately preceding the determination.

(b) After opening, tilt the container so as to distribute its contents evenly over the meshes of a circular sieve that [~~which~~] has been previously weighed.

(c) The diameter of the sieve is eight (8) inches if the quantity of the contents of the container is less than three (3) pounds, and twelve (12) inches if **the** [~~such~~] quantity is three (3) pounds or more.

(d) The bottom of the sieve is woven-wire cloth that [~~which~~] complies with the specifications for [~~such~~] cloth set forth under Official Methods of Analysis of the Association of Official Analytical Chemists 13th Ed. (**1990** [~~1980~~]), Table 1, "Nominal Dimensions of Standard Test Sieves (U.S.A. Standard Series)", under the heading "Definitions of Terms and Explanatory Notes", which is hereby incorporated by reference. Copies may be examined at the Office of the Commissioner, Department for Health Services, 275 East Main Street, Frankfort, Kentucky 40621, Monday through Friday between the hours of 8 a.m. and 4:30 p.m. on weekdays. [~~"2380 Micron (No. 8)," in Table I of "Standard Specifications for Sieves," published March 1, 1940, in L. C. 584 of the United States Department of Commerce, National Bureau of Standards.~~]

(e) Without shifting the material on the sieve, so incline the sieve as to facilitate drainage.

(f) Two (2) minutes from the time drainage begins, weigh the

sieve and the drained oysters.

(g) The weight [~~se~~] found, less the weight of the sieve, shall be considered [~~to be~~] the drained weight of the oysters.

(3) [~~(2)~~] If canned oysters fall below the standard of fill of container prescribed in this section [~~subsection (1) of this section~~], the label shall bear the general statement of substandard fill, followed by the statement, "A can of this size should contain _____oz. of oysters. This can contains only _____oz." The blanks being filled in with the applicable figures.

Section 9. [~~11.~~] Oysters, Raw Oysters, Shucked Oysters; Identity. (1) Oysters, raw oysters, shucked oysters are the class of foods [~~each of which is~~] obtained by shucking shell oysters and preparing them [~~in accordance~~] with the procedure prescribed in subsection (2) of this section. The name of each [~~such~~] food shall be [~~is~~] the name specified in the applicable definition and standard of identity prescribed in Sections 10 [~~12~~] through 19 [~~21~~] of this administrative regulation.

(2) If water, or salt water containing less than 0.75 percent salt, is used in any vessel into which the oysters are shucked, the combined volume of oysters and liquid **if** [~~when~~] [~~such~~] oysters are emptied from the [~~such~~] vessel shall [~~is~~] not be less than four (4) times the volume of [~~such~~] water or salt water. [~~Any liquid accumulated with the oysters is removed. The oysters are washed, by blowing or otherwise, in water or salt water, or both.~~] The total time that the oysters are in contact with water or salt water after leaving the shucker, including the time of washing, rinsing, and any other contact with water or salt water is not more than thirty (30) minutes. In computing the time of contact with water or salt water, the length of time that oysters are in contact with water or salt water that is agitated by blowing or otherwise, shall be calculated at twice its actual length. Any period of time that oysters are in contact with salt water containing not less than 0.75 percent salt before contact with oysters, shall not be included in computing the time that the oysters are in contact with water or salt water. Before packing into the containers for shipment or other delivery for consumption the oysters are thoroughly drained and are packed without any added substance.

Section 10. [~~12.~~] Extra large oysters, oysters counts (or plants), extra large raw oysters, raw oysters counts (or plants), extra large shucked oysters, shucked oysters counts (or plants)[~~; Identity. Extra large oysters, oysters counts (or plants); extra large raw oysters, raw oysters counts (or plants); extra large shucked oysters, shucked oysters counts (or plants);~~] are of the species Ostrea virginica and conform to the definition and standard of identity [~~prescribed~~] for oysters in [~~by~~] Section 9 [~~11~~] of this administrative regulation and are of a [~~such~~] size that one (1) gallon contains not more than 160 oysters and a quart of the smallest oysters selected therefrom contains not more than forty-four (44) oysters.

Section 11. [~~13.~~] Large oysters, oysters extra selects, large raw oysters, raw oysters extra selects, large shucked oysters[~~; Shucked Oysters Extra Selects; Identity. Large oysters, oysters extra selects, large raw oysters, raw oysters extra selects, large shucked oysters, shucked oysters extra selects~~] are of the species Ostrea virginica and conform to the definition and standard of identity prescribed for oysters by Section 9 [~~11~~] of this administrative regulation and are of **a** [~~such~~] size that one (1) gallon contains more than 160 oysters but not more than 210 oysters; a quart of the smallest oysters [~~selected therefrom~~] contains not more than fifty-eight (58) oysters, and a quart of the largest oysters [~~selected therefrom~~] contains more than thirty-six (36) oysters.

Section 12. [~~14.~~] Medium oysters, oysters selects, medium raw oysters, raw oysters selects, medium shucked oysters, shucked oysters selects[~~; Identity. Medium oysters, oysters selects, medium raw oysters, raw oysters selects, medium shucked oysters, shucked oysters select;~~] are of the species Ostrea virginica and conform to the definition and standard of identity prescribed for oysters by Section 9 [~~11~~] of this administrative regulation and are of such size that one (1) gallon contains more than 210 oysters, but not more than 300 oysters; a quart of the smallest oysters [~~selected therefrom~~] contains not more than eighty-three (83) oysters, and a quart of the largest oysters [~~selected therefrom~~] contains more than forty-six (46) oysters.

Section 13. [~~15.~~] Small oysters, oysters standards, small raw oysters, raw oysters standards, small shucked oysters, shucked oysters standards[~~; Identity. Small oysters, oysters standards, small raw oysters, raw oysters standards, small shucked oysters, shucked oysters standards;~~] are of the species Ostrea virginica and conform to the definition and standards of identity prescribed for oysters by Section 9 [~~11~~] of this administrative regulation and are of a [~~such~~] size that one (1) gallon contains more than 300 oysters but not more than 500 oysters; a quart of the smallest oysters [~~selected therefrom~~] contains not more than 138 oysters and a quart of the largest oysters [~~selected therefrom~~] contains more than sixty-eight (68) oysters.

Section 14. [~~16.~~] Very small oysters, very small raw oysters, very small shucked oysters[~~; Identity. Very small oysters, very small raw oysters, very small shucked oysters;~~] are of the species Ostrea virginica and conform to the definition and standard of identity prescribed for oysters by Section 9 [~~11~~] of this administrative regulation and are of a [~~such~~] size that one (1) gallon contains more than 500 oysters, and a quart of the largest oysters [~~selected therefrom~~] contains more than 112 oysters.

Section 15. [~~17.~~] Olympia oysters, raw Olympia oysters, shucked Olympia oysters[~~; Identity. Olympia oysters, raw Olympia oysters;~~] are of the species Ostrea lurida and conform to the definition and standard of identity prescribed for oysters in Section 9 [~~11~~] of this administrative regulation.

Section 16. [~~18.~~] Large Pacific oysters, large raw Pacific oysters, large shucked Pacific oysters[~~; Identity. Large Pacific oysters, large raw Pacific oysters, large shucked Pacific oysters;~~] are of the species Ostrea gigas and conform to the definitions and standards of identity prescribed for oysters by Section 9 [~~11~~] of this administrative regulation and are of a [~~such~~] size that one (1) gallon contains not more than sixty-four (64) oysters, and the largest oyster in the container shall [~~is~~] not be more than twice the weight of the smallest oyster therein.

Section 17. [~~19.~~] Medium Pacific oysters, medium raw Pacific oysters, medium shucked Pacific oysters[~~; Identity. Medium Pacific oysters, medium raw Pacific oysters, medium shucked Pacific oysters;~~] are of the species Ostrea gigas and conform to the definition and standard of identity prescribed for oysters by Section 9 [~~11~~] of this administrative regulation and are of **a** [~~such~~] size that one (1) gallon contains more than sixty-four (64) oysters and not more than ninety-six (96) oysters, and the largest oyster in the container shall [~~is~~] not be more than twice the weight of the smallest oyster therein.

Section 18. [~~20.~~] Small Pacific oysters, small raw Pacific oysters, small shucked Pacific oysters[~~; Identity. Small Pacific oysters, small raw Pacific oysters, small shucked Pacific oysters;~~] are of the species Ostrea gigas and conform to the definition and standard of identity prescribed for oysters by Section 9 [~~11~~] of this administrative regulation and are of a [~~such~~] size that one (1) gallon contains more than ninety-six (96) [~~ninety (90)~~] oysters and not more than 144 oysters, and the largest oyster in the container shall [~~is~~] not be more than twice the weight of the smallest oyster therein.

Section 19. [~~21.~~] Extra small Pacific oysters, extra small raw Pacific oysters, extra small shucked Pacific oysters[~~; Identity. Extra~~

~~small Pacific oysters, extra small raw Pacific oysters, extra small shucked Pacific oysters,~~] are of the species Ostrea gigas and conform to the definition and standard of identity prescribed for oysters by Section 9 [~~11~~] of this administrative regulation and are of a [~~such~~] size that one (1) gallon contains more than 144 oysters and the largest oyster in the container shall [~~is~~] not be more than twice the weight of the smallest oyster therein.

Section 20. [~~22.~~] Frozen Raw Breaded Shrimp[~~; Identity; Label Statement of Optional Ingredients~~]. (1) Frozen raw breaded shrimp shall be [~~is the food~~] prepared by coating one of the optional forms of shrimp specified in subsection (3) of this section with safe and suitable batter and breading ingredients as provided in subsection (4) of this section. The food shall be [~~is~~] frozen.

(2) The food tests not less than fifty (50) percent of shrimp material as determined by the method prescribed in subsection (7) of this section, except that if the shrimp are composite units the method prescribed in subsection (8) of this section shall be [~~is~~] used.

(3) Except for composite units, each shrimp unit shall be individually coated. The optional forms of shrimp are:

(a) Fantail or butterfly: prepared by splitting the shrimp; the shrimp are peeled, except that tail fins remain attached and the shell segment immediately adjacent to the tail fins may be left attached.

(b) Butterfly, tail off: prepared by splitting the shrimp, tail fins and all shell segments are removed.

(c) Round: round shrimp, not split; the shrimp are peeled, except that tail fins remain attached and the shell segment immediately adjacent to the tail fins may be left attached.

(d) Round, tail off: round shrimp, not split; tail fins and all shell segments are removed.

(e) Pieces: Each unit consists of a piece or a part of a shrimp, tail fins and all shell segments are removed.

(f) Composite units: each unit consists of two (2) or more whole shrimp or pieces of shrimp, or both, formed and pressed into composite units prior to coating; tail fins and all shell segments are removed; large composite units, prior to coating, may be cut into smaller units.

(4) The batter and breading ingredients referred to in subsection (1) of this section are the fluid constituents and the solid constituents of the coating around the shrimp. These ingredients consist of suitable substances which are not food additives. Batter and breading ingredients that perform a useful function are regarded as suitable, except that artificial flavorings, artificial sweeteners, artificial colors, and chemical preservatives, other than those provided for in this subsection are not suitable ingredients of frozen raw breaded shrimp. Chemical preservatives that are suitable are:

(a) Ascorbic acid, which may be used in a quantity sufficient to retard development of dark spots on the shrimp; and

(b) Antioxidant preservatives that may be used to retard development of rancidity of the fat content of the food.

(5) The label shall name the food, as prepared from each of the optional forms of shrimp specified in subsection (3)(a) through (f) of this section, and follow[~~ing~~] the numbered sequence of this [~~such~~] subsection as follows:

(a) "Breaded fantail shrimp." The word "butterfly" may be used in lieu of "fantail" in the name.

(b) "Breaded butterfly shrimp, tail off."

(c) "Breaded round shrimp."

(d) "Breaded round shrimp, tail off."

(e) "Breaded shrimp pieces."

(f) Composite units:

1. If the composite units are in a shape similar to that of breaded fish sticks the name shall be [~~is~~] "breaded shrimp sticks;" if they are in the shape of meat cutlets, the name shall be [~~is~~] "breaded shrimp cutlets."

2. If prepared in a shape other than that of sticks or cutlets, the name shall be [~~is~~] "Breaded shrimp _____" the blank to be filled in with the word or phrase that accurately describes the shape, and [~~but which~~] is not misleading.

3. In the case of the names specified in paragraphs (a) through (e) of this subsection, the words in each name may be arranged in any order, provided they are so arranged as to be accurately descriptive of the food.

4. The word "prawns" may be added in parentheses immediately after the word "shrimp" in the name of the food if the shrimp are of large size; for example, "fantail breaded shrimp (prawns)."

5. If the shrimp are from a single geographic area, the adjectival designation of that area may appear as part of the name; for example, "breaded Alaskan shrimp sticks."

(6) The names of the optional ingredients used, as provided for in subsection (4) of this section, shall be listed on the principal display panel or panels of the label with [~~such~~] prominence and conspicuousness as to render them likely to be read and understood by the ordinary individual under customary conditions of purchase.

(a) If a spice that also imparts color is used, it shall be designated as "spice and coloring," unless the spice is designated by its specific name.

(b) If ascorbic acid is used to retard development of dark spots on the shrimp, it shall be designated "Ascorbic acid added as a preservative" or "Ascorbic acid added to retard discoloration of shrimp."

(c) If any other antioxidant preservative, as provided in subsection (4) of this section, is used, **the** [~~such~~] preservative shall be designated by its common name followed by the statement "added as a preservative."

(7) The method for determining percentage of shrimp material for those forms specified in subsection (3)(a) through (e) of this section shall be [~~is~~] as follows:

(a) Equipment needed.

1. Two (2) gallon container, approximately nine (9) inches in diameter.

2. Two (2) vaned wooden paddle, each vane measuring approximately one and three-fourths (1 3/4) inches by three and three-fourths (3 3/4) inches.

3. Stirring device capable of rotating the wooden paddle at 120 rpm.

4. Balance accurate to 0.01 ounce (or one-tenth (0.1) gram).

5. U.S. Standard sieve No. 20, twelve (12) inch diameter.

6. U.S. Standard sieve, one-half (1/2) inch sieve opening, twelve (12) inch diameter. The sieves shall comply with the specifications as provided in Section 8(2) of this administrative regulation.

7. Forceps, blunt points.

8. Shallow baking pans.

9. Rubber-tipped glass stirring rod.

(b) Procedure.

1. Weigh the sample to be debreaded.

2. Fill the container three-fourths (3/4) full of water at seventy (70) to eighty (80) degrees Fahrenheit.

3. Suspend the paddle in the container, leaving a clearance of at least five (5) inches below the paddle vanes, and adjust speed to 120 rpm Add shrimp and stir for ten (10) minutes.

4. Stack the sieves, the one-half (1/2) inch mesh over the No. 20, and pour the contents of the container onto them.

5. Set the sieves under a faucet, preferably with spray attached, and rinse shrimp with no rubbing of flesh, being careful to keep all rinsings over the sieves and not having the stream of water hit the shrimp on the sieve directly.

6. Lay the shrimp out singly on the sieve as rinsed. Inspect each shrimp and use the rubber-tipped rod and spray to remove the breading material that may remain on any of them, being careful to avoid undue pressure or rubbing, and return each shrimp to the sieve.

7. Remove the top sieve and drain on a slope for two (2) minutes, then remove the shrimp to weighing pan.

8. Rinse contents of the No. 20 sieve onto a flat pan and collect any particles other than breading (i.e., flesh and tail fins) and add to

shrimp on balance pan and weigh.

9. [2.] Calculate percent shrimp material: percent shrimp material equals weight of debreaded sample divided by weight of sample, times 100, plus two (2).

(8) The method for determining percentage of shrimp material for composite units, specified in subsection (3)(f) of this section, is as follows:

(a) Equipment needed.

1. Water bath (for example a three (3) liter to four (4) liter beaker.)
2. Balance accurate to one-tenth (0.1) gram.
3. Clip tongs of wire, plastic, or glass.
4. Stopwatch or regular watch readable to a second.
5. Paper towels.
6. Spatula four (4) inch blade with rounded tip.
7. Nut picker.
8. Thermometer (immersion type) accurate to plus or minus two (2) degrees Fahrenheit.
9. Copper sulfate crystals ($CuSO_4$ $5H_2O$).

(b) Procedure.

1. Weigh all composite units in the sample while they are still hard frozen.

2. Place each composite unit individually in a water bath that is maintained at sixty-three (63) to eighty-six (86) degrees Fahrenheit and allow to remain until the breading becomes soft and can easily be removed from the still frozen shrimp material (between ten (10) seconds to eighty (80) seconds for composite units held in storage at zero degrees Fahrenheit). If the composite units were prepared using batters that are difficult to remove after one (1) dipping, redip them for up to five (5) seconds after the initial debreading and remove residual batter materials.

3. Remove the unit from the bath; blot lightly with double thickness of paper toweling; and scrape off or pick out coating from the shrimp material with the spatula or nut picker.

4. Weigh all the "debreaded" shrimp material.

5. Calculate the percentage of shrimp material in the sample, using the following formula: percent shrimp materials equals weight of debreaded shrimp sample divided by weight of sample, times 100.

Section 21. [23.] Frozen raw lightly breaded shrimp[; Identity; Label Statement of Optional Ingredients. Frozen raw lightly breaded shrimp] complies with the provisions of Section 20 [22] of this administrative regulation except that it contains not less than sixty-five (65) percent of shrimp material, as determined by the method prescribed in Section 20 [22(7) or (8)] of this administrative regulation, as appropriate, and that in the name prescribed the word "lightly" immediately precedes the words "breaded shrimp."

Section 22. Enforcement Procedures. (1) The shellfish repacking plant permit shall be suspended immediately upon notice to the holder without a hearing **if** [when] the local health department has reason to believe that an imminent health hazard exists. In **this** [such] event, the permit holder may request a hearing. If requested a hearing shall be granted within seven (7) days of receipt of request.

(2) In all other instances of violation of the provisions of this administrative regulation the local health department shall serve the holder of the shellfish repacking plant permit a written notice specifying the violations and afford the license holder a reasonable opportunity to correct same.

(3) **If** [Whenever] a shellfish repacking permit holder has failed to comply with any written notice issued under the provisions of this administrative regulation the local health department may suspend the permit.

(4) The holder of the shellfish repacking plant permit shall be notified in writing that the permit shall be suspended at the end of ten (10) days following service of notice unless a request for a hearing is made to the local health department within the ten (10) day period.

(5) Any person whose repacking permit has been suspended may make a request in writing for reinstatement of the permit.

RICE C. LEACH, Commissioner
FONTAINE BANKS, JR., Secretary
APPROVED BY AGENCY: August 23, 1993
FILED WITH LRC: October 4, 1993 at 2 p.m.

CABINET FOR HUMAN RESOURCES
Department for Health Services
Division of Local Health
(As Amended)

902 KAR 45:040. Carbonated beverages.

RELATES TO: KRS Chapter 217 [217.005 to 217.215, 217.992]
STATUTORY AUTHORITY: KRS 194.050, 217.125[, 211.090]
NECESSITY AND FUNCTION: KRS Chapter 217 [The Kentucky Food, Drug and Cosmetic Act, KRS 217.005 to 217.215 and 217.992] authorizes the Cabinet for Human Resources to protect the public against [regulate] the misbranding and adulteration of foods [in Kentucky]. The purpose of this administrative regulation is to establish uniform standards and definitions of identity for carbonated beverages (soda water) and uniform sanitary standards for carbonated beverage plants.

Section 1. [Citation of Regulation. This regulation may be cited as "State Carbonated Beverages (Soda Water) Regulation."

Section 2.] Definitions. (1) [The following definition shall apply in the interpretation and enforcement of this regulation:] "Carbonated beverage plant" means the premises, buildings, and installed equipment where carbonated beverages or syrups [therefore] are manufactured, bottled, canned, packaged, packed, stored or [otherwise] handled and processed for sale to the public. It does not include facilities used solely for finished product storage, [or for] distribution, or for establishments that prepare [such] beverages for sale to the [ultimate] consumer on the immediate premises.

(2) " [Section 3. Soda Water; Identity; Label Statement of Optional Ingredients. (1)] Soda water" means [is] the class of beverages made by absorbing carbon dioxide in potable water. The amount of carbon dioxide used is not less than that which will be absorbed by the beverage at a pressure of one atmosphere and at a temperature of sixty (60) degrees Fahrenheit. It may contain buffering agents as provided in Section 2(1)(e) of this administrative regulation [subsection (2)(e) of this section]. It either contains no alcohol or only [such] alcohol (not in excess of five-tenths (0.5) percent by weight of the finished beverage) as is contributed by the flavoring ingredient used. Soda water designated by a name, including the [any] proprietary name [provided for in subsection (3) of this section, which includes the word] "cola" or a designation as a "pepper" beverage [that for years, has become well known as being] made with kola nut extract and other natural caffeine-containing extracts[, and thus as a caffeine-containing drink,] shall contain caffeine in a quantity not to exceed 0.02 percent by weight.

Section 2. Optional Ingredients. (1) [(2)] Soda water may contain optional ingredients, [but] if the optional [any such] ingredient is a food additive or a color additive within the meaning of KRS 217.145(1) and (3)[, it is used only in conformity with regulations established pursuant thereto]. The optional ingredients that may be used in soda water **if the proportions** [in such proportions as are] reasonably required to accomplish their intended effects are:

(a) Nutritive sweeteners, consisting of the dry or liquid form of sugar, invert sugar, dextrose, fructose, corn syrup, glucose syrup sorbitol, or any combination of two (2) or more of these.

(b) One (1) or more of the following flavoring ingredients may be

added, in a carrier consisting of ethyl alcohol, glycerin, propylene glycol, or edible vegetable oils:

1. Fruit juices (including concentrated fruit juices), natural flavoring derived from fruits, vegetables, bark, buds, roots, leaves, and similar plant materials.

2. Artificial flavorings.

(c) Natural and artificial color additives.

(d) One (1) or more of the acidifying agents acetic acid, adipic acid, citric acid, fumaric acid, gluconic acid, lactic acid, malic acid, phosphoric acid, or tartaric acid.

(e) One (1) or more of the buffering agents consisting of the acetate, bicarbonate, carbonate, chloride, citrate, gluconate, lactate, orthophosphate, or sulfate salts of calcium, magnesium, potassium, or sodium.

(f) One (1) or more of the emulsifying, stabilizing, or viscosity-producing agents brominated vegetable oils, carob bean gum (locust bean gum), glycerol ester of wood rosin, guar gum, gum acacia, gum tragacanth, hydroxylated lecithin, lecithin, methlcellulose, mono- and diglycerides of fat-forming fatty acids, pectin, polyglycerol esters of fatty acids, propylene glycol alignate, sodium alignate, sodium carboxymethylcellulose, sodium metaphosphate (sodium hexametaphosphate).

(g) One (1) or more edible vegetable oils as optional ingredients in cloud producing agents.

(h) If [When] one or more of the optional ingredients in paragraphs (b) and (g) of this subsection are used, dioctyl sodium sulfosuccinate may be used in a quantity not in excess of five-tenths (0.5) percent by weight of [such] ingredients.

(i) One (1) or more of the foaming agents ammoniated glycyrrhizin, gum ghatti, licorice or glycyrrhiza, yucca (Joshua tree), yucca (Mohave), quillaia (soap-bark) (Quillaja saponaria Mol.), and enzyme-modified soy protein in a carrier of propylene glycol.

(j) Caffeine, in an amount not to exceed 0.02 percent by weight of the finished beverage.

(k) Quinine in an amount not to exceed eighty-three (83) parts per million by weight of the finished beverage.

(l) One (1) or more of the chemical preservatives ascorbic acid, benzoic acid, BHA, BHT, calcium disodium EDTA, erythorbic acid, glucose-oxidase-catalase enzyme, methylparaben or propylparaben, propyl gallate, potassium or sodium benzoate, potassium or sodium bisulfite, potassium or sodium metabisulfite, potassium or sodium sorbate, sorbic acid, sulfur dioxide or tocopherols; and in the case of canned soda water, stannous chloride in a quantity not to exceed a minimum level, as served, of 0.0015 percent or less [eleven (11) parts per million] calculated as tin (Sn), with or without one (1) or more of the other chemical preservatives listed in this subsection.

(m) The defoaming agent dimethylopolysiloxane in an amount not to exceed ten (10) parts per million.

(2) [(3)] The name of the beverage for which a definition and standard of identity is established by this section[, which is neither flavored nor sweetened,] is soda water, club soda, or plain soda.

(a) The name of each beverage containing flavoring and sweetening ingredients as provided for in [subsection (2) of] this section shall be [is] "_____ soda" or "_____ soda water" or "_____ carbonated beverage", the blank being filled in with the word or words that designate the characterizing flavor of the soda water; for example, "grape soda."

(b) If the soda water is one generally designated by a particular common name; for example, ginger ale, root beer, or sparkling water, that name may be used in lieu of the name prescribed in paragraph (a) of this subsection. [For the purpose of this section, a proprietary name that is commonly used by the public as the designation of a particular kind of soda water may likewise be used in lieu of the name prescribed in this subsection.]

(3) [(4)] Soda water that contains the optional ingredient caffeine as provided for in subsection (1)[(2)](j) of this section, artificial flavoring, artificial coloring, or any combination of these shall be labeled to show that fact by the label statement "with _____" or "_____ added," the blank being filled in with the word or words "caffeine," "artificial flavoring," "artificial coloring," or a combination of these words[, as appropriate]. If the soda water contains one (1) or more of the optional ingredients set forth in subsection (1)[(2)](l) of this section, which has or is intended to have a preservative effect in the finished beverage, it shall be labeled to show that fact by one of the following statements: "_____ added as a preservative" or "preserved with _____," the blank being filled in with the common name of the preservative ingredient. If soda water contains quinine salts, the label shall bear a prominent declaration either by use of the word "quinine" in the name of the article or by separate declaration.

(4) [(5)] The label statements prescribed in subsection (3) [(4)] of this section for declaring the optional ingredients present shall appear on a labeling surface of the beverage in [such] a manner as to render the statement likely to be read by the ordinary individual under customary conditions of purchase or use [of such beverage]. These statements shall immediately and conspicuously precede or follow the name of the beverage, **if the** [wherever such] name is prominently displayed, without intervening, written, printed, or graphic matter; provided, that, where the [such] name is part of a trademark or brand, then other written, printed or graphic matter that is also a part of **a** [such] trademark or brand may intervene if the label statements required by this section are [so] placed [as] to be conspicuously related to the name of the beverage.

Section 3. [4.] Carbonated Beverage Plant Permit. (1) No person, firm or corporation shall operate a carbonated beverage plant in Kentucky without first having obtained a permit from the cabinet.

(2) Any carbonated beverage plant in compliance with this administrative regulation [the public health laws of Kentucky and the rules and regulations of the cabinet] shall be eligible for a permit upon [proper] application supported by inspection records acceptable to the cabinet. Any person desiring to operate a carbonated beverage plant shall make written application on form DFS-200 provided by the cabinet which is **incorporated** [inspected] by reference and may be viewed or obtained at the Office of the Commissioner, Department for Health Services, 275 East Main Street, Frankfort, Kentucky 40621, Monday through Friday between the hours of 8 a.m. and 4:30 p.m.

(3) [Any permit issued pursuant to this regulation may be revoked or suspended by the cabinet for violation of any public health law or regulation.

(4) The permit required by this section shall be in addition to, and not in lieu of, any permit required by local government bodies.

(5)] Permits issued pursuant to this administrative regulation [unless sooner suspended or revoked] shall expire on December 31, following the date of issuance.

(4) [(6)] Each permit issued pursuant to this administrative regulation shall be issued only for the premises and persons named in the application and shall not be transferable.

(5) [(7)] Permits issued pursuant to this administrative regulation shall be posted in a conspicuous place at the carbonated beverage plant.

Section 4. [5.] Submission and Approval of Plans. No person shall construct or extensively alter any building intended for use as a carbonated beverage plant without having [first complied with the provisions of the cabinet relating to the submission and approval of] plans approved by the local health department having jurisdiction.

Section 5. [6.] Ingredient and Packaging Materials. (1) All ingredients used in the preparation of syrups and carbonated beverages shall comply with all applicable provisions of the Kentucky Food, Drug and Cosmetic Act KRS Chapter 217 [and regulations relating thereto].

(2) Single service articles including bottles, cans, fiber cartons, crowns, caps or gaskets shall be provided in sanitary boxes, cartons,

tubes, and [~~or otherwise~~] protected and handled in a sanitary manner.

Section 6. [~~7.~~] Construction of Buildings. (1) A separate room of solid wall construction shall be provided for:

(a) Compounding and mixing syrups;

(b) Bottling and filling operations; and

(c) Bottle washing, receiving, storage and shipping; provided, however, that a variance to paragraph (b) of this subsection and this paragraph may be permitted by the cabinet when [~~where deemed~~] necessary for existing plants and for new plants where it is demonstrated to the satisfaction of the cabinet that [~~such~~] separation is not necessary due to the design of the plant.

(2) The floors of rooms where ingredients are handled, compounded, mixed, or processed or where containers or equipment are washed shall be constructed of an impervious, smooth, easily cleaned material.

(a) Floors [~~They~~] shall be kept in good repair and graded to drain properly to trapped drains.

(b) Walls and ceilings in the syrup room shall have a smooth, washable, light-colored surface, in good repair.

(c) Walls in container filling area shall have a smooth, washable and light-colored surface up to the height reached by splash or water spray. The wall area above this height and including ceiling may be constructed of suitable sound retarding material.

(d) Interior walls of storage areas may be left unfinished or covered with standard construction materials.

(e) Exterior, hinged doors shall be outward opening and self-closing.

(f) The food processing areas shall be separated from any living quarters or toilet room.

Section 7. [~~8.~~] Lighting. Lighting (natural, artificial, or a combination of both) equal to thirty (30) foot candles shall be provided in all working areas. Storage areas shall be provided with ten (10) foot candles of light. Inspection areas shall be provided with artificial light sources which furnish at least 100 foot candles on the inspection surface. Lights in processing areas where their breakage may cause contamination of product or ingredients shall be equipped with protective shields.

Section 8. [~~9.~~] Ventilation. Natural or artificial ventilation shall be sufficient to prevent excessive condensation formation, mold or objectionable odors and maintain sanitary conditions in the processing or storage areas or rooms.

Section 9. [~~10.~~] Water Supply. (1) The water supply shall be ample[~~, clean~~] and potable, with adequate facilities for its distribution in the establishment and its protection against contamination and pollution, and shall meet the requirements of the Natural Resources and Environmental Protection Cabinet pursuant to administrative regulations 401 KAR Chapter 8.

(2) Hot water for cleaning rooms and equipment shall be delivered under pressure to sufficient convenient outlets and shall be of a [~~such~~] temperature as to accomplish a thorough clean up.

Section 10. [~~11.~~] Sewage, Waste Disposal and Plumbing. (1) All sewage and water carried wastes from a carbonated beverage plant shall be disposed of in a public sewerage system **if** [~~whenever~~] available. If [~~In the event~~] a public sewerage system is not available, all sewage and water carried wastes shall be disposed of in a private sewage disposal system, the construction and operation of which meets the requirements of 902 KAR 10:085 [~~is approved by the Department of Housing, Buildings and Construction~~].

(2) All wastes and accumulations of trash shall be disposed of in a manner approved by the Natural Resources and Environmental Protection Cabinet pursuant to KRS Chapter 224.

(3) All plumbing and plumbing fixtures shall be installed and operated pursuant to [~~in accordance with~~] the state plumbing code KRS Chapter 318.

Section 11. [~~12.~~] Toilets, Dressing Rooms and Hand-washing Facilities. (1) Toilets, dressing rooms, and hand-washing facilities shall be conveniently located and shall be kept clean and in good repair. Doors to toilets shall be tight-fitting and self-closing.

(2) Hand-washing facilities shall be located in or convenient to the syrup room, toilet rooms and the bottling room. Hand-washing facilities shall provide hot and cold running water, suitable cleaning agents and single-service towels or other acceptable drying devices.

Section 12. [~~13.~~] Construction and Repair of Equipment. (1) All equipment, containers and utensils used in the handling, processing, compounding, mixing, storage, or transporting of beverages or beverage ingredients shall be smooth, impervious, corrosion resistant, nontoxic, and in good repair and shall be constructed to permit adequate sanitation.

(2) Effective protection from contamination shall be maintained.

(3) Product-contact surfaces shall be self-draining. Piping shall be of sanitary design and installation.

(4) All temperature-control equipment and control devices used on bottle washers shall be accurate and adequately maintained.

(5) [~~(2)~~] If the washing, filling and crowning devices are not integral parts of one (1) machine, but are performed by separate units of equipment, they shall be arranged to exclude manual contact with the necks or tops of the bottles between filling and crowning.

(6) [~~(3)~~] Mixing and storage tanks, pipelines, filters and other apparatus employed in the preparation and distribution of syrups shall be constructed of stainless steel or other suitable noncorrosive materials.

(7) [~~(4)~~] All apparatus employed in syrup-making shall be free from recesses and so constructed that all parts may be easily cleaned and sanitized. All syrup tanks shall be self-draining and contents protected from contamination. Mixing shall be by mechanical means performed so as to prevent contamination of the syrup.

(8) [~~(5)~~] Carbonated water shall not be conveyed in pipelines of galvanized iron, lead, zinc, copper, or other deleterious materials.

Section 13. [~~14.~~] Cleaning and Bactericidal Treatment. (1) Multiple-service containers, equipment and utensils used in handling, processing, storing or transporting of beverages or beverage ingredients shall be thoroughly cleaned after use. They shall be [~~subjected~~] effectively sanitized [~~to an approved bactericidal process~~] prior to each usage.

(2) The cleaning and bactericidal treatment methods used shall not contaminate or adulterate [~~be such that~~] soft drinks or [~~and~~] their ingredients [~~shall not be contaminated or adulterated~~].

(3) Chemicals used for cleaning and bactericidal treatments shall have labels which identify the contents.

(4) All pipelines, apparatus, and containers used [~~in the manufacturing processes~~] shall be thoroughly cleaned and sanitized at least [~~adequate intervals, but never less frequently than~~] once weekly.

(5) Apparatus and containers shall be washed and rinsed before sanitization.

(6) Fillers shall be cleaned and sanitized at the end of each day's operation and flushed with potable water before beginning operations.

(7) Since accepted industry practice permits syrup to remain in the syrup tanks and lines between period of processing operations, the syrup tanks and lines shall be cleaned and sanitized **if** [~~when~~] emptied, as scheduled by the plant.

(8) After scheduled cleaning and sanitizing the syrup tanks and lines shall be flushed with potable water before beginning processing operations. Hot water, chlorine, or equally effective bactericidal agents are permissible for sanitization.

Section 14. [~~15.~~] Bottle Washing, Filling and Crowning and other

Requirements. (1) The operations of receiving, segregating, holding, compounding, mixing, packaging, and packing, storing, transporting and handling shall be conducted in a sanitary manner. There shall be no contamination, adulteration, or deterioration of the product or its ingredients. Every plant manufacturing bottled beverages shall be equipped with suitable mechanical bottle washing apparatus, and with approved machines for carbonating, filling and crowning. Plant operations shall be performed [~~in such a manner as~~] to prevent the operator or his clothing from coming in contact with the beverages or sanitized product contact surfaces.

(2) Reusable glass containers used in the manufacture of carbonated beverages shall, before being refilled, be sanitized by being washed in an automatic washing machine. An indicating thermometer and caustic solution test equipment shall be used to ascertain the temperature and caustic strength of the washing solution. The caustic soak [~~washing~~] solution shall consist of at least three (3) [~~two (2)~~] percent caustic with a minimum contact period of five (5) minutes and a temperature of 130 degrees Fahrenheit or an equivalent cleansing and sanitizing process. The bottles shall then be rinsed free of washing solution with potable water. Single-service containers shall be cleaned by air or water rinsing machines [~~or by other methods approved by the cabinet~~].

(3) Syrups shall be prepared in a sanitary manner. Every precaution shall be taken against contamination by filth or deleterious substances during the preparation and subsequent storage. Galvanized iron, lead, zinc, copper, or brass-lined containers, pipelines, or apparatus of other deleterious materials shall not be used in preparation, storage or conveyance of syrups.

(4) Bottles shall be filled and capped by means of automatic machinery. [~~, and neither~~] The operator or [~~nor~~] his clothes shall not come in contact with any part of the bottle or machinery that might result in contamination of the product. Removal of the crown of imperfectly crowned bottles and recrowning shall not be permitted. Crowns which have been touched on the inner side by the operator, as may occur while adjusting the crowner, shall be discarded. Returnable bottles shall be visually inspected for any abnormal conditions immediately before being filled. Unclean and abnormal bottles shall not be filled. Mechanical inspection devices may be used, but not in lieu of visual inspection.

Section 15. [~~16.~~] Sanitary Controls. Every plant manufacturing bottled carbonated beverages shall be adequately provided with apparatus for ascertaining the sanitizing strength of the soaker solution used in bottle washing. An indicating thermometer shall be used at the bottle washing machine. If pipelines and other equipment are sanitized by hot water, additional thermometers shall be available at convenient locations. A suitable caustic test or some other suitable index for determining the causticity of the soaker solution shall be available at all times. Daily caustic tests and temperature checks shall be made by the plant operators. A record of these tests results shall be kept on file at the plant for six (6) months.

Section 16. [~~17.~~] Control of Insects and Rodents [~~Animals~~]. The carbonated beverage plant shall be free of rodents, rodent harborages, insects, and insect-breeding places. [~~Effective measures shall be used to control and eliminate insects, birds, vermin, rodents and domesticated animals. Insecticides and rodenticides shall be properly identified, used and stored in a safe and acceptable manner.~~]

Section 17. [~~18.~~] Storage Facilities. Storage facilities shall be clean, in good repair, and shall be provided with ample space for the storage of food substances, container closures, gaskets, cleaned utensils, and equipment, so as to prevent contamination and deterioration. Conveyors and cases shall be maintained in a clean condition.

Section 18. [~~19.~~] Premises. The premises shall be [~~present a~~] clean, [~~and orderly appearance. They shall be~~] well-drained, and free of environmental conditions and materials that constitute a nuisance or sanitation hazard.

Section 19. [~~20.~~] Vehicles and Transportation. Vehicles used to transport carbonated beverages shall be maintained in a clean condition and aid in protecting the product from contamination.

Section 20. [~~21.~~] Health and Cleanliness of Employees. (1) No employer shall permit any person who has [~~is known or reasonably suspected to have~~] a communicable disease or is a carrier of a communicable disease to work in a bottling and filling room or syrup room of [~~and no person so affected shall work in~~] a carbonated beverage plant. No person with open cuts, lesions or sores shall be allowed to work in a bottling and filling room or syrup room.

(2) Personnel shall wear clean outer clothing. In addition, syrup room personnel shall wear head coverings. All personnel in the food processing areas of the plants shall [~~practice good sanitation and shall~~] not smoke, chew tobacco, expectorate, or eat in the processing areas.

Section 21. Enforcement Procedures. (1) The carbonated beverage plant permit shall be suspended immediately upon notice to the holder without a hearing **if** [~~when~~] the local health department has reason to believe that an imminent health hazard exists. In **this** [~~such~~] event, the permit holder may request a hearing. If requested, a hearing shall be granted within seven (7) days of receipt of request.

(2) In all other instances of violations of the provisions of this administrative regulation the local health department shall serve the holder of the carbonated beverage plant permit a written notice specifying the violations and afford the permit holder a reasonable opportunity to correct same.

(3) **If** [~~Whenever~~] a permit holder has failed to comply with any written notice issued under the provisions of this administrative regulation the local health department may suspend the permit.

(4) The holder of the carbonated beverage plant permit shall be notified in writing that the permit shall be suspended at the end of ten (10) days following service of notice unless a request for hearing is made to the local health department within the ten (10) day period.

(5) Any person whose permit has been suspended may make a request in writing for reinstatement of the permit.

RICE C. LEACH, Commissioner
FONTAINE BANKS, JR., Secretary
APPROVED BY AGENCY: August 23, 1993
FILED WITH LRC: October 1, 1993 at 10 a.m.

ADMINISTRATIVE REGULATIONS AMENDED AFTER PUBLIC HEARING OR WRITTEN COMMENTS RECEIVED

GENERAL GOVERNMENT CABINET
Kentucky Occupational Therapy Board
(Amended After Hearing)

201 KAR 28:010. Definitions and abbreviations.

RELATES TO: KRS 319A.010 through 319A.210
STATUTORY AUTHORITY: KRS 319A.070(3)
NECESSITY AND FUNCTION: KRS Chapter 319A and pertinent parts of KRS 319A.070(3) require the Kentucky Occupational Therapy Board [~~, hereinafter referred to as the board,~~] to promulgate administrative regulations pertaining to the practice and licensure of occupational therapists and occupational therapy assistants. This administrative regulation sets forth the definition of terms and phrases which will be used by the board in enforcing and interpreting the provisions of Chapter 319A and the administrative regulations promulgated pursuant thereto.

Section 1. Definitions. In addition to the definitions in KRS 319A.010, and unless otherwise specifically defined or otherwise clearly indicated by their context, terms in Title 201, Chapter 28, shall have the meanings given in this administrative regulation.

(1) "Accessory joint mobilization" means the production of accessory movements by active or passive means. Accessory movements are joint play movements and component motions. It does not include conventional, passive range of motion that a person with normal muscle and joint function could perform actively.

(2) "Act" means the Kentucky Occupational Therapy Practice Act and the provisions of KRS Chapter 319A.

(3) "Assessment of integrity and pathology of muscle, soft tissue and joint capsule" means the use of active [~~and/~~]or passive procedures or tests to identify and delineate structural deviations of the tested tissue/structure from normalcy. It does not include range of motion, and manual muscle tests which are tests to determine function or performance.

[~~(4) "Board" means the Kentucky Occupational Therapy Board and its staff, if any.~~

~~(5) "Certified occupational therapy assistant" means a person who is certified by the A.O.T.A. as having met the educational requirements, supervised field work, and examination standards required for certification as a C.O.T.A.~~]

(4) "Board" is defined pursuant to KRS 319A.010(1).

(5) [~~(4)~~] [~~(6)~~] "Electromodalities" means the physical agents which supply or induce an electric current through the body, which make the body a part of the circuit. Some examples are transcutaneous electrical nerve stimulator ("TENS") units and functional electrical stimulation ("FES"). Use of vibration, surface electromyographic biofeedback or similar therapeutic devices are not electromodalities. An **individual credentialed by this board** [~~occupational therapist~~] may perform occupational therapy with a patient while the patient is wearing a TENS unit.

(6) [~~(5)~~] [~~(7)~~] "Gait training" means the instruction of proper walking patterns but does not include instruction as to transfer functions or any instruction which is considered to be a part of occupational therapy as otherwise defined in these administrative regulations or in KRS 319A.010(2).

[~~(8) "Occupational therapist" means a person licensed in accordance with the provisions of the Act and regulations to practice occupational therapy under this chapter.~~

~~(9) "Occupational therapist registered" means a person who is certified by the A.O.T.A. as having met the educational requirements, supervised field work, and examination standards required for certification as an O.T.R.~~

~~(10) "Occupational therapy" means the use of goal directed activities with individuals who are limited by physical limitations due to injury or illness, psychiatric and emotional disorders, developmental or learning disabilities, poverty and cultural differences or the aging process, in order to maximize independence, prevent disability, and maintain health. The practice encompasses evaluation, treatment, and consultation. Occupational therapy services include: teaching daily living skills; developing perceptual motor skills and sensory integrative functioning; developing play skills and prevocational and leisure capacities; designing, fabricating or applying selective orthotic and prosthetic devices or selective adaptive equipment; using specifically designed crafts and therapeutic activities to enhance functional performance; administering and interpreting tests such as manual muscle and range of motion; and consulting in the adaptation of the environment for the handicapped. These services shall be provided individually, in groups or through medical, health, educational, and social systems. The practice of occupational therapy shall not include gait training; the use or application of thermal or electromodalities; accessory joint mobilizations; assessment of integrity and pathology of muscle, soft tissue and joint capsule; and postural or biomechanical analysis.~~

~~(11) "Occupational Therapy Aide" means a person not licensed who assists in the practice of occupational therapy under the direct supervision of a licensed occupational therapist or occupational therapy assistant and who is required to have an understanding of occupational therapy but is not required to have professional or advanced training in the basic anatomical, biological, psychological, and social sciences involved in the practice of occupational therapy.~~]

(7) [~~(6)~~] [~~(12)~~] "Occupational therapy assessment" means, within the scope of occupational therapy and the practice thereof, the process of determining the need for, nature of, and estimated time of treatment; determining the needed coordination with other persons involved; and the documentation of such activities with all assessments, including screening, patient-related consultation, evaluation, and reassessment.

[~~(13) "Occupational therapy assistant" means a person licensed in accordance with the provisions of the Act and regulations to assist in the practice of occupational therapy under this chapter, and who works under the supervision of an occupational therapist.~~]

(8) [~~(7)~~] [~~(14)~~](a) "Occupational therapy treatment" means in its broadest sense the use of specific activities, methods or exercises which are intended to develop, improve, restore the skills in performance areas of function, compensate for dysfunction or minimize debilitation, and also means the planning and documentation of treatment performances.

(b) Within the context of occupational therapy treatment, the following definitions shall apply:

1. "Independent and daily living skills" means the skill and performance of functions which are treated, including [~~but not limited to~~]: physical daily living skills (grooming and hygiene, feeding and eating, dressing, functional mobility, functional communication, object manipulation), psychological or emotional daily living skills (self-concept and self-identity, situational coping, community involvement), work (homemaking, child care/parenting, dependent care, and employment preparation), and play or leisure.

2. "Sensorimotor components" means the skill and performance of patterns of sensory and motor behavior of a person undergoing treatment with such skills, including [~~but not limited to~~]: neuromuscular activity (reflex integration, range of [e]motion, gross and fine motor coordination, strength and endurance), and sensory integration (sensory awareness, visual-spatial awareness, body integration).

3. "Cognitive components" means the skill and performance of the mental processes necessary to know or comprehend by understanding with such skills including [~~but not limited to~~]: orientation, conceptualization, and comprehension (concentration, attention span, memory), and cognitive integration (generalization, problem-solving).

4. "Psychosocial component" means the skill and performance in self-management and [~~,~~] interaction skills with such skills including [~~but not limited to~~]: self-expression, self-control, interaction with another person, and interaction with groups of three (3) or more people.

5. "Therapeutic adaptation" means the selecting, obtaining, fitting, and fabricating of equipment by an O.T.R./L. [~~L.O.T.R.~~] or a C.O.T.A. [~~L.O.T.A.~~]; the instruction of the person undergoing treatment, family or staff in the proper use and care of **the** [~~such~~] equipment; and minor repair of **the** [~~such~~] equipment; and minor modification to correct fit, position or use. This term encompasses orthotics, prosthetics, and assistive equipment, their application, instruction, and use.

6. "Prevention" means the skill and the performance of the person to minimize debilitation with **the** [~~such~~] treatment focusing on energy conservation (activity restriction, work simplification, time management), joint protection and body mechanics (proper posture and body mechanics, avoidance of excessive weight bearing), positioning and coordination of daily living activities.

(9) [~~(8)~~] [~~(15)~~] "Person **is defined pursuant to KRS 319A.010(6)** [~~(6) "means any individual, partnership, unincorporated organization or corporation~~].

(10) [~~(9)~~] [~~(16)~~] "Postural or biomechanical analysis" means the evaluation of posture with respect to spinal alignment, and gait pattern for the purpose of observing or determining:

(a) Malalignment of body segments;

(b) Distorted weight bearing line;

(c) Identification of presence of lordosis, kyphosis or scoliosis; and

(d) Identification of structural back disorders, but such analysis as defined herein does not include the treatment of postural and biomechanical deficiencies by splinting, positioning, use or fitting of adaptive equipment or determinations of a person's strength or endurance.

(11) [~~(10)~~] [~~(17)~~] "Rules" as used in Chapter 319A means those administrative regulations as promulgated in accordance with the provisions of Chapter 13A of the Kentucky Revised Statutes.

[~~(18) "States" means any states of the United States of America, its territories, treaty mandates or the District of Columbia.~~]

(12) [~~(11)~~] [~~(19)~~] "Substantially equal" or "At least as stringent as," within the context of KRS 319A.090 and KRS 319A.140, both mean, whichever is applicable, those states which have a licensure law requiring for licensure the following:

(a) An attestment as to good moral character.

(b) Evidence of satisfactorily completing the academic requirements of an educational program in occupational therapy with **the** [~~such~~] program being accredited by the [~~Committee on Allied Health, Education, and Accreditation of the American Medical Association or approved by the~~] American Occupational Therapy Association.

(c) A minimum of six (6) months of supervised field work for an occupational therapist or a minimum of four (4) months of supervised field work for an occupational therapy assistant.

(d) Evidence that the applicant has successfully completed or passed the A.O.T.C.B. [~~National~~] certification examination for the occupational therapist registered or the certified occupational therapy assistant[~~s as prepared and administered by a duly authorized agent of the board~~].

(13) [~~(12)~~] [~~(20)~~] "supervised field work" means the clinical training and direct contact with patients as a part of an A.O.T.A., O.T. or O.T.A. [~~under the direct supervision of an occupational therapist registered or in an approved~~] educational program.

(14) [~~(13)~~] [~~(21)~~] "Therapeutic activities" means those activities which encompass a variety of exercises or other practices, training or regimes which are used in the normal course of occupational therapy treatment and which for the purposes of compensation by any state or federal agency or by a private health services organization or insurance company are its functional or compensatory equivalent.

(15) [~~(14)~~] [~~(22)~~] "Written examination approved by a board" means the A.O.T.C.B. [~~National~~] certification examination for the occupational therapist or the [~~registered and certified~~] occupational therapy assistant[~~s as prepared by an authorized agent of the board or as certified and approved by the board~~].

Section 2. Abbreviations. As used in Title 201, Chapter 28, the following abbreviations shall have the meanings given below:

(1) "A.O.T.A." - American Occupational Therapy Association.

(2) "A.O.T.C.B." - American Occupational Therapy Certification Board.

(3) "O.T.R./L. - occupational therapist registered/licensed. [~~"L.O.T.R." licensed occupational therapist registered.~~]

(4) "C.O.T.A./L. - certified occupational therapy assistant/licensed. [~~(3) "L.O.T.A." licensed occupational therapy assistant.~~]

(5) [~~(4)~~] "O.T." - occupational therapy.

(6) "O.T.A." - occupational therapy assistant.

(7) [~~(5)~~] "O.T.R." - occupational therapist registered.

(8) [~~(6)~~] "C.O.T.A." - certified occupational therapy assistant.

CONSTANCE HEROLD, Chairman
APPROVED BY AGENCY: December 6, 1993
FILED WITH LRC: December 7, 1993 at 9 a.m.

GENERAL GOVERNMENT CABINET
Kentucky Occupational Therapy Board
(Amended After Hearing)

201 KAR 28:030. Short-term practice of occupational therapy [~~Exemptions from licensing~~].

RELATES TO: KRS 319A.090
STATUTORY AUTHORITY: KRS 319A.070(3)
NECESSITY AND FUNCTION: KRS 319A.090 provides that certain persons may be exempt from the licensure requirements of KRS Chapter 319A. This administrative regulation sets forth the requirements for persons to follow who wish to engage in the practice of occupational therapy for no more than sixty (60) days in a calendar year pursuant to KRS 319A.090(5). [~~determining whether a person is exempt from obtaining a license.~~]

Section 1. (1) [~~Exemptions. The requirement for a license as a L.O.T.R. or a L.O.T.A. does not apply to a person who is:~~

~~(1) Licensed in accordance with the provisions of another law of this Commonwealth and is practicing a profession or occupation for which the person is licensed;~~

~~(2) Directly employed as an O.T.R. or a C.O.T.A. in a full time capacity by the United States Government, is solely under the direction or control of the federal organization by which an individual is employed, and is not practicing occupational therapy outside the scope of employment of the federal organization by which the individual is employed;~~

~~(3) A person pursuing a course of study leading to a degree or certificate in occupational therapy at an accredited or approved educational program, provided the activities and services are part of the supervised course study and the person is wearing a badge or other emblem designating by title the fact that such person is a student or trainee and not a licensed occupational therapist or occupational therapy assistant;~~

~~(4) A person fulfilling the supervised field work experience requirements of KRS 319A.110 provided that such activities and~~

~~services constitute a part of the experience necessary to meet the requirements of the educational program; and~~

~~(5) Any person employed as an occupational therapy aide.~~

~~Section 2. Exemption for Limited Practice. (1) The requirement for a license as an occupational therapist registered or an occupational therapy assistant does not apply to an individual who is performing occupational therapy services in the Commonwealth for no more than sixty (60) days in a calendar year in association with a L.O.T.R. provided that such person is licensed under the laws of another state which has licensure requirements at least as stringent as or substantially equal to the requirements of KRS Chapter 319A, and who meets the requirements for certification as an O.T.R. or a C.O.T.A. as established by the American Occupational Therapy Association.~~

~~(2)~~] Any individual who intends to practice occupational therapy in the Commonwealth of Kentucky, in association with a Kentucky O.T.R./L., under the provisions of KRS 319A.090(5) [~~subsection (1) of this section~~] shall submit to the board [~~on a form approved by the board~~] all of the following information:

(a) Name, permanent address, address in Kentucky, and telephone number or number where the individual can be reached;

(b) The name, business address, and phone number of the O.T.R./L. [~~L.O.T.R.~~] with whom the individual is associated;

(c) The estimated number of calendar days the individual intends [~~intended~~] to practice in Kentucky;

(d) A copy of the current [~~individual's~~] license from the state in which the individual is licensed along with a statement from the licensing authority that the individual is in good standing;

(e) A copy of the administrative regulations **and** [~~or~~] state law under which the individual is licensed; and

(f) A **letter of verification** [~~copy of the certificate~~] issued by the A.O.T.C.B. [~~American Occupational Therapy Association~~] stating that the individual meets the requirements for certification as an O.T.R. or a C.O.T.A **and is in good standing**.

(2) [~~(3)~~] The [~~form and~~] information as described in subsection (1) [~~(2)~~] of this section shall be submitted to the board prior to the commencement of practice. [~~and shall be sent certified mail, return receipt requested, to the office of the board whose address is P.O. Box 23562, Lexington, Kentucky 40523. If after seven (7) working days from the delivery of the signed receipt~~] The [~~request for exemption is not disapproved, the~~] individual may commence occupational therapy practice upon notification by the board, provided that **the** [~~such~~] practice does not last more than sixty (60) calendar days.

CONSTANCE HEROLD, Chairman
APPROVED BY AGENCY: December 6, 1993
FILED WITH LRC: December 7, 1993 at 9 a.m.

GENERAL GOVERNMENT CABINET
Kentucky Occupational Therapy Board
(Amended After Hearing)

201 KAR 28:050. Special licensure requirements.

RELATES TO: KRS 319A.110, 319A.120, 319A.140
STATUTORY AUTHORITY: KRS 319A.070(3)
NECESSITY AND FUNCTION: KRS Chapter 319A and pertinent parts of KRS 319A.070(3) require the board to establish a procedure for the licensure of those persons who [~~either have been practicing as an O.T.R. or a C.O.T.A. and were certified by the A.O.T.A. prior to the effective date of this Act or~~] have been licensed as an O.T.R./L. or a C.O.T.A./L. by another state with licensure requirements substantially equal to, or at least as stringent as, those [~~that~~] of KRS Chapter 319A [~~the Act~~]. This administrative regulation sets forth the procedures by which **the** [~~such~~] applicants shall apply for a license under the provisions of KRS Chapter 319A.

Section 1. [~~Licensure of an O.T.R. or a C.O.T.A. Any individual who was certified as an O.T.R. or a C.O.T.A. by the A.O.T.A. prior to July 15, 1986, and who desires to be licensed as an L.O.T.R. or an L.O.T.A. under the provisions of KRS 319A.140(1) must by no later than July 15, 1987, fulfill the following requirements:~~

~~(1) Submit to the board an application for licensure on a form approved by the board;~~

~~(2) Submit to the board a certified or true copy of the applicant certificate as an O.T.R. or a C.O.T.A. as issued prior to July 15, 1986, by the A.O.T.A.;~~

~~(3) Submit a statement from an authorized agent of the A.O.T.A. that the applicant is a member and is in good standing with the association.~~

~~Section 2.~~] Persons Licensed by Another State. Any individual desiring to be licensed as an O.T.R./L. [~~L.O.T.R.~~] or a C.O.T.A./L. [~~L.O.T.A.~~] under the provisions of KRS 319A.140(2) shall fulfill the following requirements:

(1) Submit to the board an application for licensure [~~on a form approved by the board~~];

(2) Submit a certified copy of the individual's current license, registration or certification from the state in which the individual has been credentialed [~~was licensed~~] along with a statement from the credentialling [~~licensing~~] authority that the individual is in good standing as either an O.T.R. or an C.O.T.A.;

(3) Submit a current copy of the administrative regulations and state law under which the individual is credentialed [~~licensed~~]; [~~and~~]

(4) [~~Those persons certified by A.O.T.A. in another state as an O.T.R. or as a C.O.T.A.~~] Submit a current copy of the certificate issued by the A.O.T.C.B. [~~A.O.T.A.~~] stating that the individual meets the requirements of [~~a~~] certification as an O.T.R. or a C.O.T.A; and

(5) Submit the appropriate fee for licensure as required by 201 KAR 28:110.

[~~Section 3. Waiver of Examination. Any provision to the contrary notwithstanding in 201 KAR 28:040, any individual who qualifies for licensure under the provisions of this regulation shall be exempt from taking a written examination.~~

~~Section 4. Approval Required. Any application submitted by an applicant in accordance with these regulations shall be approved if the board believes that applicant qualifies for licensure under the provisions of KRS 319A.140(1) or (2). The board shall give notice in writing to the applicant of its decision and if approved, a license shall be issued in accordance with the provisions of 201 KAR 28:080 and upon payment to the Kentucky State Treasurer of the appropriate licensing fee.~~]

CONSTANCE HEROLD, Chairman
APPROVED BY AGENCY: December 6, 1993
FILED WITH LRC: December 7, 1993 at 9 a.m.

GENERAL GOVERNMENT CABINET
Kentucky Occupational Therapy Board
(Amended After Hearing)

201 KAR 28:070. Examination.

RELATES TO: KRS 319A.120
STATUTORY AUTHORITY: KRS 319A.070(3), 319A.120(4)
NECESSITY AND FUNCTION: KRS Chapter 319A[~~, in pertinent part,~~] requires the board to promulgate administrative [~~establish~~] regulations establishing the requirements for an examination to be taken by an applicant for licensure [~~for the taking of an examination~~

~~by an applicant for licensure~~]. This administrative regulation establishes those requirements [~~describes the procedure by which an applicant shall fulfill the requirements and necessity for taking of an examination~~].

Section 1. [~~Necessity of Examination. (1) Except as provided in 201 KAR 28:040 and 201 KAR 28:050, any~~] An applicant for licensure [~~as a L.O.T.R. or a L.O.T.A.~~] shall take the appropriate [~~an~~] examination as **authorized** [~~administered~~] by the A.O.T.C.B. [~~a duly authorized agent of the board~~] and shall receive a [~~minimum~~] passing score[~~, as established by the board,~~] on the [~~such~~] examination [~~in order to qualify for licensure~~].

Section 2. [~~(2)~~] It shall be the responsibility of the applicant to make arrangements to:

(1) Sit for the examination;

(2) Pay the requisite examination fee; and

(3) Ensure that the board receives evidence of successful completion for the examination. [~~to ensure that the board receives the result of the examination.~~

~~(3) An applicant may retake the examination by sitting for the examination, paying the requisite fee, and ensuring the forwarding of the examination results to the board. An applicant may not take an exam more than two (2) times every two (2) years.~~

~~Section 2. Review of Tests. Applicants for licensure may review the results of the examination as administered by the duly authorized agent of the board at the office of the board by requesting such a review in writing. Requests shall be mailed to P.O. Box 23562, Lexington, Kentucky 40523. Upon receipt of the request, the executive secretary or the secretary of the board shall arrange for a mutually convenient time not to exceed ten (10) calendar days from the date of the request for the applicant to review the examination, the results, provided a copy has been obtained by applicant from the authorized agent of the board, and, if in the possession of the board, the graded examination paper.~~]

CONSTANCE HEROLD, Chairman
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GENERAL GOVERNMENT CABINET
Kentucky Occupational Therapy Board
(Amended After Hearing)

201 KAR 28:090. Renewals.

RELATES TO: KRS 319A.160
STATUTORY AUTHORITY: KRS 319A.070(3), 319A.160(1)
NECESSITY AND FUNCTION: KRS Chapter 319A provides[~~, in pertinent part,~~] that the board shall promulgate administrative [~~establish~~] regulations establishing procedures for [~~the~~] annual renewal of licenses. This administrative regulation establishes those procedures. [~~provides for a procedure by which such licenses shall be renewed.~~]

Section 1. Persons licensed as an O.T.R./L. or a C.O.T.A./L. shall annually, before July 1, pay to the board a renewal fee as set forth in 201 KAR 28:110 for the renewal of the license. Licenses not renewed before July 1 of each year shall expire. [~~General Provisions. In order to continue the practice of occupational therapy as a L.O.T.R. or a L.O.T.A., each license as issued by the board must be annually renewed by the board.~~]

Section 2. A sixty (60) day grace period shall be allowed beginning July 1, during which time individuals may renew their licenses upon payment of the late renewal fee as set forth in 201 KAR 28:110. Licenses not renewed before August 30, shall terminate based on the failure of the individual to renew in a timely manner. Upon termination, the licensee is no longer eligible to practice occupational therapy in the Commonwealth and shall be sent notice at the last known address available to the board of termination, and to cease and desist practice. [~~Requisites for Renewal. To qualify for a renewal of licenses previously issued by the board, the license holder, sixty (60) calendar days prior to the expiration of the license, shall comply with all of the following requirements:~~

~~(1) File with the board a properly completed application for renewal on a form approved by the board and mail the application to the office of the board whose address is P.O. Box 23562, Lexington, Kentucky 40523.~~

~~(a) An application for renewal shall be deemed timely received if the envelope contains a properly completed application for renewal and bears a postmark indicating the application was mailed at least sixty (60) calendar days prior to the expiration of the license.~~

~~(b) Failure to timely file an application or to properly complete the application shall result in the rejection of the application and may submit the license holder to the provisions of 201 KAR 28:100.~~

~~(2) File with the application a check payable to the board in the amount of fifty (50) dollars for renewal of the license.~~]

Section 3. After the sixty (60) day grace period, individuals with a terminated license may have their licenses reinstated upon:

(1) Payment of the late renewal fee plus a reinstatement fee as set forth by 201 KAR 28:110;

(2) Documentation of employment from the time of termination until the present;

(3) Documentation that licensure, certification, or registration in other states **is** [~~are~~] in good standing; and

(4) Documentation of current certification by the A.O.T.C.B. [~~Issuance of Renewal License. Upon receipt of a timely filed, properly completed application and upon presentment and honoring of the tendered check, the board, after a review of the application for renewal and the requirements of KRS 319A.190, shall notify the applicant within sixty (60) calendar days of the receipt of the application whether the license will be renewed.~~

~~Section 4. Denial of Renewals. (1) In the event the board, for whatever reason, denies a timely application for renewal, the board shall notify the licensee, in writing, and shall send such notice, certified mail, return receipt requested, to the address given by the applicant in the application for renewal. The notice of denial shall state the reasons for the denial of the application of renewal, the right of the license holder to request a hearing within thirty (30) calendar days from receipt of the notice, and a warning that if a hearing is not requested, the license is subject to being revoked.~~

~~(2) If after thirty (30) calendar days from the return of the certified receipt notifying the applicant that the application for renewal has been denied, a request for a hearing is not timely filed, the board shall issue an order, signed by the chairman, revoking the license. A copy of the order shall be mailed to the license holder and to his employer, if any.~~

~~(3) If a hearing is requested, the license holder may continue to practice as a L.O.T.R. or a L.O.T.A. until a final order of the board is entered disposing the matter.~~

~~(4) The provisions of this regulation shall not apply to the denial of an application for late renewal as provided in 201 KAR 28:100.~~

~~Section 5. Suspended Licenses. Suspended licenses or licenses on probation shall be subject to the provisions of this regulation, but the issuance of a renewal license during the period of suspension shall not permit the license holder to practice occupational therapy as a L.O.T.R. or a L.O.T.A. until such time as the terms of the suspension have been satisfied or the period of probation has expired or the~~

~~license has been reinstated.~~]

CONSTANCE HEROLD, Chairman
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GENERAL GOVERNMENT CABINET
Kentucky Occupational Therapy Board
(Amended After Hearing)

201 KAR 28:120. Applications by foreign trained O.T.R.s and O.T.A.s.

RELATES TO: KRS 319A.180
STATUTORY AUTHORITY: KRS 319A.070(3)
NECESSITY AND FUNCTION: KRS Chapter 319A[~~, in pertinent part,~~] provides for the licensure of foreign trained occupational therapists [~~registered~~] and occupational therapy assistants [~~who are either licensed in a country other than the United States or who have completed their education requirements and training at an educational institution located in a country other than the United States~~]. This administrative regulation provides for licensure of those [~~such~~] applicants.

Section 1. Scope. The provisions of this administrative regulation shall apply to all applicants for licensure as an O.T.R./L. [~~L.O.T.R.~~] or as a C.O.T.A/L. [~~L.O.T.A.~~] who have been [~~are:~~
~~(1) Of foreign nationality; or~~
~~(2) Educated or~~] trained at an educational facility in a country or nation other than the United States. [~~This regulation also applies to any citizen of the United States who received training in occupational therapy at an educational facility in a country or nation other than the United States.~~]

Section 2. Requirements for Licensure. [~~(1)~~] All applicants applying for a license under this administrative regulation shall meet all of the requirements set forth in 201 KAR 28:060. Additionally, they shall provide evidence of legal permission, as furnished by the U.S. Department of Immigration and Naturalization, for employment in the United States. This documentation may take any of the following forms:
(1) I-94 form;
(2) Alien registration card;
(3) Temporary resident card; or
(4) A stamp on their passport. [~~section shall:~~
~~(a) Complete an application on a form approved by the board.~~
~~(b) Present proof of a good moral character as set forth in 201 KAR 28:060.~~
~~(c) Present proof of having completed an educational program substantially similar to the requirements of 201 KAR 28:060.~~
~~(d) If English is not the native language of the applicant, submit the results of a Test of English as a Foreign Language (TOEFL) with a score of at least 550 or the Test of Spoken English (TSE) with a total score of at least 220.~~
~~(e) Provide evidence of legal permission as furnished by the U.S. Department of Immigration for employment in the United States or submit evidence, such as a birth certificate or certificate of naturalization, that the applicant is a United States citizen.~~
~~(f) Successfully pass an examination approved by the board as required under 201 KAR 28:070.~~]

Section 3. [~~(2)~~] Any applicant who files for a license under the provisions of this administrative regulation may satisfy the educational requirement of 201 KAR 28:060, Section 2, [~~subsection 1(c) of this section~~] by:
(1) Submitting a **letter of verification from the A.O.T.C.B. which indicates the applicant:**
(a) Is currently certified;
(b) Is currently in good standing; and
(c) Has ever been disciplined by the A.O.T.C.B. [~~current copy of their A.O.T.C.B. certificate;~~] [~~(a) Submitting with the application a certified copy of the applicant's degree in an education program approved by the World Federation of Occupational Therapists;~~] or
(2) Submitting a letter from the A.O.T.C.B. documenting eligibility to sit for the A.O.T.C.B. certification examination.
[~~(b) Submitting a certified copy of a transcript and a certified copy of a degree in an educational program having the minimum educational requirements required for certification as an O.T.R. or a C.O.T.A. by the A.O.T.A. Applications filed under this provision shall be reviewed by the board for comparison to the educational program approved by the A.O.T.A.~~
~~(3) Issuance of licenses and temporary permits shall be in accordance with the provisions of 201 KAR 28:080 and 201 KAR 28:060, Section 3. Once licensed, licenses issued pursuant to this regulation shall be subject to all provisions of Chapter 28 and KRS Chapter 319A.~~

~~Section 3. Exemptions. Any applicant who satisfies the criteria of KRS 319A.140 may, in lieu of applying for a license under this regulation, apply for a license under the provisions of 201 KAR 28:050.~~]

CONSTANCE HEROLD, Chairman
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GENERAL GOVERNMENT CABINET
Kentucky Occupational Therapy Board
(Amended After Hearing)

201 KAR 28:130. Supervision of occupational therapy assistants, [~~and~~] occupational therapy aides, occupational therapy students, and temporary permit holders.

RELATES TO: KRS 319A.010(4), (5), 319A.100
STATUTORY AUTHORITY: KRS 319A.070(3)
NECESSITY AND FUNCTION: KRS Chapter 319A provides[~~, in pertinent part,~~] that a C.O.T.A./L., [~~L.O.T.A.,~~] an occupational therapy aide or an individual issued a temporary permit may only practice occupational therapy under [~~the~~] supervision [~~of a L.O.T.R~~]. This administrative regulation establishes the [~~sets forth the terms and~~] requirements of such supervision. General policy statement for supervision: The O.T.R./L. shall have the ultimate responsibility for occupational therapy treatment outcomes. Supervision shall be a shared responsibility. The supervising O.T.R./L. shall have a legal and ethical responsibility to provide supervision and the supervisee shall have a legal and ethical responsibility to obtain supervision. Supervision by the O.T.R./L. of the supervisee's provision of occupational therapy services shall always be required, even when the supervisee is experienced and highly skilled in a particular practice area.

Section 1. Supervision of Licensed Certified Occupational Therapy Assistants. (1) C.O.T.A./L.s [~~All L.O.T.A.s~~] shall assist in the practice of occupational therapy only under the supervision of an O.T.R./L. [~~L.O.T.R.~~]
(2) Supervision by an O.T.R./L. of a C.O.T.A./L. [~~L.O.T.R. of a L.O.T.A.~~] shall consist of no less than three (3) direct contact [~~at least eight (8)~~] hours per week [~~month~~] of [~~one-to-one~~] supervision for each occupational therapy assistant; the amount of supervision time shall be prorated for the part-time C.O.T.A./L. Supervision shall be an interactive process between the O.T.R./L. and the C.O.T.A./L. It shall be more than a paper review or cosignature.

(a) Assessment/reassessment. Patient evaluation is the responsibility of the O.T.R./L. The C.O.T.A./L. may contribute to the evaluation process by gathering data, administering structured tests, and reporting observations. The C.O.T.A./L. may not evaluate independently or initiate treatment prior to the O.T.R./L.'s evaluation.

(b) Treatment planning. The O.T.R./L. shall take primary responsibility for the treatment planning. The C.O.T.A./L. may contribute to the treatment planning as directed by the O.T.R./L.

(c) Intervention. The O.T.R./L. shall be responsible for the outcome of the occupational therapy intervention and for assigning appropriate intervention components to the C.O.T.A./L.

(d) Discontinuation of intervention. The O.T.R./L. shall be responsible for the outcome of occupational therapy. The C.O.T.A./L. may contribute to the discontinuation of intervention as directed by the O.T.R./L. [~~with such supervision including:~~

~~(a) The evaluation of each patient by a L.O.T.R. prior to treatment by the L.O.T.A.~~

~~(b) A treatment plan written by the supervising L.O.T.R. outlining the elements which have been delegated to the L.O.T.A.~~

~~(c) The monitoring of a patient's progress by the L.O.T.R.~~

~~(d) Evaluation of the treatment plan and determination of treatment termination by the L.O.T.R.~~]

(3) The O.T.R./L. [~~L.O.T.R.~~] shall assign and [~~ensure that~~] the C.O.T.A./L. shall accept [~~L.O.T.A. is assigned~~] only those duties and responsibilities for which the C.O.T.A./L. [~~assistant~~] has been specifically trained and which the C.O.T.A./L. [~~L.O.T.A.~~] is qualified to perform.

(4) In extenuating circumstances, when the **C.O.T.A./L. is without supervision** [~~O.T.R./L. is absent from the job~~], the C.O.T.A./L. may continue carrying out established programs for up to thirty (30) calendar days under agency supervision while appropriate occupational therapy supervision is sought. It shall be the responsibility of the C.O.T.A./L. to notify the board of these circumstances and to submit, in writing, a plan for resolution of the situation. [~~The provisions as enumerated in subsections (1), (2), and (3) shall apply to any individual holding a temporary permit as issued by the board.~~]

Section 2. Supervision of Occupational Therapy Aides. (1) Occupational therapy aides shall assist in the practice of occupational therapy only under the direct supervision of an O.T.R./L. or a C.O.T.A./L. [~~A L.O.T.R. shall perform the following functions with respect to an occupational therapy aide who meets the qualifications set forth in KRS 319A.010(5) and 201 KAR 28:010(11):~~

~~(a) Evaluation of each patient by the L.O.T.R.~~

~~(b) Determination of the treatment plan with delegation of such treatment set forth in writing.~~

~~(c) Availability at all times on the premises for purposes of rendering advice, instruction, and assistance to the occupational therapy aide.~~

~~(d) Monitoring of patient progress, change of treatment plan as indicated, and termination of the treatment with written report indicating evaluation data and progress made.~~]

(2) The supervising O.T.R./L. or C.O.T.A./L. shall be in direct verbal and visual contact with the supervisee, at all times, for all treatment-related activities. [~~Care rendered by an occupational therapy aide shall not be held out as and shall not be charged as occupational therapy unless on premises supervision is provided by the L.O.T.R.~~]

Section 3. Occupational Therapy Students. The occupational therapy student is an unlicensed person. However, in accordance with KRS 319A.090(3), students enrolled in an A.O.T.A. occupational therapy or occupational therapy assistant educational program, when participating in supervised fieldwork education experiences, may, at the discretion of the supervising O.T.R./L. or C.O.T.A./L., be assigned duties or functions commensurate with their education and training.

Section 4. Temporary Permits. (1) Holders of temporary permits shall be supervised by an O.T.R./L. The O.T.R./L. shall be responsible for all occupational therapy treatment outcomes.

(2) The supervising O.T.R./L. shall be available at all times to provide supervision.

(3) Face-to-face supervision shall be provided for at least thirty (30) minutes daily.

(4) The temporary permit holder who is applying for a license as an O.T.R./L. may perform all of the functions of the O.T.R./L., with the exception of supervision.

(5) A temporary permit holder who is applying for a license as a C.O.T.A./L. may perform all of the functions of a C.O.T.A./L., with the exception of supervision. [~~Any individual issued a temporary permit under the provisions of 201 KAR 28:060, Section 3, shall be supervised in accordance with the requirements of Section 1 of this regulation.~~]

CONSTANCE HEROLD, Chairman
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GENERAL GOVERNMENT CABINET
Kentucky Occupational Therapy Board
(Amended After Hearing)

201 KAR 28:140. Unprofessional conduct and code of ethics. [~~Grounds for denial, refusal to renew, suspension, revocation, or imposition of probationary conditions.~~]

RELATES TO: KRS 319A.160, 319A.190
STATUTORY AUTHORITY: KRS 319A.070(3), 319A.190(1), (6)
NECESSITY AND FUNCTION: KRS Chapter 319A provides[~~, in part,~~] for the denial, refusal to renew, suspension, revocation, or imposition of probationary conditions upon a license for various violations of the Act and [~~or~~] violation of the administrative regulations promulgated pursuant thereto. This administrative regulation sets forth a description of unprofessional conduct and also a code of ethics. [~~describes the type of conduct which may result in the denial, refusal to renew, suspension, revocation, or imposition of probationary conditions upon a license and the application of appropriate sanctions and the procedure for reinstatement of a license.~~]

Section 1. [~~Grounds for Denial, Refusal to Renew Suspension, Revocation, or Imposition of Probationary Conditions. (1) The board may deny, refuse to renew, suspend, revoke, or impose probationary conditions where the licensee or applicant for licensure has engaged in unprofessional conduct which has endangered or is likely to endanger the health, welfare, or safety of the public. Such unprofessional conduct shall include:~~

~~(a) Engaging in fraud, misrepresentation or concealment of material facts in the obtaining of the license.~~

~~(b) Engaging in unprofessional conduct as defined in Section 1(2) of this regulation or violating the code of ethics as adopted and published by the board in Section 1(3) of this regulation.~~

~~(c) Being convicted of a felony offense in any court if the act for which the licensee or applicant for licensure was convicted is determined by the board to have a direct bearing on whether the licensee or applicant for licensure should be entrusted to serve the public in the capacity of a L.O.T.R. or a L.O.T.A.~~

~~(d) Violating any lawful order or regulation rendered or promulgated by the board.~~

~~(e) Violating any provision of KRS Chapter 319A.~~

~~(2)~~] Unprofessional conduct in the practice of occupational therapy shall include, [~~but shall not be limited to,~~] the following acts: [~~as used in 201 KAR 28:140 Section 1(1)(b) is defined as violation of any of the following provisions:~~]

(1) [(a)] An O.T.R./L. or a C.O.T.A./L. shall not delegate to an unlicensed employee or person [under his or her control or supervision] a service which requires the skill, knowledge or judgment of an O.T.R./L. or a C.O.T.A./L.;

(2) An O.T.R./L. shall address goals identified in the evaluation and treatment plan;

(3) [(b)] An O.T.R./L. or an O.T.R./L. shall inform the referring source when any requested occupational therapy service [treatment procedure] is [inadvisable or] contraindicated, in the professional judgment of the licensee, and may [shall] refuse to carry out that request; [the orders of a referring practitioner when the requested treatment is inadvisable or contraindicated.]

(4) [(c)] An O.T.R./L. or a C.O.T.A./L. shall not continue occupational therapy services [treatment] beyond the point of possible benefit to the patient or [by] treat[ing] the patient more frequently than necessary to obtain the maximum therapeutic effect;

(5) [(d)] An O.T.R./L. or a C.O.T.A./L. shall not directly or indirectly request, receive or participate in the dividing, transferring, assigning, rebating or refunding of an unearned fee or [nor shall an O.T.R./L. or a C.O.T.A./L.] profit by means of a credit or other valuable consideration as an unearned commission, discount or gratuity in connection with the furnishing of occupational therapy services; [assessment or treatment.

(e) An O.T.R./L. or a C.O.T.A./L. shall not exercise influence on patients to purchase equipment produced or supplied by a company in which the L.O.T.R. or the L.O.T.A. owns stock or has any other direct or indirect financial interest.]

(6) [(f)] An O.T.R./L. or a C.O.T.R./L. shall not permit another person to use his [or her] license for any purpose;

(7) [(g)] An O.T.R./L. or a C.O.T.R./L. shall not abuse alcohol or any controlled substance while engaged [obtain, possess, or attempt to obtain or possess a controlled substance without lawful authority, nor shall an O.T.R./L. or a C.O.T.R./L. sell, prescribe, give away, or administer controlled substances] in the practice of occupational therapy;

(8) [(h)] An O.T.R./L. or a C.O.T.R./L. shall not verbally or physically abuse a patient;

(9) [(i)] An O.T.R./L. or a C.O.T.R./L. shall not engage in false or misleading advertising, betrayal of a professional confidence, or falsification of patients' records;

(10) [(j)] An O.T.R./L. or a C.O.T.R./L. shall report a change of name or address to the board within thirty (30) days after a change of name or address occurs;

[(k) An O.T.R./L. or a C.O.T.R./L. shall not submit a false report of continuing education or fail to submit the annual report on continuing education.]

(11) [(l)] An O.T.R./L. or a C.O.T.A./L. shall notify the board within thirty (30) days after being adjudged guilty of malpractice by a court of competent jurisdiction; [occurrence of any judgment or settlement of a malpractice claim or action.]

(12) [(m)] An O.T.R./L. or a C.O.T.A./L. shall comply with any subpoena issued by the board; and

(13) [(n)] An O.T.R./L. or a C.O.T.A./L. shall report to the board any violation of the Act or these administrative regulations.

Section 2. The following code of ethics consists of general guidelines for occupational therapy practice. The code of ethics shall be as follows:

(1) [(3) Unethical conduct as used in 201 KAR 28:140 Section 1(1)(b) is defined as violation of any of the following provisions:

(a)] An O.T.R./L. or a C.O.T.A./L. shall be [is] responsible for providing services without regard to race, creed, national origin, sex, age, handicap, disease [;] entity, social status, financial status or religious affiliation;

(2) [(b)] An O.T.R./L. or a C.O.T.A./L. shall inform those people served of the nature and potential outcomes of treatment and shall respect the right of potential recipients of service to refuse treatment;

(3) [(c)] An O.T.R./L. or a C.O.T.A./L. shall inform subjects involved in education or research activities of the potential outcome of those activities;

(4) [(d)] An O.T.R./L. or C.O.T.A./L. shall include those people served in the treatment planning process;

(5) [(e)] An O.T.R./L. or a C.O.T.A./L. shall maintain goal-directed and objective relationships with all people served;

(6) [(f)] An O.T.R./L. or a C.O.T.A./L. shall protect the confidential nature of information gained from educational, practice, and investigational activities unless sharing **the** [such] information is necessary to protect the well-being of a third party;

(7) [(g)] An O.T.R./L. or a C.O.T.A./L. shall take all reasonable precautions to avoid harm to the recipient of services or detriment to the recipient's property;

(8) [(h)] An O.T.R./L. or a C.O.T.A./L. shall establish fees, based on cost analysis, that are commensurate with services rendered;

(9) [(i)] An O.T.R./L. or a C.O.T.A./L. shall hold the appropriate credentials for providing service;

(10) [(j)] An O.T.R./L. or a C.O.T.A./L. shall function within the parameters of his [or her] competence and the standards of the profession;

(11) An O.T.R./L. or a C.O.T.A./L. shall actively maintain high standards of professional competence;

(12) [(k)] An O.T.R./L. or a C.O.T.A./L. shall refer clients to other service providers or consult with other service providers when additional knowledge and expertise is required;

(13) [(l)] An O.T.R./L. or a C.O.T.A./L. shall be acquainted with applicable local, state, federal, and institutional rules and shall function accordingly;

(14) [(m)] An O.T.R./L. or a C.O.T.A./L. shall inform employers, employees and colleagues about those laws and policies that apply to the profession of occupational therapy;

(15) [(n)] An O.T.R./L. or a C.O.T.A./L. shall require those whom they supervise to adhere to ethical standards of conduct;

(16) [(o)] An O.T.R./L. or a C.O.T.A./L. shall accurately record and report client information;

(17) [(p)] An O.T.R./L. or a C.O.T.A./L. shall accurately represent his or her competence and training to the public;

(18) [(q)] An O.T.R./L. or a C.O.T.A./L. shall not use or participate in the use of any form of communication that contains a false, fraudulent, deceptive, or unfair statement or claim;

(19) [(r)] An O.T.R./L. or a C.O.T.A./L. shall report any illegal, incompetent or unethical practice to the appropriate authority;

(20) [(s)] An O.T.R./L. or a C.O.T.A./L. shall not disclose privileged information when participating in reviews of peers, programs, or systems;

(21) [(t)] An O.T.R./L. or a C.O.T.A./L. who employs or supervises colleagues shall provide appropriate supervision; and

(22) [(u)] An O.T.R./L. or a C.O.T.A./L. shall recognize the contributions of colleagues when disseminating professional information.

[Section 2. Sanctions. (1) After a hearing, as provided under 201 KAR 28:150 and 201 KAR 28:160, the board may, in its discretion, revoke or suspend a license for such period of time as the board believes to be warranted by the facts and circumstances of the violation. Such findings and determinations shall be rendered in accordance with the provisions of 201 KAR 28:160.

(2) After a hearing, as provided under 201 KAR 28:150 and 201 KAR 28:160, the board may, in lieu of revoking or suspending a license, place the licensee on probation for a period not to exceed one (1) year, except that if the adjudication of the violation is the second such adjudication within five (5) years, the licensee shall not be entitled to probation.

Section 3. Reinstatement. (1) A suspended license shall be reinstated upon the filing of an application for reinstatement by the

~~licensee and a determination by the board that the period of suspension has expired and, if applicable, that the licensee has renewed his license in accordance with the provisions of 201 KAR 28:090.~~

~~(2)(a) A revoked license shall only be reinstated if the applicant has fully complied with all of the provisions of 201 KAR 28:060.~~

~~(b) An individual whose license has been revoked may not apply for reinstatement under the provisions of this regulation for a period of one (1) year from the entry of the order of the board or, if the decision is appealed, from the date the appeal is finally resolved or an endorsement of finality is entered by the appropriate appellate court. Hearings upon application for reinstatement shall be held in accordance with the provisions of 201 KAR 28:160.~~]

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GENERAL GOVERNMENT CABINET
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201 KAR 28:150. Disciplinary proceedings.

RELATES TO: KRS 319A.190
STATUTORY AUTHORITY: KRS 319A.070(3), 319A.190
NECESSITY AND FUNCTION: KRS Chapter 319A authorizes [~~, in pertinent parts, requires~~] the board to promulgate administrative regulations establishing a procedure by which the board will institute actions against an O.T.R./L. [~~L.O.T.R.~~] or a C.O.T.A./L. [~~L.O.T.A.~~] for violation of the Act, and the administrative regulations promulgated thereto or for professional misconduct. This administrative regulation sets forth the procedure and process by which such complaints shall be instituted.

Section 1. Definitions. The following definitions, in conjunction with the provisions of 201 KAR 28:010, shall apply to this administrative regulation as well as 201 KAR 28:160:

(1) "Chairman" means the chairman of the board.

(2) "Investigative assistant" means an appropriately licensed individual designated by the board to assist the board's attorney in the investigation of a complaint or an investigator employed by the Attorney General. [~~"Committee" means the L.O.T.R. or the L.O.T.A. review advisory committee appointed by the board, unless otherwise indicated from the context.~~]

(3) "Complaint" [~~"Board" means the Kentucky Occupational Therapy Board.~~

~~(4) "Grievance"~~] means any written allegation [~~in whatever form~~] alleging misconduct which might constitute a violation of KRS Chapter 319A or the administrative regulations promulgated thereunder by a licensed individual or other person [~~L.O.T.R. or a L.O.T.A~~].

(4) [~~(5)~~] "Charge" means a specific allegation contained in a formal complaint [~~any document~~] issued by the board [~~or its committees~~] alleging a violation of a specified provision of KRS Chapter 319A [~~the Kentucky Occupational Therapy Act~~] or the administrative regulations promulgated thereunder.

(5) "Formal [~~(6) "~~] complaint" means a formal administrative pleading authorized by the board which sets forth charges against a licensed individual or other person [~~L.O.T.R. or a L.O.T.A., the relief requested,~~] and commences a formal disciplinary proceeding.

(6) [~~(7)~~] "Hearing officer" means the person designated and given authority by the board to preside over all proceedings pursuant to the issuance of any formal complaint.

(7) [~~(8)~~] "Informal proceedings" means proceedings instituted at any stage of the disciplinary process with the intent of reaching an informal dispensation of any matter without further recourse to formal disciplinary procedures.

Section 2. Reception of Complaints [~~Grievances; Investigations~~]. (1) Complaints [~~Grievances~~] may be submitted by an individual, organization or entity. Complaints shall be in writing and shall be signed by the person offering the complaint. The board may also file a complaint based on information in its possession. [~~The board shall approve a written form upon which grievances may be made and any party submitting a grievance shall be required to complete the form and shall give an affidavit acknowledging the truth and veracity to the best of affiant's knowledge and belief of the information contained in the grievance.~~]

(2) Upon receipt of a complaint, a copy of the complaint shall be sent to the board's attorney for an initial review and preliminary recommendation of subsequent action to the board. A copy of the complaint shall also be sent to the [~~licensed~~] individual named in the complaint along with a request for that individual's response to the complaint. The response of the individual shall be required for the next regularly scheduled meeting of the board except that the individual shall be allowed a period of twenty (20) days from the date of receipt to make a response. [~~All grievances shall be investigated as necessary by the committee unless the circumstances of a particular grievance make it impossible for the committee to timely review a grievance. The committee shall have the authority to direct any investigation and shall possess any and all powers possessed by the board in regard to investigations. The committee shall further be empowered to request the attendance of any person at any meeting of the committee in regard to the investigation of any grievance or consideration of any disciplinary matter. The failure, without good cause, of any L.O.T.R. or L.O.T.A. to appear before the committee when requested shall be considered unprofessional conduct.~~

~~(3) The committee shall be empowered to request compliance with the requirements of KRS 319A.010 et seq. and may pursue investigations on its own initiative in regard to acts of noncompliance or any other perceived violation of the Act including but not limited to professional misconduct and unauthorized practice of occupational therapy without a license.~~]

Section 3. Preliminary Recommendations and Initial Board Review. [~~Reports and Recommendations; Petitions.~~] (1) After the receipt of a complaint and the period for the individual's response has concluded, the board shall consider the preliminary recommendation of the board's attorney, the individual's response, and any other relevant material available to the board in the initial review of the complaint. The determination that the board makes at this point is whether or not there is enough evidence to warrant a formal investigation.

(2) When in the opinion of the board [~~committee~~] a complaint [~~grievance~~] does not warrant the formal investigation [~~issuance~~] of a complaint against an individual [~~L.O.T.R. or a L.O.T.A.~~], the board [~~committee~~] shall notify both the complaining party and the individual of the outcome of the complaint. [~~submit a written report to the board briefly denoting the committee's findings and recommending an appropriate course of action.~~]

(3) [~~(2)~~] When in the opinion of the board [~~committee~~] a complaint [~~grievance~~] warrants the formal investigation [~~issuance~~] of a complaint against either a licensed individual or a person who is practicing occupational therapy without a license, [~~L.O.T.R. or a L.O.T.A.,~~] the board [~~committee~~] shall authorize its attorney and a designated investigative assistant to investigate the matter and report their findings and recommendations to the board at their earliest opportunity. [~~cause a complaint to be prepared together with at petition requesting a hearing, signed by the chairman of the committee, stating the committee's belief that the charges are based upon reliable information and requesting the board to authorize the issuance of the complaint.~~

~~(3) When in the opinion of the chairman a grievance warrants the issuance of a complaint against a L.O.T.R. or a L.O.T.A. and circumstances do not allow the timely review of the grievance by the~~

~~committee, the chairman shall cause a complaint to be prepared together with a petition requesting a hearing, signed by the chairman stating the chairman's belief that the charges are based upon reliable information and requesting the board to authorize the issuance of the complaint.~~

~~(4) When in the opinion of the committee a grievance warrants the issuance of a complaint against a person who is practicing occupational therapy without a license, the committee shall cause a complaint to be prepared together with a petition requesting a hearing, signed by the chairman of the committee, stating the committee's belief that the charges are based upon reliable information and requesting the board to authorize the issuance of the complaint. Such complaint shall be forwarded to the county attorney of the county of residence of the person allegedly practicing occupational therapy without a license with a request that appropriate action be taken under KRS 319A.990.~~

~~(5) Nothing in this section shall be construed to limit the board's power to deny a license to any applicant without a prior hearing upon a finding that the applicant has violated any provision of the Act.~~]

Section 4. Results of Formal Investigation; Board Decision on Hearing. [~~Complaints.~~] (1) Upon completion of the formal investigation, the board's attorney or the investigative assistant shall report to the board their findings and recommendations as to the proper disposition of the complaint. The determination that the board makes at this point is whether or not there is enough evidence to believe that a violation of the law or administrative regulations may have occurred and that a hearing should be held. [~~The complaint shall be signed by the party petitioning the board for its issuance and shall be dated. The complaint shall be styled in regard to the matter of the license to practice in the Commonwealth of Kentucky held by the named L.O.T.R. or L.O.T.A., shall state the relief requested of the board, and shall be designated by the secretary of the board with an appropriate case number.~~]

(2) When in the opinion of the board a complaint does not warrant the issuance of a formal complaint and the holding of a hearing, the complaint shall be dismissed or other appropriate action taken. The board shall notify both the complaining party and the individual of the outcome of the complaint. [~~The complaint shall set forth the board's jurisdiction in regard to the subject matter of the complaint and shall further set forth, in numerical paragraphs, sufficient information to apprise the named L.O.T.R. or L.O.T.A. of the general nature of the charges.~~]

(3) When in the opinion of the board a complaint warrants the issuance of a formal complaint, the board shall cause a complaint to be prepared stating clearly the charge or charges to be considered at the hearing. The formal complaint shall be signed by the chairman and served upon the individual as required by Section 6 of this administrative regulation.

(4) When in the opinion of the board a complaint warrants the issuance of a formal complaint against a person who is practicing occupational therapy without a license, the board shall cause a complaint to be prepared and signed by the chairman of the board, stating the board's belief the charges are based upon reliable information. **The** [~~Such~~] complaint shall be forwarded to the appropriate county attorney with a request that appropriate action be taken under KRS 319A.990. The board may also initiate action in Franklin Circuit Court for injunctive relief to stop the unauthorized practice of occupational therapy.

Section 5. Settlement by Informal Proceedings; Letter of Admonishment. [~~Authorization of Complaint by Board; Orders to Respond.~~] (1) The board, through counsel may, at any time during this process, enter into informal proceedings with the individual who is the subject of the complaint for the purpose of appropriately dispensing with the matter. Any agreed order or settlement reached through this process shall be approved by the board and signed by the individual who is the subject of the complaint and the chairman of the board. [~~Upon being presented with a petition requesting the issuance of a complaint, the board shall, within sixty (60) days, grant or deny the petition. If the petition is granted, the board shall issue an order and summons authorizing the complaint's issuance, directing the charged L.O.T.R. or L.O.T.A. to respond within thirty (30) days after receiving notice of the complaint, and informing the L.O.T.R. or the L.O.T.A. that failure to respond shall be taken by the board as an admission of the charges and the relief in the complaint shall be summarily imposed.~~]

(2) The board may, at any time during this process, issue a letter of admonishment to the individual who is named in the complaint as a means of resolving the complaint. **The** [~~Such~~] action may be taken if it is determined by the board that this is an appropriate method of dispensing with the complaint. Such letter of admonishment shall be sent to the individual with a copy placed in the individual's permanent file. Within thirty (30) days of the date of the letter, the individual shall have the right to file a written response to the letter and have it attached to the letter of admonishment and placed in the permanent file. The individual shall also, within thirty (30) days of the date of the letter, have the right to appeal the letter of admonishment and be granted a full hearing on the complaint. If this appeal is requested, the board shall immediately file a formal complaint in regard to the matter and set a date for a hearing. [~~If the board denies a petition, the board shall return the complaint to the committee, with or without directions as to the disposal of the complaint.~~]

~~(3) The board may, in its discretion, grant a petition only in part and may modify a requested complaint prior to authorizing its issuance.~~]

Section 6. Notice and Service of Process. (1) Any notice required by the Act or this administrative regulation shall be in writing, dated and signed by the chairman of the board [~~appropriate person~~].

(2) Service of notice and other process shall be made by hand-delivery or delivery by certified mail, return receipt requested, to the individual's [~~L.O.T.R.'s or the L.O.T.A.'s~~] last known address of which the board has record or, if known, by such service on the named individual's [~~L.O.T.R.'s or L.O.T.A.'s~~] attorney of record, if appropriate. Refusal of service if by certified mail; or avoidance of service if hand-delivered [~~or any failure of the named L.O.T.R. or L.O.T.A. to receive actual notice after execution of the prescribed service~~] shall not prevent the board from pursuing proceedings as may be appropriate.

(3) When notice of the initial date for the administrative hearing is given by either the board or the hearing officer, **the** [~~such~~] notice shall be sent to the appropriate person at least twenty (20) days prior to the date of the hearing.

CONSTANCE HEROLD, Chairman
APPROVED BY AGENCY: December 6, 1993
FILED WITH LRC: December 7, 1993 at 9 a.m.

GENERAL GOVERNMENT CABINET
Kentucky Occupational Therapy Board
(Amended After Hearing)

201 KAR 28:160. Administrative hearings.

RELATES TO: KRS 319A.190, 319A.200
STATUTORY AUTHORITY: KRS 319A.070(3), 319A.190
NECESSITY AND FUNCTION: KRS Chapter 319A and [~~pertinent parts of~~] KRS 319A.190 provide for promulgation of administrative regulations governing the conduct of administrative hearings authorized by the Act. This administrative regulation sets forth the procedure by which such hearings are to be conducted.

Section 1. Composition of the Board for Purposes of a Hearing. (1) Disciplinary actions may be heard by a quorum of the board members eligible to hear that particular case, the board's designated hearing officer, or both.

(2) The board may appoint a hearing officer to preside over the hearing, conduct all prehearing activities, prepare findings of fact and conclusions of law at the direction of the board, and provide legal advice to the board.

(3) A board member who has participated in the investigation of a disciplinary action or who has personal knowledge of the facts giving rise to a disciplinary action shall not sit as a member of the board hearing that particular action and shall not be considered an eligible member for purposes of determining a quorum.

(4) Staff members of the board, legal counsel for the board and a court stenographer may also be present for the hearing.

Section 2. Rights of the Licensee or Applicant. The licensee or applicant shall have the right to be present and to be heard at the hearing, to be represented by legal counsel, to present evidence, to cross-examine witnesses presented by the board, and to make both opening and closing statements. The licensee or applicant shall also have the right to have subpoenas issued in accordance with KRS 319A.070(2).

Section 3. Prehearing Disclosure of Evidence. (1) By the board. The names, addresses, and phone numbers of witnesses expected to be called by the board shall be made available upon request of the licensee or applicant. Copies of documentary evidence may be obtained upon the payment of a reasonable charge therefor, except documents protected from disclosure by state or federal law. Nothing in this section shall be construed as giving the licensee or applicant the right to examine or copy the personal notes, observations, or conclusions of the board's investigators nor shall it be construed as allowing access to the work product of legal counsel for the board. The licensee or applicant shall also be permitted to examine any items of tangible evidence in the possession of the board.

(2) By the licensee or applicant. At least ten (10) days prior to the scheduled hearing date the licensee or applicant shall furnish to the investigator or legal counsel for the board copies of any documents which the licensee or applicant intends to introduce at the hearing, and a list of the names, addresses, and home and work telephone numbers of any witnesses to be presented to the board by the licensee or applicant. The licensee or applicant shall also produce for inspection any items of tangible evidence within his possession or control which he intends to introduce at the hearing.

(3) Written response. At least ten (10) days prior to the scheduled hearing date, the licensee or applicant shall also file with the board a sworn (under oath) written response to the specific allegations contained in the notice of charges. Allegations not properly answered shall be deemed admitted. The board may for good cause permit the late filing of a response.

(4) Sanctions for failure to comply with prehearing disclosure. Should a party fail to comply with this section the board hearing the disciplinary action may refuse to allow into evidence such items or testimony as have not been disclosed, may continue the action to allow the opposing party a fair opportunity to meet the new evidence, or may make [~~such~~] other orders as it deems appropriate.

(5) Continuing duty to disclose. After disclosure has been completed, each party shall remain under an obligation to disclose any new or additional items of evidence which the party intends to introduce or witnesses the party intends to have testify. [~~Such~~] Additional disclosure shall take place as soon as practicable. Failure to disclose may result in the exclusion of the new evidence or testimony from the hearing.

Section 4. Order of Proceeding. (1) The hearing officer or presiding officer shall call the hearing to order and shall identify the parties to the action and the persons present and shall read the letter of notice and charges. The hearing officer shall then ask the parties to state any objections or motions. The hearing officer shall rule upon any objections or motions, subject to being overridden by a majority vote of the members of the board. Opening statements shall then be made, with the attorney for the board proceeding first. Either side may waive opening statement.

(2) The taking of proof shall commence with the calling of witnesses on behalf of the board. Such witnesses shall be examined first by the attorney for the board, then by the licensee or applicant or that person's attorney, and finally by members of the board. Rebuttal examination of witnesses shall proceed in the same order. Documents or other items may be introduced into evidence as appropriate.

(3) Upon conclusion of the case for the board, the licensee or applicant shall call its witnesses. **The** [~~Such~~] witnesses shall be examined first by the licensee or applicant or that person's attorney, then by the attorney for the board, and finally by the members of the board. Rebuttal examination of those witnesses shall proceed in the same order. Again, documents or other evidence may be introduced as appropriate.

(4) At the conclusion of the proof, the parties shall be afforded the opportunity to make a closing statement, with the attorney for the board always proceeding last. The hearing officer may impose reasonable limitations upon the time allowed for opening and closing statements.

(5) The hearing officer shall also be responsible for enforcing the general rules of conduct and decorum and expediting the hearing by keeping the testimony and exhibits relevant to the case.

Section 5. Rules of Evidence. (1) The board shall not be bound by the technical rules of evidence. The board may receive any evidence which it considers to be reliable, including testimony which would be hearsay if presented in a court of law. Documentary evidence may be admitted in the form of copies or excerpts, and need be authenticated only to the extent that the board is satisfied of its genuineness and accuracy. Tangible items may be received into evidence without the necessity of establishing a technical legal chain of custody so long as the board is satisfied that the item is what it is represented to be and that it is in substantially the same condition as it was at the time of the events under consideration.

(2) The board retains the discretion to exclude any evidence which it considers to be unreliable, incompetent, irrelevant, immaterial or unduly repetitious. Rulings on objections to evidence shall be made by the hearing officer but may be overridden by a majority vote of the eligible members of the board.

Section 6. Decisions by the Board. (1) Upon the conclusion of the hearing, the board shall retire into closed session for the purpose of deliberations.

(2) At the conclusion of the board's deliberations it shall propose an order based upon the evidence presented. The hearing officer shall draft a proposed order including findings of fact and conclusions of law consistent with the board's deliberations as well as a recommended order to be submitted to the full board.

Section 7. Final Approval by the Board. The board, at its next meeting, or as soon thereafter as may be arranged, shall review the proposed order and consider it for final approval.

Section 8. Continuances; Proceedings in Absentia. It is the policy of the board not to postpone cases which have been scheduled for hearing absent good cause. A request by a licensee or applicant for a continuance may be considered if communicated to the staff reasonably in advance of the scheduled hearing date and based upon good cause. The decision whether to grant a continuance shall be made by the hearing officer or chairman of the board. However, the burden is upon the licensee or applicant to be present at a scheduled

hearing. Failure to appear at a scheduled hearing for which a continuance has not been granted in advance shall be deemed a waiver of the right to appear and the hearing shall be held as scheduled.

~~[Section 1. Procedure. (1)(a) The board shall appoint a hearing officer who will be empowered to preside at any and all proceedings to issue subpoenas, to rule upon all motions and objections, to prepare and submit proposed findings of fact, conclusions of law and disciplinary measures to the board, and to perform any other act necessary to the proper conduct of the proceedings.~~

~~(b) If in the discretion of the board it is determined that the case is of sufficient complexity and that the service of an attorney is needed, the board shall appoint an attorney who shall prosecute the complaint before the hearing officer; otherwise the board shall appoint a member of the committee to prosecute the complaint.~~

~~(2) Pleadings shall be in any form provided that all pleadings must be legible, dated, and signed by the offering party. The original of all pleadings must be filed with the executive director or secretary for entry into the official record and copies must be served on the hearing officer, the opposing party, and any other person who might be designated by the hearing officer.~~

~~(3) Upon motion of either party or upon the initiative of the hearing officer, a prehearing conference may be held. The prehearing conference shall be the forum for consideration of any matter properly before the hearing officer, including all motions, discovery, stipulations, identification of issues, dates of future proceedings, and objections.~~

~~(4)(a) Either party may at any time after the issuance of a complaint move the hearing officer to order that discovery from the other party be allowed, which shall be limited to the following methods:~~

~~1. Oral depositions;~~

~~2. Request for more definite statement;~~

~~3. Request for production of names of witnesses, documents and other demonstrative evidence; and~~

~~4. Request for a brief synopsis of the testimony expected to be given by any expert witness.~~

~~(b) The hearing officer may limit or allow discovery of any matter relevant to the issues and may issue protective orders as necessary. Material which is privileged or deemed confidential under the laws of the Commonwealth or which constitutes an attorney's work product shall not be discoverable.~~

~~(c) Depositions, upon motion and upon good reason for the nonavailability of the deponent as a witness, may be used in lieu of the witness' testimony.~~

~~Section 2. Hearings. (1) At the hearing the defendant has the right to be present and to be represented by counsel. The hearing officer may or may not wish to follow formal rules of evidence, but the hearing officer may exclude irrelevant or repetitious evidence. The hearing may include the calling of witnesses and the production of pertinent documents. Testimony shall be under oath or affirmation and shall be recorded. All documents accepted by the hearing officer, including the investigative file, shall be made part of the record of the hearing.~~

~~(2)(a) The hearing officer shall be charged with the responsibility of compiling a written summary of the proceedings which shall contain all evidence introduced at the hearing and all pleas, motions, objections, responses, rulings, and other legal documents which the hearing officer deems properly part of the record.~~

~~(b) Transcripts of the proceedings shall not be prepared unless requested in writing by either of the parties. Any person or other interested party requesting a transcript shall be responsible for the cost of the transcript and shall make suitable arrangements with the court reporter for payment for such transcript or for copies of same.~~

~~Section 3. Hearing Officer's Proposed Findings, Conclusions, and Recommendations. (1) The hearing officer shall present the record, proposed findings of fact, conclusions of law, and recommendations to the chairman for deliberation by the board. The hearing officer shall serve a copy of such findings, conclusions, and recommendations on all parties or if represented by counsel, upon the parties' attorney, at least thirty (30) days from the date of the hearing, or if a transcript is requested, from the date the court reporter certified that the transcript is complete. All parties shall have the right to file exceptions to the hearing officer's findings, conclusions, and recommendations ten (10) days from the entry of the hearing officer's report.~~

~~(2) Any party to the proceeding may move the board to allow briefs to be filed with the board prior to the board's final determination. The hearing officer may grant the motion and establish a briefing schedule if the hearing officer believes that such a procedure would substantially aid the board in its deliberations. Briefs shall not exceed ten (10) pages in length unless otherwise allowed by the hearing officer.~~

~~(3) Oral argument. Any party to the proceeding may move the board to allow oral argument before the board prior to the board's final determination. The board may order oral arguments on its own initiative.~~

~~Section 4. Board's Findings of Fact, Conclusions of Law, and Final Order, Remand. Within sixty (60) days from the entry of the hearing officer's findings, conclusions, and recommendations, the board shall convene to consider the hearing officer's report. At the conclusion of its deliberations the board may adopt the hearing officer's proposed findings, conclusions, and recommendations of action in whole or in part or may reject them and prepare its own. The board shall enter a final order dated and signed by the chairman of the board stating its ultimate determination. Prior to, during or subsequent to any deliberations the board may remand the matter to the hearing officer for further proceedings as directed.~~

~~Section 5. Appeals. (1) Any person aggrieved by the final decision of the board may appeal, in accordance with KRS 319A.200, the board's determination to the Franklin Circuit Court. Such appeals must be filed with the Franklin Circuit Court within thirty (30) days of the entry of the board's final decision, and shall designate the board as the appellee in the appeal. If a transcript is requested, the aggrieved party shall pay for the preparation of the transcript and shall make suitable arrangements with the court reporter at the time the request for a transcript is made.~~

~~(2) All appeals shall be considered by the Franklin Circuit Court in accordance with the provisions of KRS 319A.200.]~~

CONSTANCE HEROLD, Chairman
APPROVED BY AGENCY: December 6, 1993
FILED WITH LRC: December 7, 1993 at 9 a.m.

NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION CABINET
Department for Environmental Protection
Division of Waste Management
(Amended After Hearing)

401 KAR 31:010. General provisions for hazardous wastes.

RELATES TO: KRS 224.01, 224.40, 224.43, 224.46, 224.99
STATUTORY AUTHORITY: KRS 224.10-100, 224.46-510(3)
NECESSITY AND FUNCTION: KRS 224.46-510(3) requires the [~~Natural Resources and Environmental Protection~~] cabinet to identify the characteristics of and to list hazardous wastes. This chapter identifies and lists hazardous waste. This administrative regulation establishes the general provisions necessary for identification and listing of a hazardous waste.

Section 1. Purpose and Scope. (1) This chapter identifies those wastes which are subject to administrative regulation as hazardous wastes under 401 KAR Chapters 32 to [~~through~~] 40 and which are subject to the notification and permitting requirements of KRS 224.01, 224.40, 224.43, and 224.46. In this chapter:

(a) This administrative regulation defines the terms "waste" and "hazardous waste," identifies those wastes which are excluded from administrative regulation under 401 KAR Chapters 32 to [~~through~~] 40 and establishes special management requirements for hazardous waste produced by limited quantity generators and hazardous waste which is recycled.

(b) 401 KAR 31:020 sets forth the criteria used by the cabinet to identify characteristics of hazardous waste and to list particular hazardous wastes.

(c) 401 KAR 31:030 identifies characteristics of hazardous waste.

(d) 401 KAR 31:040 lists particular hazardous wastes.

(2)(a) The definition of waste contained in this chapter applies only to wastes that are also hazardous for purposes of the administrative regulations implementing those provisions of KRS Chapter 224 relating to hazardous waste management. This chapter identifies only some of the materials which are hazardous wastes under KRS 224.01-400, 224.10-100(10), and 224.10-410. For example, it does not apply to materials (such as nonhazardous scrap, paper, textiles, or rubber) that are not otherwise hazardous wastes and that are recycled.

(b) This chapter identifies only some of the materials which are wastes and hazardous wastes for purposes of KRS 224.01-400, 224.10-100(10), and 224.10-410. A material which is not defined as a waste in this chapter, or is not a hazardous waste identified or listed in this chapter is still a waste and a hazardous waste for purposes of this administrative regulation if:

1. In the case of KRS 224.10-100(10), the cabinet has reason to believe that the material may be a waste within the meaning of KRS 224.10-010 and a hazardous waste within the meaning of KRS 224.10-010; or

2. In the case of KRS 224.10-410, the statutory elements are established.

(3) For the purposes of Sections 2, 6, 8 and 9 of this administrative regulation:

(a) A "spent material" is any material that has been used and as a result of contamination can no longer serve the purpose for which it was produced without processing;

(b) "Sludge" has the [~~same~~] meaning [~~used~~] in Section 1 of 401 KAR 30:010;

(c) A "by-product" is a material that is not one (1) of the primary products of a production process and is not solely or separately produced by the production process. Examples are process residues such as slags or distillation column bottoms. The term does not include a coproduct that is produced for the general public's use and is ordinarily used in the form it is produced by the process.

(d) A material is "reclaimed" if it is processed to recover a usable product, or if it is regenerated. Examples are recovery of lead values from spent batteries and regeneration of spent solvents.

(e) A material is "used or reused" if it is either:

1. Employed as an ingredient (including use as an intermediate) in an industrial process to make a product (for example, distillation bottoms from one (1) process used as feedstock in another process). However, a material shall not satisfy this condition if distinct components of the material are recovered as separate end products (as when metals are recovered from metal-containing secondary materials); or

2. Employed in a particular function or application as an effective substitute for a commercial product (for example, spent pickle liquor used as phosphorous precipitant and sludge conditioner in wastewater treatment).

(f) "Scrap metal" is bits and pieces of metal parts (for example, [~~e.g.,~~] bars, turnings, rods, sheets, or wire) or metal pieces that may be combined together with bolts or soldering (for example, [~~e.g.,~~] radiators, scrap automobiles, or railroad boxcars), which when worn or superfluous can be recycled.

(g) A material is "recycled" if it is used, reused, or reclaimed.

(h) A material is "accumulated speculatively" if it is accumulated before being recycled.

1. A material is not accumulated speculatively, if the person accumulating it can show:

a. That the material is potentially recyclable and has a feasible means of being recycled; and

b. That - during the calendar year (commencing on January 1) - the amount of material that is recycled, or transferred to a different site for recycling, equals at least seventy-five (75) percent by weight or volume of the amount of that material accumulated at the beginning of the calendar year (including any material accumulated from previous years).

2. In calculating the percentage of turnover, the seventy-five (75) percent requirement is to be applied to each material of the same type that is recycled in the same way. Materials accumulating in units that would be exempt from administrative regulation under Section 4(3) of this administrative regulation are not to be included in making the calculation. (Materials that are already defined as wastes also are not to be included in making the calculation.) Materials are no longer in this category once they are removed from accumulation for recycling.

Section 2. Definition of a Waste. (1)(a) A "waste" is any discarded material that is not excluded by Section 4(1) of this administrative regulation or that is not excluded by a variance granted under Section 1 or 2 of 401 KAR 30:080, or Section 8 or 9 of this administrative regulation.

(b) A "discarded material" is any material which is:

1. "Abandoned," as explained in subsection (2) of this section; or

2. "Recycled," as explained in subsection (3) of this section; or

3. Listed in subsection (4) of this section.

(2) Materials are waste if they are "abandoned" by being:

(a) Disposed of; or

(b) Burned or incinerated; or

(c) Accumulated, stored, or treated (but not recycled) before or in lieu of being abandoned by being disposed of, burned, or incinerated.

(3) The following materials are wastes if they are "recycled" - or accumulated, stored, or treated before recycling - as specified in paragraphs (a) to [~~through~~] (d) of this subsection.

(a) "Used in a manner constituting disposal."

1. Materials noted with a "(waste)" in column (1) of Table 1 in paragraph (e) of this subsection are wastes when they are:

a. Applied to or placed on the land in a manner that constitutes disposal; or

b. Used to produce products that are applied to or placed on the land or are otherwise contained in products that are applied to or placed on the land (in which case the product itself remains a waste).

2. However, commercial chemical products listed in Section 4 of 401 KAR 31:040 are not wastes if they are applied to the land and that is their ordinary manner of use.

(b) The following materials are "burned for energy recovery:"

1. Materials noted with a "(waste)" in column (2) of Table 1 in paragraph (e) of this subsection are wastes when they are:

a. Burned to recover energy;

b. Used to produce a fuel or are otherwise contained in fuels (in which cases the fuel itself remains a solid waste).

2. However, commercial chemical products listed in Section 4 of 401 KAR 31:040 are not wastes if they are themselves fuels.

(c) The following materials are "reclaimed." Materials noted with a "(waste)" in column (3) of Table 1 in paragraph (e) of this subsection are wastes when reclaimed.

(d) The following materials are "accumulated speculatively." Materials noted with a "(waste)" in column (4) of Table 1 in paragraph

(e) of this subsection are wastes when accumulated speculatively.

(e) The following Table 1 identifies materials which are wastes when "used in a manner constituting disposal," "burned for energy recovery," "reclaimed," or "accumulated speculatively." Materials noted with the word "(waste)" in Table 1 are considered to be wastes for the purposes of 401 KAR Chapters 32 to [~~through~~] 40 and KRS Chapter 224. Materials noted with a dash "-" in Table 1 are not considered to be a waste for the purposes of 401 KAR Chapters 32 to [~~through~~] 40 and KRS Chapter 224.

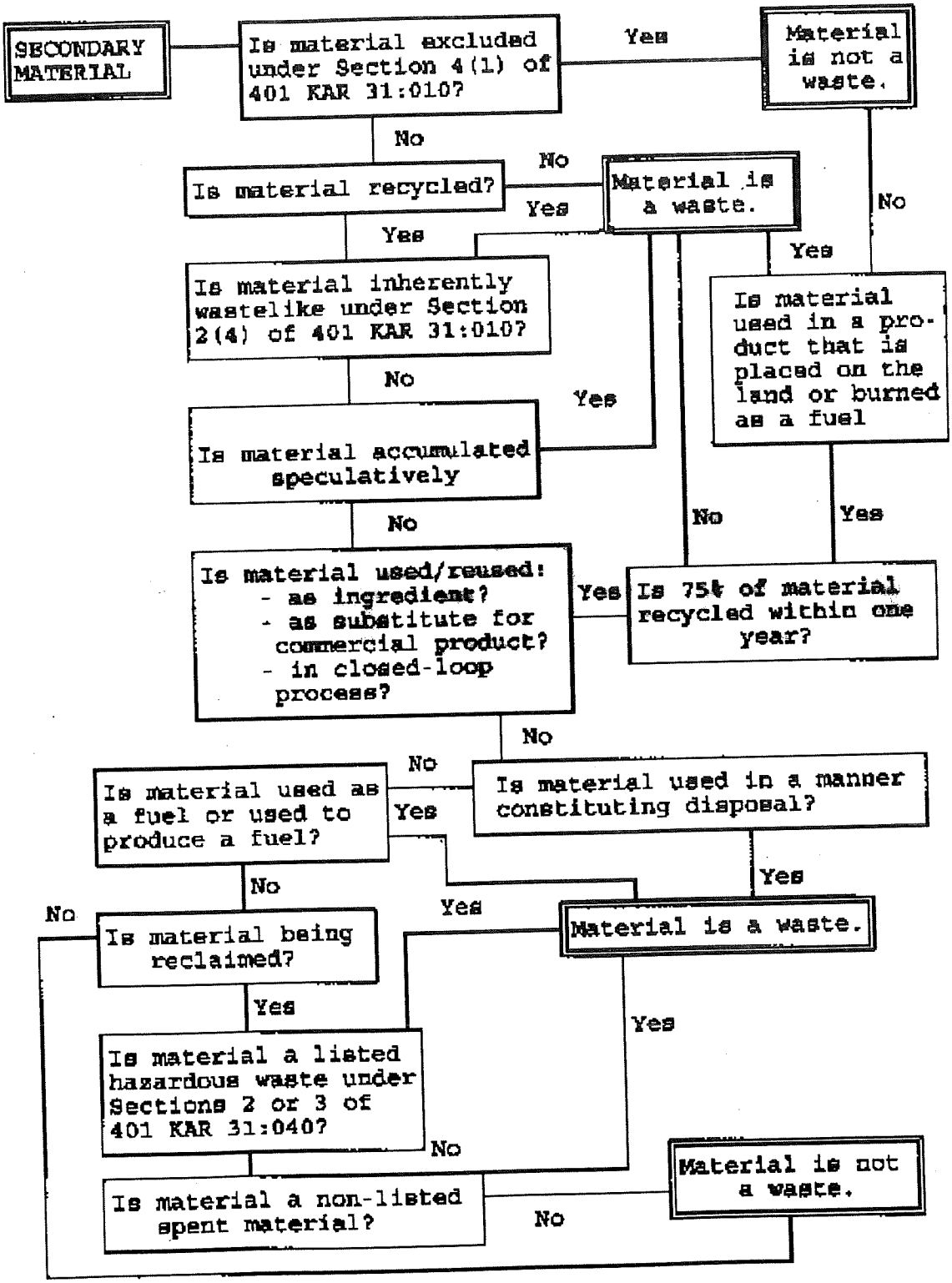
TABLE 1

	Use constituting disposal 401 KAR 31:010 Section 2(3)(a) (1)	Energy recovery/ fuel 401 KAR 31:010 Section 2(3)(b) (2)	Reclamation 401 KAR 31:010 Section 2(3)(c) (3)	Speculative accumulation 401 KAR 31:010 Section 2(3)(d) (4)
Spent materials	(waste)	(waste)	(waste)	(waste)
Sludges (listed in Sections 2 or 3 of 401 KAR 31:040)	(waste)	(waste)	(waste)	(waste)
Sludges exhibiting a characteristic of hazardous waste	(waste)	(waste)	-	(waste)
By-products (listed in Sections 2 or 3 of 401 KAR 31:040)	(waste)	(waste)	(waste)	(waste)
By-products exhibiting a characteristic of hazardous waste	(waste)	(waste)	-	(waste)
Commercial chemical products listed in Section 4 of 401 KAR 31:040	(waste)	(waste)	-	-
Scrap metal	(waste)	(waste)	(waste)	(waste)

NOTE - The terms "spent materials," "sludges," "by-products," and "scrap metal" are defined in Section 1 of this administrative regulation.

(f) The following Table 2 is a decision tree for deciding which secondary materials are wastes when recycled.

TABLE 2. DECISION TREE FOR DECIDING WHICH SECONDARY MATERIALS ARE WASTES WHEN RECYCLED



(4) The following materials are wastes when they are recycled in any manner:

(a) Hazardous Waste Numbers F020, F021 (unless used as an ingredient to make a product at the site of generation), F022, F023, F026, and F028 (chlorinated dioxins, chlorinated dibenzofurans and chlorinated phenols).

(b) Secondary materials fed to a halogen acid furnace that exhibit a characteristic of a hazardous waste or are listed as a hazardous waste as defined in 401 KAR 31:030 and 31:040, except for brominated material that meets the following criteria:

1. The material shall contain a bromine concentration of at least forty-five (45) percent; and

2. The material shall contain less than a total of one (1) percent of toxic organic compounds listed in 401 KAR 31:120; and

3. The material is processed continually on-site via direct conveyance (hard piping).

(c) [~~(b)~~] The cabinet shall use the following criteria to add wastes to that [~~the~~] list [~~in paragraph (a) of this subsection~~]:

1.a. The materials are ordinarily disposed of, burned, or incinerated; or

b. The materials contain toxic constituents listed in Section 1 of 401 KAR 31:170 and these constituents are not ordinarily found in raw materials or products for which the material substitute (or are found in raw materials or products in smaller concentrations) and are not used or reused during the recycling process; and

2. The material may pose a substantial hazard to human health and the environment when recycled.

(5) ["]Materials that are not wastes when recycled.["]

(a) Materials are not wastes when they can be shown to be recycled by being:

1. Used or reused as ingredients in an industrial process to make a product, provided the materials are not being reclaimed; or

2. Used or reused as effective substitutes for commercial products; or

3. Returned to the original process from which they are generated, without first being reclaimed. The material shall be returned as a substitute for raw material feedstock, and the process shall use raw materials as principal feedstocks.

(b) The following materials are wastes, even if the recycling involves use, reuse, or return to the original process (described in paragraph (a)1 to [~~through~~] 3 of this subsection):

1. Materials used in a manner constituting disposal, or used to produce products that are applied to the land; or

2. Materials burned for energy recovery, used to produce a fuel, or contained in fuels; or

3. Materials accumulated speculatively; or

4. Materials listed in subsection (4)(a) of this section.

(6) ["]Documentation of claims that materials are not wastes or are conditionally exempt from administrative regulation.["] Respondents in enforcement actions pursuant to 401 KAR Chapter 40, who raise a claim that a certain material is not waste, or is conditionally exempt from administrative regulation, shall demonstrate that there is a known market or disposition for the material, and that they meet the terms of the exclusion or exemption. In doing so, they shall provide appropriate documentation (such as contracts showing that a second person uses the material as an ingredient in a production process) to demonstrate that the material is not a waste, or is exempt from administrative regulation. In addition, owners or operators of facilities claiming that they actually are recycling materials shall show that they have the necessary equipment to do so.

Section 3. Definition of a Hazardous Waste. (1) A waste, as defined in Section 2 of this administrative regulation is a hazardous waste if:

(a) It is not excluded from administrative regulation as a hazardous waste under Section 4(2) of this administrative regulation; and

(b) It meets any of the following criteria:

1. It exhibits any of the characteristics of hazardous waste identified in 401 KAR 31:030 except that any mixture of a waste from the extraction, beneficiation, and processing of ores and minerals, excluded under Section 4 of this administrative regulation and any other waste exhibiting a characteristic of hazardous waste under 401 KAR Chapter 31 only if it exhibits a characteristic that would not have been exhibited by the excluded waste alone if such mixture had not occurred or if it continues to exhibit any of the characteristics exhibited by the nonexcluded wastes prior to mixture. Further, for the purposes of applying the toxicity characteristic leaching procedure to such mixtures, the mixture is also a hazardous waste if it exceeds the maximum concentration for any contaminant listed in Table I to Section 5 of 401 KAR 31:030 that would not have been exceeded by the excluded waste alone if the mixture had not occurred or if it continues to exceed the maximum concentration for any contaminant exceeded by the nonexempt waste prior to mixture.

2. It is listed in 401 KAR 31:040 and has not been excluded from the lists under 401 KAR 31:060 and 401 KAR 31:070.

3. It is a mixture of a solid waste and a hazardous waste that is listed in 401 KAR 31:040 solely because it exhibits one (1) or more of the characteristics of hazardous waste identified in 401 KAR 31:030, unless the resultant mixture no longer exhibits any characteristic of hazardous waste identified in 401 KAR 31:030 or unless the solid waste is excluded from regulation under Section 4(2)(g) of this administrative regulation and the resultant mixture no longer exhibits any characteristic of hazardous waste identified in 401 KAR 31:030 for which the hazardous waste listed in 401 KAR 31:040 was listed.

[~~3. It is a mixture of any waste and a hazardous waste that is listed in 401 KAR 31:040 solely because it exhibits one (1) or more of the characteristics of hazardous waste identified in 401 KAR 31:030, unless the resultant mixture no longer exhibits any characteristics of hazardous waste identified in 401 KAR 31:030.~~]

4. It is a mixture of any waste and one (1) or more hazardous wastes listed in 401 KAR 31:040 and has not been excluded from this paragraph under Sections 1 and 2 of 401 KAR 31:060; however, the following mixtures of wastes and hazardous wastes listed in 401 KAR 31:040 are not hazardous wastes (except by application of subparagraph 1 or 2 of this paragraph) if the generator can demonstrate that the mixture consists of waste water the discharge of which is subject to administrative regulation under either Section 402 or Section 307(b) of the CWA (including wastewater at facilities which have eliminated the discharge of wastewater) and:

a. One (1) or more of the following spent solvents listed in Section 2 of 401 KAR 31:040: carbon tetrachloride, tetrachloroethylene, or trichloroethylene provided that the maximum total weekly usage of these solvents (other than the amounts that can be demonstrated not to be discharged to wastewater) divided by the average weekly flow of wastewater into the headworks of the facility's wastewater treatment or pretreatment system does not exceed one (1) part per million; or

b. One (1) or more of the following spent solvents listed in Section 2 of 401 KAR 31:040; methylene chloride, 1,1,1-trichloroethane, chlorobenzene, o-dichlorobenzene, cresols, cresylic acid, nitrobenzene, toluene, methyl ethyl ketone, carbon disulfide, isobutanol, pyridine, or spent chlorofluorocarbon solvents provided that the maximum total weekly usage of these solvents (other than the amounts that can be demonstrated not to be discharged to wastewater) divided by the average weekly flow of wastewater into the headworks of the facility's wastewater treatment or pretreatment system does not exceed twenty-five (25) parts per million; or

c. One (1) of the following wastes listed in Section 3 of 401 KAR 31:040, heat exchanger bundle cleaning sludge from the petroleum refining industry (EPA Hazardous Waste No. K050); or

d. A discarded commercial chemical product, or chemical intermediate listed in Section 4 of 401 KAR 31:040, arising from minimal losses of these materials from manufacturing operations in which these materials are used as raw materials or are produced in

the manufacturing process. For purposes of this paragraph, minimal losses include those from normal material handling operations (for example, [e.g.,] spills from the unloading or transfer of materials from bins or other containers, leaks from pipes, valves, or other devices used to transfer materials); minor leaks of process equipment, storage tanks or containers; leaks from well-maintained pump packings and seals; sample purgings; relief device discharges; discharges from safety showers and rinsing and cleaning of personal safety equipment; and rinsate from empty containers or from containers that are rendered empty by that rinsing; or

e. Wastewater resulting from laboratory operations containing toxic (T) wastes listed in 401 KAR 31:040, provided that the annualized average flow of laboratory wastewater does not exceed one (1) percent of total wastewater flow into the headworks of the facility's wastewater treatment or pretreatment system, or provided the wastes' combined annualized average concentration does not exceed one (1) part per million in the headworks of the facility's wastewater treatment or pretreatment facility. Toxic (T) wastes used in laboratories that are demonstrated not to be discharged to wastewater are not to be included in this calculation.

(2) A waste which is not excluded from administrative regulation under subsection (1)[, paragraph] (a) of this section becomes a hazardous waste when any one (1) of the following events occur:

(a) In the case of a waste listed in 401 KAR 31:040 of this administrative regulation when the waste first meets the listing description set forth in 401 KAR 31:040;

(b) In the case of a mixture of [solid] waste (including wastes subject to the Atomic Energy Act) and one (1) or more hazardous wastes when a hazardous waste listed in 401 KAR 31:040 is first added to the waste; or

(c) In the case of any other waste (including a waste mixture or wastes subject to the Atomic Energy Act) when the waste exhibits any of the characteristics identified in 401 KAR 31:030.

(3) Unless and until it meets the criteria of subsection (4) of this section:

(a) A hazardous waste shall remain a hazardous waste.

(b)1. Except as otherwise provided in subparagraph 2 of this paragraph, any waste generated from the treatment, storage, or disposal of a hazardous waste, including any sludge, spill residue, ash, emission control dust, or leachate (but not including precipitation run-off) is a hazardous waste. (However, materials that are reclaimed from wastes and that are used beneficially are not wastes and hence are not hazardous wastes under this provision unless the reclaimed material is burned for energy recovery or used in a manner constituting disposal.)

2. The following wastes are not hazardous even though they are generated from the treatment, storage, or disposal of hazardous waste, unless they exhibit one (1) or more of the characteristics of hazardous waste:

a. Waste pickle liquor sludge generated by lime stabilization of spent pickle liquor from the iron and steel industry (SIC Codes 331 and 332).

b. Waste from burning any of the materials exempted from administrative regulation by Section 6(1)(c)5-9 of this administrative regulation.

c. Nonwastewater residues, such as slag, resulting from high temperature metals recovery (HTMR) processing of K061 waste, in units identified as rotary kilns, flame reactors, electric furnaces, plasma arc furnaces, slag reactors, rotary hearth and electric furnace combinations or industrial furnaces (as defined in 401 KAR 30:010) that are disposed in solid waste sites or facilities, provided that these residues meet the generic exclusion levels identified below for all constituents, and exhibit no characteristics of hazardous waste. Testing requirements shall be incorporated in a site or facility's waste analysis plan or a generator's self-implementing waste analysis plan; at a minimum, composite samples of residues shall be collected and analyzed quarterly and when the process or operation generating the waste changes. The generic exclusions levels are:

Constituent	Maximum for any single composite sample (mg/1)
Antimony	0.063
Arsenic	0.055
Barium	6.3
Beryllium	0.0063
Cadmium	0.032
Chromium (total)	0.33
Lead	0.095
Mercury	0.009
Nickel	0.63
Selenium	0.16
Silver	0.30
Thallium	0.013
Vanadium	1.26

For each shipment of K061 HTMR residues sent to a solid waste site or facility that meets the generic exclusion levels for all constituents, and does not exhibit any characteristic, a notification and certification shall be sent to the cabinet. The notification shall include the following information:

(i) The name and address of the solid waste site or facility receiving the waste shipment;

(ii) The EPA hazardous waste number and treatability group at the initial point of generation; and

(iii) Treatment standards applicable to the waste at the initial point of generation. The certification shall be signed by an authorized representative and shall state as follows:

I certify under penalty of law that the generic exclusion levels for all constituents have been met without impermissible dilution and that no characteristic of hazardous waste is exhibited. I am aware that there are significant penalties for submitting a false certification, including the possibility of fine and imprisonment.

(4) Any waste described in subsection (3) of this section is not a hazardous waste if it meets the following criteria:

(a) In the case of any waste, it does not exhibit any of the characteristics of hazardous waste identified in 401 KAR 31:030. (However, wastes that exhibit a characteristic at the point of generation may still be subject to the requirements of 401 KAR Chapter 38, even if they no longer exhibit a characteristic at the point of land disposal.)

(b) In the case of a waste which is a listed waste under 401 KAR 31:040, contains a waste listed under 401 KAR 31:040 or is derived from a waste listed in 401 KAR 31:040, it also has been excluded from Section 1(3) of 401 KAR 31:060 and 401 KAR 31:070.

Section 4. Exclusions. (1) The following materials are not wastes for the purpose of this chapter:

(a) Domestic sewage and any mixture of domestic sewage and other wastes that pass through a sewer system to a publicly-owned treatment works for treatment. "Domestic sewage" means untreated sanitary wastes that pass through a sewer system;

(b) Industrial wastewater discharges that are point source discharges subject to administrative regulation under Section 402 of the CWA, as amended; however, this exclusion applies only to the actual point source discharge. It does not exclude industrial wastewaters while they are being collected, stored, or treated before discharge, nor does it exclude sludges that are generated by industrial wastewater treatment;

(c) Irrigation return flows;

(d) Source, special nuclear or by-product material as defined by the Atomic Energy Act of 1954, as amended, 42 USC 2011 et seq., except as provided in Section 3 of this administrative regulation;

(e) Materials subjected to in situ mining techniques which are not

removed from the ground as part of the extraction process;

(f) Pulping liquors (that is, [i.e.,] black liquor) that are reclaimed in a pulping liquor recovery furnace and then reused in the pulping process, unless they are accumulated speculatively as defined in Section 1(3) of this administrative regulation.

(g) Spent sulfuric acid used to produce virgin sulfuric acid, unless it is accumulated speculatively as defined in Section 1(3) of this administrative regulation.

[~~(h) Mining overburden returned to the mine site; and~~

~~(i) Material from the extraction, beneficiation, and processing of ores and minerals (including coal), including phosphate rock and overburden from the mining of uranium ore.~~]

(h) [~~(j)~~] Secondary materials that are reclaimed and returned to the original process or processes in which they were generated where they are reused in the production process, provided:

1. Only tank storage is involved, and the entire process through completion of reclamation, is closed by being entirely connected with pipes or other comparable enclosed means of conveyance;

2. Reclamation does not involve controlled flame combustion (such as occurs in boilers, industrial furnaces, or incinerators);

3. The secondary materials are never accumulated in such tanks for over twelve (12) months without being reclaimed; and

4. The reclaimed material is not used to produce a fuel, or used to produce products that are used in a manner constituting disposal, as provided in 401 KAR Chapter 36.

(i)1. Spent wood preserving solutions that have been reclaimed and are reused for their original intended purpose; and

2. Wastewaters from the wood preserving process that have been reclaimed and are reused to treat wood.

(j) EPA Hazardous Waste No. K087, and any wastes from the coke byproducts processes that are hazardous only because they exhibit the toxicity characteristic specified in Section 5 of 401 KAR 31:030, when, subsequent to generation, these materials are recycled to coke ovens, to the tar recovery process as a feed stock to produce coal tar or are mixed with coal tar prior to the tar's sale or refining. This exclusion is conditioned on there being no land disposal of the wastes from the point they are generated to the point they are recycled to coke ovens or the tar refining process.

(k) Nonwastewater splash condenser dross residue from the treatment of K061 in high temperature metals recovery units, provided it is shipped in drums (if shipped) and not land disposed before recovery.

(2) Any waste which meets the requirements of this subsection is not a hazardous waste.

(a) Household waste, including household waste that has been collected, transported, stored, treated, disposed, recovered (for example, [e.g.,] refuse-derived fuel), or reused. "Household waste" means any waste material (including garbage, trash, and sanitary wastes in septic tanks) derived from households (including single and multiple residences, hotels and motels, bunkhouses, ranger stations, crew quarters, campgrounds, picnic grounds, and day-use recreation areas). A resource recovery facility managing municipal solid waste shall not be deemed to be treating, storing, disposing of, or otherwise managing hazardous wastes for the purposes of administrative regulation under the waste management administrative regulations, if the facility:

1. Receives and burns only:

a. Household waste (from single and multiple dwellings, hotels, motels, and other residential sources); and

b. Waste from commercial or industrial sources that does not contain hazardous waste; and

2. The facility does not accept hazardous wastes and the owner or operator of the facility has established contractual requirements or other appropriate notification or inspection procedures to assure that hazardous wastes are not received at or burned in the facility.

(b) Agricultural wastes generated by any of the following and which are returned to the soils as fertilizers:

1. The growing and harvesting of agricultural crops.

2. The raising of animals, including animal manures.

(c) Mining overburden returned to the mine site.

(d) Fly ash waste, bottom ash waste, slag waste, and flue gas emission control waste generated primarily from the combustion of coal or other fossil fuels, except as provided by Section 13 of 401 KAR 36:020 for facilities that burn or process hazardous waste.

(e) Drilling fluids, produced waters, and other wastes associated with the exploration, development, or production of crude oil, natural gas, or geothermal energy.

(f)1. Wastes which fail the test for the toxicity characteristic because chromium is present or are listed in 401 KAR 31:040 due to the presence of chromium, which do not fail the test for the toxicity characteristic for any other constituent or are not listed due to the presence of any other constituent, and which do not fail the test for any other characteristic, if it is shown by a waste generator or by waste generators that:

a. The chromium in the waste is exclusively (or nearly exclusively) trivalent chromium; and

b. The waste is generated from an industrial process which uses trivalent chromium exclusively (or nearly exclusively) and the process does not generate hexavalent chromium; and

c. The waste is typically and frequently managed in nonoxidizing environments.

2. Specific wastes which meet the standard in subparagraph 1a, b and c of this paragraph (so long as they do not fail the test for any other characteristic) are:

a. Chrome (blue) trimmings generated by the following subcategories of the leather tanning and finishing industry: hair pulp/chrome tan/retan/wet finish; hair save/chrome tan/retan/wet finish; retan/wet finish; no beam house; through-the-blue; and shearling.

b. Chrome (blue) shavings generated by the following subcategories of the leather tanning and finishing industry: hair pulp/chrome tan/retan/wet finish; hair save/chrome tan/retan/wet finish; retan/wet finish; no beam house; through-the-blue; and shearling.

c. Buffing dust generated by the following subcategories of the leather tanning and finishing industry: hair pulp/chrome tan/retan/wet finish; hair save/chrome tan/retan/wet finish; retan/wet finish; no beam house; through-the-blue.

d. Sewer screenings generated by the following subcategories of the leather tanning and finishing industry: hair pulp/chrome tan/retan/wet finish; hair save/chrome tan/retan/wet finish; retan/wet finish; no beam house; through-the-blue; and shearling.

e. Wastewater treatment sludges generated by the following subcategories of the leather tanning and finishing industry: hair pulp/chrome tan/retan/wet finish; hair save/chrome tan/retan/wet finish; retan/wet finish; no beam house; through-the-blue; and shearling.

f. Wastewater treatment sludges generated by the following subcategories of the leather tanning and finishing industry: hair pulp/chrome tan/retan/wet finish; hair save/chrome tan/retan/wet finish; and through-the-blue.

g. Waste scrap leather from the leather tanning industry, the shoe manufacturing industry, and other leather product manufacturing industries.

h. Wastewater treatment sludges from the production of TiO_2 pigment using chromium-bearing ores by the chloride process.

(g) Waste from the extraction, beneficiation, and processing of ores and minerals (including coal[)], [including] phosphate rock and overburden from the mining of uranium ore), except as provided by Section 13 of 401 KAR 36:020 for facilities that burn or process hazardous waste. For the purpose of this paragraph, beneficiation of ores and minerals is restricted to the following activities: crushing; grinding; washing; dissolution; crystallization; filtration; sorting; sizing; drying; sintering; pelletizing; briquetting; calcining to remove water or carbon dioxide; roasting, autoclaving, or chlorination in preparation for leaching (except where the roasting (or autoclaving, or chlorina-

tion)/leaching sequence produces a final or intermediate product that does not undergo further beneficiation or processing); gravity concentration; magnetic separation; electrostatic separation; flotation; ion exchange; solvent extraction; electrowinning; precipitation; amalgamation; and heap, dump, vat, tank and in situ leaching. For the purpose of this paragraph, waste from the processing of ores and minerals includes only the following wastes:

1. Slag from primary copper processing;
2. Slag from primary lead processing;
3. Red and brown muds from bauxite refining;
4. Phosphogypsum from phosphoric acid production;
5. Slag from elemental phosphorus production;
6. Gasifier ash from coal gasification;
7. Process wastewater from coal gasification;
8. Calcium sulfate wastewater treatment plant sludge from primary copper processing;
9. Slag tailings from primary copper processing;
10. Fluorogypsum from hydrofluoric acid production;
11. Process wastewater from hydrofluoric acid production;
12. Air pollution control dust or sludge from iron blast furnaces;
13. Iron blast furnace slag;
14. Treated residue from roasting or leaching of chrome ore;
15. Process wastewater from primary magnesium processing by the anhydrous process;
16. Process wastewater from phosphoric acid production;
17. Basic oxygen furnace and open hearth furnace air pollution control dust/sludge from carbon steel production;
18. Basic oxygen furnace and open hearth furnace slag from carbon steel production;
19. Chloride process waste solids from titanium tetrachloride production; and
20. Slag from primary zinc processing. [~~waste from the processing of ores and minerals does not include:~~

~~1. Acid plant blowdown slurry/sludge resulting from the thickening of blowdown slurry from primary copper production;~~

~~2. Surface impoundment solids contained in and dredged from surface impoundments at primary lead smelting facilities;~~

~~3. Sludge from treatment of process wastewater or acid plant blowdown from primary zinc production;~~

~~4. Spent potliners from primary aluminum reduction;~~

~~5. Emission control dust or sludge from ferrochromiumsilicon production;~~

~~6. Emission control dust or sludge from ferrochromium production.~~]

(h) Cement kiln dust waste except as provided by Section 13 of 401 KAR 36:020 for facilities that burn or process hazardous waste.

(i) Waste which consists of discarded wood or wood products which fails the test for the toxicity characteristic solely for arsenic and which is not a hazardous waste for any other reason [~~or reasons~~], if the waste is generated by persons who utilize the arsenical-treated wood and wood products for these materials' intended end use.

(j) Petroleum - contaminated media and debris that fail the test for the toxicity characteristic of 401 KAR 31:030 (hazardous waste codes D018 to [~~through~~] D043 only) and are subject to the corrective action administrative regulations under 401 KAR Chapter 42.

(k) Injected groundwater that is hazardous only because it exhibits the toxicity characteristic (Hazardous Waste Codes D018 to D043 only) in Section 5 of 401 KAR 31:030 that is reinjected through an underground injection well pursuant to free phase hydrocarbon recovery operations undertaken at petroleum refineries, petroleum marketing terminals, petroleum bulk plants, petroleum pipelines and petroleum transportation spill sites until January 25, 1993. This extension applies to recovery operations in existence, or for which contracts have been issued, on or before March 25, 1991. For groundwater returned through infiltration galleries from such operations at petroleum refineries, marketing terminals, and bulk plants, until October 2, 1991. New operations involving injection wells (beginning after March 25, 1991) will qualify for this compliance date extension (until January 25, 1993) only if:

1. Operations are performed pursuant to a written state agreement that includes a provision to assess the groundwater and the need for further remediation once the free phase recovery is completed; and

2. A copy of the written agreement has been submitted to: Characteristics Section (OS-333), U.S. EPA, 401 M Street SW, Washington, DC 20460.

(l) Used chlorofluorocarbon refrigerants from totally enclosed heat transfer equipment, including mobile air conditioning systems, mobile refrigeration, and commercial and industrial air conditioning and refrigeration systems that use chlorofluorocarbons as the heat transfer fluid in a refrigeration cycle, provided the refrigerant is reclaimed for further use.

(m) Nonterne plated used oil filters that are not mixed with wastes listed in 401 KAR 31:040 if these oil filters have been gravity hot-drained using one (1) of the following methods:

1. Puncturing the filter antidrain back valve or the filter dome end and hot-draining;

2. Hot-draining and crushing;

3. Dismantling and hot-draining; or

4. Any other equivalent hot-draining method which **will** [~~shall~~] remove used oil.

(3) Hazardous wastes which are exempted from certain administrative regulations. A hazardous waste which is generated, in a product or raw material storage tank, a product or raw material transport vehicle or vessel, a product or raw material pipeline, or in a manufacturing process unit or an associated nonwaste-treatment-manufacturing unit, is not subject to administrative regulation under 401 KAR Chapters 32 to [~~, 33, 34, 35, 37, 38 and~~] 39 or to the notification requirements of 401 KAR 32:010, 401 KAR 34:020, and 401 KAR 35:020 until it exits the unit in which it was generated, unless the unit is a surface impoundment, or unless the hazardous waste remains in the unit more than ninety (90) days after the unit ceases to be operated for manufacturing, or for storage or transportation of product or raw materials.

(4) Samples.

(a) Except as provided in paragraph (b) of this subsection, a sample of waste or a sample of water, soil, or air, which is collected for the sole purpose of testing to determine its characteristics or composition, is not subject to any requirements of this chapter; 401 KAR Chapter 32 to [~~, 33, 34,~~] 35, and 37 to [~~, 38 and~~] 39; or to the notification requirements of 401 KAR Chapter 32 and 38 when:

1. The sample is being transported to a laboratory for the purpose of testing; or

2. The sample is being transported back to the sample collector after testing; or

3. The sample is being stored by the sample collector before transport to a laboratory for testing; or

4. The sample is being stored in a laboratory before testing; or

5. The sample is being stored in a laboratory after testing but before it is returned to the sample collector; or

6. The sample is being stored temporarily in the laboratory after testing for a specific purpose (for example, until conclusion of a court case or enforcement action where further testing of the sample may be necessary).

(b) In order to qualify for the exemption in paragraphs (a)1 and 2 of this subsection, a sample collector shipping samples to a laboratory and a laboratory returning samples to a sample collector shall:

1. Comply with DOT, USPS, or any other applicable shipping requirements; or

2. Comply with the following requirements if the sample collector determines that DOT, USPS, or other shipping requirements do not apply to the shipment of the sample:

a. Assure that the following information accompanies the sample:

(i) The sample collector's name, mailing address, and telephone

number;

(ii) The laboratory's name, mailing address, and telephone number;

(iii) The quantity of the sample;

(iv) The date of shipment; and

(v) A description of the sample.

b. Package the sample so that it does not leak, spill, or vaporize from its packaging.

c. This exemption does not apply if the laboratory determines that the waste is hazardous but the laboratory is no longer meeting any of the conditions stated in paragraph (a) of this subsection.

(5) Treatability study samples.

(a) Except as provided in paragraph (b) of this subsection, persons who generate or collect samples for the purpose of conducting treatability studies shall not be subject to any requirement of 401 KAR Chapters 31 to [~~through~~] 33 or to the notification requirements of KRS 224.46-510(3) [~~Section 30:010 of RCRA~~] and 401 KAR Chapters 32 and 38, nor shall the samples be included in the quantity determinations of Section 5 of this administrative regulation and 401 KAR 32:030, Section 5(4) if:

1. The sample is being collected and prepared for transportation by the generator or sample collector; or

2. The sample is being accumulated or stored by the generator or sample collector prior to transportation to a laboratory or testing facility; or

3. The sample is being transported to the laboratory or testing facility for the purpose of conducting a treatability study.

(b) The exemption in paragraph (a) of this subsection shall be applicable to samples of hazardous waste being collected and shipped for the purpose of conducting treatability studies if:

1. The generator or sample collector uses (in " treatability studies") no more than 1000 kg of any nonacute hazardous waste; one (1) kg of acute hazardous waste; or 250 kg of soil, water, or debris contaminated with acute hazardous waste for each process being evaluated for each generated waste stream; and

2. The mass of each sample shipment does not exceed 1000 kg of nonacute hazardous waste; one (1) kg of acute hazardous waste; or 250 kg of soils, water, or debris contaminated with acute hazardous waste; and

3. The sample is packaged so that it does not leak, spill, or vaporize from its packaging during shipment; and

4. The requirements of subparagraph a or b of this paragraph are met:

a. The transportation of each sample shipment complies with DOT, USPS or any other applicable shipping requirements; or

b. If the DOT, USPS, or other shipping requirements do not apply to the shipment of the sample, the following information shall accompany the sample:

(i) The name, mailing address, and telephone number of the originator of the sample;

(ii) The name, address, and telephone number of the facility that will perform the treatability study;

(iii) The quantity of the sample;

(iv) The date of shipment; and

(v) A description of the sample, including its EPA hazardous waste number;

5. The sample is shipped to a laboratory or testing facility which is exempt under Section 4(6) of this administrative regulation or has an appropriate RCRA permit or interim status;

6. The generator or sample collector maintains the following records for a period ending three (3) years after completion of the treatability study:

a. Copies of the shipping documents;

b. A copy of the contract with the facility conducting the treatability study;

c. Documentation showing:

(i) The amount of waste shipped under this exemption;

(ii) The name, address, and EPA identification number of the laboratory or testing facility that received the waste;

(iii) The date the shipment was made; and

(iv) Whether or not unused samples and residues were returned to the generator;

7. The generator reports the information required under Section 4(5)(b)6c of this administrative regulation in its annual report required under 401 KAR 32:040.

(c)1. The cabinet may grant requests, on a case-by-case basis, for quantity limits in excess of those specified in Section 4(5)(b)1 of this administrative regulation for up to an additional 500 kg of nonacute hazardous waste; one (1) kg of acute hazardous waste and 250 kg of soil, water, or debris contaminated with acute hazardous waste, to conduct further treatability study evaluation when:

a. There has been an equipment or mechanical failure during the conduct of a treatability study;

b. There is a need to verify the results of a previously conducted treatability study;

c. There is a need to study and analyze alternative techniques within a previously evaluated treatment process; or

d. There is a need to do further evaluation of an ongoing treatability study to determine final specifications for treatment.

2. The additional quantities allowed pursuant to subparagraph 1 of this paragraph shall be subject to all provisions in paragraph (a) and (b)2 to [~~through~~] 7 of this subsection. The generator or sample collector shall apply to the cabinet when the sample is collected and provide in writing the following information:

a. The reason why the generator or sample collector requires additional quantity of sample for the treatability study evaluation, and the additional quantity needed;

b. Documentation accounting for all samples of hazardous waste from the waste stream which have been sent for or undergone treatability studies including the date each previous sample from the waste stream was shipped, the quantity of each previous shipment, the laboratory or testing facility to which it was shipped, what treatability study processes were conducted on each sample shipped, and the available results of each treatability study;

c. A description of the technical modifications or change in specifications which **will** [~~shall~~] be evaluated and the expected results;

d. If further study is being required due to equipment or mechanical failure, the applicant shall include information regarding the reason for the failure or breakdown and what procedures or equipment improvements have been made to protect against further breakdowns; and

e. Any other information that the cabinet deems necessary.

(6) [~~3.~~] Samples undergoing treatability studies at laboratories and testing facilities. Samples undergoing treatability studies and laboratories and testing facilities conducting treatability studies (to the extent the facilities are not otherwise subject to the requirements of 401 KAR Chapters 31 to [~~through~~] 38) shall not be subject to any requirements of Section 3010 of RCRA and 401 KAR Chapters 31 to [~~through~~] 38 provided that the conditions of paragraphs (a) to (k) of this subsection [~~Section 4(5)(c)6a through k of this regulation~~] are met. A mobile treatment unit (MTU) may qualify as a testing facility subject to paragraphs (a) to (k) of this subsection [~~Section 4(5)(c)6a through k of this regulation~~]. Where a group of MTUs are located at the same site, the limitations specified in paragraphs (a) to (k) of this subsection [~~Section 4(5)(c)6 a through k of this regulation~~] shall apply to the entire group of MTUs collectively, as if the group were one (1) MTU.

[~~(d)~~] The conditions for exemption are:

(a) [~~1.~~] No less than forty-five (45) days before conducting treatability studies, the facility shall notify the cabinet in writing that it intends to conduct treatability studies under this subsection;

(b) [~~2.~~] The laboratory or testing facility conducting the treatability study shall have an EPA identification number;

(c) [3.] No more than 250 kg of "as received" hazardous waste shall be subjected to initiation of treatment in all treatability studies in a single day. "As received" waste refers to the waste as received in the shipment from the generator or sample collector;

(d) [4.] The quantity of "as received" hazardous waste stored at the facility for the purpose of evaluation in treatability studies shall not exceed 1000 kg, the total of which may include 500 kg of soils, water, or debris contaminated with acute hazardous waste or one (1) kg of acute hazardous waste. This quantity of limitation shall not include:

1. [a.] Treatability study residues; or

2. [b.] Treatment materials (including nonhazardous solid waste) added to "as received" hazardous waste;

(e) [5.] No more than ninety (90) days shall elapse since the treatability study for the sample was completed, or no more than one (1) year shall elapse since the generator or sample collector shipped the sample to the laboratory or testing facility, whichever date first occurs;

(f) [6.] The treatability study shall not involve the placement of hazardous waste on the land or open burning of hazardous waste;

(g) [7.] The facility shall maintain records for three (3) years following completion of each study that show compliance with the treatment rate limits and the storage time and quantity limits. The following specific information shall be included for each treatability study conducted:

1. [a.] The name, address, and EPA identification number of the generator or sample collector of each waste sample;

2. [b.] The date the shipment was received;

3. [c.] The quantity of waste accepted;

4. [d.] The quantity of "as received" waste in storage each day;

5. [e.] The date the treatment was initiated and the amount of "as received" waste introduced to treatment study each day;

6. [f.] The date the treatability study was concluded; and

7. [g.] The date any unused sample or residue generated from the treatability study was returned to the generator or sample collector or, if sent to a designated facility, the name of the facility and the EPA identification number;

(h) [8.] The facility shall keep on site a copy of the treatability study contract and all shipping papers associated with the transport of treatability study samples to and from the facility for at least three (3) years from the completion date of each treatability study;

(i) [9.] The facility shall prepare and submit a report to the cabinet by March 15 of each year that estimates the number of studies and the amount of waste expected to be used in treatability studies during the current calendar year. The report shall also contain following information for the previous calendar year:

1. [a.] The name, address, and EPA identification number of the facility conducting the treatability studies;

2. [b.] The types (by process) of treatability studies conducted;

3. [c.] The names and addresses of persons for whom studies have been conducted (including their EPA identification numbers);

4. [d.] The total quantity of waste in storage each day;

5. [e.] The quantity and types of waste subjected to treatability studies;

6. [f.] The data on which each treatability study was conducted; and

7. [g.] The final disposition of residues and unused samples from each treatability study;

(j) [10.] The facility shall determine whether any unused samples or residues generated by the treatability study are hazardous wastes under Section 3 of this administrative regulation and, if so, are subject to 401 KAR Chapters 31 through 38, unless the residues and unused samples are returned to the sample originator under the exemption in Section 4(5) of this administrative regulation;

(k) [11.] The facility shall notify the cabinet by letter when the facility is no longer planning to conduct any treatability studies at the site.

Section 5. Special Requirements for Hazardous Waste Generated by Limited Quantity Generators. (1) A generator is a limited quantity generator in a calendar month if he generates less than 100 kilograms of hazardous waste in that month, except as specified in subsection (5) of this section.

(2) Except for those wastes identified in subsections (5), (6), (7), and (10) of this section, a limited quantity generator's hazardous wastes are not subject to administrative regulation under 401 KAR Chapters 32 to [through] 39 and the notification requirements of KRS 224.46-510(3), provided the generator complies with the requirements [regulations] of subsections (6), (7), and (10) of this section.

(3) Hazardous waste that is not subject to administrative regulation or that is subject only to Sections 2 and 3 of 401 KAR 32:010 and Sections 1(3) and 2 of 401 KAR 32:040 is not included in the quantity determinations of this chapter and 401 KAR Chapters 32 to [through] 40 and is not subject to any requirements of those administrative regulations. Hazardous waste that is subject to the requirements of Section 6(2) and (3) of this administrative regulation and 401 KAR 36:030, 401 KAR 36:040, and 401 KAR 36:060 is included in the quantity determination of this chapter, and is subject to the requirements of 401 KAR Chapters 32 to [through] 40.

(4) In determining the quantity of hazardous waste generated, a generator need not include:

(a) Hazardous waste when it is removed from on-site storage; or

(b) Hazardous waste produced by on-site treatment (including reclamation) of his hazardous waste, so long as the hazardous waste that is treated was counted once; or

(c) Spent materials that are generated, reclaimed, and subsequently reused on site, so long as spent materials have been counted once.

(5) If a generator generates acute hazardous waste in a calendar month in quantities greater than set forth in this subsection, all quantities of that acute hazardous waste are subject to administrative regulations applicable to generators of greater than 1,000 kilograms of nonacute hazardous waste in a calendar month under 401 KAR Chapters 32 to [through] 39, and the notification and permitting requirements of KRS 224.01-400, 224.40-310, 224.46-510 to 224.46-580, and 224.50-130:

(a) A total of one (1) kilogram of acute hazardous wastes listed in Section 2, 3, or 4(5) of 401 KAR 31:040.

(b) A total of 100 kilograms of any residue or contaminated soil, waste, or other debris resulting from the cleanup of a spill, into or on any land or water, of any acute hazardous wastes listed in Section 2, 3 or 4(5) of 401 KAR 31:040.

(6) A limited quantity generator may accumulate hazardous waste on site in tanks or containers. If he accumulates at any time more than 1000 kilograms of his hazardous waste, or his acutely hazardous wastes in quantities greater than set forth in subsection (5)(a) or (b) of this section, all of those accumulated wastes [for which the accumulation limit was exceeded] are subject to administrative regulation under 401 KAR Chapters 32 to [through] 39 and the notification and permitting requirements of KRS 224.01, 224.40, 224.43, and 224.46. The time period set out in Section 5 of 401 KAR 32:030 for accumulation of wastes on-site begins for a limited quantity generator when the accumulated wastes exceed the applicable exclusion level.

(7) In order for a limited quantity generator to be excluded from full administrative regulations under this section, the generator shall:

(a) Comply with the requirements of 401 KAR 32:010, Section 2;

(b) If he stores his hazardous waste on-site, store it in compliance with subsection (6) of this section; and

(c) Either treat or dispose of hazardous waste in an on-site facility, or ensure direct delivery to an off-site storage, treatment, or disposal facility, either of which if located in the U.S. is:

1. Permitted under 401 KAR Chapter 38;

2. In interim status under 401 KAR Chapters 35 and 38;

3. Located outside of Kentucky and is permitted under 40 CFR

Part 270 or in interim status under 40 CFR Parts 270 and 265;

4. Located outside of Kentucky and is authorized to manage hazardous waste by a state with a hazardous waste management program
approved under 40 CFR Part 271;

5. Permitted to manage municipal or industrial solid waste and is specifically approved for that waste; or

6. A facility which:

a. Beneficially uses or reuses, or legitimately recycles or reclaims its waste; or

b. Treats its waste prior to beneficial use or reuse, or legitimate recycling or reclamation.

(8) Hazardous waste subject to the reduced requirements of this section may be mixed with nonhazardous waste and remain subject to these reduced requirements even though the resultant mixture exceeds the quantity limitations identified in this section unless the mixture meets any of the characteristics of hazardous wastes identified in 401 KAR 31:030.

(9) If a limited quantity generator mixes a solid waste with a hazardous waste that exceeds the quantity exclusion level of this section, the mixture shall be subject to full administrative regulation.

(10) If a limited quantity generator's hazardous wastes are mixed with used oil, the mixture shall be subject to Sections 1 through 5 of 401 KAR 36:050, if it is destined to be burned for energy recovery. Any material produced from such a mixture by processing, blending, or other treatment shall also be so regulated if it is destined to be burned for energy recovery.

Section 6. Requirements for Recyclable Materials. (1)(a) Hazardous wastes that are recycled are subject to the requirements for generators, transporters, and storage facilities of subsections (2) and (3) of this section, except for the materials listed in paragraphs (b) and (c) of this subsection. Hazardous wastes that are recycled shall be known as "recyclable materials."

(b) The following recyclable materials are not subject to the requirements of this section, but are regulated under 401 KAR Chapter 36 and all applicable provisions of 401 KAR Chapters 38 and 39:

1. Recyclable materials used in a manner constituting disposal (see 401 KAR 36:030);

2. Hazardous wastes burned for energy recovery in boilers and industrial furnaces that are not regulated under 401 KAR 34:240 or 401 KAR 35:240 (see 401 KAR 36:040);

3. Used oil that exhibits one (1) or more of the characteristics of hazardous waste and is burned for energy recovery in boilers and industrial furnaces that are not regulated under 401 KAR 34:240 and 35:240 (see 401 KAR 36:040);

4. Recyclable materials from which precious metals are reclaimed (see 401 KAR 36:060); and

5. Spent lead-acid batteries that are being reclaimed (see 401 KAR 36:070).

(c) The following recyclable materials are not subject to administrative regulation under 401 KAR Chapters 32 to [~~through~~] 38, and are not subject to the notification requirements of KRS 224.46-510(3):

1. Industrial ethyl alcohol that is reclaimed except that, unless provided otherwise in an international agreement as specified in 401 KAR 32:050:

a. A person initiating a shipment for reclamation in a foreign country, and any intermediary arranging for the shipment, shall comply with the requirements applicable to a primary exporter in Sections 4, 7(1)(a) to [~~through~~] (d), (f), (2) and 8 of 401 KAR 32:050, export these materials only upon consent of the receiving country and in conformance with the EPA Acknowledgment of Consent as defined in 401 KAR 32:050, and provide a copy of the EPA Acknowledgment of Consent to the shipment to the transporter transporting the shipment for export;

b. Transporters transporting a shipment for export shall not accept a shipment if he knows the shipment does not conform to the EPA Acknowledgment of Consent, shall ensure that a copy of the EPA Acknowledgment of Consent accompanies the shipment, and shall ensure that it is delivered to the facility designated by the person initiating the shipment.

2. Used batteries (or used battery cells) returned to a battery manufacturer for regeneration;

3. Used oil that exhibits one (1) or more of the characteristics of hazardous waste but is recycled in some other manner than being burned for energy recovery;

4. Scrap metal;

5. Fuels produced from the refining of oil-bearing hazardous wastes along with normal process streams at a petroleum refining facility if the wastes result from normal petroleum refining, production, and transportation practices;

6. Oil reclaimed from hazardous waste resulting from normal petroleum refining, production, and transportation practices, which oil is to be refined along with normal process streams at a petroleum refining facility;

7. [~~Coke and coal tar from the iron and steel industry that contains EPA Hazardous Waste No. K087 (Decanter tank tar sludge from coking operations) from the iron and steel production process;~~

~~8.~~]a. Hazardous waste fuel produced from oil-bearing hazardous wastes from petroleum refining, production, or transportation practices, or produced from oil reclaimed from such hazardous wastes, where such hazardous wastes are reintroduced into a process that does not use distillation or does not produce products from crude oil so long as the resulting fuel meets the used oil specification under Section 1(5) of 401 KAR 35:050 and so long as no other hazardous wastes are used to produce the hazardous waste fuel;

b. Hazardous waste fuel produced from oil-bearing hazardous waste from petroleum refining production, and transportation practices, where such hazardous wastes are reintroduced into a refining process after a point at which contaminants are removed, so long as the fuel meets the used oil fuel specification under Section 1(5) of 401 KAR 36:050; and

c. Oil reclaimed from oil-bearing hazardous wastes from petroleum refining, production, and transportation practices, which reclaimed oil is burned as a fuel without reintroduction to a refining process, so long as the reclaimed oil meets the used oil fuel specification under Section 1(5) of 401 KAR 36:050; and

8. [~~9.~~] Petroleum coke produced from petroleum refinery hazardous wastes containing oil at the same facility at which the wastes were generated, unless the resulting coke product exceeds one (1) or more of the characteristics of hazardous waste in 401 KAR 31:030.

(2) Generators and transporters of recyclable materials are subject to the applicable requirements of 401 KAR Chapters 32 and 33 and the notification requirements under KRS 224.46-510(3) and 224.46-560, except as provided in subsection (1) of this section.

(3)(a) Owners or operators of facilities that store recyclable materials before they are recycled are regulated under all applicable provisions of 401 KAR 34:010 to 401 KAR 34:280 [~~through 34:210~~], 401 KAR 35:010 to 401 KAR 35:280 [~~through 35:210~~], 401 KAR Chapters 36 to [~~through~~] 38, and the notification requirements under KRS 224.46-510(3) and 224.46-520, except as provided in subsection (1) of this section. (The recycling process itself is exempt from administrative regulation except as provided in subsection (4) of this section.)

(b) Owners or operators of facilities that recycle recyclable materials without storing them before they are recycled are subject to the following requirements, except as provided in subsection (1) of this section:

1. The owner or operator shall submit an annual notification to the cabinet. After the date of promulgation of this administrative regulation, the owner or operator shall submit an initial notification on a schedule determined by the cabinet. Subsequent annual notifications shall be submitted to the cabinet at least thirty (30) days before the

expiration date shown on the notification; and

2. Sections 2 and 3 of 401 KAR 35:050 (dealing with the use of the manifest and manifest discrepancies); and

3. Subsection (4) of this section.

(4) Owners or operators of facilities subject to permitting requirements in 401 KAR Chapters 34, 35, and 38 with hazardous waste management units that recycle hazardous wastes are subject to the requirements of 401 KAR 34:275 and 401 KAR 34:280, or 401 KAR 35:275 and 401 KAR 35:280.

Section 7. Residues of Hazardous Waste in Empty Containers. (1)(a) Any hazardous waste remaining in either an empty container or an inner liner removed from an empty container, as defined in subsection (2) of this section, is not subject to 401 KAR Chapters 32 to [~~, 33, 34,~~] 35, and 37 to [~~, 38, and~~] 39, but is subject to 401 KAR Chapter 47.

(b) Any hazardous waste in either a container that is not empty or an inner liner removed from a container that is not empty, as defined in subsection (2) of this section is subject to 401 KAR Chapters 32 to [~~, 33, 34,~~] 35, and 37 to [~~, 38,~~] and 39; 401 KAR 30:020; and 401 KAR 30:030.

(2)(a) A container or an inner liner removed from a container that has held any hazardous waste, except a waste that is a compressed gas or that is identified as an acute hazardous waste listed in Section 2, 3, or 4(5) of 401 KAR 31:040, is empty if:

1. All wastes have been removed that can be removed using the practices commonly employed to remove materials from that type of container, (for example, [~~e.g.,~~] pouring, pumping, and aspirating); and

2. No more than two and five-tenths (2.5) centimeters (one (1) inch) of residue remain on the bottom of the container or inner liner; or

3.a. No more than three (3) percent by weight of the total capacity of the container remains in the container or inner liner if the container is less than or equal to 110 gallons in size; or

b. No more than three-tenths (0.3) percent by weight of the total capacity of the container remains in the container or inner liner if the container is greater than 110 gallons in size.

(b) A container that has held a hazardous waste that is a compressed gas is empty when the pressure in the container approaches atmospheric.

(c) A container or an inner liner removed from a container that has held an acute hazardous waste listed in Section 2, 3, or 4(5) of 401 KAR 31:040 is empty if:

1. The container or inner liner has been triple rinsed using a solvent capable of removing the commercial chemical product or manufacturing chemical intermediate;

2. The container or inner liner has been cleaned by another method that has been shown in the scientific literature, or by test conducted by the generator, to achieve equivalent removal; or

3. In the case of a container, the inner liner that prevented contact of the commercial chemical product or manufacturing chemical intermediate with the container has been removed.

Section 8. PCB Wastes Regulated Under the Toxic Substance Control Act. The disposal of PCB - containing dielectric fluid and electric equipment containing such fluid authorized for use and regulated under 40 CFR Part 761 (1990) and that are hazardous only because they fail the test for the toxicity characteristic (hazardous waste codes D018 to [~~through~~] D043 only) are exempt from 401 KAR Chapters 31 to [~~through~~] 35, 37, and 38, including the notification requirements of these chapters.

Section 9. Additional Administrative regulation of Certain Hazardous Waste Recycling Activities on a Case-by-case Basis. (1) The cabinet may decide on a case-by-case basis that persons accumulating or storing the recyclable materials described in Section 6(1)(b)3 of this administrative regulation shall be regulated under Section 6(2) and (3) of this administrative regulation. The basis for this decision is that the materials are being accumulated or stored in a manner that does not protect human health and the environment because the materials or their toxic constituents have not been adequately contained or because the materials being accumulated or stored together are incompatible. In making this decision, the cabinet shall consider the following factors:

(a) The types of materials accumulated or stored and the amounts accumulated or stored;

(b) The method of accumulation or storage;

(c) The length of time the materials have been accumulated or stored before being reclaimed;

(d) Whether any contaminants are being released into the environment, or are likely to be so released; and

(e) Other relevant factors.

(2) The procedures for this decision are set forth in Section 9 of this administrative regulation.

Section 10. Procedures for Case-by-case Administrative regulation of Hazardous Waste Recycling Activities. The cabinet shall use the following procedures when determining whether to regulate hazardous waste recycling activities described in Section 6(1)(b)4 of this administrative regulation under the provisions of Section 6(2) and (3) of this administrative regulation rather than under the provisions of 401 KAR 36:060 (precious metals being reclaimed).

(1) If a generator is accumulating the waste, the cabinet shall issue a notice setting forth the factual basis for the decision and stating that the person shall comply with the applicable requirements of 401 KAR 32:010, 32:030, 32:040, and 32:050. The notice shall become final within thirty (30) days, unless the person served requests a public hearing to challenge the decision. Upon receiving such a request, the cabinet shall hold a public hearing. The cabinet shall provide notice of the hearing to the public and allow public participation at the hearing. The cabinet shall issue a determination after the hearing stating whether or not compliance with 401 KAR Chapter 32 is required. The order shall become effective thirty (30) days after service of the determination, unless the cabinet specifies a later date.

(2) If the person is accumulating the recyclable material as a storage facility, the notice shall state that the person shall obtain a permit in accordance with all applicable provisions of 401 KAR Chapter 38. The owner or operator of the facility shall apply for a permit within no more than six (6) months of notice. If the owner or operator of the facility wishes to challenge the cabinet's decision, he may do so in his permit application, in a public hearing held on the draft permit, or in comments filed on the draft permit or on the notice of intent to deny the permit. The fact sheet accompanying the permit shall specify the reasons for the cabinet's determination. The question of whether the cabinet's decision was proper shall remain open for consideration during the public comment period discussed under Section 8 of 401 KAR 38:050 and in any subsequent hearing.

Section 11. Administrative regulation of Mixed Radioactive Hazardous Wastes. Radioactive mixed wastes are wastes that contain both hazardous wastes subject to KRS Chapter 224 and radioactive wastes subject to the Atomic Energy Act [~~(AEA)~~]. Radioactive mixed wastes are subject to all the requirements of 401 KAR Chapters 30 to [~~through~~] 40 and the Atomic Energy Act.

PHILLIP J. SHEPHERD, Secretary
E. DOUGLAS STEPHAN, Commissioner
APPROVED BY AGENCY: December 13, 1993
FILED WITH LRC: December 14, 1993 at 10 a.m.

NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION CABINET
Department for Environmental Protection
Division of Waste Management
(Amended After Hearing)

401 KAR 31:040. Lists of hazardous wastes.

RELATES TO: KRS 224.01, 224.40, 224.43, 224.46, 224.99
STATUTORY AUTHORITY: KRS 224.10-100, 224.46-510(3), 224.46-530 [~~, 224.50-100~~]
NECESSITY AND FUNCTION: KRS 224.46-510(3) requires the cabinet to identify the characteristics of and to list hazardous wastes. This chapter identifies and lists hazardous waste. This administrative regulation establishes the lists of hazardous wastes.

Section 1. General Applicability and Delisting Procedures. (1) A waste is a hazardous waste if it is listed in any section of this administrative regulation unless it has been excluded from that list under 401 KAR 31:060 and 31:070.

(2) The cabinet shall indicate the basis for listing the classes or types of wastes listed in this administrative regulation by employing one (1) or more of the following Hazard Codes:

Hazard Code	Class or Type of Waste
(I)	Ignitable waste
(C)	Corrosive waste
(R)	Reactive waste
(E)	Toxicity characteristic waste
(H)	Acute hazardous waste
(T)	Toxic waste

401 KAR 31:160 identifies the constituent which caused the cabinet to list the waste as a toxicity characteristic waste (E) or toxic waste (T) in Sections 2 and 3 of this administrative regulation.

(3) Each hazardous waste listed in this administrative regulation is assigned an EPA Hazardous Waste Number, which precedes the name of the waste. This number shall be used in complying with the notification requirements of KRS 224.46-510 and the recordkeeping and reporting requirements under 401 KAR Chapters 32 to [~~through~~] 40.

(4) The following hazardous wastes listed in Section 2 or 3 of this administrative regulation are subject to the exclusion limits for acutely hazardous wastes established in Section 5 of 401 KAR 31:010: EPA Hazardous Waste Nos. F020, F021, F022, F023, F026, and F027.

Section 2. Hazardous Wastes from Nonspecific Sources. (1) Hazardous wastes from nonspecific sources are:

Industry and EPA Hazardous Waste No.	Hazardous Waste	Hazard Code
Generic:		
F001	The following spent halogenated solvents used in degreasing: tetrachloroethylene, trichloroethylene, methylene chloride, 1,1,1-trichloroethane, carbon tetrachloride, and chlorinated fluorocarbons; all spent solvent mixtures/blends used in degreasing containing, before use, a total of ten (10) percent or more (by volume) of one (1) or more of the above halogenated solvents or those solvents listed in F002, F004, and F005; and still bottoms from the recovery of these spent solvents and spent solvent mixtures.	(T)
F002	The following spent halogenated solvents: tetrachloroethylene, methylene chloride, trichloroethylene, 1,1,1-trichloroethane chlorobenzene, 1,1,2-trichloro-1,2,2-trifluoroethane, orthodichlorobenzene, trichlorofluoromethane, and 1,1,2-trichloroethane; all spent solvent mixtures/blends containing, before use, a total of ten (10) percent or more (by volume) of one (1) or more of the above halogenated solvents or those solvents listed in F001, F004, or F005; and still bottoms from the recovery of these spent solvents and spent solvent mixtures.	(T)
F003	The following spent nonhalogenated solvents: xylene, acetone, ethyl acetate, ethyl benzene, ethyl ether, methyl isobutyl ketone, n-butyl alcohol, cyclohexanone, and methanol; all spent solvent mixtures/blends containing, before use, only the above spent nonhalogenated solvents; and all spent solvent mixtures/blends containing, before use, one (1) or more of the above nonhalogenated solvents, and, a total of ten (10) percent or more (by volume) of one (1) or more of those solvents listed in F001, F002, F004, and F005; and still bottoms from the recovery of these spent solvents and spent solvent mixtures.	(I)*
F004	The following spent nonhalogenated solvents: cresols and cresylic acid, and nitrobenzene; all spent solvent mixtures/blends containing, before use, a total of ten (10) percent or more (by volume) of one (1) or more of the above nonhalogenated solvents or those solvents listed in F001, F002, and F005; and still bottoms from the recovery of these spent solvents and spent solvent mixtures.	(T)
F005	The following spent nonhalogenated solvents: toluene, methyl ethyl ketone, carbon disulfide, isobutanol, pyridine, benzene, 2-ethoxyethanol, and 2-nitropropane; all spent solvent mixtures/blends containing, before use, a total of ten (10) percent or more (by volume) of one (1) or more of the above nonhalogenated	(I,T)

	solvents, or those solvents listed in F001, F002, or F004; and still bottoms from the recovery of these spent solvents and spent solvent mixtures.	
F006	Wastewater treatment sludges from electroplating operations except from the following processes: (1) sulfuric acid anodizing of aluminum; (2) tin plating on carbon steel; (3) zinc plating (segregated basis) on carbon steel; (4) aluminum or zinc-aluminum plating on carbon steel; (5) cleaning/stripping associated with tin, zinc, and aluminum plating on carbon steel; and (6) chemical etching and milling of aluminum.	(T)
F007	Spent cyanide plating bath solutions from electroplating operations.	(R,T)
F008	Plating bath residues from the bottom of plating baths from electroplating operations where cyanides are used in the process.	(R,T)
F009	Spent stripping and cleaning bath solutions from electroplating operations where cyanides are used in the process.	(R,T)
F010	Quenching bath residues from oil baths from metal heat treating operations where cyanides are used in the process.	(R,T)
F011	Spent cyanide solutions from salt bath pot cleaning from metal heat treating operations.	(R,T)
F012	Quenching wastewater treatment sludges from metal heat treating operations where cyanides are used in the process.	(T)
F019	Wastewater treatment sludges from the chemical conversion coating of aluminum except from zirconium phosphating in aluminum can washing when such phosphating is an exclusive conversion coating process.	(T)
F020	Wastes (except wastewater and spent carbon from hydrogen chloride purification) from the production or manufacturing use (as a reactant, chemical intermediate, or component in a formulating process) of tri- or tetrachlorophenol, or of intermediates used to produce their pesticide derivatives. (This listing does not include wastes from the production of Hexachlorophene from highly purified 2,4,5-trichlorophenol.)	(H)
F021	Wastes (except wastewater and spent carbon from hydrogen chloride purification) from the production or manufacturing use (as a reactant, chemical intermediate, or component in a formulating process) of pentachlorophenol or of intermediates used to produce its derivatives.	(H)
F022	Wastes (except wastewater and spent carbon from hydrogen chloride purification) from the manufacturing use (as a reactant, chemical intermediate, or component in a formulating process) of tetra-, penta-, or hexachlorobenzenes under alkaline conditions.	(H)
F023	Wastes (except wastewater and spent carbon from hydrogen chloride purification) from the production of materials on equipment previously used for the production or manufacturing use (as a reactant, chemical intermediate, or component in a formulating process) of tri- or tetrachlorophenols. (This listing does not include wastes from equipment used only for the production or use of Hexachlorophene from highly purified 2,4,5-trichlorophenol.)	(H)
F024	Process wastes, including but not limited to, distillation residues, heavy ends, tars, and reactor clean-out wastes, from the production of certain chlorinated aliphatic hydrocarbons by [~~, having carbon content from one (1) to five (5), utilizing~~] free radical catalyzed processes. These chlorinated hydrocarbons are those having carbon chain lengths ranging from one (1) to and including five (5), with varying amounts and positions of chloring substitution. (This listing does not include [~~light ends, spent filters and filter aids, spent desiccants,~~] wastewater, wastewater treatment sludges, spent catalysts, and wastes listed in Sections 2 and 3 of this administrative regulation.)	(T)
F025	Condensed light ends, spent filters and filter aids, and spent desiccant wastes from the production of certain chlorinated aliphatic hydrocarbons, by free radical catalyzed processes. These chlorinated aliphatic hydrocarbons are those having carbon chain lengths ranging from one (1) to and including five (5), with varying amounts and positions of chlorine substitution.	(T)
F026	Wastes (except wastewater and spent carbon from hydrogen chloride purification) from the production of materials on equipment previously used for the manufacturing use (as a reactant, chemical intermediate, or component in a formulating process) of tetra-, penta-, or	(H)

	hexachlorobenzene under alkaline conditions.	
F027	Discarded unused formulations containing tri-, tetra-, or pentachlorophenol or discarded unused formulations containing compounds derived from these chlorophenols. (This listing does not include formulations containing Hexachlorophene synthesized from prepurified 2,4,5-trichlorophenol as the sole component.)	(H)
F028	Residues resulting from the incineration or thermal treatment of soil contaminated with EPA Hazardous Waste Nos. F020, F021, F022, F023, F026, and F027.	(T)
F032	Wastewaters (except those that have not come into contact with process contaminants), process residuals, preservative drippage, and spent formulations from wood preserving processes generated at plants that currently use or have previously used chlorophenolic formulations (except potentially cross-contaminated wastes that have had the F032 waste code deleted in accordance with Section 6 of this administrative regulation or potentially cross-contaminated wastes that are otherwise currently regulated as hazardous wastes (For example, F034 or F035), and where the generator does not resume or initiate use of chlorophenolic formulations). This listing does not include K001 bottom sediment sludge from the treatment of wastewater from wood preserving processes that use creosote or pentachlorophenol.	(T)
F034	Wastewaters (except those that have not come into contact with process contaminants), process residuals, preservative drippage, and spent formulations from wood preserving processes generated at plants that use creosote formulations. This listing does not include K001 bottom sediment sludge from the treatment of wastewater from wood preserving processes that use creosote or pentachlorophenol.	(T)
F035	Wastewaters (except those that have not come into contact with process contaminants), process residuals, preservative drippage, and spent formulations from wood preserving processes generated at plants that use inorganic preservatives containing arsenic or chromium. This listing does not include K001 bottom sediment sludge from the treatment of wastewater from wood preserving processes that use creosote or pentachlorophenol.	(T)
F037	Petroleum refinery primary oil/water/solids separation sludge - Any sludge generated from the gravitational separation of oil/water/solids during the storage or treatment of process wastewaters and oily cooling wastewaters from petroleum refineries. Such sludges include, but are not limited to, those generated in: oil/water/solids separators; tanks and impoundments; ditches and other conveyances; sumps; and stormwater units receiving dry weather flow. Sludge generated in stormwater units that do not receive dry weather flow, sludges generated from noncontact once-through cooling waters segregated for treatment from other process or oily cooling waters, sludges generated in aggressive biological treatment units as defined in subsection (2)(b) of this section (including sludges generated in one (1) or more additional units after wastewaters have been treated in aggressive biological treatment units) and K051 wastes are not included in this listing.	(T)
F038	Petroleum refinery secondary (emulsified) oil/water/solids separation sludge - Any sludge and float generated from the physical and chemical separation of oil/water/solids in process wastewaters and oily cooling wastewaters from petroleum refineries. Such wastes include, but are not limited to, all sludges and floats generated in: induced air flotation (IAF) units, tanks and impoundments, and all sludges generated in DAF units. Sludges generated in stormwater units that do not receive dry weather flow, sludges generated from noncontact once-through cooling waters segregated for treatment from other process or oily cooling waters, sludges and floats generated in aggressive biological treatment units as defined in subsection (2) of this section (including sludges and floats generated in one (1) or more additional units after wastewaters have been treated in aggressive biological treatment units) and F037, K048, and K051 wastes are not included in this listing.	(T)
F039	Leachate (liquids that have percolated through land disposal wastes) resulting from the disposal of more than one (1) restricted waste classified as hazardous under this administrative regulation. (Leachate resulting from the disposal of one (1) or more of the following EPA Hazardous Wastes and no other hazardous wastes retains its EPA Hazardous Waste Number: F020, F021, F022, F026, F027, and F028.).	(T)

*(I,T) shall be used to specify mixtures containing ignitable and toxic constituents.

(2) Listing specific definitions.

(a) For the purposes of the F037 and F038 listings, oil/water/solids is defined as oil and water and solids.

(b)1. For the purposes of the F037 and F038 listings, aggressive biological treatment units are defined as units which employ one (1) of the following four treatment methods: activated sludge; trickling filter; rotating biological contactor for the continuous accelerated biological oxidation of wastewaters; or high-rate aeration. High-rate aeration is a system of surface impoundments or tanks, in which intense mechanical aeration is used to completely mix the wastes, enhance biological activity; and

a. The units employs a minimum of six (6) hp per million gallons of treatment volume, and either:

b. The hydraulic retention time of the unit is no longer than five (5) days; or

c. The hydraulic retention time is no longer than thirty (30) days and the unit does not generate a sludge that is a hazardous waste by the toxicity characteristic.

2. Generators and treatment, storage and disposal facilities have the burden of proving that their sludges are exempt from listing as F037 and F038 wastes under this definition. Generators and treatment, storage and disposal facilities shall maintain, in their operating or other on-site records, documents and data sufficient to prove that:

a. The unit is an aggressive biological treatment unit as defined in this subsection; and

b. The sludges sought to be exempted from the definitions of F037 or F038 were actually generated in the aggressive biological treatment unit.

(c)1. For the purposes of the F037 listing, sludges are considered to be generated at the moment of deposition in the unit, where deposition is defined as at least a temporary cessation of lateral particle movement.

2. For the purposes of the F038 listing:

a. Sludges are considered to be generated at the moment of deposition in the unit, where deposition is defined as at least a temporary cessation of lateral particle movement; and

b. Floats are considered to be generated at the moment they are formed in the top of the unit.

Section 3. Hazardous Wastes from Specific Sources. Hazardous wastes from specific sources are:

Industry and EPA Hazardous Waste No.	Hazardous Waste	Hazard Code
Wood Preservation:		
K001	Bottom sediment sludge from the treatment of wastewaters from wood preserving processes that use creosote or pentachlorophenol.	(T)
Inorganic Pigments:		
K002	Wastewater treatment sludge from the production of chrome yellow and orange pigments.	(T)
K003	Wastewater treatment sludge from the production of molybdate orange pigments.	(T)
K004	Wastewater treatment sludge from the production of zinc yellow pigments.	(T)
K005	Wastewater treatment sludge from the production of chrome green pigments.	(T)
K006	Wastewater treatment sludge from the production of chrome oxide green pigments (anhydrous and hydrated).	(T)
K007	Wastewater treatment sludge from the production of iron blue pigments.	(T)
K008	Oven residue from the production chrome oxide green pigments.	(T)
Organic Chemicals:		
K009	Distillation bottoms from the production of acetaldehyde from ethylene.	(T)
K010	Distillation side cuts from the production of acetaldehyde from ethylene.	(T)
K011	Bottom stream from the wastewater stripper in the production of acrylonitrile.	(R,T)
K013	Bottom stream from the acetonitrile column in the production of acrylonitrile.	(R,T)
K014	Bottoms from the acetoniltrile purification column in the production of acrylonitrile.	(T)
K015	Still bottoms from the distillation of benzyl chloride.	(T)
K016	Heavy ends or distillation residues from the production of carbon tetrachloride.	(T)
K017	Heavy ends (still bottoms) from the purification column in the production of epichlorohydrin.	(T)
K018	Heavy ends from the fractionation column in ethyl chloride production.	(T)
K019	Heavy ends from the distillation of ethylene dichloride in ethylene dichloride production.	(T)
K020	Heavy ends from the distillation of vinyl chloride in vinyl chloride monomer production.	(T)
K021	Aqueous spent antimony catalyst waste from fluoromethanes production.	(T)
K022	Distillation bottom tars from the production of phenol/acetone from cumene.	(T)
K023	Distillation light ends from the production of phthalic anhydride from naphthalene.	(T)
K024	Distillation bottoms from the production of phthalic anhydride from naphthalene.	(T)
K025	Distillation bottoms from the production of nitrobenzene by the nitration of benzene.	(T)
K026	Stripping still tails from the production of methy ethyl pyridines.	(T)
K027	Centrifuge and distillation residues from toluene diisocyanate production.	(R, T)
K028	Spent catalyst from the hydrochlorinator reactor in the production of 1,1,1-trichloroethane.	(T)
K029	Waste from the product steam stripper in the production of 1,1,1-trichloroethane.	(T)

K030	Column bottoms or heavy ends from the combined production of trichloroethylene and perchloroethylene.	(T)
K083	Distillation bottoms from aniline production.	(T)
K085	Distillation or fractionation column bottoms from the production of chlorobenzenes.	(T)
K093	Distillation light ends from the production of phthalic anhydride from orthoxylene.	(T)
K094	Distillation bottoms from the production of phthalic anhydride from ortho-xylene.	(T)
[~~K025~~	~~Distillation bottoms from the production of nitrobenzene by the nitration of benzene.~~	~~(T)~~
~~K026~~	~~Stripping still tails from the production of methy ethyl pyridines.~~	~~(T)~~
~~K027~~	~~Centrifuge and distillation residues from toluene diisocyanate production.~~	~~(R,T)~~
~~K028~~	~~Spent catalyst from the hydrochlorinator reactor in the production of 1,1,1-trichloroethane.~~	~~(T)~~
~~K029~~	~~Waste from the product steam stripper in the production of 1,1,1 trichloroethane.~~]	~~(T)~~
K095	Distillation bottoms from the production of 1,1,1-trichloroethane.	(T)
K096	Heavy ends from the heavy ends column from the production of 1,1,1-trichloroethane.	(T)
[~~K030~~	~~Column bottoms or heavy ends from the combined production of trichloroethylene and perchloroethylene.~~	~~(T)~~
~~K083~~	~~Distillation bottoms from aniline production.~~]	~~(T)~~
K103	Process residues from aniline extraction from the production of aniline.	(T)
K104	Combined wastewater streams generated from nitrobenzene/ aniline production.	(T)
[~~K085~~	~~Distillation or fractionation column bottoms from the production~~] of chlorobenzenes.	~~(T)~~
K105	Separated aqueous stream from the reactor product washing step in the production of chlorobenzenes.	(T)
K107	Column bottoms from product separation from the production of 1,1-dimethyl-hydrazine (UDMH) from carboxylic acid hydrazines.	(C, T)
K108	Condensed column overheads from product separation and condensed reactor vent gases from the production of 1,1-dimethylhydrazine (UDMH) from carboxylic acid hydrazides.	(I, T)
K109	Spent filter cartridges from product purification from the production of 1,1-dimethylhydrazine (UDMH) from carboxylic acid hydrazides.	(T)
K110	Condensed column overheads from intermediate separation from the production of 1,1-dimethylhydrazine (UDMH) from carboxylic acid hydrazides.	(T)
K111	Product wash waters from the production of dinitrotoluene via nitration of toluene.	(C,T)
K112	Reaction by-product water from the drying column in the production of toluenediamine via hydrogenation of dinitrotoluene.	(T)
K113	Condensed liquid light ends from the purification of toluenediamine in the production of toluenediamine via hydrogenation of dinitrotoluene.	(T)
K114	Vicinals from the purification of toluenediamine in the production of toluenediamine via hydrogenation of dinitrotoluene.	(T)
K115	Heavy ends from the purification of toluenediamine in the production of toluenediamine via hydrogenation of dinitrotoluene.	(T)
K116	Organic condensate from the solvent recovery column in the production of toluene diisocyanate via phosgenation of toluenediamine.	(T)
K117	Wastewater from the reactor vent gas scrubber in the production of ethylene dibromide via bromination of ethene.	(T)
K118	Spent adsorbent solids from purification of ethylene dibromide in the production of ethylene dibromide via bromination of ethene.	(T)
K136	Still bottoms from the purification of ethylene dibromide in the production of ethylene dibromide via bromination of ethene.	(T)

Inorganic Chemicals:

K071	Brine purification muds from the mercury cell process in chlorine production, where separately prepurified brine is not used.	(T)
K073	Chlorinated hydrocarbon waste from the purification step of the diaphragm cell process using graphite anodes in chlorine production.	(T)
K106	Wastewater treatment sludge from the mercury cell process in chlorine production.	(T)

Pesticides:

K031	By-product salts generated in the production of MSMA and cacodylic acid.	(T)
K032	Wastewater treatment sludge from the production of chlordane.	(T)
K033	Wastewater and scrub water from the chlorination of cyclopentadiene in the production	(T)

	of chlordane.	
K034	Filter solids from the filtration of hexachlorocyclopentadiene in the production of chlordane.	(T)
~~[K097~~	~~Vacuum stripper discharge from the chlordane chlorinator in the production of chlordane.]~~	~~(T)~~
K035	Wastewater treatment sludges generated in the production of creosote.	(T)
K036	Still bottoms from toluene reclamation distillation in the production of disulfoton.	(T)
K037	Wastewater treatment sludges from the production of disulfoton.	(T)
K038	Wastewater from the washing and stripping of phorate production.	(T)
K039	Filter cake from the filtration of diethylphosphorodithioic acid in the production of phorate.	(T)
K040	Wastewater treatment sludge from the production of phorate.	(T)
K041	Wastewater treatment sludge from the production of toxaphene.	(T)
K042	Heavy ends or distillation residues from the distillation of tetrachlorobenzene in the production of 2,4,5-T.	(T)
K043	2,6-Dichlorophenol waste from production of 2,4-Dichlorophenol.	(T)
K097	Vacuum stripper discharge from the chlordane chlorinator in the production of chlordane.	(T)
K098	Untreated process wastewater from the production of toxaphene.	(T)
~~[K042~~	~~Heavy ends or distillation residues from the distillation of tetrachlorobenzene in the production of 2,4,5-T.~~	~~(T)~~
~~K043~~	~~2,6-Dichlorophenol waste from the production of 2,4-D.]~~	~~(T)~~
K099	Untreated wastewater from the production of 2,4-D.	(T)
K123	Process wastewater (including supernates, filtrates, and washwaters) from the production of ethylenebisdithiocarbamic acid and its salts.	(T)
K124	Reactor vent scrubber water from the production of ethylenebisdithiocarbamic acid and its salts.	(C,T)
K125	Filtration, evaporation, and centrifugation solids from the production of ethylenebisdithiocarbamic acid and its salts.	(T)
K126	Baghouse dust and floor sweepings in milling and packaging operations from the production or formulation of ethylenebisdithiocarbamic acid and its salts.	(T)
K131	Wastewater from the reactor and spent sulfuric acid from the acid dryer from the production of methyl bromide.	(C,T)
K132	Spent absorbent and wastewater separator solids from the production of methyl bromide.	(T)

Explosives:		
K044	Wastewater treatment sludges from the manufacturing and processing of explosives.	(R)
K045	Spent carbon from the treatment of wastewater containing explosives.	(R)
K046	Wastewater treatment sludges from the manufacturing, formulation and loading of lead-based initiating compounds.	(T)
K047	Pink/red water from TNT operations.	(T)
Petroleum Refining:		
K048	Dissolved air flotation (DAF) float from the petroleum refining industry.	(T)
K049	Slop oil emulsion solids from the petroleum refining industry.	(T)
K050	Heat exchanger bundle cleaning sludge from the petroleum refining industry.	(T)
K051	API separator sludge from the petroleum refining industry.	(T)
K052	Tank bottoms (leaded) from the petroleum refining industry.	(T)
Iron and Steel:		
K061	Emission control dust/sludge from the primary production of steel in electric furnaces.	(T)
K062	Spent pickle liquor generated by steel finishing operations of facilities within the iron and steel industry (SIC Codes 331 and 332).	(C,T)
Primary Copper:		
K064	Acid plant blowdown slurry/sludge resulting from the thickening of blowdown slurry from primary copper production.	(T)
Primary Lead:		
K065	Surface impoundment solids contained in and dredged from surface impoundments at primary lead smelting facilities.	(T)
Primary Zinc:		
K066	Sludge from treatment of process wastewater and acid plant blowdown from primary zinc production.	(T)
Primary Aluminum:		
K088	Spent potliners from primary aluminum reduction.	(T)
Ferroalloys:		
K090	Emission control dust or sludge from ferrochromiumsilicon production.	(T)
K091	Emission control dust or sludge from ferrochromium production.	(T)

The listing of wastes K064, K065, K066, K088, K090 and K091 as hazardous wastes shall become applicable to persons who generate or manage such wastes six (6) months after the effective

date of this administrative regulation.

Secondary Lead:		
K069	Emission control dust/sludge from secondary lead smelting.	(T)
K100	Waste leaching solution from acid leaching of emission control dust/ sludge from secondary lead smelting.	(T)
Veterinary Pharmaceuticals:		
K084	Wastewater treatment sludges. generated during the production of veterinary pharmaceuticals from arsenic or organoarsenic compounds.	(T)
K101	Distillation tar residues from the distillation of aniline-based compounds in the production of veterinary pharmaceuticals from arsenic or organoarsenic compounds.	(T)
K102	Residue from the use of activated carbon for decolorization in the production of veterinary pharmaceuticals from arsenic or organoarsenic compounds.	(T)
Ink Formulation:		
K086	Solvent washes and sludges, caustic washes and sludges, or water washes and sludges from cleaning tubs and equipment used in the formulation of ink from pigments, driers, soaps, and stabilizers containing chromium and lead.	(T)
Coking:		
K060	Ammonia still lime sludge from coking operations.	(T)
K087	Decanter tank tar sludge from coking operations.	(T)

Section 4. Discarded Commercial Chemical Products, Off-specification Species, Container Residues, and Spill Residues Thereof. The following materials or items are hazardous wastes if and when they are discarded or intended to be discarded as described in Section 2(1)(b)1 of 401 KAR 31:010; when they are mixed with waste oil or used oil or other material and applied to the land for dust suppression or road treatment; when they are otherwise applied to the land in lieu of their original intended use or when they are contained in products that are applied to the land in lieu of their original intended use; when in lieu of their original intended use; they are produced for use as (or as a component of) a fuel, distributed for use as a fuel, or burned as a fuel:

(1) Any commercial chemical product or manufacturing chemical intermediate having the generic name listed in subsection (5) or (6) of this section.

(2) Any off-specification commercial chemical product or manufacturing chemical intermediate which, if it met specifications, would have the generic name listed in subsection (5) or (6) of this section.

(3) Any residue remaining in a container or in an inner liner removed from a container that has held any commercial chemical product or manufacturing chemical intermediate having the generic name listed in subsection (5) or (6) of this section, unless the container is empty as defined in Section 7(2)[(e)] of 401 KAR 31:010.

(4) Any residue or contaminated soil, water, or other debris resulting from the cleanup of a spill into or on any land or water of any commercial chemical product or manufacturing chemical intermediate having the generic name listed in subsection (5) or (6) of this section, or any residue or contaminated soil, water, or other debris resulting from the cleanup of a spill into or on any land or water of any off-specification chemical intermediate which, if it met specification, would have the generic name listed in subsection (5) or (6) of this section.

(5) The commercial chemical products, manufacturing chemical intermediate or off-specification commercial chemical products referred to in subsections (1) to [through] (4) of this section, are identified as acute hazardous wastes (H) and are subject to the limited quantity generator exclusion in Section 5 of 401 KAR 31:010.

(NOTE: The primary hazardous properties of these materials have been indicated by the letters T (Toxicity), and R (Reactivity). Absence of a letter indicates that the compound is only listed for acute toxicity.) These wastes and their corresponding EPA Hazardous Waste Numbers are:

Hazardous Waste No.	Substance	Chemical Abstracts No.
P023	Acetaldehyde, chloro-	107-20-0
P002	Acetamide, N-(aminothioxomethyl)-	591-08-2
P057	Acetamide, 2-fluoro-	640-19-7
P058	Acetic acid, fluoro-, sodium salt	62-74-8
P002	1-Acetyl-2-thiourea	591-08-2
P003	Acrolein	107-02-8
P070	Aldicarb	116-06-3
P004	Aldrin	309-00-2
P005	Allyl alcohol	107-18-6
P006	Aluminum phosphide (R,T)	20859-73-8
P007	5-(Aminomethyl)-3-isoxazolol	2763-96-4
P008	4-Aminopyridine	504-24-5
P009	Ammonium picrate (R)	131-74-8
P119	Ammonium vanadate	7803-55-6
P099	Argentate (1-), bis(cyano-C)-, potassium	506-61-6
P010	Arsenic acid H_3AsO_4	7778-39-4
P012	Arsenic oxide As_2O_3	1327-53-3
P011	Arsenic oxide As_2O_5	1303-28-2
P011	Arsenic pentoxide	1303-28-2
P012	Arsenic trioxide	1327-53-3
P038	Arsine, diethyl-	692-42-2
P036	Arsonous dichloride, phenyl-	696-28-6
P054	Aziridine	151-56-4
P067	Aziridine, 2-methyl-	75-55-8
P013	Barium cyanide	542-62-1
P024	Benzenamine, 4-chloro-	106-47-8
P077	Benzenamine, 4-nitro-	100-01-6
P028	Benzene, (chloromethyl)-	100-44-7
P042	1,2-Benzenediol, 4-(1-hydroxy-2-(methylamino)ethyl)-, (R)-	51-43-4
P046	Benzeneethanamine, alpha, alpha-dimethyl-	122-09-8
P014	Benzenethiol	108-98-5
P028	Benzyl chloride	100-44-7
P015	Beryllium	7440-41-7
P017	Bromoacetone	598-31-2
P018	Brucine	357-57-3
P045	2-Butanone, 3,3-dimethyl-1-(methylthio)-,O-(methylamino) carbonyl) oxime	39196-18-4
P021	Calcium cyanide	592-01-8
P021	Calcium cyanide $Ca(CN)_2$	592-01-8
P022	Carbon disulfide	75-15-0

P095	Carbonic dichloride	75-44-5
P023	Chloroacetaldehyde	107-20-0
P024	p-Chloroaniline	106-47-8
P026	1-(o-Chlorophenyl)thiourea	5344-82-1
P027	3-Chloropropionitrile	542-76-7
P029	Copper cyanide	544-92-3
P029	Copper cyanide Cu(CN)	544-92-3
P030	Cyanides (soluble cyanide salts), not otherwise specified	--------
P031	Cyanogen	460-19-5
P033	Cyanogen chloride	506-77-4
P033	Cyanogen chloride (CN)Cl	506-77-4
P034	2-Cyclohexyl-4,6-dinitrophenol	131-89-5
P016	Dichloromethyl ether	542-88-1
P036	Dichlorophenylarsine	696-28-6
P037	Dieldrin	60-57-1
P038	Diethylarsine	692-42-2
P041	Diethyl-p-nitrophenyl phosphate	311-45-5
P040	O,O-Diethyl O-pyrazinyl phosphorothioate	297-97-2
P043	Diisopropylfluorophosphate (DFP)	55-91-4
P004	1,4,5,8-Dimethanonaphthalene, 1,2,3,4,10,10-hexachloro-1,4,4a,5,8,8a,- hexahydro-, (1alpha, 4alpha, 4abeta, 5alpha, 8alpha, 8abeta)-	309-00-2
P060	1,4,5,8-Dimethanonaphthalene, 1,2,3,4,10,10-hexachloro-1,4,4a,5,8,8a- hexahydro-, (1alpha, 4alpha, 4abeta, 5beta, 8beta, 8abeta)-	465-73-6
P037	2,7:3,6-Dimethanonaphth(2,3-b) oxirene,3,4,5,6,9,9-hexachloro-1a,2,2a,3,6,6a,7,7a-octahydro-,(1aalpha, 2beta, 2aalpha, 3beta, 6beta, 6aalpha, 7beta, 7aalpha)-	60-57-1
P051	2,7:3,6-Dimethanonaphth(2,3-b),oxirene, 3,4,5,6,9,9-hexachloro-1a,2,2a,3,6,6a,7,7a-octahydro-,(1aalpha, 2beta, 2abeta,3alpha, 6alpha, 6abeta,7beta, 7aalpha)-, and metabolites	*72-20-8
P044	Dimethoate	60-51-5
P046	alpha, alpha-Dimethylphenethylamine	122-09-8
P047	4,6-Dinitro-o-cresol, and salts	*534-52-1
P048	2,4-Dinitrophenol	51-28-5
P020	Dinoseb	88-85-7
P085	Diphosphoramide, octamethyl-	152-16-9
P111	Diphosphoric acid, tetraethyl ester	107-49-3
P039	Disulfoton	298-04-4
P049	Dithiobiuret	541-53-7
P050	Endosulfan	115-29-7
P088	Endothal	145-73-3
P051	Endrin	72-20-8
P051	Endrin, and metabolites	72-20-8
P042	Epinephrine	51-43-4
P031	Ethanedinitrile	460-19-5
P066	Ethanimidothioic acid, N-(((methylamino)carbonyl) oxy)-,methyl ester	16752-77-5
P101	Ethyl cyanide	107-12-0
P054	Ethyleneimine	151-56-4
P097	Famphur	52-85-7
P056	Fluorine	7782-41-4
P057	Fluoroacetamide	640-19-7
P058	Fluoroacetic acid, sodium salt	62-74-8
P065	Fulminic acid, mercury (2+) salt (R,T)	628-86-4
P059	Heptachlor	76-44-8
P062	Hexaethyl tetraphosphate	757-58-4
P116	Hydrazinecarbothioamide	79-19-6
P068	Hydrazine, methyl-	60-34-4
P063	Hydrocyanic acid	74-90-8
P063	Hydrogen cyanide	74-90-8
P096	Hydrogen phosphide	7803-51-2
P060	Isodrin	465-73-6
P007	3(2H)-Isoxazolone,5-(aminomethyl)-	2763-96-4
P092	Mercury, (acetato-O) phenyl-	62-38-4
P065	Mercury fulminate (R,T)	628-86-4
P082	Methanamine,N-methyl-N-nitroso-	62-75-9
P064	Methane, isocyanato-	624-83-9
P016	Methane, oxybis (chloro-	542-88-1
P112	Methane, tetranitro-(R)	509-14-8
P118	Methanethiol, trichloro-	75-70-7
P050	6,9-Methano-2,4,3-benzodioxathiepen, 6,7,8,9,10,10-hexachloro-1,5,5a,6,9,9a-hexahydro-,3-oxide	115-29-7
P059	4,7-Methano-1H-indene,1,4,5,6,7,8,8-heptachloro-3a,4,7,7a-tetrahydro-	76-44-8
P066	Methomyl	16752-77-5
P068	Methyl hydrazine	60-34-4
P064	Methyl isocyanate	624-83-9
P069	2-Methyllactonitrile	75-86-5
P071	Methyl parathion	298-00-0
P072	alpha-Naphthylthiourea	86-88-4
P073	Nickel carbonyl	13463-39-3
P073	Nickel carbonyl $Ni(CO)_4$, (T-4)-	13463-39-3
P074	Nickel cyanide	557-19-7
P074	Nickel cyanide $Ni(CN)_2$	557-19-7
P075	Nicotine, and salts	*54-11-5
P076	Nitric oxide	10102-43-9
P077	p-Nitroaniline	100-01-6
P078	Nitrogen dioxide	10102-44-0
P076	Nitrogen oxide NO	10102-43-9
P078	Nitrogen oxide NO_2	10102-44-0
P081	Nitroglycerine (R)	55-63-0
P082	N-Nitrosodimethylamine	62-75-9
P084	N-Nitrosomethylvinylamine	4549-40-0
P085	Octamethylpyrophosphoramide	152-16-9
P087	Osmium oxide OsO_4, (T-4)-	20816-12-0
P087	Osmium tetroxide	20816-12-0
P088	7-Oxabicyclo (2.2.1)heptane-2,3-dicarboxylic acid	145-73-3
P089	Parathion	56-38-2
P034	Phenol, 2-cyclohexyl-4, 6-dinitro-	131-89-5
P048	Phenol, 2, 4-dinitro	51-28-5
P047	Phenol, 2-methyl-4,6-dinitro-, and salts	*534-52-1
P020	Phenol, 2-(1-methylpropyl)-4, 6-dinitro-	88-85-7
P009	Phenol, 2,4,6-trinitro-, ammonium salt (R)	131-74-8
P092	Phenylmercury acetate	62-38-4
P093	Phenylthiourea	103-85-5
P094	Phorate	298-02-2
P095	Phosgene	75-44-5
P096	Phosphine	7803-51-2
P041	Phosphoric acid, diethyl 4 -nitrophenyl ester	311-45-5

P039	Phosphorodithioic acid, 0,0-diethyl S-(2-(ethylthio)ethyl) ester	298-04-4
P094	Phosphorodithioic acid, 0,0-diethyl S-((ethylthio)methyl) ester	298-02-2
P044	Phosphorodithioic acid, O, O-dimethyl S-(2-(methylamino)-2-oxoethyl) ester	60-51-5
P043	Phosphorofluoridic acid, bis (1-methylethyl) ester	55-91-4
P089	Phosphorothioic acid, O, O-diethyl O-(4-nitrophenyl) ester	56-38-2
P040	Phosphorothioic acid, O, O-diethyl O-pyrazinyl ester	297-97-2
P097	Phosphorothioic acid, O-(4-((dimethylamino) sulfonyl) phenyl) 0,0-dimethyl ester	52-85-7
P071	Phosphorothioic acid, 0,0-dimethyl 0-(4-nitrophenyl) ester	298-00-0
P110	Plumbane, tetraethyl-	78-00-2
P098	Potassium cyanide	151-50-8
P098	Potassium cyanide K(CN)	151-50-8
P099	Potassium silver cyanide	506-61-6
P070	Propanal, 2-methyl-2-(methylthio)-,O-((methylamino)carbonyl)oxime	116-06-3
P101	Propanenitrile	107-12-0
P027	Propanenitrile, 3-chloro-	542-76-7
P069	Propanenitrile, 2-hydroxy-2-methyl-	75-86-5
P081	1,2,3-Propanetriol, trinitrate (R)	55-63-0
P017	2-Propanone, 1-bromo-	598-31-2
P102	Propargyl alcohol	107-19-7
P003	2-Propenal	107-02-8
P005	2-Propen-1-ol	107-18-6
P067	1,2-Propylenimine	75-55-8
P102	2-Propyn-1-ol	107-19-7
P008	4-Pyridinamine	504-24-5
P075	Pyridine,3-(1-methyl-2-pyrrolidinyl)-,(S)-, and salts	*54-11-5
P114	Selenious acid, dithalium(1+)salt	12039-52-0
P103	Selenourea	630-10-4
P104	Silver cyanide	506-64-9
P104	Silver cyanide Ag(CN)	506-64-9
P105	Sodium azide	26628-22-8
P106	Sodium cyanide	143-33-9
P106	Sodium cyanide Na(CN)	143-33-9
P108	Strychnidin-10-one, and salts	*57-24-9
P018	Strychnidin-10-one, 2, 3-dimethoxy-	357-57-3
P108	Strychnine, and salts	*57-24-9
P115	Sulfuric acid, dithallium (1+)salt	7446-18-6
P109	Tetraethyldithiopyrophosphate	3689-24-5
P110	Tetraethyl lead	78-00-2
P111	Tetraethyl pyrophosphate	107-49-3
P112	Tetranitromethane (R)	509-14-8
P062	Tetraphosphoric acid, hexaethyl ester	757-58-4
P113	Thallic oxide	1314-32-5
P113	Thallium oxide Tl_2O_3	1314-32-5
P114	Thallium (I) selenite	12039-52-0
P115	Thallium (I) sulfate	7446-18-6
P109	Thiodiphosphoric acid, tetraethyl ester	3689-24-5
P045	Thiofanox	39196-18-4
P049	Thioimidodicarbonic diamide $((H_2N)C(S))_2NH$	541-53-7
P014	Thiophenol	108-98-5
P116	Thiosemicarbazide	79-19-6
P026	Thiourea, (2-chlorophenyl)-	5344-82-1
P072	Thiourea, 1-naphthalenyl-	86-88-4
P093	Thiourea, phenyl-	103-85-5
P123	Toxaphene	8001-35-2
P118	Trichloromethanethiol	75-70-7
P119	Vanadic acid, ammonium salt	7803-55-6
P120	Vanadium oxide V_2O_5	1314-62-1
P120	Vanadium pentoxide	1314-62-1
P084	Vinylamine, N-methyl-N-nitroso-	4549-40-0
P001	Warfarin, and salts, when present at concentrations greater than 0.3%	*81-81-2
P121	Zinc cyanide	557-21-1
P121	Zinc cyanide $Zn(CN)_2$	557-21-1
P122	Zinc phosphide Zn_3P_2, when present at concentrations greater than 10% (R,T)	1314-84-7

*CAS number given for parent compound only

(6) The commercial chemical products, manufacturing chemical intermediates, or off-specification commercial chemical products referred to in subsections (1) to [~~through~~] (4) of this section, are identified as toxic wastes (T), unless otherwise designated, and are subject to the limited quantity generator exclusion in Section 5(1), (6), and (7) of 401 KAR 31:010.

(NOTE: The primary hazardous properties of these materials have been indicated by the letters T (Toxicity), R (Reactivity), I (Ignitability) and C (Corrosivity). Absence of a letter indicates that the compound is only listed for toxicity.) These wastes and their corresponding EPA Hazardous Waste Numbers are:

Hazardous Waste No.	Substance	Chemical Abstracts No.
U001	Acetaldehyde (I)	75-07-0
U034	Acetaldehyde, trichloro-	75-87-6
U187	Acetamide, N-(4-ethoxyphenyl)-	62-44-2
U005	Acetamide, N-9H-fluoren-2-yl-	53-96-3
U240	Acetic acid, (2,4-dichlorophenoxy)-, salts and esters	*94-75-7
U112	Acetic acid ethyl ester (I)	141-78-6
U144	Acetic acid, lead (2+) salt	301-04-2
U214	Acetic acid, thallium (1+) salt	563-68-8
See F027	Acetic acid, (2,4,5-trichlorophenoxy)	93-76-5
U002	Acetone (I)	67-64-1
U003	Acetonitrile (I,T)	75-05-8
U004	Acetophenone	98-86-2
U005	2-Acetylaminofluorene	53-96-3
U006	Acetyl chloride (C,R,T)	75-36-5
U007	Acrylamide	79-06-1
U008	Acrylic acid (I)	79-10-7
U009	Acrylonitrile	107-13-1
U011	Amitrole	61-82-5
U012	Aniline (I,T)	62-53-3
U136	Arsinic acid, dimethyl-	75-60-5
U014	Auramine	492-80-8
U015	Azaserine	115-02-6
U010	Azirino (2',3':3,4) pyrrolo (1,2-a) indole-4, 7-dione, 6-amino-8-(((aminocarbonyl) oxy) methyl)-1,1a,2,8,8a,8b-hexahydro-8a-methoxy-5-methyl-, (1aS- (1aalpha, 8beta, 8aalpha, 8balpha))	50-07-7
U157	Benz(j)aceanthrylene, 1,2-dihydro-3-methyl-	56-49-5
U016	Benz(c)acridine	225-51-4

U017	Benzal chloride	98-87-3
U192	Benzamide, 3,5-dichloro-N-(1,1-dimethyl-2-propynyl)-	23950-58-5
U018	Benz(a)anthracene	56-55-3
U094	Benz(a)anthracene, 7,12-dimethyl-	57-97-6
U012	Benzenamine (I,T)	62-53-3
U014	Benzenamine, 4,4'-carbonimidoylbis (N,N-dimethyl-	492-80-8
U049	Benzenamine, 4-chloro-2-methyl-,hydrochloride	3165-93-3
U093	Benzenamine, N, N-dimethyl-4-(phenylazo)-	60-11-7
U328	Benzenamine, 2-methyl-	95-53-4
U353	Benzenamine, 4-methyl-	106-49-0
U158	Benzenamine, 4,4'-methylenebis (2-chloro-	101-14-4
U222	Benzenamine, 2-methyl-, hydrochloride	636-21-5
U181	Benzenamine, 2-methyl-5-nitro	99-55-8
U019	Benzene (I,T)	71-43-2
U038	Benzeneacetic acid, 4-chloro-alpha-(4-chlorophenyl)-alpha-hydroxy-, ethyl ester	510-15-6
U030	Benzene, 1-bromo-4-phenoxy-	101-55-3
U035	Benzenebutanoic acid, 4-(bis (2-chloroethyl)amino)-	305-03-3
U037	Benzene, chloro-	108-90-7
U221	Benzenediamine, ar-methyl-	25376-45-8
U028	1,2-Benzenedicarboxylic acid, bis(2-ethylhexyl) ester	117-81-7
U069	1,2-Benzenedicarboxylic acid, dibutyl ester	84-74-2
U088	1,2-Benzenedicarboxylic acid, diethyl ester	84-66-2
U102	1,2-Benzenedicarboxylic acid, dimethyl ester	131-11-3
U107	1,2-Benzenedicarboxylic acid, dioctyl ester	117-84-0
U070	Benzene, 1,2-dichloro-	95-50-1
U071	Benzene, 1,3-dichloro-	541-73-1
U072	Benzene, 1,4-dichloro-	106-46-7
U060	Benzene, 1,1'-(2,2-dichloroethylidene)bis(4-chloro-	72-54-8
U017	Benzene, (dichloromethyl)-	98-87-3
U223	Benzene, 1,3-diisocyanatomethyl- (R,T)	26471-62-5
U239	Benzene, dimethyl- (I,T)	1330-20-7
U201	1,3-Benzenediol	108-46-3
U127	Benzene, hexachloro-	118-74-1
U056	Benzene, hexahydro-(I)	110-82-7
U220	Benzene, methyl-	108-88-3
U105	Benzene, 1-methyl-2, 4-dinitro-	121-14-2
U106	Benzene, 2-methyl-1,3-dinitro-	606-20-2
U055	Benzene, (1-methylethyl)-(I)	98-82-8
U169	Benzene, nitro-	98-95-3
U183	Benzene, pentachloro-	608-93-5
U185	Benzene, pentachloronitro-	82-68-8
U020	Benzenesulfonic acid chloride (C,R)	98-09-9
U020	Benzenesulfonyl chloride (C,R)	98-09-9
U207	Benzene, 1,2,4,5-tetrachloro-	95-94-3
U061	Benzene),1,1'-(2,2,2-trichloroethylidene)bis(4-chloro-	50-29-3
U247	Benzene, 1,1'-(2,2,2-trichloroethylidene)bis(4-methoxy-	72-43-5
U023	Benzene, (trichloromethyl)-	98-07-7
U234	Benzene, 1,3,5-trinitro-	99-35-4
U021	Benzidine	92-87-5
U202	1,2-Benzisothiazol-3(2H)-one, 1,1-dioxide, and salts	*81-07-02
U203	1,3-Benzodioxole, 5-(2-propenyl)-	94-59-7
U141	1,3-Benzodioxole, 5-(1-propenyl)-	120-58-1
U090	1,3-Benzodioxole, 5-propyl-	94-58-6
U064	Benzo(rst)pentaphene	189-55-9
U248	2H-1-Benzopyran-2-one, 4-hydroxy-3-(3-oxo-1-phenylbutyl)-, and salts, when present at concentrations of 0.3% or less	*81-81-2
U022	Benzo(a)pyrene	50-32-8
U197	p-Benzoquinone	106-51-4
U023	Benzotrichloride (C,R,T)	98-07-7
U085	2,2'-Bioxirane	1464-53-5
U021	(1,1'-Biphenyl)-4,4'-diamine	92-87-5
U073	(1,1'-Biphenyl)-4,4'-diamine, 3,3'-dichloro-	91-94-1
U091	(1,1'-Biphenyl)-4,4'-diamine, 3,3'-dimethoxy-	119-90-4
U095	(1,1'-Biphenyl)-4,4'-diamine, 3,3'-dimethyl-	119-93-7
U225	Bromoform	75-25-2
U030	4-Bromophenyl phenyl ether	101-55-3
U128	1,3-Butadiene,1,1,2,3,4,4-hexachloro-	87-68-3
U172	1-Butanamine, N-butyl-N-nitroso-	924-16-3
U031	1-Butanol (I)	71-36-3
U159	2-Butanone (I,T)	78-93-3
U160	2-Butanone, peroxide (R,T)	1338-23-4
U053	2-Butenal	4170-30-3
U074	2-Butene,1,4-dichloro- (I,T)	764-41-0
U143	2-Butenoic acid, 2-methyl-,7-((2,3-dihydroxy-2-(1-methoxyethyl)-3-methyl-1-oxobutoxy)methyl)-2,3,5,7a-tetrahydro-1H-pyrrolizin-1-yl ester, (1S-(1alpha(Z), 7(2S*,3R*),7aalpha))-	303-34-4
U031	n-Butyl alcohol (I)	71-36-3
U136	Cacodylic acid	75-60-5
U032	Calcium chromate	13765-19-0
U238	Carbamic acid, ethyl ester	51-79-6
U178	Carbamic acid, methylnitroso-, ethyl ester	615-53-2
U097	Carbamic chloride, dimethyl-	79-44-7
U114	Carbamodithioic acid, 1,2-ethanediylbis-, salts and esters	*111-54-6
U062	Carbamothioic acid, bis(1-methylethyl)-,S-(2,3-dichloro-2-propenyl) ester	2303-16-4
U215	Carbonic acid, dithallium (1+) salt	6533-73-9
U033	Carbonic difluoride	353-50-4
U156	Carbonochloridic acid, methyl ester (I,T)	79-22-1
U033	Carbon oxyfluoride (R,T)	353-50-4
U211	Carbon tetrachloride	56-23-5
U034	Chloral	75-87-6
U035	Chlorambucil	305-03-3
U036	Chlordane, alpha and gamma isomers	57-74-9
U026	Chlornaphazin	494-03-1
U037	Chlorobenzene	108-90-7
U038	Chlorobenzilate	510-15-6
U039	p-Chloro-m-cresol	59-50-7
U042	2-Chloroethyl vinyl ether	110-75-8
U044	Chloroform	67-66-3
U046	Chloromethyl methyl ether	107-30-2
U047	beta-Chloronaphthalene	91-58-7
U048	o-Chlorophenol	95-57-8

U049	4-Chloro-o-toluidine, hydrochloride	3165-93-3
U032	Chromic acid H_2CrO_4, calcium salt	13765-19-0
U050	Chrysene	218-01-9
U051	Creosote	--------
U052	Cresol (Cresylic acid)	1319-77-3
U053	Crotonaldehyde	4170-30-3
U055	Cumene (I)	98-82-8
U246	Cyanogen bromide (CN) Br	506-68-3
U197	2,5-Cyclohexadiene-1,4-dione	106-51-4
U056	Cyclohexane (I)	110-82-7
U129	Cyclohexane,1,2,3,4,5,6-hexachloro-(1alpha, 2alpha, 3beta, 4alpha, 5alpha, 6beta)-	58-89-9
U057	Cyclohexanone (I)	108-94-1
U130	1,3-Cyclopentadiene,1,2,3,4,5,5-hexachloro-	77-47-4
U058	Cyclophosphamide	50-18-0
U240	2,4-D, salts and esters	*94-75-7
U059	Daunomycin	20830-81-3
U060	DDD	72-54-8
U061	DDT	50-29-3
U062	Diallate	2303-16-4
U063	Dibenz(a,h) anthracene	53-70-3
U064	Dibenzo(a,i) pyrene	189-55-9
U066	1,2-Dibromo-3-chloropropane	96-12-8
U069	Dibutyl phthalate	84-74-2
U070	o-Dichlorobenzene	95-50-1
U071	m-Dichlorobenzene	541-73-1
U072	p-Dichlorobenzene	106-46-7
U073	3,3'-Dichlorobenzidine	91-94-1
U074	1,4-Dichloro-2-butene (I,T)	764-41-0
U075	Dichlorodifluoromethane	75-71-8
U078	1,1-Dichloroethylene	75-35-4
U079	1,2-Dichloroethylene	156-60-5
U025	Dichloroethyl ether	111-44-4
U027	Dichloroisoprophyl ether	108-60-1
U024	Dichloromethoxy ethane	111-91-1
U081	2,4-Dichlorophenol	120-83-2
U082	2,6-Dichlorophenol	87-65-0
U084	1,3-Dichloropropene	542-75-6
U085	1,2:3,4-Diepoxybutane (I,T)	1464-53-5
U108	1,4-Diethyleneoxide	123-91-1
U028	Diethylhexyl phthalate	117-81-7
U086	N, N'-Diethylhydrazine	1615-80-1
U087	O, O-Diethyl S-methyl dithio-phosphate	3288-58-2
U088	Diethyl phthalate	84-66-2
U089	Diethylstilbesterol	56-53-1
U090	Dihydrosafrole	94-58-6
U091	3,3'-Dimethoxybenzidine	119-90-4
U092	Dimethylamine (I)	124-40-3
U093	p-Dimethylaminoazobenzene	60-11-7
U094	7,12-Dimethylbenz(a)anthracene	57-97-6
U095	3,3'-Dimethylbenzidine	119-93-7
U096	alpha, alpha-Dimethylbenzyl-hydroperoxide (R)	80-15-9
U097	Dimethylcarbamoyl chloride	79-44-7
U098	1,1-Dimethylhydrazine	57-14-7
U099	1,2-Dimethylhydrazine	540-73-8
U101	2,4-Dimethylphenol	105-67-9
U102	Dimethyl phthalate	131-11-3
U103	Dimethyl sulfate	77-78-1
U105	2,4-Dinitrotoluene	121-14-2
U106	2,6-Dinitrotoluene	606-20-2
U107	Di-n-octyl phthalate	117-84-0
U108	1,4-Dioxane	123-91-1
U109	1,2-Diphenylhydrazine	122-66-7
U110	Dipropylamine (I)	142-84-7
U111	Di-n-propylnitrosamine	621-64-7
U041	Epichlorohydrin	106-89-8
U001	Ethanal (I)	75-07-0
U174	Ethanamine, N-ethyl-N-nitroso-	55-18-5
U155	1,2-Ethanediamine, N,N-dimethyl-N'-2-pyridinyl-N'-(2-thienylmethyl)-	91-80-5
U067	Ethane, 1,2-dibromo-	106-93-4
U076	Ethane, 1,1-dichloro-	75-34-3
U077	Ethane, 1,2-dichloro-	107-06-2
U131	Ethane, hexachloro-	67-72-1
U024	Ethane, 1,1'-(methylenebis (oxy))bis(2-chloro-)	111-91-1
U117	Ethane, 1,1'-oxybis- (I)	60-29-7
U025	Ethane, 1,1'-oxybis(2-chloro-)	111-44-4
U184	Ethane, pentachloro-	76-01-7
U208	Ethane, 1,1,1,2-tetrachloro-	630-20-6
U209	Ethane, 1,1,2,2-tetrachloro-	79-34-5
U218	Ethanethioamide	62-55-5
U226	Ethane, 1,1,1-trichloro	71-55-6
U227	Ethane, 1,1,2-trichloro-	79-00-5
U359	Ethanol, 2-ethoxy-	110-80-5
U173	Ethanol, 2,2'-(nitrosoimino)bis-	1116-54-7
U004	Ethanone, 1-phenyl	98-86-2
U043	Ethene, chloro-	75-01-4
U042	Ethene, (2-chloroethoxy)-	110-75-8
U078	Ethene, 1,1-dichloro-	75-35-4
U079	Ethene, 1,2-dichloro-,(E)	156-60-5
U210	Ethene, tetrachloro-	127-18-4
U228	Ethene, trichloro-	79-01-6
U112	Ethyl acetate (I)	141-78-6
U113	Ethyl acrylate (I)	140-88-5
U238	Ethyl carbamate (urethane)	51-79-6
U117	Ethyl ether (I)	60-29-7
U114	Ethylenebisdithiocarbamic acid, salts and esters	*111-54-6
U067	Ethylene dibromide	106-93-4
U077	Ethylene dichloride	107-06-2
U359	Ethylene glycol monoethyl ether	110-80-5
U115	Ethylene oxide (1,T)	75-21-8
U116	Ethylenethiourea	96-45-7
U117	Ethyl ether (I)	60-29-7
U076	Ethylidene dichloride	75-34-3
U118	Ethyl methacrylate	97-63-2
U119	Ethyl methanesulfonate	62-50-0
U120	Fluoranthene	206-44-0
U122	Formaldehyde	50-00-0
U123	Formic acid (C,T)	64-18-6
U124	Furan (I)	110-00-9
U125	2-Furancarboxaldehyde (I)	98-01-1
U147	2,5-Furandione	108-31-6
U213	Furan, tetrahydro- (I)	109-99-9
U125	Furfural (I)	98-01-1
U124	Furfuran (I)	110-00-9
U206	Glucopyranose, 2-deoxy-2-(3-methyl-3-nitrosoureido)-,D-	18883-66-4
U206	D-Glucose, 2-deoxy-2-(((methylnitrosoamino)-carbonyl(amino)-	18883-66-4
U126	Glycidylaldehyde	765-34-4
U163	Guanidine, N-methyl-N'-nitro-N-nitroso-	70-25-7
U127	Hexachlorobenzene	118-74-1
U128	Hexachlorobutadiene	87-68-3
U130	Hexachlorocyclopentadiene	77-47-4
U131	Hexachloroethane	67-72-1

U132	Hexachlorophene	70-30-4
U243	Hexachloropropene	1888-71-7
U133	Hydrazine (R,T)	302-01-2
U086	Hydrazine,1,2-diethyl-	1615-80-1
U098	Hydrazine,1,1-dimethyl-	57-14-7
U099	Hydrazine,1,2-dimethyl-	540-73-8
U109	Hydrazine,1,2-diphenyl-	122-66-7
U134	Hydrofluoric acid (C,T)	7664-39-3
U134	Hydrogen fluoride (C,T)	7664-39-3
U135	Hydrogen sulfide	7783-06-4
U135	Hydrogen sulfide H_2S	7783-06-4
U096	Hydroperoxide, 1-methyl-1-phenylethyl-(R)	80-15-9
U116	2-Imidazolidinethione	96-45-7
U137	Indeno(1,2,3-cd) pyrene	193-39-5
U190	1,3-Isobenzofurandione	85-44-9
U140	Isobutyl alcohol (I,T)	78-83-1
U141	Isosafrole	120-58-1
U142	Kepone	143-50-0
U143	Lasiocarpine	303-34-4
U144	Lead acetate	301-04-2
U146	Lead, bis(acetato-0)tetrahydroxytri-	1335-32-6
U145	Lead phosphate	7446-27-7
U146	Lead subacetate	1335-32-6
U129	Lindane	58-89-9
U163	MNNG	70-25-7
U147	Maleic anhydride	108-31-6
U148	Maleic hydrazide	123-33-1
U149	Malononitrile	109-77-3
U150	Melphalan	148-82-3
U151	Mercury	7439-97-6
U152	Methacrylonitrile (I,T)	126-98-7
U092	Methanamine, N-methyl- (I)	124-40-3
U029	Methane, bromo-	74-83-9
U045	Methane, chloro- (I,T)	74-87-3
U046	Methane, chloromethoxy-	107-30-2
U068	Methane, dibromo-	74-95-3
U080	Methane, dichloro-	75-09-2
U075	Methane, dichlorodifluoro-	75-71-8
U138	Methane, iodo-	74-88-4
U119	Methanesulfonic acid, ethyl ester	62-50-0
U211	Methane, tetrachloro-	56-23-5
U153	Methanethiol (I,T)	74-93-1
U225	Methane, tribromo-	75-25-2
U044	Methane, trichloro-	67-66-3
U121	Methane, trichlorofluoro-	75-69-4
U036	4,7-Methano-1H-indene, 1,2,4,5,6,7,8,8-octachloro-2,3,3a,4,7,7a-hexahydro-	57-74-9
U154	Methanol (I)	67-56-1
U155	Methapyrilene	91-80-5
U142	1,3,4-Metheno-2H-cyclobuta (cd)pentalen-2-one, 1,1a,3,3a,4,5,5,5a,5b,6-decachloro-octahydro-	143-50-0
U247	Methoxychlor	72-43-5
U154	Methyl alcohol (I)	67-56-1
U029	Methyl bromide	74-83-9
U186	1-Methylbutadiene (I)	504-60-9
U045	Methyl chloride (I,T)	74-87-3
U156	Methyl chlorocarbonate (I,T)	79-22-1
U226	Methyl chloroform	71-55-6
U157	3-Methylcholanthrene	56-49-5
U158	4,4'-Methylenebis (2-chloro-aniline)	101-14-4
U068	Methylene bromide	74-95-3
U080	Methylene chloride	75-09-2
U159	Methyl ethyl ketone (MEK) (I,T)	78-93-3
U160	Methyl ethyl ketone peroxide (R,T)	1338-23-4
U138	Methyl iodide	74-88-4
U161	Methyl isobutyl ketone (I)	108-10-1
U162	Methyl methacrylate (I,T)	80-62-6
U161	4-Methyl-2-pentanone (I)	108-10-1
U164	Methylthiouracil	56-04-2
U010	Mitomycin C	50-07-7
U059	5,12-Naphthacenedione, 8-acetyl-10-((3-amino-2,3,6-trideoxy)-alpha-L-lyxo-hexopyranosyl)oxyl)-7,8,9,10,tetrahydro-6,8,11-trihydroxy-1-methoxy-, (8S-cis)-	20830-81-3
U167	1-Naphthalenamine	134-32-7
U168	2-Naphthalenamine	91-59-8
U026	Naphthalenamine,N,N'-bis (2-chloroethyl)-	494-03-1
U165	Naphthalene	91-20-3
U047	Naphthalene, 2-chloro-	91-58-7
U166	1,4-Naphthalenedione	130-15-4
U236	2,7-Naphthalenedisulfonic acid, 3,3'-((3,3'-dimethyl (1,1'-biphenyl)-4,4'-diyl) bis(azo)bis(5-amino-4-hydroxy)-,tetrasodium salt	72-57-1
U166	1,4-Naphthoquinone	130-15-4
U167	alpha-Naphthylamine	134-32-7
U168	beta-Naphthylamine	91-59-8
U217	Nitric acid, thallium(1+) salt	10102-45-1
U169	Nitrobenzene (I,T)	98-95-3
U170	p-Nitrophenol	100-02-7
U171	2-Nitropropane (I,T)	79-46-9
U172	N-Nitrosodi-n-butylamine	924-16-3
U173	N-Nitrosodiethanolamine	1116-54-7
U174	N-Nitrosodiethylamine	55-18-5
U176	N-Nitroso-N-ethylurea	759-73-9
U177	N-Nitroso-N-methylurea	684-93-5
U178	N-Nitroso-N-methylurethane	615-53-2
U179	N-Nitrosopiperidine	100-75-4
U180	N-Nitrosopyrrolidine	930-55-2
U181	5-Nitro-o-toluidine	99-55-8
U193	1,2-Oxathiolane,2,2-dioxide	1120-71-4
U058	2H-1,3,2-Oxazaphosphorin-2-amine,N,N-bis(2-chloroethyl) tetrahydro-, 2-oxide	50-18-0
U115	Oxirane (I,T)	75-21-8
U126	Oxiranecarboxyaldehyde	765-34-4
U041	Oxirane,(chloromethyl)-	106-89-8
U182	Paraldehyde	123-63-7
U183	Pentachlorobenzene	608-93-5
U184	Pentachloroethane	76-01-7
U185	Pentachloronitrobenzene (PCNB)	82-68-8
See F027	Pentachlorophenol	87-86-5
U161	Pentanol, 4-methyl-	108-10-1
U186	1,3-Pentadiene (I)	504-60-9
U187	Phenacetin	62-44-2
U188	Phenol	108-95-2
U048	Phenol,2-chloro-	95-57-8
U039	Phenol,4-chloro-3-methyl-	59-50-7
U081	Phenol,2,4-dichloro-	120-83-2
U082	Phenol,2,6-dichloro-	87-65-0
U089	Phenol,4,4'-(1,2-diethyl-1,2-ethenediyl)bis-,(E)-	56-53-1
U101	Phenol,2,4-dimethyl-	105-67-9
U052	Phenol, methyl-	1319-77-3
U132	Phenol,2,2'-methylenebis (3,4,6-trichloro-	70-30-4

U170	Phenol,4-nitro-	100-02-7
See F027	Phenol, pentachloro-	87-86-5
See F027	Phenol,2,3,4,6-tetrachloro-	58-90-2
See F027	Phenol,2,4,5-trichloro-	95-95-4
See F027	Phenol,2,4,6-trichloro	88-06-2
U150	L-Phenylalanine, 4-(bis(2-chloroethyl)amino)-	148-82-3
U145	Phosphoric acid, lead (2+) salt (2:3)	7446-27-7
U087	Phosphorodithioic acid,0,0-diethyl S-methyl ester	3288-58-2
U189	Phosphorus sulfide (R)	1314-80-3
U190	Phthalic anhydride	85-44-9
U191	2-Picoline	109-06-8
U179	Piperidine, 1-nitroso-	.100-75-4
U192	Pronamide	23950-58-5
U194	1-Propanamine (I,T)	107-10-8
U111	1-Propanamine, N-nitroso-N-propyl-	621-64-7
U110	1-Propanamine, N-propyl- (I)	142-84-7
U066	Propane, 1,2-dibromo-3-chloro-	96-12-8
U083	Propane, 1,2-dichloro-	78-87-5
U149	Propanedinitrile	109-77-3
U171	Propane, 2-nitro- (I,T)	79-46-9
U027	Propane,2,2'-oxybis (2-chloro-	108-60-1
U193	1,3-Propane sultone	1120-71-4
See F027	Propanoic acid, 2-(2,4,5-trichlorophenoxy)-	93-72-1
U235	1-Propanol,2,3-dibromo-, phosphate (3:1)	126-72-7
U140	1-Propanol, 2-methyl- (I,T)	78-83-1
U002	2-Propanone (I)	67-64-1
U007	2-Propenamide	79-06-1
U084	1-Propene, 1,3-dichloro-	542-75-6
U243	1-Propene, 1,1,2,3,3,3-hexachloro-	1888-71-7
U009	2-Propenenitrile	107-13-1
U152	2-Propenenitrile, 2-methyl- (I,T)	126-98-7
U008	2-Propenoic acid (I)	79-10-7
U113	2-Propenoic acid, ethyl ester (I)	140-88-5
U118	2-Propenoic acid, 2-methyl-, ethyl ester	97-63-2
U162	2-Propenoic acid, 2-methyl-, methyl ester (I,T)	80-62-6
U194	n-Propylamine (I,T)	107-10-8
U083	Propylene dichloride	78-87-5
U148	3,6-Pyridazinedione,1,2-dihydro-	123-33-1
U196	Pyridine	110-86-1
U191	Pyridine, 2-methyl-	109-06-8
U237	2,4(1H,3H)-Pyrimidinedione, 5-(bis(2-chloroethyl)amino)-	66-75-1
U164	4(1H)-Pyrimidinone,2,3-dihydro-6-methyl-2-thioxo-	56-04-2
U180	Pyrrolidine, 1-nitroso-	930-55-2
U200	Reserpine	50-55-5
U201	Resorcinol	108-46-3
U202	Saccharin, and salts	*81-07-2
U203	Safrole	94-59-7
U204	Selenious acid	7783-00-8
U204	Selenium dioxide	7783-00-8
U205	Selenium sulfide	7488-56-4
U205	Selenium sulfide SeS_2 (R,T)	7488-56-4
U015	L-Serine, diazoacetate (ester)	115-02-6
See F027	Silvex (2,4,5,-TP)	93-72-1
U206	Streptozotocin	18883-66-4
U103	Sulfuric acid, dimethyl ester	77-78-1
U189	Sulfur phosphide (R)	1314-80-3
See F027	2,4,5-T	93-76-5
U207	1,2,4,5,-Tetrachlorobenzene	95-94-3
U208	1,1,1,2-Tetrachloroethane	630-20-6
U209	1,1,2,2-Tetrachloroethane	79-34-5
U210	Tetrachloroethylene	127-18-4
See F027	2,3,4,6-Tetrachlorophenol	58-90-2
U213	Tetrahydrofuran (I)	109-99-9
U214	Thallium (I) acetate	563-68-8
U215	Thallium (I) carbonate	6533-73-9
U216	Thallium (I) chloride	7791-12-0
U216	Thallium chloride Tlcl	7791-12-0
U217	Thallium (I) nitrate	10102-45-1
U218	Thioacetamide	62-55-5
U153	Thiomethanol (I,T)	74-93-1
U244	Thioperoxydicarbonic diamide $((H_2N)C(S))_2S_2$, tetramethyl-	137-26-8
U219	Thiourea	62-56-6
U244	Thiram	137-26-8
U220	Toluene	108-88-3
U221	Toluenediamine	25376-45-8
U223	Toluene diisocyantate (R,T)	26471-62-5
U328	o-Toluidine	95-53-4
U353	p-Toluidine	106-49-0
U222	o-Toluidine hydrochloride	636-21-5
U011	1H-1,2,4-Triazol-3-amine	61-82-5
U227	1,1,2-Trichloroethane	79-00-5
U228	Trichloroethylene	79-01-6
U121	Trichloromonofluoromethane	75-69-4
See F027	2,4,5-Trichlorophenol	95-95-4
See F027	2,4,6-Trichlorophenol	88-06-2
U234	1,3,5-Trinitrobenzene (R,T)	99-35-4
U182	1,3,5-Trioxane,2,4,6-tri-methyl-	123-63-7
U235	Tris(2,3-dibromopropyl) phosphate	126-72-7
U236	Trypan blue	72-57-1
U237	Uracil mustard	66-75-1
U176	Urea, N-ethyl-N-nitroso-	759-73-9
U177	Urea, N-methyl-N-nitroso-	684-93-5
U043	Vinyl chloride	75-01-4
U248	Warfarin, and salts, when present at concentrations of 0.3% or less	*81-81-2
U239	Xylene (I)	1330-20-7
U200	Yohimban-16-carboxylic acid, 11, 17-dimethoxy-18((3,4,5-trimethoxybenzoyl)oxy)-, methyl ester, (3beta,16beta, 17alpha,18beta,20alpha)-	50-55-5
U249	Zinc phosphide Zn_3P_2, when present at concentrations of 10% or less	1314-84-7

*CAS number given for parent compound only.

Section 5. Nerve and Blister Agents. The following substances are listed as hazardous wastes:

Kentucky Waste Number	Substance	Chemical Abstracts Number
N001	GB (isopropyl methyl phosphonoflouridate) (H)	107-44-8
N002	VX (0-ethyl-S-(2-diisopropyl-aminoethyl) -methyl phosphonothiolate) (H)	50782-69-9
N003	H (bis(2-chloroethyl) sulfide) and related compounds (H)	505-60-2

Section 6. Deletion of Certain Hazardous Waste Codes Following

Equipment Cleaning and Replacement. (1) Wastes from wood preserving processes at plants that do not resume or initiate use of chlorophenolic preservatives shall not meet the listing definition of F032 once the generator has met all of the requirements of subsection (2) and (3) of this section. These wastes may, however, continue to meet another hazardous waste listing description or may exhibit one (1) or more of the hazardous waste characteristics.

(2) Generators shall either clean or replace all process equipment that may have come into contact with chlorophenolic formulations or constituents thereof, including, but not limited to, treatment cylinders, sumps, tanks, piping systems, drip pads, fork lifts, and trams, in a manner that minimizes or eliminates the escape of hazardous waste or constituents, leachate, contaminated drippage, or hazardous waste decomposition products to the ground water, surface water, or atmosphere.

(a) Generators shall do one (1) of the following:

1. Prepare and follow an equipment cleaning plan and clean equipment in accordance with this section;

2. Prepare and follow an equipment replacement plan and replace equipment in accordance with this section; or

3. Document cleaning and replacement in accordance with this section, carried out after termination of use of chlorophenolic preservations.

(b) Cleaning requirements.

1. **Generators shall** prepare and sign a written equipment cleaning plan that describes:

a. The equipment to be cleaned;

b. How the equipment will be cleaned;

c. The solvent to be used in cleaning;

d. How solvent rinses **will** [~~shall~~] be tested; and

e. How cleaning residues **will** [~~shall~~] be disposed.

2. Equipment shall be cleaned as follows:

a. Remove all visible residues from process equipment;

b. Rinse process equipment with an appropriate solvent until dioxins and dibenzofurans are not detected in the final solvent rinse.

3. Analytical requirements.

a. Rinses shall be tested in accordance with SW-846, Method 8290.

b. "Not detected" means at or below the lower method calibration limit (MCL) in Method 8290, Table 1.

4. The generator shall manage all residues from the cleaning process as F032 waste.

(c) Replacement requirements.

1. **Generators shall** prepare and sign a written equipment replacement plan that describes:

a. The equipment to be replaced;

b. How the equipment **will** [~~shall~~] be replaced; and

c. How the equipment **will** [~~shall~~] be disposed.

2. The generator shall manage the discarded equipment as F032 waste.

(d) Documentation requirements. **Generators shall** document that previous equipment cleaning or replacement was performed in accordance with this section and occurred after cessation of use of chlorophenolic preservatives.

(3) The generator shall maintain the following records documenting the cleaning and replacement as part of the facility's operating record:

(a) The name and address of the facility;

(b) Formulations previously used and the date on which their use ceased in each process at the plant;

(c) Formulations currently used in each process at the plant;

(d) The equipment cleaning or replacement plan;

(e) The name and address of any persons who conducted the cleaning and replacement;

(f) The dates on which cleaning and replacement were accomplished;

(g) The dates of sampling and testing;

(h) A description of the sample handling and preparation techniques, including techniques used for extraction, containerization, preservation, and chain-of-custody of the samples;

(i) A description of the tests performed, the date the tests were performed, and the results of the tests;

(j) The name and model numbers of the instrument(s) used in performing the tests;

(k) QA/QC documentation; and

(l) The following statement signed by the generator or his authorized representative:

I certify under penalty of law that all process equipment required to be cleaned or replaced under Section 6 of 401 KAR 31:040 was cleaned or replaced as represented in the equipment cleaning and replacement plan and accompanying documentation. I am aware that there are significant penalties for providing false information, including the possibility of fine or imprisonment.

PHILLIP J. SHEPHERD, Secretary
E. DOUGLAS STEPHAN, Commissioner
APPROVED BY AGENCY: December 13, 1993
FILED WITH LRC: December 14, 1993 at 10 a.m.

NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION CABINET
Department for Environmental Protection
Division of Waste Management
(Amended After Hearing)

401 KAR 31:060. Rulemaking petitions for hazardous waste.

RELATES TO: KRS 224.10, 224.40, 224.43, 224.46, 224.50, 224.99[~~, 40 CFR 261.11(a)(3)~~]

STATUTORY AUTHORITY: KRS 224.10-100, 224.46-510(3)[~~, 40 CFR 261.11(e)(3)~~]

NECESSITY AND FUNCTION: To implement provisions of KRS 224.46-510(3) and to [~~requires the cabinet to identify the characteristics of and to list hazardous wastes. This chapter identifies and lists hazardous wastes. This regulation~~] establish[~~es~~] the procedures to add a testing or analytical method to 401 KAR Chapters 31, 34, or 35[~~, or 37,~~] or to exclude a waste at a particular site or facility from Section 3 of 401 KAR 31:010 or the lists of hazardous wastes in 401 KAR 31:040.

Section 1. General Procedures. (1) This administrative regulation sets forth requirements for petitions to add a testing or analytical method to 401 KAR Chapters 31, 34, or 35[~~, or 37,~~] or to exclude a waste at a particular facility from Section 3 of 401 KAR 31:010 or the lists of hazardous wastes in 401 KAR 31:040.

(2) Each petition shall be submitted to the cabinet by certified mail and shall include:

(a) The petitioner's name and address;

(b) A statement of the petitioner's interest in the proposed action;

(c) A description of the proposed action, including (where appropriate) suggested regulatory language;

(d) A statement of the need and justification for the proposed action, including any supporting tests, studies, or other information; and

(e) A check payable to the Kentucky State Treasurer in the amount required by 401 KAR Chapter 39.

(3) The cabinet shall make a tentative decision to grant or deny a petition. If the tentative decision is to deny, the cabinet shall notify the petitioner. If the tentative decision is to grant the petition, the cabinet shall propose an amendment to 401 KAR 31:070, and file the proposed amendment with the Legislative Research Commission pursuant to KRS Chapter 13A.

Section 2. Petitions to Amend 401 KAR Chapter 31 to Exclude a Waste Produced at a Particular Facility. (1) Any person seeking to exclude a waste at a particular generating facility from the lists in 401 KAR 31:040 may petition for an amendment to the administrative regulation under this section and Section 1 of this administrative regulation. To be successful:

(a) The petitioner shall demonstrate to the satisfaction of the cabinet that the waste produced by a particular generating facility does not meet any of the criteria under which the waste was listed as a hazardous waste or an acutely hazardous waste; and

(b) Based on a complete application the cabinet shall determine, where it has a reasonable basis to believe that factors (including additional constituents) other than those for which the waste was listed **will** [~~shall~~] cause the waste to be a hazardous waste, that such factors do not warrant retaining the waste as a hazardous waste. A waste which is so excluded, however, still may be a hazardous waste by operation of 401 KAR 31:030.

(2) The procedures in this section and Section 1 of this administrative regulation may also be used to petition the cabinet for a regulatory amendment to exclude from Section 3(1)(b)2 or (3) of 401 KAR 31:010, a waste which is described in these subsections [~~that section~~] and is either a waste listed in 401 KAR 31:040, or is derived from a waste listed in 401 KAR 31:040. This exclusion may only be issued for a particular generating, storage, treatment, or disposal facility. The petitioner shall make the same demonstration as required by subsection (1) of this section. [~~, except that~~] Where the waste is a mixture of solid waste and one (1) or more listed hazardous wastes or is derived from one (1) or more hazardous wastes, his demonstration shall be made with respect to the waste mixture as a whole; analysis shall be conducted for not only those constituents of [~~for which~~] the listed waste(s) contained within the mixture [~~was listed as hazardous,~~] but also for factors (including additional constituents) that could cause the waste mixture to be a hazardous waste. A waste which is so excluded may still be a hazardous waste in accordance with 401 KAR 31:030.

(3) If the waste is listed with codes "I," "C," "R," or "E" in 401 KAR 31:040:

(a) The petitioner shall show that the waste does not exhibit the relevant characteristic for which the waste was listed as defined in Sections 2, 3, 4, or 5 of 401 KAR 31:030 using any applicable methods prescribed therein. The petitioner also shall show that the waste does not exhibit any of the other characteristics defined in Sections 2, 3, 4, or 5 of 401 KAR 31:030 using any applicable methods prescribed therein; and

(b) Based on a complete application, the cabinet shall determine, where it has a reasonable basis to believe that factors (including additional constituents) other than those for which the waste was listed shall cause the waste to be hazardous waste, that such factors do not warrant retaining the waste as a hazardous waste. A waste which is so excluded, however, still may be a hazardous waste by operation of 401 KAR 31:030.

(4) If the waste is listed with code "T" in 401 KAR 31:040:

(a) The petitioner shall demonstrate that the waste:

1. Does not contain the constituent or constituents (as defined in 401 KAR 31:160) that caused the cabinet to list the waste, using the appropriate test methods prescribed in 401 KAR 31:120; or

2. Although containing one (1) or more of the hazardous constituents (as defined in 401 KAR 31:160) that caused the cabinet to list the waste, does not meet the criterion of 40 CFR 261.11(a)(3), (1990) when considering the factors used by the cabinet in 40 CFR 261.11(a)(3)(i) to [~~through~~] (xi), (1990) under which the waste was listed as hazardous; and

(b) Based on a complete application, the cabinet shall determine, where it has a reasonable basis to believe that factors (including additional constituents) other than those for which the waste was listed could cause the waste to be a hazardous waste, that such factors do not warrant retaining the waste as a hazardous waste; and

(c) The petitioner shall demonstrate that the waste does not exhibit any of the characteristics defined in Sections 2, 3, 4 and 5 of 401 KAR 31:030 using any applicable methods prescribed therein;

(d) A waste which is so excluded, however, still may be a hazardous waste by operation of 401 KAR 31:030.

(5) If the waste is listed with the code "H" in 401 KAR 31:040:

(a) The petitioner shall demonstrate that the waste does not meet criterion of subsection (1)(b) of 401 KAR 31:020; and

(b) Based on a complete application, the cabinet shall determine, where it has a reasonable basis to believe that additional factors (including additional constituents) other than those for which the waste was listed **will** [~~shall~~] cause the waste to be a hazardous waste, that such factors do not warrant retaining the waste as a hazardous waste; and

(c) The petitioner shall demonstrate that the waste does not exhibit any of the characteristics defined in Sections 2, 3, 4, and 5 of 401 KAR 31:030 using any applicable methods prescribed therein;

(d) A waste which is so excluded, however, still may be a hazardous waste by operation of 401 KAR 31:030.

(6) Demonstration samples shall consist of enough representative samples, but in no case less than four (4) samples, taken over a period of time sufficient to represent the variability or the uniformity of the waste.

(7) Each petition shall include, in addition to the information required by Section 1(2) of this administrative regulation:

(a) The name and address of the laboratory facility performing the sampling or tests of the waste;

(b) The names and qualifications of the persons sampling and testing the waste;

(c) The dates of sampling and testing;

(d) The location of the generating facility;

(e) A description of the manufacturing processes or other operations and feed materials producing the waste and an assessment of whether such processes, operations, or feed materials can or might produce a waste that is not covered by the demonstration;

(f) A description of the waste and an estimate of the average and maximum monthly and annual quantities of waste covered by the demonstration;

(g) Pertinent data on and discussion of the factors delineated in the respective criterion for listing a hazardous waste, where the demonstration is based on the factors in Section 2(1)(c) of 401 KAR 31:020;

(h) A description of the methodologies and equipment used to obtain the representative samples;

(i) A description of the sample handling and preparation techniques, including techniques used for extraction, containerization and preservation of the samples;

(j) A description of the tests performed (including results);

(k) The names and model numbers of the instruments used in performing the tests; and

(l) The following statement signed by the generator of the waste or his authorized representative:

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this demonstration and all attached documents, and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the submitted information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

(8) After receiving a petition for an exclusion, the cabinet may request any additional information which the cabinet may reasonably require to evaluate the petition.

(9) An exclusion shall only apply to the waste generated at the individual facility covered by the demonstration and shall not apply to waste from any other facility.

(10) The cabinet may exclude only the part of the waste for which the demonstration is submitted where the cabinet has [~~there is~~]

reason to believe that variability of the waste justifies a partial exclusion.

Section 3. Requirements for Excluded Wastes. Upon approval by the cabinet of a petition to exclude waste from a particular facility, the excluded waste shall thereby be listed as a solid waste and be subject to the requirements for solid waste disposal in 401 KAR Chapter 47 and the conditions as specified in the approved exclusion.

Section 4. Repeal or Modification of an Exclusion. The cabinet shall repeal or modify an exclusion granted to any generator or petitioner for a waste or to any generator or petitioner for an equivalent testing or analytical method whenever:

(1) The cabinet has obtained information, which was not available at the time the petition for exclusion was granted, which leads [~~leaves~~] the cabinet to believe that reasonable probability exists that the waste:

(a) Was erroneously excluded from administrative regulation in accordance with Section 2 of this administrative regulation;

(b) Shall be regulated as a hazardous waste because it contains a hazardous constituent which was listed as a hazardous waste subsequent to approval of a petition to delist the waste at a particular facility; or

(c) Shall be regulated as a hazardous waste because new studies or analysis have been performed which indicate the waste meets the definition of a hazardous waste in KRS 224.01-010.

(2) The cabinet has obtained information, which was not available at the time the petition for an equivalent testing or analytical method was granted, which leaves the cabinet to believe that reasonable probability exists that the equivalent testing or analytical method was erroneously approved in accordance with Section 6 of this administrative regulation.

(3) The cabinet has obtained information that a petition for an exclusion or an equivalent testing or analytical method was incomplete, inaccurate, or based on erroneous data or calculations.

(4) The cabinet has obtained information from any other agency of state or federal government, including the EPA, that the waste shall be regulated as a hazardous waste consistent with the Resource Conservation and Recovery Act (PL 94-580), as amended (including PL 98-616, the 1984 Hazardous and Solid Waste Amendments), and pursuant to KRS Chapter 224.

(5) The cabinet has obtained information from any other agency of a state or the federal government, including the EPA, that the testing or analytical method is not equal to or superior to the corresponding method prescribed in 401 KAR Chapter 31, 34, 35, or 37 in terms of its sensitivity, accuracy, and precision.

Section 5. Requirements for Approval. In accordance with Section 3 of 401 KAR 30:020, the cabinet shall not approve a petition to exclude a waste at a particular facility unless:

(1) Exclusion of the waste is consistent with the requirements in KRS 224.46-510(3);

(2) Petitioning fees have been paid in accordance with 401 KAR 39:020; and

(3) All the requirements of this administrative regulation are satisfied.

Section 6. Petitions for Equivalent Testing or Analytical Methods. (1) Any person seeking to add a testing or analytical method to 401 KAR Chapter 31, 34, 35, or 37 may petition for a regulatory amendment under this section and Section 1 of this administrative regulation. To be successful, the person shall demonstrate to the satisfaction of the cabinet that the proposed method is equal to or superior to the corresponding method prescribed in 401 KAR Chapter 31, 34, 35, or 37 in terms of its sensitivity, accuracy, and precision ([~~i.e.,~~] reproducibility).

(2) Each petition shall include, in addition to the information required by Section 1(2) of this administrative regulation:

(a) A full description of the proposed method, including all procedural steps and equipment used in the method;

(b) A description of the types of wastes or waste matrices for which the proposed method may be used;

(c) Comparative results obtained from using the proposed method with those obtained from using the relevant or corresponding methods prescribed in 401 KAR Chapter 31, 34, 35, or 37;

(d) An assessment of any factors which may interfere with, or limit the use of, the proposed method; and

(e) A description of the quality control procedures necessary to ensure the sensitivity, accuracy, and precision of the proposed method.

(3) After receiving a petition for an equivalent method, the cabinet may request any additional information on the proposed method which is reasonably required to evaluate the method.

(4) If the cabinet amends the hazardous waste administrative regulations to permit use of a new testing method, the method shall be referenced in Section 3 of 401 KAR 30:010.

PHILLIP J. SHEPHERD, Secretary
E. DOUGLAS STEPHAN, Commissioner
APPROVED BY AGENCY: December 13, 1993
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NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION CABINET
Department for Environmental Protection
Division of Waste Management
(Amended After Hearing)

401 KAR 32:030. Pretransport requirements.

RELATES TO: KRS 224.01, 224.10, 224.40, 224.46, 224.99[~~, 49 CFR Parts 172, 173, 178, 179~~]

STATUTORY AUTHORITY: KRS 224.10-100, 224.46-510

NECESSITY AND FUNCTION: To implement provisions of KRS 224.46-510 and 49 CFR Parts 172, 173, 178, and 179 and to [~~requires the cabinet to promulgate regulations to establish standards for the generation of hazardous waste. The chapter establishes standards applicable to generators of hazardous waste. This regulation~~] establish[~~es the~~] requirements for labeling, marking, placarding, and accumulation time.

Section 1. Packaging. Before transporting hazardous waste or offering hazardous waste for transportation off-site, a generator shall package the waste in accordance with the applicable DOT U.S. Department of Transportation regulations on packaging under 49 CFR Parts 173, 178, and 179 (1989).

Section 2. Labeling. Before transporting or offering hazardous waste for transportation off-site, a generator shall label each package in accordance with the applicable DOT U. S. Department of Transportation regulations on hazardous materials, under 49 CFR 172 (1989).

Section 3. Marking. (1) Before transporting or offering hazardous waste for transportation off-site, a generator shall mark each package of hazardous waste in accordance with the applicable DOT U.S. Department of Transportation regulations on hazardous materials under 49 CFR 172 (1989).

(2) Before transporting hazardous waste or offering hazardous waste for transportation off-site, a generator shall mark each container of 110 gallons or less used in such transportation in accordance with the requirements of 49 CFR 172.304 (1989). The following words and information shall be displayed: "Hazardous Waste - Federal Law Prohibits Improper Disposal. If found, contact the nearest police or

public safety authority or the U.S. Environmental Protection Agency.
Generator's Name and Address _____
Manifest Document Number _____

Section 4. Placarding. Before transporting hazardous waste or offering hazardous waste for transportation off-site, a generator shall offer the initial transporter the appropriate placards according to DOT U.S. Department of Transportation regulations for hazardous materials under 49 CFR Part 172, Subpart F (1989).

Section 5. Accumulation Time. (1) Except as provided in subsection (3) of this section and Section 6 of this administrative regulation, a generator may accumulate hazardous waste on-site for ninety (90) days or less without a permit or without having interim status if:

(a) The waste is placed:

1. In containers and the generator complies with 401 KAR 35:180; or

2. In tanks and the generator complies with 401 KAR 35:190 (except Sections 8(3) and 11 and forty-five (45) days prior to closing a tank, the generator notifies the cabinet in writing of the intent to begin closure); or

3. On drip pads and the generator complies with 401 KAR 35:285 and maintains the following records at the facility:

a. A description of procedures that **will** [~~shall~~] be followed to ensure that all wastes are removed from the drip pad and associated collection system at least once every ninety (90) days; and

b. Documentation of each waste removal, including the quantity of waste removed from the drip pad and the sump or collection system and the date and time of removal.

[~~(a) The waste is placed in containers which meet the standards of Section 1 of this regulation and the generator complies with 401 KAR 35:180, or the waste is placed in tanks and the generator complies with 401 KAR 35:190, except these provisions in Sections 8(3) and 11 of 401 KAR 35:190. Forty-five (45) days prior to closing a tank, the generator shall notify the cabinet in writing of the intent to begin closure. Excluding the requirements in Section 2(1), (2), 4 and 5 of 401 KAR 35:070, a generator is exempt from the requirements in 401 KAR 35:070 through 35:130.~~]

(b) The date upon which each period of accumulation begins is clearly marked and visible for inspection on each container[~~. The date on which accumulation begins and the date and amount of waste removed from each tank shall be recorded in the inspection log required by Section 6 of 401 KAR 35:020~~];

(c) While being accumulated on-site, each container and tank is labeled or marked clearly with the words "Hazardous Waste;" and

(d) The generator complies with the requirements for owners or operators [~~specified~~] in 401 KAR 35:030, and 401 KAR 35:040, with Section 7 [~~and Sections 6 and 7~~] of 401 KAR 35:020, and with Section 7(1)(d) of 401 KAR 37:010. In addition, the generator is exempt from all requirements in 401 KAR 35:070 and 35:080, except for Sections 2, 4, and 5 of 401 KAR 35:070.

(2) A generator who accumulates hazardous waste for more than ninety (90) days is an operator of a storage facility and is subject to the requirements of 401 KAR Chapter 34, 401 KAR Chapter 35 and the permit requirements of 401 KAR Chapter 38, unless he has been granted an extension to the ninety (90) day period. Such extensions may be granted by the cabinet if hazardous wastes **will** [~~shall~~] remain on-site for longer than ninety (90) days due to unforeseen, temporary, and uncontrolled circumstances. An extension of up to thirty (30) days may be granted at the discretion of the cabinet on a case-by-case basis.

(3) Satellite accumulation.

(a) A generator may accumulate as much as fifty-five (55) gallons of hazardous waste or one (1) quart of acutely hazardous waste listed in Section 4 of 401 KAR 31:040 in containers at or near any point of generation where wastes initially accumulate, which is under the control of the operator of the process generating the waste, without a permit or interim status and without complying with subsection (1) of this section provided that upon commencement of accumulation, he:

1. Complies with Sections 2, 3, and 4(1) of 401 KAR 35:180; and

2. Marks his containers with the words "Hazardous Waste."

(b) A generator who accumulates either hazardous waste or acutely hazardous waste listed in Section 4 of 401 KAR 31:040 in excess of the amounts listed in paragraph (a) of this subsection at or near any point of generation shall, with respect to that amount of excess waste, comply with subsection (1) of this section or other applicable provisions of this chapter and continue to comply with paragraph (a)1 and 2 of this subsection. The generator must mark the container holding the excess accumulation of hazardous waste with the date the excess amount began accumulating. The date shall be placed on the container on the day that excess accumulation began.

Section 6. Accumulation Time for Small Quantity Generators. (1) A generator generating a total quantity of hazardous waste greater than 100 kilograms, but less than 1,000 kilograms during a calendar month for every month in a calendar year (that is, [~~i.e.,~~] a registered small quantity generator), may accumulate without a permit for up to 180 days. The on-site accumulation may occur without a permit for not more than 6,000 kilograms for up to 270 days if the generator is obligated to ship or haul the waste over 200 miles.

(2) A generator who generates greater than 100 kilograms but less than 1,000 kilograms of hazardous waste in a calendar month and who accumulates hazardous waste in quantities exceeding 6,000 kilograms or accumulates hazardous waste for more than 180 days (or for more than 270 days if he [~~must~~] transports his waste or offers his waste for transportation over a distance of 200 miles or more) is an operator of a storage facility and is subject to the requirements of 401 KAR Chapters 34 and 35 and the permit requirements of 401 KAR Chapter 38 unless he has been granted an extension to the 180 day (or 270 day if applicable) period. Such extension may be granted by the cabinet if hazardous wastes **will** [~~shall~~] remain on site for longer than 180 days (or 270 days if applicable) due to unforeseen, temporary, and uncontrollable circumstances. An extension of up to thirty (30) days may be granted at the discretion of the cabinet on a case-by-case basis.

(3) A small quantity generator may accumulate hazardous waste on site for 180 days (or for 270 days if he is obligated to transport his waste or offer his waste for transportation over a distance of 200 miles or more) or less without a permit or without having interim status provided that he complies with the requirements of Section 5(1)[~~(a) through (d)~~] of this administrative regulation.

(4) A small quantity generator may accumulate hazardous waste in satellite areas provided that he complies with the requirements of Section 5(3) of this administrative regulation.

PHILLIP J. SHEPHERD, Secretary
E. DOUGLAS STEPHAN, Commissioner
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NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION CABINET
Department for Environmental Protection
Division of Waste Management
(Amended After Hearing)

401 KAR 32:050. Special conditions.

RELATES TO: KRS 224.01, 224.10, 224.40, 224.46, 224.99, 40 CFR 260.2, 262.54(h), 262.58, 263.20(g)(4)
STATUTORY AUTHORITY: KRS 10-100, 224.46-510

NECESSITY AND FUNCTION: To implement provisions of KRS 224.46-510 and to [~~requires the cabinet to promulgate regulations to establish standards for the generation of hazardous waste. This chapter establishes standards applicable to generators of hazardous waste. This regulation~~] establish[~~es~~] special conditions for generators who export or import hazardous waste. This administrative regulation exempts farmers from certain requirements.

Section 1. Definitions. In addition to the definitions set forth at Section 1 of 401 KAR 30:010, the following definitions apply to this administrative regulation:

(1) "Consignee" means the ultimate treatment, storage or disposal facility in a receiving country to which the hazardous waste is [~~shall be~~] sent.

(2) "EPA acknowledgment of consent" means the cable set to EPA from the U.S. Embassy in a receiving country that acknowledges the written consent of the receiving country to accept the hazardous waste and describes the terms and conditions of the receiving country's consent to the shipment.

(3) "Primary exporter" means any person who is required to originate the manifest for a shipment of hazardous waste in accordance with Section 1 of 401 KAR 32:020 which specifies a treatment, storage, or disposal facility in a receiving country as the facility to which the hazardous waste **will** [~~shall~~] be sent and any intermediary arranging for the export.

(4) "Receiving country" means a foreign country to which a hazardous waste is sent for the purpose of treatment, storage or disposal (except short-term storage incidental to transportation).

(5) "Transit country" means any foreign country, other than a receiving country, through which a hazardous waste is transported.

Section 2. Applicability. This administrative regulation establishes requirements applicable to exports of hazardous waste. [~~Except to the extent 40 CFR 262.58 (1989) provides otherwise,~~] A primary exporter of hazardous waste shall comply with the special requirements of this administrative regulation and a transporter transporting hazardous waste for export shall comply with applicable requirements of 401 KAR Chapter 33. 40 CFR 262.58 (1989) sets forth the requirements of international agreements between the United States and receiving countries which establish different notice, export, and enforcement procedures for the transportation, treatment, storage and disposal of hazardous waste for shipments between the United States and those countries.

Section 3. General Requirements. Exports of hazardous waste are prohibited except in compliance with the applicable requirements of this administrative regulation and 401 KAR Chapter 33. Exports of hazardous waste are prohibited unless:

(1) Notification in accordance with Section 4 of this administrative regulation has been provided;

(2) The receiving country has consented to accept the hazardous waste;

(3) A copy of the EPA acknowledgment of consent to the shipment accompanies the hazardous waste shipment and, unless exported by rail, is attached to the manifest (or shipping paper for exports by water (bulk shipment)); and

(4) The hazardous waste shipment conforms to the terms of the receiving country's written consent as reflected in the EPA acknowledgment of consent.

Section 4. Notification of Intent to Export. (1) A primary exporter of hazardous waste shall notify EPA of an intended export before the waste is scheduled to leave the United States. A complete notification shall be submitted sixty (60) days before the initial shipment is intended to be shipped off site. This notification may cover export activities extending over a twelve (12) month or lesser period. The notification shall be in writing, signed by the primary exporter, and include the following information:

(a) Name, mailing address, telephone number and EPA ID number of the primary exporter;

(b) By consignee, for each hazardous waste type:

1. A description of the hazardous waste and the EPA hazardous waste number (from 401 KAR 31:030 and 31:040), U.S. DOT proper shipping name, hazard class and ID number (UN/NA) for each hazardous waste as identified in 49 CFR Part 171-177 (1989);

2. The estimated frequency or rate at which such waste is to be exported and the period of time over which such waste is to be exported;

3. The estimated total quantity of the hazardous waste in units as specified in the instructions to the Uniform Hazardous Waste Manifest Form (8700-22);

4. All points of entry to and departure from each foreign country through which the hazardous waste **will** [~~shall~~] pass;

5. A description of the means by which each shipment of the hazardous waste **will** [~~shall~~] be transported (for example, [~~e.g.,~~] mode of transportation vehicle (air, highway, rail, or water[~~, etc.~~]) type(s) of container (drums, boxes, or tanks[~~, etc.~~]));

6. A description of the manner in which the hazardous waste **will** [~~shall~~] be treated, stored or disposed of in the receiving country (for example, [~~e.g.,~~] land or ocean incineration, other land disposal, ocean dumping, recycling);

7. The name and site address of the consignee and any alternate consignee; and

8. The name of any transit countries through which the hazardous waste **will** [~~shall~~] be sent and a description of the approximate length of time the hazardous waste **will** [~~shall~~] remain in such country and the nature of its handling while there.

(2) Notification shall be sent to the Office of Waste Programs Enforcement, RCRA Enforcement Division (OS-520), U.S. Environmental Protection Agency [~~Office of International Activities (A-106), EPA~~], 401 M Street[~~,~~] SW, Washington, DC 20460 with "Attention: Notification to Export" prominently displayed on the front of the envelope.

(3) Except for changes to the telephone number in subsection (1)(a) of this section, changes to subsection (1)(b)5 of this section and decreases in the quantity indicated pursuant to subsection (1)(b)3, of this section when the conditions specified on the original notification change (including any exceedance of the estimate of the quantity of hazardous waste specified in the original notification), the primary exporter shall provide EPA with a written renotification of the change. The shipment cannot take place until consent of the receiving country to the changes (except for changes to subsection (1)(b)8 of this section and in the ports of entry to and departure from transit countries pursuant to subsection (1)(b)4 of this section) has been obtained and the primary exporter receives an EPA acknowledgment of consent reflecting the receiving country's consent to the changes.

(4) Upon request by EPA, a primary exporter shall furnish to EPA any additional information which a receiving country requests in order to respond to a notification.

(5) In conjunction with the department of state, EPA shall provide a complete notification to the receiving country and any transit countries. A notification is complete when EPA receives a notification which EPA determines satisfies the requirements of subsection (1) of this section. Where a claim of confidentiality is asserted with respect to any notification information required by subsection (1) of this section, EPA may find the notification not complete until any such claim is resolved in accordance with 40 CFR 260.2 (1989).

(6) Where the receiving country consents to the receipt of the hazardous waste, EPA shall forward an EPA acknowledgment of consent to the primary exporter for purposes of 40 CFR 262.54(h) (1989). Where the receiving country objects to receipt of the hazardous waste or withdraws a prior consent, EPA shall notify the primary exporter in writing. EPA shall also notify the primary exporter of any responses from transit countries.

Section 5. Special Manifest Requirements. A primary exporter shall comply with the manifest requirements of Sections 1 to [~~through~~] 4 of 401 KAR 32:020 except that:

(1) In lieu of the name, site address and EPA ID number of the designated permitted facility, the primary exporter shall enter the name and site address of the consignee;

(2) In lieu of the name, site address and EPA ID number of a permitted alternate facility, the primary exporter may enter the name and site address of any alternate consignee;

(3) In special handling instructions and additional information, the primary exporter shall identify the point of departure from the United States;

(4) The following statement shall be added to the end of the first sentence of the certification set forth in Item 16 of the Uniform Hazardous Waste Manifest Form: "and conforms to the terms of the attached EPA acknowledgment of consent;"

(5) In lieu of the requirements of Section 2 of 401 KAR 32:020, the primary exporter shall obtain the manifest form from the primary exporter's state if that state supplies the manifest form and requires its use. If the primary exporter's state does not supply the manifest form, the primary exporter may obtain a manifest form from any source;

(6) The primary exporter shall require the consignee to confirm in writing the delivery of the hazardous waste to that facility and to describe any significant discrepancies (as defined in Section 3(1) of 401 KAR 34:050) between the manifest and the shipment. A copy of the manifest signed by the facility may be used to confirm delivery of the hazardous waste;

(7) In lieu of the requirements of Section 1(4) of 401 KAR 32:020, where a shipment cannot be delivered for any reason to the designated or alternate consignee, the primary exporter shall:

(a) Renotify EPA of a change in the conditions of the original notification to allow shipment to a new consignee in accordance with Section 4(3) of this administrative regulation and obtain an EPA acknowledgment of consent prior to delivery; or

(b) Instruct the transporter to return the waste to the primary exporter in the United States or designate another facility within the United States; and

(c) Instruct the transporter to revise the manifest in accordance with the primary exporter's instructions.

(8) The primary exporter shall attach a copy of the EPA acknowledgment of consent to the shipment to the manifest which shall accompany the hazardous waste shipment. For exports by rail or water (bulk shipment), the primary exporter shall [~~must~~] provide the transporter with an EPA acknowledgment of consent which shall accompany the hazardous waste but which need not be attached to the manifest except that for exports by water (bulk shipment) the primary exporter shall attach the copy of the EPA acknowledgment of consent to the shipping paper.

(9) The primary exporter shall provide the transporter with an additional copy of the manifest for delivery to the U.S. Customs official at the point the hazardous waste leaves the United States in accordance with 40 CFR 263.20(g)(4) (1989).

Section 6. Exception Reports. In lieu of the requirements of Section 3 of 401 KAR 32:040, a primary exporter shall file an exception report with the cabinet if:

(1) He has not received a copy of the manifest signed by the transporter stating the date and place of departure from the United States within forty-five (45) days from the date it was accepted by the initial transporter;

(2) Within ninety (90) days from the date the waste was accepted by the initial transporter, the primary exporter has not received written confirmation from the consignee that the hazardous waste was received;

(3) The waste is returned to the United States.

Section 7. Annual Reports. (1) Primary exporters of hazardous waste shall file with the cabinet [~~secretary~~] no later than March 1 of each year a report summarizing the types, quantities, frequency, and ultimate destination of all hazardous waste exported during the previous calendar year. The reports shall include the following:

(a) The EPA identification number, name, and mailing and site address of the exporter;

(b) The calendar year covered by the report;

(c) The name and site address of each consignee;

(d) By consignee, for each hazardous waste exported, a description of the hazardous waste, the EPA hazardous waste number (from 401 KAR 31:030 and 31:040), DOT hazard class, the name and [~~U.S.~~] EPA ID number (where applicable) for each transporter used, the total amount of waste shipped and number of shipments pursuant to each notification;

(e) Except for hazardous waste produced by exporters of greater than 100 kilograms but less than 1000 kilograms in a calendar month, unless provided pursuant to Section 2 of 401 KAR 32:040:

1. A description of the efforts undertaken during the year to reduce the volume and toxicity of waste generated; and

2. A description of the changes in volume and toxicity of waste actually achieved during the year in comparison to previous years to the extent such information is available for years prior to 1984.

(f) A certification signed by the primary exporter which states:

"I certify under penalty of law that I have personally examined and am familiar with the information submitted in this and all attached documents, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the submitted information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information including the possibility of fine and imprisonment."

(2) Reports shall be sent to the cabinet and the Office of Waste Programs Enforcement, RCRA Enforcement Division (OS-520), U.S. Environmental Protection Agency [~~International Activities (A-106), Environmental Protection Agency~~], 401 M Street SW, Washington, DC 20460.

Section 8. Recordkeeping. (1) For all exports a primary exporter shall:

(a) Keep a copy of each notification of intent to export for a period of at least three (3) years from the date the hazardous waste was accepted by the initial transporter;

(b) Keep a copy of each EPA acknowledgment of consent for a period of at least three (3) years from the date the hazardous waste was accepted by the initial transporter;

(c) Keep a copy of each confirmation of delivery of the hazardous waste from the consignee for at least three (3) years from the date the hazardous waste was accepted by the initial transporter; and

(d) Keep a copy of each annual report for a period of at least three (3) years from the due date of the report.

(2) The periods of retention referred to in this section are extended automatically during the course of any unresolved enforcement action regarding the regulated activity or as requested by the cabinet.

Section 9. Imports of Hazardous Waste. (1) Any person who imports hazardous waste from a foreign country into the United States shall comply with the requirements of this chapter and the special requirements of this section.

(2) When importing hazardous waste, a person shall meet all the requirements of Section 1(1) of 401 KAR 32:020 for the manifest except that:

(a) In place of the generator's name, address and EPA identification number, the name and address of the foreign generator and the importer's name, address and EPA identification number shall be used.

(b) In place of the generator's signature on the certification

statement, the U.S. importer or his agent shall sign and date the certification and obtain the signature of the initial transporter.

(3) A person who imports hazardous waste shall obtain the manifest form from the consignment state if the state supplies the manifest and requires its use. If the consignment state does not supply the manifest form, then the manifest form may be obtained from any source.

Section 10. Farmers. A farmer disposing of waste pesticides from his own use which are hazardous wastes is not required to comply with the standards in this chapter or other standards in 401 KAR Chapters 34, 35, 37, or 38 for those wastes provided he triple rinses each emptied pesticide container in accordance with Section 7(2)(c) of 401 KAR 31:010[~~, Section 7(2)(c)~~], and disposes of the pesticide residues on his own farm in a manner consistent with the disposal instructions on the pesticide label.

PHILLIP J. SHEPHERD, Secretary
E. DOUGLAS STEPHAN, Commissioner
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NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION CABINET
Department for Environmental Protection
Division of Waste Management
(Amended After Hearing)

401 KAR 34:020. General facility standards.

RELATES TO: KRS 224.01, 224.10, 224.40, 224.43, 224.46, 224.70, 224.99

STATUTORY AUTHORITY: KRS 224.10-100, 224.46-520

NECESSITY AND FUNCTION: To implement provisions of KRS 224.46-520 and to [~~requires that persons engaging in the storage, treatment, and disposal of hazardous waste obtain a permit. KRS 224.46-520 requires the cabinet to establish standards for these permits, to require adequate financial responsibility, to establish minimum standards for closure for all facilities and the postclosure monitoring and maintenance of hazardous waste disposal facilities. This chapter establishes minimum standards for new hazardous waste sites or facilities. This regulation~~] establish[~~es~~] the general standards for facilities.

Section 1. Applicability. (1) This chapter applies to owners and operators of all hazardous waste facilities, except as provided in Section 1 of 401 KAR 34:010[~~, Section 1,~~] and subsection (2) of this section.

(2) Section 9(2) of this administrative regulation applies only to facilities subject to administrative regulation under 401 KAR 34:180, 34:190, 34:200, 34:210, 34:220, 34:230, 34:240, and 34:250.

Section 2. Identification Number. Every facility owner or operator shall apply to the cabinet for an EPA identification number in accordance with the notification procedures.

Section 3. Required Notices. (1) The owner or operator of a facility that has arranged to receive hazardous waste from a foreign source shall notify the cabinet in writing at least four (4) weeks in advance of the date the waste is expected to arrive at the facility. Notice of subsequent shipments of the same waste from the same foreign source is not required.

(2) The owner or operator of a facility that receives hazardous waste from an off-site source (except where the owner or operator is also the generator) shall inform the generator in writing that he has the appropriate permit(s) for, and shall accept, the waste the generator is shipping. The owner or operator shall keep a copy of this written notice as part of the operating record.

(3) Before transferring ownership or operation of a facility during its operating life, or of a disposal facility during the postclosure care period, the owner or operator shall notify the new owner or operator in writing of the requirements of this chapter and 401 KAR Chapter 38.

Section 4. General Waste Analysis. (1)(a) Before an owner or operator treats, stores, or disposes of any hazardous waste, or nonhazardous wastes if applicable under Section 4(4) of 401 KAR 34:070, he shall obtain a detailed chemical and physical analysis of a representative sample of the waste. At a minimum, this analysis shall contain all the information which **will** [~~shall~~] be known to treat, store, or dispose of the waste in accordance with the requirements of this chapter and 401 KAR Chapter 37 or with the conditions of a permit issued under 401 KAR Chapter 38.

(b) The analysis may include data developed under 401 KAR Chapter 31 and existing published or documented data on the hazardous waste or on hazardous waste generated from similar processes.

(c) The analysis shall be repeated as necessary to ensure that it is accurate and up to date. At a minimum, the analysis shall be repeated:

1. When the owner or operator is notified, or has reason to believe, that the process or operation generating the hazardous waste, or nonhazardous wastes if applicable under Section 4(4) of 401 KAR 34:070, has changed; and

2. For off-site facilities, when the results of the inspection required in paragraph (d) of this subsection indicate that the hazardous waste received at the facility does not match the waste designated on the accompanying manifest or shipping paper.

(d) The owner or operator of an off-site facility shall inspect and, if necessary, analyze each hazardous waste movement received at the facility to determine whether it matches the identity of the waste specified on the accompanying manifest or shipping paper.

(2) The owner or operator shall develop and follow a written waste analysis plan which describes the procedures which he **will** [~~shall~~] carry out to comply with subsection (1) of this section. He shall keep this plan at the facility. At a minimum, the plan shall specify:

(a) The parameters for which each hazardous waste, or nonhazardous waste if applicable under Section 4(4) of 401 KAR 34:070, **will** [~~shall~~] be analyzed and the rationale for the selection of these parameters (that is, [~~i.e.,~~] how analysis for these parameters **will** [~~shall~~] provide sufficient information on the waste's properties to comply with subsection (1) of this section);

(b) The test methods which **will** [~~shall~~] be used to test for these parameters;

(c) The sampling method which **will** [~~shall~~] be used to obtain a representative sample of the waste to be analyzed. A representative sample
may be obtained using one (1) of the sampling methods described in 401 KAR 31:100.

(d) The frequency with which the initial analysis of the waste **will** [~~shall~~] be reviewed or repeated to ensure that the analysis is accurate and up to date;

(e) For off-site facilities, the waste analyses that hazardous waste generators have agreed to supply;

(f) Where applicable, the methods that [~~which~~] **will** [~~shall~~] be used to meet the additional waste analysis requirements for specific waste management methods as specified in Section 8 of this administrative regulation, Section 9 of 401 KAR 34:230, in Section 2 of 401 KAR 34:240, [~~and~~] Section 7 of 401 KAR 37:010, Section 5(4) of 401 KAR 34:275, and Section 14(4) of 401 KAR 34:280; and

(g) For surface impoundments exempted from land disposal restrictions under Section 4(1) of 401 KAR 37:010, the procedures and schedules for:

1. The sampling of impoundment contents;
2. The analysis of test data; and
3. The annual removal of residues which are not delisted under Section 2 of 401 KAR 31:060 or which exhibit a characteristic of hazardous waste and either:

a. Do not meet applicable treatment standards of 401 KAR 37:040; or

b. Where no treatment standards have been established;

(i) The residues are prohibited from land disposal under Section 4 of 401 KAR 37:030[~~, Section 4,~~] or KRS 224.46-520; or

(ii) The residues are prohibited from land disposal under Section 5(6) of 401 KAR 37:030[~~, Section 5(6)~~].

(3) For off-site facilities, the waste analysis plan required in subsection (2) of this section shall also specify the procedures which **will** [~~shall~~] be used to inspect and, if necessary, analyze each movement of hazardous waste received at the facility to ensure that it matches the identity of the waste designated on the accompanying manifest or shipping paper. At a minimum, the plan shall describe:

(a) The procedures which **will** [~~shall~~] be used to determine the identity of each movement of waste managed at the facility; and

(b) The sampling method which **will** [~~shall~~] be used to obtain a representative sample of the waste to be identified, if the identification method includes sampling.

Section 5. Security. (1) The owner or operator shall prevent the unknowing entry, and minimize the possibility for the unauthorized entry, of persons or livestock onto the active portion of his facility, unless he can demonstrate to the cabinet that:

(a) Physical contact with the waste, structures, or equipment within the active portion of the facility **will** [~~shall~~] not injure unknowing or unauthorized persons or livestock which may enter the active portion of a facility; and

(b) Disturbance of the waste or equipment, by the unknowing or unauthorized entry of persons or livestock onto the active portion of a facility, **will** [~~shall~~] not cause a violation of the requirements of this chapter.

(2) Unless the owner or operator has made a successful demonstration under subsection (1) of this section, a facility shall have:

(a) A twenty-four (24) hour surveillance system (for example, [~~e.g.,~~] television monitoring or surveillance by guards or facility personnel) which continuously monitors and controls entry onto the active portion of the facility; or

(b)1. An artificial or natural barrier ([~~e.g.,~~] a fence in good repair or a fence combined with a cliff), which completely surrounds the active portion of the facility; and

2. A means to control entry, at all times, through the gates or other entrances to the active portion of the facility ([~~e.g.,~~] an attendant, television monitors, locked entrance, or controlled roadway access to the facility).

(3) Unless the owner or operator has made a successful demonstration under subsection (1) of this section, a sign with the legend, "Danger - Unauthorized Personnel Keep Out," shall be posted at each entrance to the active portion of a facility, and at other locations, in sufficient number to be seen from any approach to this active portion. The legend shall be written in English and in any other language predominant in the area surrounding the facility and shall be legible from a distance of at least twenty-five (25) feet. Existing signs with a legend other than "Danger - Unauthorized Personnel Keep Out" may be used if the legend on the sign indicates that only authorized personnel are allowed to enter the active portion, and that entry onto the active portion can be dangerous.

Section 6. General Inspection Requirements. (1) The owner or operator shall inspect his facility for malfunctions and deterioration, operator errors, and discharges which may be causing or may lead to: release of hazardous waste constituents to the environment, or a threat to human health. The owner or operator shall conduct these inspections often enough to identify problems in time to correct them before they harm human health or the environment.

(2)(a) The owner or operator shall develop and follow a written schedule for inspecting monitoring equipment, safety and emergency equipment, security devices, and operating and structural equipment (such as dikes and sump pumps) that are important to preventing, detecting, or responding to environmental or human health hazards.

(b) He shall keep this schedule at the facility.

(c) The schedule shall identify the types of problems (for example, [~~e.g.,~~] malfunctions or deterioration) which are to be looked for during the inspection (for example, [~~e.g.,~~] inoperative sump pump, leaking fitting, or eroding dike[~~, etc.~~]).

(d) The frequency of inspection may vary for the items on the schedule. However, it should be based on the rate of [~~possible~~] deterioration of the equipment and the probability of an environmental or human health incident if the deterioration, [~~or~~] malfunction, or any operator error goes undetected between inspections. Areas subject to spills, such as loading and unloading areas, shall be inspected daily when in use. At a minimum, the inspection schedule shall include the terms and frequencies called for in Section 5 of 401 KAR 34:180, Sections 4 and 6 [~~5~~] of 401 KAR 34:190, Section 4 of 401 KAR 34:200, Section[~~s 4 and~~] 5 of 401 KAR 34:210, Section 6 of 401 KAR 34:220, Section 4 of 401 KAR 34:230, Section 7 of 401 KAR 34:240, and Section 3 of 401 KAR 34:250, Section 4 of 401 KAR 34:275, and Sections 3, 4, and 9 of 401 KAR 34:280 where applicable.

(3) The owner or operator shall remedy any deterioration or malfunction of equipment or structures which the inspection reveals on a schedule which ensures that the problem does not lead to an environmental or human health hazard. Where a hazard is imminent or has already occurred, remedial action shall be taken immediately.

(4) The owner or operator shall record inspections in an inspection log or summary. He shall keep these records for at least three (3) years from the date of inspection. At a minimum, these records shall include the date and time of the inspection, the name of the inspector, a notation of the observations made, and the date and nature of any repairs or other remedial actions.

Section 7. Personnel Training. (1)(a) Facility personnel shall successfully complete a program of classroom instruction or on-the-job training that teaches them to perform their duties in a way that ensures the facility's compliance with the requirements of this chapter. The owner or operator shall ensure that this program includes all the elements described in the document required under subsection (4)(c) of this section.

(b) This program shall be directed by a person trained in hazardous waste management procedures, and shall include instruction which teaches facility personnel hazardous waste management procedures (including contingency plan implementation) relevant to the positions in which they are employed.

(c) At a minimum, the training program shall be designed to ensure that facility personnel are able to respond effectively to emergencies by familiarizing them with emergency procedures, emergency equipment, and emergency systems, including where applicable:

1. Procedures for using, inspecting, repairing, and replacing facility emergency and monitoring equipment;
2. Key parameters for automatic waste feed cutoff systems;
3. Communications or alarm systems;
4. Response to fires or explosions;
5. Response to groundwater contamination incidents; and
6. Shutdown of operations.

(2) Facility personnel shall successfully complete the program required in subsection (1) of this section within six (6) months after the effective date of these administrative regulations or six (6) months after the date of their employment or assignment to a facility, or to a

new position at a facility, whichever is later. Employees hired after the effective date of these administrative regulations shall not work in unsupervised positions until they have completed the training requirements of subsection (1) of this section.

(3) Facility personnel shall take part in an annual review of the initial training required in subsection (1) of this section.

(4) The owner or operator shall maintain the following documents and records at the facility:

(a) The job title for each position at the facility related to hazardous waste management, and the name of the employee filling each job;

(b) A written job description for each position listed under paragraph (a) of this subsection. This description may be consistent in its degree of specificity with descriptions for other similar positions in the same company location or bargaining unit, but shall include the requisite skill, education, or other qualifications, and duties of employees assigned to each position;

(c) A written description of the type and amount of both introductory and continuing training that **will** **[~~shall~~]** be given to each person filling a position listed under paragraph (a) of this subsection; and

(d) Records that document that the training or job experience required under subsections (1), (2) and (3) of this section has been given to, and completed by, facility personnel.

(5) Training records on current personnel shall be kept until closure of the facility; training records on former employees shall be kept for at least three (3) years from the date the employee last worked at the facility. Personnel training records may accompany personnel transferred within the same company.

Section 8. General Requirements for Ignitable, Reactive, or Incompatible Wastes. (1) The owner or operator shall take precautions to prevent accidental ignition or reaction of ignitable or reactive waste. This waste shall be separated and protected from sources of ignition or reaction including but not limited to: open flames, smoking, cutting and welding, hot surfaces, frictional heat, sparks (static, electrical, or mechanical), spontaneous ignition (for example, [~~e.g.,~~] from heat-producing chemical reactions), and radiant heat. While ignitable or reactive waste is being handled, the owner or operator shall confine smoking and open flame to specially designated locations. "No Smoking" signs shall be conspicuously placed wherever there is a hazard from ignitable or reactive waste.

(2) Where specifically required by other sections of this administrative regulation, the owner or operator of a facility that treats, stores or disposes ignitable or reactive waste, or mixes incompatible waste or incompatible wastes and other materials, shall take precautions to prevent reactions which:

(a) Generate extreme heat or pressure, fire or explosions, or violent reactions;

(b) Produce uncontrolled toxic mists, fumes, dusts, or gases in sufficient quantities to threaten human health or the environment;

(c) Produce uncontrolled flammable fumes or gases in sufficient quantities to pose a risk of fire or explosion;

(d) Damage the structural integrity of the device or facility; or

(e) Through other like means threaten human health or the environment.

(3) When required to comply with subsection (1) or (2) of this section, the owner or operator shall document that compliance. This documentation may be based on references to published scientific or engineering literature, data from trial tests (for example, [~~e.g.,~~] bench scale or pilot scale tests), waste analyses (as specified in Section 4 of this administrative regulation), or the results of the treatment of similar wastes by similar treatment processes and under similar operating conditions.

Section 9. Location Standards. (1) Seismic considerations. Portions of new facilities where treatment, storage, or disposal of hazardous waste **will** **[~~shall~~]** be conducted shall not be located within sixty-one (61) meters (approximately 200 feet) of a fault which had displacement in Holocene time.

(2) Flood plains.

(a) Except as paragraph (c) of this subsection applies, a facility located in a 100-year flood plain shall be designed, constructed, operated, maintained, and refitted if necessary, to prevent washout of any hazardous waste and to protect the facility from inundation by waters of the 100-year flood plain throughout the active life of the facility, throughout the closure phase of the facility, and for disposal facilities only, throughout the postclosure phase. Facilities that have closed and removed all hazardous waste, waste constituents, contaminated soil, debris or other material contaminated with hazardous constituents, are not required to protect the closed portion of the facility from washout of waste or inundation by waters of the 100-year flood. Prevention of washout and protection from inundation shall be accomplished by one (1) of the following:

1. Using a structure or device such as a dike or floodwall which has been designed:

a. To provide adequate freeboard to prevent overtopping of the structure during a 100-year flood due to wind and wave action;

b. To provide sufficient structural integrity to prevent massive failure due to the force and erosive tendencies of the 100-year floodwaters;

c. To accommodate such other characteristics of the facility's location, such as special geologic or hydrological features, as necessary to accomplish the requirements of this subsection.

2. Providing procedures which **wil** **[~~shall~~]** cause the waste to be removed safely, before floodwaters can reach the facility, to a location where the wastes **will** **[~~shall~~]** not be vulnerable to floodwaters.

3. Demonstrating to the satisfaction of the cabinet that alternate devices or measures, with the exception of covering the waste, **will** **[~~shall~~]** provide protection which meets the requirements of this paragraph.

(b) No person shall be issued a permit to construct a new hazardous waste site or facility in the floodway.

(c) No person shall be issued a permit to construct a new hazardous waste disposal site or facility in the 100-year flood plain or a seasonal high-water table.

(d) No hazardous waste site or facility shall restrict the flow of the 100-year flood or reduce the temporary water storage capacity of the 100-year flood plain so as to pose a hazard to human life, wildlife or land or water resources.

(3) Salt dome formations, salt bed formations, underground mines and caves. The placement of any noncontainerized or bulk liquid hazardous waste in any salt dome formation, salt bed formation, underground mine or cave is prohibited.

Section 10. Construction Quality Assurance Program. (1)(a) A construction quality assurance (CQA) program is required for all surface impoundment, waste pile, and landfill units that are required to comply with Section 2(4) of 401 KAR 34:200, Section 2(3) of 401 KAR 34:210, and Section 2(3) and (4) of 401 KAR 34:230. The program shall ensure that the constructed unit meets or exceeds all design criteria and specifications in the permit. The program shall be developed and implemented under the direction of a CQA officer who is a registered professional engineer.

(b) The CQA program shall address the following physical components, where applicable:

1. Foundations;

2. Dikes;

3. Low-permeability soil liners;

4. Geomembranes (flexible membrane liners);

5. Leachate collection and removal systems and leak detection systems; and

6. Final cover systems.

(2) Written CQA plan. The owner or operator of units subject to the CQA program under subsection (1) of this section shall develop

and implement a written CQA plan. The plan shall identify steps that **will** [~~shall~~] be used to monitor and document the quality of materials and the condition and manner of their installation. The CQA plan shall include:

(a) Identification of applicable units, and a description of how they **will** [~~shall~~] be constructed.

(b) Identification of key personnel in the development and implementation of the CQA plan, and CQA officer qualifications.

(c) A description of inspection and sampling activities for all unit components identified in subsection (1)(b) of this section, including observations and tests that **will** [~~shall~~] be used before, during, and after construction to ensure that the construction materials and the installed unit components meet the design specifications. The description shall cover: sampling size and locations; frequency of testing; data evaluation procedures; acceptance and rejection criteria for construction materials; plans for implementing corrective measures; and data or other information to be recorded and retained in the operating record under Section 4 of 401 KAR 34:050.

(3) Contents of program.

(a) The CQA program shall include observations, inspections, tests, and measurements sufficient to ensure:

1. Structural stability and integrity of all components of the unit identified in subsection (1)(b) of this section;

2. Proper construction of all components of the liners, leachate collection and removal system, leak detection system, and final cover system, according to permit specifications and good engineering practices, and proper installation of all components (for example, pipes) according to design specifications;

3. Conformity of all materials used with design and other material specifications under Section 2 of 401 KAR 34:200, Section 2 of 401 KAR 34:210, and Section 2 of 401 KAR 34:230.

(b) The CQA program shall include test fills for compacted soil liners, using the same compaction methods as in the full scale unit, to ensure that the liners are constructed to meet the hydraulic conductivity requirements of Sections 2(3)(a)1b of 401 KAR 34:200, Section 2(3)(a)1b of 401 KAR 34:210, and Section 2(3)(a)1b of 401 KAR 34:230 in the field. Compliance with the hydraulic conductivity requirements shall be verified by using in-situ testing on the constructed test fill. The cabinet may accept an alternative demonstration, in lieu of a test fill, where data are sufficient to show that a constructed soil liner **will** [~~shall~~] meet the hydraulic conductivity requirements of Section 2(3)1b of 401 KAR 34:200, Section 2(3)(a)1b of 401 KAR 34:210, and Section 2(3)(a)1b of 401 KAR 34:230 in the field.

(4) Certification. Waste shall not be received in a unit subject to this section until the owner or operator has submitted to the cabinet by certified mail or hand delivery a certification signed by the CQA officer that the approved CQA plan has been successfully carried out and that the unit meets the requirements of Section 2(3) or (4) of 401 KAR 34:200, Section 2(3) or (4) of 401 KAR 34:210, and Section 2(3) or (4) of 401 KAR 34:230; and the procedure in Section 1(12)(b)2 of 401 KAR 38:030 of this has been completed. Documentation supporting the CQA officer's certification shall be furnished to the cabinet upon request.

PHILLIP J. SHEPHERD, Secretary
E. DOUGLAS STEPHAN, Commissioner
APPROVED BY AGENCY: December 13, 1993
FILED WITH LRC: December 14, 1993 at 10 a.m.

NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION CABINET
Department for Environmental Protection
Division of Waste Management
(Amended After Hearing)

401 KAR 34:070. Closure and postclosure.

RELATES TO: KRS 224.01, 224.10, 224.40, 224.43, 224.46, 224.50, 224.70, 224.99

STATUTORY AUTHORITY: KRS 224.10-100, 224.46-520

NECESSITY AND FUNCTION: To implement provisions of KRS 224.46-520 and to establish [~~KRS 224.46-520 requires that persons engaging in the storage, treatment, and disposal of hazardous waste obtain a permit. KRS 224.46.520 requires the Cabinet to establish standards for these permits, to require adequate financial responsibility, to establish minimum standards for closure for all facilities and the postclosure monitoring and maintenance of hazardous waste disposal facilities. This chapter establishes minimum standards for new hazardous waste sites or facilities. This regulation establishes~~] standards for closure and postclosure of facilities.

Section 1. Applicability. Except as Section 1 of 401 KAR 34:010 provides otherwise:

(1) Sections 2 to [~~through~~] 6 of this administrative regulation (which concern closure) apply to the owners and operators of all hazardous waste management sites or facilities; and

(2) Sections 7 to [~~through~~] 11 of this administrative regulation (which concern postclosure care) apply to the owners and operators of:

(a) All hazardous waste disposal facilities;

(b) Waste piles and surface impoundments from which the owner or operator intends to remove the wastes at closure to the extent that these sections are made applicable to such facilities in Section 6 of 401 KAR 34:200 or Section 8 of 401 KAR 34:210; and

(c) Tank systems that are required under Section 8 of 401 KAR 34:190 to meet the requirements for landfills.

Section 2. Closure Performance Standards. The owner or operator shall close the facility in a manner that:

(1) Minimizes the need for further maintenance; [~~and~~]

(2) Controls, minimizes or eliminates, to the extent necessary to protect human health and the environment, postclosure escape of hazardous waste, hazardous constituents, leachate, contaminated run-off, or hazardous waste decomposition products to the ground or surface waters or to the atmosphere; [~~and~~]

(3) Complies with the closure requirements of this administrative regulation including but not limited to, the requirements of Section 9 of 401 KAR 34:180, Section 8 of 401 KAR 34:190, Section 6 of 401 KAR 34:200, Section 8 of 401 KAR 34:210, Section 8 of 401 KAR 34:220, Section 6 of 401 KAR 34:230, Section 8 of 401 KAR 34:240, and Section 2 to [~~through~~] 4 of 401 KAR 34:250.

Section 3. Closure Plan; Amendment of Plan. (1) Written plan.

(a) The owner or operator of a hazardous waste site or facility shall have a written closure plan. In addition, certain surface impoundments and waste piles from which the owner or operator intends to remove or decontaminate the hazardous waste at partial or final closure are required by Section 6(3)(a)1 of 401 KAR 34:200 and Section 8(3)(a)1 of 401 KAR 34:210 to have contingent closure plans. The plan shall be submitted with the permit application, in accordance with Section 2(13) of 401 KAR 38:090, and approved by the cabinet as part of the permit issuance procedures under 401 KAR 38:050. In accordance with Section 3 of 401 KAR 38:030, the approved closure plan shall become a condition of any hazardous waste site or facility permit.

(b) The cabinet's approval of the plan shall ensure that the

approved closure plan is consistent with Sections 2 to [~~, 3, 4, 5 and~~] 6 of this administrative regulation and the applicable requirements of 401 KAR 34:060, Section 9 of 401 KAR 34:180, Section 8 of 401 KAR 34:190, Section 6 of 401 KAR 34:200, Section 8 of 401 KAR 34:210, Section 8 of 401 KAR 34:220, Section 6 of 401 KAR 34:230, Section 8 of 401 KAR 34:240, and Section 2 of 401 KAR 34:250. Until final closure is completed and certified in accordance with Section 6 of this administrative regulation, a copy of the approved plan and all approved revisions shall be furnished to the cabinet upon request, including request by mail.

(2) Content of plan. The plan shall identify steps necessary to perform partial and final closure of the facility at any point during its active life. The closure plan shall include at least:

(a) A description of how each hazardous waste management unit at the facility **will** [~~shall~~] be closed in accordance with Section 2 of this administrative regulation;

(b) A description of how final closure of the facility **will** [~~shall~~] be conducted in accordance with Section 2 of this administrative regulation. The description shall identify the maximum extent of the operations which **will** [~~shall~~] be unclosed during the active life of the facility; [~~and~~]

(c) An estimate of the maximum inventory of hazardous wastes that was ever on-site over the active life of the facility and a detailed description of the methods to be used during partial closures and final closure, including, but not limited to, methods for removing, transporting, treating, storing, or disposing of all hazardous wastes, and identification of the type(s) of the off-site hazardous waste management units to be used, if applicable; [~~and~~]

(d) A detailed description of the steps needed to remove or decontaminate all hazardous waste residues and contaminated containment system components, equipment, structures, and soils during partial and final closure, including, but not limited to, procedures for cleaning equipment and removing contaminated soils, methods for sampling and testing surrounding soils, and criteria for determining the extent of decontamination required to satisfy the closure performance standard; [~~and~~]

(e) A detailed description of other activities necessary during the closure period to ensure that all partial closures and final closure satisfy the closure performance standards, including, but not limited to, groundwater monitoring, leachate collection, and run-on and run-off control; [~~and~~]

(f) A schedule for closure of each hazardous waste management unit and for final closure of the facility. The schedule shall include, at a minimum, the total time required to close each hazardous waste management unit and the time required for intervening closure activities which **will** [~~shall~~] allow tracking of the progress of partial and final closure (for example, in the case of a landfill unit, estimates of the time required to treat or dispose of all hazardous waste inventory and of the time required to place a final cover shall be included); and

(g) For facilities that use trust funds to establish financial assurance under 401 KAR 34:090 or 401 KAR 34:100 and that are expected to close prior to the expiration of the permit, an estimate of the expected year of final closure.

(3) Amendment of plan. The owner or operator shall submit a written request for a permit modification to authorize a change in operating plans, facility design, or the approved closure plan in accordance with the procedures in 401 KAR Chapter 38. The written request shall include a copy of the amended closure plan for approval by the cabinet.

(a) The owner or operator may submit a written request to the cabinet for a permit modification to amend the closure plan at any time prior to the notification of partial or final closure of the facility.

(b) The owner or operator shall submit a written request for a permit modification to authorize a change in the approved closure plan whenever:

1. Changes in operating plans or facility design affect the closure plan; or

2. There is a change in the expected year of closure, if applicable; or

3. In conducting partial or final closure activities, unexpected events require a modification of the approved closure plan.

(c) The owner or operator shall submit a written request for a permit modification including a copy of the amended closure plan for approval at least sixty (60) days prior to the proposed change in facility design or operation, or no later than sixty (60) days after an unexpected event has occurred which has affected the closure plan. If an unexpected event occurs during the partial or final closure period, the owner or operator shall request a permit modification no later than thirty (30) days after the unexpected event. An owner or operator of a surface impoundment or waste pile that intends to remove all hazardous waste at closure and is not otherwise required to prepare a contingent closure plan under Section 6(3)(a)1 of 401 KAR 34:200 or Section 8(3)(a)1 of 401 KAR 34:210, shall submit an amended closure plan to the cabinet no later than sixty (60) days from the date that the owner or operator or cabinet determines that the hazardous waste management unit **will** [~~shall~~] be closed as a landfill, subject to the requirements of Section 6 of 401 KAR 34:230, or no later than thirty (30) days from that date if the determination is made during partial or final closure. The cabinet shall approve, disapprove, or modify this amended plan in accordance with the procedures in 401 KAR Chapter 38. In accordance with Section 3 of 401 KAR 38:030, the approved closure plan shall become a condition of any hazardous waste site or facility permit issued.

(d) The cabinet may request modifications to the plan under the conditions described in paragraph (b) of this subsection. The owner or operator shall submit the modified plan within sixty (60) days of the cabinet's request or within thirty (30) days if the change in facility conditions occurs during partial or final closure. Any modifications requested by the cabinet shall be approved in accordance with the procedures in 401 KAR Chapter 38.

(4) Notification of partial closure and final closure.

(a) The owner or operator shall notify the cabinet in writing at least sixty (60) days prior to the date on which he expects to begin closure of a surface impoundment, waste pile, land treatment or landfill unit, or final closure of a facility with such a unit. The owner or operator shall notify the cabinet in writing at least forty-five (45) days prior to the date on which he expects to begin final closure of a facility with only treatment or storage tanks, container storage, or incinerator units to be closed. The owner or operator shall notify the cabinet in writing at least forty-five (45) days prior to the date on which he expects to begin partial or final closure of a boiler or industrial furnace, whichever is earlier.

(b) The date when he "expects to begin closure" shall be either:

1. No later than thirty (30) days after the date on which any hazardous waste management unit receives the known final volume of hazardous wastes or, if there is a reasonable possibility that the hazardous waste management unit **will** [~~shall~~] receive additional hazardous wastes no later than one (1) year after the date on which the unit received the most recent volume of hazardous waste. If the owner or operator of a hazardous waste management unit can demonstrate to the cabinet that the hazardous waste management unit or facility has the capacity to receive additional hazardous wastes and he has taken, and **will** [~~shall~~] continue to take, all steps to prevent threats to human health and the environment, including compliance with all applicable permit requirements, the cabinet may approve an extension to this one (1) year limit; or

2. For units meeting the requirements of Section 4 of this administrative regulation, no later than thirty (30) days after the date on which the hazardous waste management unit receives the known final volume of nonhazardous wastes, or if there is a reasonable possibility that the hazardous waste management unit will receive additional nonhazardous wastes, no later than one (1) year after the date on which the unit received the most recent volume of nonhazardous wastes. If the owner or operator can demonstrate to the cabinet

that the hazardous waste management unit has the capacity to receive additional nonhazardous wastes and he has taken, and will continue to take, all steps to prevent threats to human health and the environment, including compliance with all applicable permit requirements, the cabinet may approve an extension to this one (1) year limit.

(c) If the facility's permit is terminated, or if the facility is otherwise ordered, by judicial decree or final order under KRS 224.10-100, 224.10-440 [~~420~~], and 224.46-530 or 224.99-010 to cease receiving hazardous wastes or to close, then the requirements of this subsection do not apply. However, the owner or operator shall close the facility in accordance with the deadlines established in Section 4 of this administrative regulation.

(5) Removal of wastes and decontamination or dismantling of equipment. Nothing in this section shall preclude the owner or operator from removing hazardous wastes and decontaminating or dismantling equipment in accordance with the approved partial or final closure plan at any time before or after notification of partial or final closure.

(6) For existing disposal facilities within the 100-year flood plain, the closure plan and cost estimates shall reflect compliance with the requirements in Section 9(2) of 401 KAR 34:020 to prevent washout of waste and protect the facility from inundation by waters of the 100-year flood.

(7) For new hazardous waste sites or facilities located or to be located in the 100-year flood plain, the closure plan and cost estimates shall reflect that all hazardous waste and hazardous waste residues **will** [~~shall~~] be removed from the site at closure, in accordance with Section 9(2) of 401 KAR 34:020.

Section 4. Closure; Time Allowed for Closure. (1) Within ninety (90) days after receiving the final volume of hazardous wastes, or the final volume of nonhazardous wastes if the owner or operator complies with all applicable requirements in subsections (4) and (5) of this section, at a hazardous waste management unit or facility, the owner or operator shall treat, remove from the unit or facility, or dispose of on-site, all hazardous wastes in accordance with the approved closure plan. The cabinet may approve a longer period if the owner or operator complies with all applicable requirements for requesting a modification to the permit and demonstrates that:

(a)1. The activities required to comply with this subsection will [~~shall~~], of necessity, take longer than ninety (90) days to complete; or

2.a. The hazardous waste management unit or facility has the capacity to receive additional hazardous wastes, or has the capacity to receive nonhazrdous wastes if the owner or operator complies with subsections (4) and (5) of this section; and

b. There is a reasonable likelihood that the owner or operator [~~he~~] or another person will [~~shall~~] recommence operation of the hazardous waste management unit or the facility within one (1) year; and

c. Closure of the hazardous waste management unit or facility would be incompatible with continued operation of the site; and

(b) The owner or operator [~~He~~] has taken and **will** [~~shall~~] continue to take all steps to prevent threats to human health and the environment, including compliance with all applicable permit requirements.

(2) The owner or operator shall complete partial and final closure activities in accordance with the approved closure plan and within 180 days after receiving the final volume of hazardous wastes, or the final volume of nonhazardous wastes if the owner or operator complies with all applicable requirements in subsections (4) and (5) of this section, at the hazardous waste management unit or facility. The cabinet may approve an extension to the closure period if the owner or operator complies with all applicable requirements for requesting a modification to the permit and demonstrates that:

(a)1. The partial or final closure activities **will** [~~shall~~], of necessity, take longer than 180 days to complete; or

2.a. The hazardous waste management unit or facility has the capacity to receive additional hazardous wastes, or has the capacity to receive nonhazardous wastes if the owner or operator complies with subsections (4) and (5) of this section; and

b. There is reasonable likelihood that the owner or operator [~~he~~] or another person **will** [~~shall~~] recommence operation of the hazardous waste management unit or the facility within one (1) year; and

c. Closure of the hazardous waste management unit or facility would be incompatible with continued operation of the site; and

(b) The owner or operator [~~He~~] has taken and **will** [~~shall~~] continue to take all steps to prevent threats to human health and the environment from the unclosed but not operating hazardous waste management unit or facility, including compliance with all applicable permit requirements.

(3) The demonstrations referred to in subsections (1) and (2) of this section shall be made as follows:

(a) The demonstrations in subsection (1)(a) of this section shall be made at least thirty (30) days prior to the expiration of the ninety (90) day period in subsection (1) of this section; and

(b) The demonstration in subsection (2)(a) of this section shall be made at least thirty (30) days prior to the expiration of the 180 day period in subsection (2) of this section, unless the owner or operator is otherwise subject to the deadlines in subsection (4) of this section.

(4)The cabinet may allow an owner or operator to receive only nonhazardous wastes in a landfill, land treatment, or surface impoundment unit after the final receipt of hazardous wastes at that unit if:

(a) The owner or operator requests a permit modification in compliance with all applicable requirements in 401 KAR Chapter 38 and in the permit modification request demonstrates that:

1. The unit has the existing design capacity as indicated on the Part A application to receive nonhazardous wastes; and

2. There is a reasonable likelihood that the owner or operator or another person will receive nonhazardous wastes in the unit within one (1) year after the final receipt of hazardous wastes; and

3. The nonhazardous wastes will not be incompatible with any remaining wastes in the unit, or with facility design and operating requirements of the unit or facility; and

4. Closure of the hazardous waste management unit would be incompatible with continued operation of the unit or facility; and

5. The owner or operator is operating and will continue to operate in compliance with all applicable permit requirements; and

(b) The request to modify the permit includes:

1. An amended waste analysis plan;

2. Groundwater monitoring and response program;

3. Human exposure assessment required under Section 9 of 401 KAR 38:070; and

4. Closure and postclosure plans, and updated cost estimates and demonstrations of financial assurance for closure and postclosure care as necessary and appropriate, to reflect any changes due to the presence of hazardous constituents in the nonhazardous wastes, and changes in closure activities, including the expected year of closure if applicable under Section 3(2)(g) of this administrative regulation, as a result of the receipt of nonhazardous wastes following the final receipt of hazardous wastes; and

(c) The request to modify the permit includes revisions, as necessary and appropriate, to affected conditions of the permit to account for the receipt of nonhazardous wastes following receipt of the final volume of hazardous wastes; and

(d) The request to modify the permit and the demonstrations referred to in paragraphs (a) and (b) of this subsection are submitted to the cabinet no later than 120 days prior to the date on which the owner or operator of the facility receives the known final volume of hazardous wastes at the unit, or no later than ninety (90) days after the effective date of this administrative regulation whichever is later.

(5) In addition to the requirements in subsection (4) of this section, an owner or operator of a hazardous waste surface impoundment that is not in compliance with the liner and leachate collection system requirements in Section 2 of 401 KAR 34:200; Section 2 of

401 KAR 34:230; Section 4 of 401 KAR 34:240; and Section 10 of 401 KAR 35:200 or Section 2(4) of 401 KAR 34:200 or Section 10(4) of 35:200 shall:

(a) Submit with the request to modify the permit:

1. A contingent corrective measures plan, unless a corrective action plan has already been submitted under Section 10 of 401 KAR 34:060; and

2. A plan for removing hazardous wastes in compliance with paragraph (b) of this subsection; and

(b) Remove all hazardous wastes from the unit by removing all hazardous liquids, and removing all hazardous sludges to the extent practicable without impairing the integrity of the liner(s), if any.

(c) Remove hazardous wastes no later than ninety (90) days after the final receipt of hazardous wastes. The cabinet may approve an extension to this deadline if the owner or operator demonstrates that the removal of hazardous wastes **will** [~~shall~~], of necessity, take longer than the allotted period to complete and that extension will not pose a threat to human health and the environment.

(d) If a release that is a statistically significant increase (or decrease in the case of pH) over background values for detection monitoring parameters or constituents specified in the permit or that exceeds the facility's groundwater protection standard at the point of compliance, if applicable, is detected in accordance with the requirements in 401 KAR 34:060, the owner or operator of the unit:

1. Shall comply with the reporting requirements of KRS 224.01-400, if applicable;

2. Shall implement corrective measures in accordance with the approved contingent corrective measures plan required by paragraph (a) of this subsection no later than one (1) year after detection of the release, or approval of the contingent corrective measures plan, whichever is later;

3. May continue to receive wastes at the unit following detection of the release only if the approved corrective measures plan includes a demonstration that continued receipt of wastes will not impede corrective action; and

4. May be required by the cabinet to implement corrective measures in less than one (1) year or to cease the receipt of wastes until corrective measures have been implemented if necessary to protect human health and the environment.

(e) During the period of corrective action, the owner or operator shall provide semiannual reports to the cabinet that describe the progress of the corrective action program, compile all groundwater monitoring data, and evaluate the effect of the continued receipt of nonhazardous wastes on the effectiveness of corrective action.

(f) The cabinet may require the owner or operator to commence closure of the unit if the owner or operator fails to implement corrective action measures in accordance with the approved contingent corrective measures plan within one (1) year as required in paragraph (d) of this subsection, or fails to make substantial progress in implementing corrective action and achieving the facility's groundwater protection standard or background levels if the facility has not yet established a groundwater protection standard.

(g) If the owner or operator fails to implement corrective measures as required in paragraph (d) of this subsection, or if the cabinet determines that substantial progress has not been made pursuant to paragraph (f) of this subsection the cabinet shall:

1. Notify the owner or operator in writing that the owner or operator must begin closure in accordance with the deadlines in subsections (1) and (2) of this section and provide a detailed statement of reasons for this determination; and

2. Provide the owner or operator and the public, through a newspaper notice, the opportunity to submit written comments on the decision no later than twenty (20) days after the date of the notice.

3. If the cabinet receives no written comments,the decision shall become final five (5) days after the close of the comment period. The cabinet shall notify the owner or operator that the decision is final, and that a revised closure plan, if necessary, shall be submitted within fifteen (15) days of the final notice and that closure shall begin in accordance with the deadlines in subsection (1) and (2) of this section.

4. If the cabinet receives written comments on the decision, a final decision shall be made within thirty (30) days after the end of the comment period. The cabinet shall provide the owner or operator in writing and the public through a newspaper notice, a detailed statement of reasons for the final decision. If the cabinet determines that substantial progress has not been made, the owner or operator shall initiate closure in accordance with the deadlines in subsections (1) and (2) of this section.

Section 5. Disposal or Decontamination of Equipment, Structures and Soils. During the partial and final closure periods, all contaminated equipment, structures and soils shall be properly disposed of or decontaminated unless otherwise specified in Section 8 of 401 KAR 34:190, Section 6 of 401 KAR 34:200, Section 8 of 401 KAR 34:210, Section 8 of 401 KAR 34:220, or Section 6 of 401 KAR 34:230 or under the authority of Section 2 and 4 of 401 KAR 34:250. By removing any hazardous wastes or hazardous constituents during partial and final closure, the owner or operator may become a generator of hazardous waste and shall handle that waste in accordance with all applicable requirements of 401 KAR Chapter 32.

Section 6. Certificate of Closure. Within sixty (60) days of completion of closure of each hazardous waste surface impoundment, waste pile, land treatment, and landfill unit, and within sixty (60) days of the completion of final closure, the owner or operator shall submit to the cabinet, by registered mail, a certification that the hazardous waste management unit or facility, as applicable, has been closed in accordance with the specifications in the approved closure plan. The certification shall be signed by the owner or operator and by an [~~independent professional~~] engineer [~~registered in Kentucky~~]. Documentation supporting the [~~independent registered professional~~] engineer's certification shall be furnished to the cabinet upon request until it [~~he~~] releases the owner or operator from the financial assurance requirements for closure under Section 12 of 401 KAR 34:090.

Section 7. Survey Plat. No later than the submission of the certification of closure of each hazardous waste disposal unit, the owner or operator shall submit to the local zoning authority, or the authority with jurisdiction over local land use, and to the cabinet, a survey plat indicating the location and dimensions of landfill cells or other hazardous waste disposal units with respect to permanently displayed benchmarks. This plat shall be prepared and certified by a professional land surveyor registered in [~~the Commonwealth of~~] Kentucky. The plat filed with the local zoning authority, or the authority with jurisdiction over local land use, shall contain a note, prominently displayed, which states the owner's or operator's obligation to restrict disturbance of the hazardous waste disposal unit in accordance with this administrative regulation.

Section 8. Postclosure Care and Use of Property. (1)(a) Postclosure care for each hazardous waste management unit subject to the requirements of Sections 8 to [~~through~~] 11 of this administrative regulation shall begin after completion of closure of the unit and continue for thirty (30) years after that date and shall consist of at least the following:

1. Monitoring and reporting in accordance with the requirements of 401 KAR 34:060, 401 KAR 34:200, 401 KAR 34:210, 401 KAR 34:220, 401 KAR 34:230, and 401 KAR 34:250; and

2. Maintenance and monitoring of waste containment systems in accordance with the requirements of 401 KAR 34:060, 401 KAR 34:200, 401 KAR 34:210, 401 KAR 34:220, 401 KAR 34:230, and 401 KAR 34:250.

(b) Any time preceding partial closure of a hazardous waste management unit subject to postclosure care requirements or final

closure, or any time during the postclosure period for a particular unit, the cabinet may, in accordance with the permit modification procedures in 401 KAR Chapter 38:

1. Shorten the postclosure care period applicable to the hazardous waste management unit, or facility, to not less than thirty (30) years as specified in KRS 224.46-520 if all disposal units have been closed, if the cabinet [he] finds that the reduced period is sufficient to protect human health and the environment (e.g., leachate or groundwater monitoring results, characteristics of the hazardous wastes, application of advanced technology, or alternative disposal, treatment, or reuse techniques indicate that the hazardous waste management unit or facility is secure); or

2. Extend the postclosure care period applicable to the hazardous waste management unit or facility if the cabinet [he] finds that the extended period is necessary to protect human health and the environment (e.g., leachate or groundwater monitoring results indicate a potential for migration of hazardous wastes at levels which may be harmful to human health and the environment).

(2) The cabinet may require, at partial and final closure, continuation of any of the security requirements of Section 5 of 401 KAR 34:020 during part or all of the postclosure period when:

(a) Hazardous wastes may remain exposed after completion of partial or final closure; or

(b) Access by the public or domestic livestock may pose a hazard to human health.

(3) Postclosure use of property on or in which hazardous wastes remain after partial or final closure shall never be allowed to disturb the integrity of the final cover, liner(s), or any other components of any containment system, or the function of the facility's monitoring systems, unless the cabinet finds that the disturbance:

(a) Is necessary to the proposed use of the property, and **will** [shall] not increase the potential hazard to human health or the environment; or

(b) Is necessary to reduce a threat to human health or the environment.

(4) All postclosure care activities shall be in accordance with the provisions of the approved postclosure plan as specified in Section 9 of this administrative regulation.

Section 9. Postclosure Plan; Amendment of Plan. (1) Written plan. The owner or operator of a hazardous waste disposal unit shall have a written postclosure plan. In addition, certain waste piles and certain surface impoundments from which the owner or operator intends to remove or decontaminate the hazardous wastes at partial or final closure are required by Section 6(3)(a)2 of 401 KAR 34:200, and Section 8(3)(a)2 of 401 KAR 34:210 to have contingent postclosure plans. Owners or operators of surface impoundments and waste piles not otherwise required to prepare contingent postclosure plans under Section 6(3)(a)2 of 401 KAR 34:200 and Section 8(3)(a)2 of 401 KAR 34:210 shall submit a postclosure plan to the cabinet within ninety (90) days from the date that the owner or operator or cabinet determines that the hazardous waste management unit shall be closed as a landfill, subject to the requirements of Sections 8 to [through] 11 of this administrative regulation. The plan shall be submitted with the permit application, in accordance with Section 2(13) of 401 KAR 38:090, and approved by the cabinet as part of the permit issuance procedures under 401 KAR Chapter 38. In accordance with Section 3 of 401 KAR 38:030, the approved postclosure plan shall become a condition of any hazardous waste site or facility permit issued.

(2) For each hazardous waste management unit subject to the requirements of this section, the postclosure plan shall identify the activities that **will** [shall] be carried on after closure of each disposal unit and the frequency of these activities, and include at least:

(a) A description of the planned monitoring activities and frequencies at which they **will** [shall] be performed to comply with 401 KAR 34:060, 401 KAR 34:200, 401 KAR 34:210, 401 KAR 34:220, 401 KAR 34:230, and 401 KAR 34:250 during the postclosure care period; and

(b) A description of the planned maintenance activities, and frequencies at which they **will** [shall] be performed, to ensure:

1. The integrity of the cap and final cover or other containment systems in accordance with the requirements of 401 KAR 34:060, 401 KAR 34:200, 401 KAR 34:210, 401 KAR 34:220, 401 KAR 34:230, and 401 KAR 34:250; and

2. The function of the monitoring equipment in accordance with the requirements of 401 KAR 34:060, 401 KAR 34:200, 401 KAR 34:210, 401 KAR 34:220, 401 KAR 34:230, and 401 KAR 34:250; and

(c) The name, address and phone number of the person or office to contact about the hazardous waste disposal unit or facility during the postclosure care period.

(3) Until final closure of the facility, a copy of the approved postclosure plan shall be furnished to the cabinet upon request, including request by mail. After final closure has been certified, the person or office specified in subsection (2)(c) of this section shall keep the approved postclosure plan during the remainder of the postclosure period.

(4) Amendment of plan. The owner or operator shall request a permit modification to authorize a change in the approved postclosure plan in accordance with the applicable requirements of 401 KAR Chapter 38. The written request shall include a copy of the amended postclosure plan for approval by the cabinet.

(a) The owner or operator may submit a written request to the cabinet for a permit modification to amend the postclosure plan at any time during the active life of the facility or during the postclosure care period.

(b) The owner or operator shall submit a written request for a permit modification to authorize a change in the approved postclosure plan whenever:

1. Changes in operating plans or facility design affect the approved postclosure plan; or

2. There is a change in the expected year of final closure, if applicable; or

3. Events which occur during the active life of the facility, including partial and final closures, affect the approved postclosure plan.

(c) The owner or operator shall submit a written request for a permit modification at least sixty (60) days prior to the proposed change in facility design or operation, or no later than sixty (60) days after an unexpected event has occurred which has affected the postclosure plan. An owner or operator of a surface impoundment or waste pile that intends to remove all hazardous waste at closure and is not otherwise required to submit a contingent postclosure plan under Section 6(3)(a)2 of 401 KAR 34:200 and Section 8(3)(a)2 of 401 KAR 34:210, shall submit a postclosure plan to the cabinet no later than ninety (90) days after the date that the owner or operator or cabinet determines that the hazardous waste management unit shall be closed as a landfill, subject to the requirements of Section 6 of 401 KAR 34:230. The cabinet shall approve, disapprove, or modify this plan in accordance with the procedures in 401 KAR Chapter 38. In accordance with Section 3 of 401 KAR 38:030, the approved postclosure plan shall become a permit condition.

(d) The cabinet may request modifications to the plan under the conditions described in paragraph (b) of this subsection. The owner or operator shall submit the modified plan no later than sixty (60) days after the cabinet's request, or no later than ninety (90) days if the unit is a surface impoundment or waste pile not previously required to prepare a contingent postclosure plan. Any modifications requested by the cabinet shall be approved, disapproved, or modified in accordance with the procedures in 401 KAR Chapter 38.

(5) For existing disposal facilities within the 100-year flood plain, the postclosure plan and cost estimates shall reflect compliance with the requirements in Section 9(2) of 401 KAR 34:020 to prevent washout of waste and protect the facility from inundation by waters of

the 100-year flood.

Section 10. Postclosure Notices. (1) No later than sixty (60) days after certification of closure of each hazardous waste disposal unit, the owner or operator shall submit to the local zoning authority or the authority with jurisdiction over local land use and to the cabinet a record of the type, location, and quantity of hazardous wastes disposed of within each cell or other disposal unit of the facility. For hazardous wastes disposed of before January 12, 1981, the owner or operator shall identify the type, location, and quantity of the hazardous wastes to the best of his knowledge and in accordance with any records he has kept.

(2) Within sixty (60) days of certification of closure of the first hazardous waste disposal unit and within sixty (60) days of certification of closure of the last hazardous waste disposal unit, the owner or operator shall:

(a) Record, in accordance with state law, a notation on the deed to the facility property - or on some other instrument which is normally examined during title search - that **will** [~~shall~~] in perpetuity notify any potential purchaser of the property that:

1. The land has been used to manage hazardous wastes; and
2. Its use is restricted under this administrative regulation; and
3. The survey plat and record of the type, location, and quantity of hazardous wastes disposed of within each cell or other hazardous waste disposal unit of the facility required by Section 7 of this administrative regulation and subsection (1) of this section have been filed with the local zoning authority or the authority with jurisdiction over local land use and with the cabinet; and

(b) Submit a certification, signed by the owner or operator, that he has recorded the notation specified in paragraph (a) of this subsection, including a copy of the document in which the notation has been placed, to the cabinet.

(3) If the owner or operator or any subsequent owner or operator of the land upon which a hazardous waste disposal unit is located wishes to remove hazardous wastes, hazardous waste residues, the liner, if any, or contaminated soils, he shall request a modification to the postclosure permit in accordance with the applicable requirements in 401 KAR Chapter 38. The owner or operator shall demonstrate that the removal of hazardous wastes **will** [~~shall~~] satisfy the criteria of Section 8(3) of this administrative regulation. By removing hazardous waste, the owner or operator may become a generator of hazardous waste and shall manage it in accordance with all applicable requirements of this chapter. If he is granted a permit modification or otherwise granted approval to conduct such removal activities, the owner or operator may request that the cabinet approve either:

(a) The removal of the notation on the deed to the facility property or other instrument normally examined during title during title search; or

(b) The addition of a notation to the deed or other instrument indicating the removal of the hazardous waste.

Section 11. Certification of Completion of Postclosure Care. No later than sixty (60) days after completion of the established postclosure care period for each hazardous waste disposal unit, the owner or operator shall submit to the cabinet by registered mail, a certification that the postclosure care period for the hazardous waste disposal unit was performed in accordance with the specifications in the approved postclosure plan. The certification shall be signed by the owner or operator and an [~~independent professional~~] engineer [~~registered in the Commonwealth of Kentucky~~]. Documentation supporting the [~~independent registered professional~~] engineer's certification shall be furnished to the cabinet upon request until he releases the owner or operator from the financial assurance requirements for postclosure care under Section 12 of 401 KAR 34:100.

PHILLIP J. SHEPHERD, Secretary
E. DOUGLAS STEPHAN, Commissioner

APPROVED BY AGENCY: December 13, 1993
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NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION CABINET
Department for Environmental Protection
Division of Waste Management
(Amended After Hearing)

401 KAR 34:090. Closure financial requirements.

RELATES TO: KRS 224.01, 224.10, 224.40, 224.43, 224.46, 224.99

STATUTORY AUTHORITY: KRS 224.10-100, 224.46-505, 224.46-520

NECESSITY AND FUNCTION: To implement provisions of KRS 224.46-505 and KRS 224.46-520 and to [~~requires that persons engaging in the storage, treatment, and disposal of hazardous waste obtain a permit. KRS 224.46-520 requires the cabinet to establish standards for these permits, to require adequate financial responsibility, and to establish minimum standards for closure for all facilities and the postclosure monitoring and maintenance of hazardous waste disposal facilities. This chapter establishes minimum standards for new hazardous waste sites or facilities. This regulation~~] establish[~~es the~~] closure financial requirements.

Section 1. Cost Estimate for Closure. (1) The owner or operator shall have a detailed written estimate, in current dollars, of the cost of closing the facility in accordance with the requirements in Sections 2 to [~~through~~] 6 of 401 KAR 34:070 and applicable closure requirements in Section 9 of 401 KAR 34:180, Section 8 of 401 KAR 34:190, Section 6 of 401 KAR 34:200, Section 8 of 401 KAR 34:210, Section 8 of 401 KAR 34:220, Section 6 of 401 KAR 34:230, Section 8 of 401 KAR 34:240, and Sections 2 to [~~through~~] 4 of 401 KAR 34:250.

(a) The estimate shall equal the cost of final closure at the point in the facility's active life when the extent and manner of its operation **will** [~~shall~~] make closure the most expensive, as indicated by its closure plan (see Section 3(2) of 401 KAR 34:070); and

(b) The closure cost estimate shall be based on the costs to the owner or operator of hiring a third party to close the facility. A third party is a party who is neither a parent nor a subsidiary of the owner or operator. (See definition of parent corporation in Section 1 [~~3~~](1)(e) of 401 KAR 34:080.) The owner or operator may use costs for on-site disposal if he can demonstrate that on-site disposal capacity **will** [~~shall~~] exist at all times over the life of the facility.

(c) The closure cost estimate shall [~~may~~] not incorporate any salvage value that may be realized with the sale of hazardous wastes, or nonhazardous wastes if applicable under Section 4(4) of 401 KAR 34:070, facility structures or equipment, land, or other assets associated with the facility at the time of partial or final closure.

(d) The owner or operator shall [~~may~~] not incorporate a zero cost for hazardous wastes, or nonhazardous wastes if applicable under Section 4(4) of 401 KAR 34:070, that might have economic value.

(2) During the active life of the facility, the owner or operator shall adjust the closure cost estimate for inflation within sixty (60) days prior to the anniversary date of the establishment of the financial instrument used to comply with Section 2 of this administrative regulation. For owners and operators using the financial test or corporate guarantee, the closure cost estimate shall be updated for inflation within thirty (30) days after the close of the firm's fiscal year and before submission of updated information to the cabinet as specified in Section 8(3) of this administrative regulation. The adjustment shall be made by recalculating the maximum costs of closure in current dollars, or by using an inflation factor derived from the most recent Implicit Price Deflator for Gross National Product published by the U.S. Department of Commerce in its Survey of

Current Business as specified in paragraphs (a) and (b) of this subsection. The inflation factor is the result of dividing the latest published annual Deflator by the Deflator for the previous year.

(a) The first adjustment shall be [is] made by multiplying the closure cost estimate by the inflation factor. The result shall be [is] the adjusted closure cost estimate.

(b) Subsequent adjustments shall be [are] made by multiplying the latest adjusted closure cost estimate by the latest inflation factor.

(3) During the active life of the facility, the owner or operator shall revise the closure cost estimate no later than thirty (30) days after the cabinet has approved the request to modify the closure plan, if the change in the closure plan increases the cost of closure. The revised closure cost estimate shall be adjusted for inflation as specified in subsection (2) of this section.

(4) The owner or operator shall keep the following at the facility during the operating life of the facility:

(a) The latest closure cost estimate prepared in accordance with subsections (1) and (3) of this section; and

(b) When this estimate has been adjusted in accordance with subsection (2) of this section, the latest adjusted closure cost estimate.

Section 2. Financial Assurance for Facility Closure. An owner or operator of each facility shall establish financial assurance for closure of the facility. He shall choose from the options as specified in Sections 3 to [through] 9 of this administrative regulation.

Section 3. Closure Trust Fund. (1) An owner or operator may satisfy the requirements of this administrative regulation by establishing a closure trust fund which conforms to the requirements of this section and submitting an originally signed duplicate of the trust agreement to the cabinet. An owner or operator of a new facility shall send the originally signed duplicate of the trust agreement to the cabinet at least sixty (60) days before the date on which hazardous waste is first received for treatment, storage, or disposal. The trustee shall be an entity which has the authority to act as a trustee and whose trust operations are regulated and examined by a federal or state agency.

(2) The trust agreement, including the formal certification of acknowledgment, shall be executed on the form incorporated by reference in Section 4 of 401 KAR 34:080 [provided by the cabinet containing wording identical to the wording specified in Section 1 of 401 KAR 34:140 and the trust agreement shall be accompanied by a formal certification of acknowledgment (for an example, see Section 2 of 401 KAR 34:140)]. Schedule A of the trust agreement shall be updated within sixty (60) days after a change in the amount of the current closure cost estimate covered by the agreement.

(3) Payments to the trust fund shall be made annually by the owner or operator over the term of the initial permit or over the remaining operating life of the facility as estimated in the closure plan, whichever period is shorter; this period is hereafter referred to as the "pay-in period." The payments into the closure trust fund shall be made as follows:

(a) For a new facility, as defined in 401 KAR 30:010, the first payment shall be made before the initial receipt of hazardous waste for treatment, storage, or disposal. A receipt from the trustee for this payment shall be submitted by the owner or operator to the cabinet before this initial receipt of hazardous waste. The first payment shall be at least equal to the current closure cost estimate (see Section 1 of this administrative regulation), except as provided in Section 10 of this administrative regulation, divided by the number of years in the pay-in period. Subsequent payments shall be made no later than thirty (30) days after each anniversary date of the first payment. The amount of each subsequent payment shall be determined by this formula:

$$\text{NEXT payment} = \frac{CE - CV}{Y}$$

Where CE is the current closure cost estimate, CV is the current value of the trust fund, and Y is the number of years remaining in the pay-in period.

(b) If an owner or operator established a trust fund as specified in Section 3 of 401 KAR 35:090, and the value of that trust fund is less than the current closure cost estimate when a permit is awarded for the facility, the amount of the current closure cost estimate still to be paid into the trust fund shall be paid in over the pay-in period as defined in this subsection. Payments shall continue to be made no later than thirty (30) days after each anniversary date of the first payment made pursuant to 401 KAR Chapter 35. The amount of each payment shall be determined by this formula:

$$\text{NEXT payment} = \frac{CE - CV}{Y}$$

Where CE is the current closure cost estimate, CV is the current value of the trust fund and Y is the number of years remaining in the pay-in period.

(4) The owner or operator may accelerate payments into the trust fund or he may deposit the full amount of the closure cost estimate at the time the fund is established. However, he shall maintain the value of the fund at no less than the value the fund **would** [shall] have been if annual payments were made as specified in subsection (3) of this section.

(5) If the owner or operator establishes a closure trust fund after having used one (1) or more alternate mechanisms specified in this administrative regulation or in 401 KAR 35:090, his first payment shall be at least the amount that the fund **would** [shall] have contained if the trust fund were established initially and annual payments made according to specifications of this section and Section 3 of 401 KAR 35:090, as applicable.

(6) After the pay-in period is completed, whenever the current closure cost estimate changes, the owner or operator shall compare the new estimate with the trustee's most recent annual valuation of the trust fund. If the value of the fund is less than the amount of the new estimate, the owner or operator, within sixty (60) days of the change in the cost estimate, shall either deposit an amount into the fund so that its value after this deposit at least equals the amount of the current closure cost estimate, or obtain other financial assurance as specified in this section to cover the difference.

(7) If the value of the trust fund is greater than the total amount of the current closure cost estimate, the owner or operator may submit a written request to the cabinet for release of the amount in excess of the current closure cost estimate.

(8) If an owner or operator substitutes other financial assurance as specified in this administrative regulation for all or part of the trust fund, he may submit a written request to the cabinet for release of the amount in excess of the current closure cost estimate covered by the trust fund.

(9) Within sixty (60) days after receiving a request from the owner or operator for release of funds as specified in subsections (7) and (8) of this section, the cabinet shall instruct the trustee to release to the owner or operator such funds as the cabinet specifies in writing.

(10) After beginning partial or final closure, an owner or operator or another person authorized to conduct partial or final closure may request reimbursements for partial or final closure expenditures by submitting itemized bills to the cabinet. The owner or operator may request reimbursements for partial closure only if sufficient funds are remaining in the trust fund to cover the maximum costs of closing the facility over its remaining operating life. Within sixty (60) days after receiving bills for partial or final closure activities, the cabinet shall instruct the trustee to make reimbursements in those amounts as the

cabinet specifies in writing, if the cabinet determines that the partial or final closure expenditures are in accordance with the approved closure plan, or otherwise justified. If the cabinet has reason to believe that the maximum cost of closure over the remaining life of the facility will [~~shall~~] be significantly greater than the value of the trust fund, he may withhold reimbursements of such amounts as he deems prudent until he determines, in accordance with Section 12 of this administrative regulation, that the owner or operator is no longer required to maintain financial assurance for final closure of the facility. If the cabinet does not instruct the trustee to make such reimbursements, he shall provide the owner or operator with a detailed written statement of reasons.

(11) The cabinet shall agree to termination of the trust when:

(a) An owner or operator substitutes alternate financial assurance for closure as specified in this section; or

(b) The cabinet releases the owner or operator from the requirements of this administrative regulation in accordance with Section 12 of this administrative regulation.

Section 4. Surety Bond Guaranteeing Payment into a Closure Trust Fund. (1) An owner or operator may satisfy the requirements of this administrative regulation by obtaining a surety bond which conforms to the requirements of this section and submitting the bond to the cabinet. An owner or operator of a new facility shall submit the bond to the cabinet at least sixty (60) days before the date on which hazardous waste is first received for treatment, storage, or disposal. The bond shall be effective before this initial receipt of hazardous waste. The surety company issuing the bond shall, at a minimum, be among those listed as acceptable sureties on federal bonds in Circular 570 of the U.S. Department of the Treasury.

(2) The surety bond shall be executed on the form incorporated by reference in Section 4 of 401 KAR 34:080 [~~provided by the cabinet containing wording identical to the wording specified in 401 KAR 34:144~~].

(3) The owner or operator who uses a surety bond to satisfy the requirements of this administrative regulation shall also establish a standby trust fund. Under the terms of the bond, all payments made thereunder shall be deposited by the surety directly into the standby trust fund in accordance with instructions from the cabinet. This standby trust fund shall meet the requirements specified in Section 3 of this administrative regulation, except that:

(a) An originally signed duplicate of the trust agreement shall be submitted to the cabinet with the surety bond; and

(b) Unless the standby trust fund is funded pursuant to the requirements of this administrative regulation, the following are not required by these administrative regulations:

1. Payments into the trust fund as specified in Section 3 of this administrative regulation;

2. Updating of Schedule A of the trust agreement (see Section 1 of 401 KAR 34:140) to show current closure cost estimates;

3. Annual valuations as required by the trust agreement; and

4. Notices of nonpayment as required by the trust agreement.

(4) The bond shall guarantee that the owner or operator will [~~shall~~]:

(a) Fund the standby trust fund in an amount equal to the penal sum of the bond before the beginning of final closure of the facility; or

(b) Fund the standby trust fund in an amount equal to the penal sum within fifteen (15) days after an order to begin final closure issued by the cabinet becomes final, or within fifteen (15) days after an order to begin final closure is issued by a circuit court or other court of competent jurisdiction pursuant to KRS 224.46-520, or within fifteen (15) days after issuance of a notice of termination of the permit pursuant to 401 KAR Chapter 38; or

(c) Provide alternate financial assurance as specified in this administrative regulation and obtain the cabinet's written approval of the assurance provided, within ninety (90) days after receipt by both the owner or operator and the cabinet of a notice of cancellation of the bond from the surety.

(5) Under the terms of the bond, the surety shall become liable on the bond obligation when the owner or operator fails to perform as guaranteed by the bond.

(6) The penal sum of the bond shall be in an amount at least equal to the amount of the current closure cost estimate, except as provided in Section 10 of this administrative regulation.

(7) Whenever the current closure cost estimate increases to an amount greater than the amount of the penal sum, the owner or operator within sixty (60) days after the increase, shall either cause the penal sum of the bond to be increased to an amount at least equal to the current closure cost estimate and submit evidence of such increase to the cabinet, or obtain other financial assurance as specified in this administrative regulation to cover the increase. Whenever the current closure cost estimate decreases, the penal sum may be reduced to the amount of the current closure cost estimate following written approval by the cabinet.

(8) Under the terms of the bond, the surety may cancel the bond by sending a notice of cancellation by certified mail to the owner or operator and to the cabinet. Cancellation shall not [~~cannot~~] occur, however, during the 120 days beginning on the date of receipt of the notice of cancellation by both the owner or operator and the cabinet, as evidenced by return receipt.

(9) The owner or operator may cancel the bond if the cabinet has given prior written consent based on the cabinet's receipt of evidence of alternate financial assurance as specified in this administrative regulation.

Section 5. Surety Bond Guaranteeing Performance of Closure. (1) An owner or operator may satisfy the requirements of this administrative regulation by obtaining a surety bond which conforms to the requirements of this section and by submitting the bond to the cabinet. An owner or operator of a new facility shall submit the bond to the cabinet at least sixty (60) days before the date on which hazardous waste is first received for treatment, storage, or disposal. The bond shall be effective before this initial receipt of hazardous waste. The surety company issuing the bond shall, at a minimum, be among those listed as acceptable sureties on federal bonds in Circular 570 of the U.S. Department of the Treasury.

(2) The surety bond shall be executed on the form incorporated by reference in Section 4 of 401 KAR 34:080 [~~provided by the cabinet containing wording identical to the wording specified in 401 KAR 34:148~~].

(3) The owner or operator who uses a surety bond to satisfy the requirements of this administrative regulation shall also establish a standby trust fund. Under the terms of the bond, all payments made thereunder shall be deposited by the surety directly into the standby trust fund in accordance with the instructions of the cabinet. This standby trust shall meet the requirements specified in Section 3 of this administrative regulation, except that:

(a) An originally signed duplicate of the trust agreement shall be submitted to the cabinet with the surety bond; and

(b) Unless the standby trust fund is funded pursuant to the requirements of this administrative regulation, the following are not required by these administrative regulations:

1. Payments into the trust fund as specified in Section 3 of this administrative regulation;

2. Updating of Schedule A of the trust agreement (see 401 KAR 34:140) to show current closure cost estimates;

3. Annual valuations as required by the trust agreement; and

4. Notices of nonpayment as required by the trust agreement.

(4) The bond shall guarantee that the owner or operator shall:

(a) Perform final closure in accordance with the closure plan and other requirements in the permit for the facility whenever required to do so; or

(b) Provide alternate financial assurance as specified in this

administrative regulation and obtain the cabinet's written approval of the assurance provided, within ninety (90) days after receipt by both the owner or operator and the cabinet of a notice of cancellation of the bond from the surety.

(5) Under the terms of the bond, the surety shall become liable on the bond obligation when the owner or operator fails to perform as guaranteed by the bond. Following a final administrative determination pursuant to KRS 224.46-520 that the owner or operator has failed to perform final closure in accordance with the approved closure plan and other permit requirements when required to do so, under the terms of the bond the surety shall perform final closure as guaranteed by the bond or shall deposit the amount of the penal sum into the standby trust fund.

(6) The penal sum of the bond shall be in an amount at least equal to the amount of the current closure cost estimate.

(7) Whenever the current closure cost estimate increases to an amount greater than the amount of the penal sum of the bond, the owner or operator, within sixty (60) days after the increase, shall either cause the penal sum of the bond to be increased to an amount at least equal to the current closure cost estimate and submit evidence of such increase to the cabinet, or obtain other financial assurance as specified in this administrative regulation. Whenever the current closure cost estimate decreases, the penal sum may be reduced to the amount of the current closure cost estimate following written approval by the cabinet.

(8) Under the terms of the bond, the surety may cancel the bond by sending notice of cancellation by certified mail to the owner or operator and to the cabinet. Cancellation may not occur, however, during the 120 days beginning on the date of receipt of the notice of cancellation by both the owner or operator and the cabinet, as evidenced by the return receipts.

(9) The owner or operator may cancel the bond if the cabinet has given prior written consent. The cabinet shall provide such written consent when:

(a) An owner or operator substitutes alternate financial assurance as specified n this administrative regulation; or

(b) The cabinet releases the owner or operator from the requirements of this administrative regulation in accordance with Section 12 of this administrative regulation.

(10) The surety shall not be liable for deficiencies in the performance of closure by the owner or operator after the cabinet releases the owner or operator from the requirements of this administrative regulation in accordance with Section 12 of this administrative regulation.

Section 6. Closure Letter of Credit. (1) An owner or operator may satisfy the requirements of this administrative regulation by obtaining an irrevocable standby letter of credit which conforms to the requirements of this section and by submitting the letter to the cabinet. An owner or operator of a new facility shall have submitted the letter of credit to the cabinet at least sixty (60) days before the date on which hazardous waste is first received for treatment, storage, or disposal. The letter of credit shall be effective before the initial receipt of hazardous waste. The issuing institution shall be an entity which has the authority to issue letters of credit and whose letter of credit operations are regulated and examined by a federal or state agency.

(2) The [~~wording of the~~] letter of credit shall be executed on the form incorporated by reference in Section 4 of 401 KAR 34:080. The trust agreement required to be filed with the letter of credit shall be executed on the form incorporated by reference in Section 4 of 401 KAR 34:080. [~~identical to the wording specified in Section 2 of 401 KAR 34:152.~~]

(3) An owner or operator who uses a letter of credit to satisfy the requirements of this administrative regulation shall also establish a standby trust fund. Under the terms of the letter of credit, all amounts paid pursuant to a draft by the cabinet shall be deposited by the issuing institution directly into the standby trust fund in accordance with instructions from the cabinet. The standby trust fund shall meet the requirements of the trust fund specified in Section 3 of this administrative regulation, except that:

(a) An originally signed duplicate of the trust agreement shall be submitted to the cabinet with the letter of credit; and

(b) Unless the standby trust fund is funded pursuant to the requirements of this administrative regulation, the following are not required by these administrative regulations:

1. Payments into the trust fund as specified in Section 3 of this administrative regulation;

2. Updating the Schedule A of the trust agreement [~~(see Section 1 of 401 KAR 34:140)~~] to show current closure cost estimates;

3. Annual valuations as required by the trust agreement; and

4. Notices of nonpayment as required by the trust agreement.

(4) The letter of credit shall be accompanied by a letter from the owner or operator referring to the letter of credit by number, issuing institution, and date, and providing the following information: the EPA identification number, name, and address of the facility, and the amounts of funds assured for closure of the facility by the letter of credit [~~(see Section 1 of 401 KAR 34:152 for an example)~~].

(5) The letter of credit shall be irrevocable and issued for a period of at least one (1) year. The letter of credit shall provide that the expiration date **will** [~~shall~~] be automatically extended for a period of at least one (1) year unless, at least 120 days before the current expiration date, the issuing institution notifies both the owner or operator and the cabinet by certified mail of a decision not to extend the expiration date. Under the terms of the letter of credit, the 120 days shall begin on the date when both the owner or operator and the cabinet have received the notice, as evidenced by the return receipts.

(6) The letter of credit shall be issued for at least the amount of the current closure cost estimate except as provided in Section 10 of this administrative regulation.

(7) Whenever the current closure cost estimate increases to an amount greater than the amount of the credit, the owner or operator, within sixty (60) days of the increase, shall either cause the amount of the credit to be increased so that it at least equals the current closure cost estimate and submit evidence of such increase to the cabinet, or obtain other financial assurance as specified in this administrative regulation to cover the increase. Whenever the adjusted closure cost estimate decreases, the amount of the credit may be reduced to the amount of the current closure cost estimate following written approval by the cabinet.

(8) Following a final administrative determination pursuant to KRS 224.46-520 that the owner or operator has failed to perform final closure in accordance with the approved closure plan and other permit requirements when required to do so, the cabinet may draw on the letter of credit.

(9) If the owner or operator does not establish alternate financial assurance as specified in this administrative regulation and obtain written approval of such alternate assurance from the cabinet within ninety (90) days after receipt by both the owner or operator and the cabinet of a notice from the issuing institution that it has decided not to extend the letter of the credit beyond the current expiration date, the cabinet shall draw on the letter of credit. The cabinet may delay the drawing if the issuing institution grants an extension of the term of credit. During the last thirty (30) days of any such extension, the cabinet shall draw on the letter of credit if the owner or operator has failed to provide alternate financial assurance as specified in this administrative regulation and obtain written approval of such assurance from the cabinet.

(10) The cabinet shall return the letter of credit to the issuing institution for termination when:

(a) An owner or operator substitutes alternate financial assurance as specified in this administrative regulation; or

(b) The cabinet releases the owner or operator from the requirements of this administrative regulation in accordance with Section 12 of this administrative regulation.

Section 7. Closure Insurance. (1) An owner or operator may satisfy the requirements of this administrative regulation by obtaining closure insurance which conforms to the requirements of this section and by submitting a certificate of such insurance to the cabinet. An owner or operator of a new facility shall submit the certificate of insurance to the cabinet at least sixty (60) days before the date on which hazardous waste is first received for treatment, storage, or disposal. The insurance shall be effective before this initial receipt of hazardous waste. Except as KRS 304.11-030 provides otherwise. Each insurance policy providing primary coverage shall be issued by an insurer who is authorized [~~licensed~~] to transact [~~the business of~~] insurance in [~~the Commonwealth of~~] Kentucky. Each insurance policy providing excess coverage shall be issued by an insurer who is authorized [~~licensed~~] to transact [~~the business of~~] insurance in a state.

(2) The certificate of insurance shall be executed on the [a] form incorporated by reference in Section 4 of 401 KAR 34:080 [~~provided by the cabinet containing wording identical to the wording specified in 401 KAR 34:156~~].

(3) The closure insurance policy shall be issued for a face amount at least equal to the current closure cost estimate, except as provided in Section 10 of this administrative regulation. The term "face amount" means the total amount the insurer is obligated to pay under the policy. Actual payments by the insurer shall not change the face amount, although the insurer's future liability shall be lowered by the amount of the payments.

(4) The closure insurance policy shall guarantee that funds **will** [~~shall~~] be available to close a facility whenever final closure occurs. The policy shall also guarantee that once final closure begins, the insurer **will** [~~shall~~] be responsible for paying out funds, up to an amount equal to the face amount of the policy, upon the direction of the cabinet to such party or parties as the cabinet specifies.

(5) After beginning partial or final closure, an owner or operator or any other person authorized to conduct closure may request reimbursements for closure expenditures by submitting itemized bills to the cabinet. The owner or operator may request reimbursements for partial closure only if the remaining value of the policy is sufficient to cover the maximum costs of closing the facility over its remaining operating life. Within sixty (60) days after receiving bills for closure activities, the cabinet shall instruct the insurer to make reimbursements in such amounts as the cabinet specifies in writing, if the cabinet determines that the partial or final closure expenditures are in accordance with the approved closure plan or otherwise justified. If the cabinet has reason to believe that the maximum cost of closure over the remaining life of the facility shall be significantly greater than the face amount of the policy, he may withhold reimbursements of such amounts as he deems prudent until he determines, in accordance with Section 12 of this administrative regulation, that the owner or operator is no longer required to maintain financial assurance for final closure of the facility. If the cabinet does not instruct the trustee to make such reimbursements, he shall provide the owner or operator with a detailed written statement of reasons.

(6) The owner or operator shall maintain the policy in [~~full force and~~] effect until the cabinet consents to termination of the policy by the owner or operator as specified in subsection (10) of this section. Failure to pay the premium, without substitution of alternate financial assurance as specified in this administrative regulation, shall constitute a significant violation of these administrative regulations, warranting such remedy as the cabinet deems necessary. Such violation shall be deemed to begin upon receipt by the cabinet of a notice of future cancellation, termination, or failure to renew due to nonpayment of the premium, rather than upon the date of expiration.

(7) Each policy shall contain a provision allowing assignment of the policy to a successor owner or operator. Such assignment may be conditional upon consent of the insurer provided such consent is not unreasonably refused.

(8) The policy shall provide that the insurer may not cancel, terminate, or fail to renew the policy except for failure to pay the premium. The automatic renewal of the policy shall, at a minimum, provide the insured with the option of renewal at the face amount of the expiring policy. If there is a failure to pay the premium, the insurer may elect to cancel, terminate, or fail to renew the policy by sending notice by certified mail to the owner or operator and the cabinet. Cancellation, termination, or failure to renew may not occur, however, during the 120 days beginning with the date of receipt of the notice by both the cabinet and the owner or operator, as evidenced by the return receipts. Cancellation, termination, or failure to renew may not occur and the policy shall remain in [~~full force and~~] effect in the event that on or before the date of expiration:

(a) The cabinet deems the facility abandoned; or

(b) The permit is terminated or revoked or a new permit is denied; or

(c) Closure is ordered by the cabinet or a circuit court or other court of competent jurisdiction; or

(d) The owner or operator is named as debtor in a voluntary or involuntary proceeding under Title 11 (Bankruptcy), U.S. Code; or

(e) The premium due is paid.

(9) Whenever the current closure cost estimate increases to an amount greater than the face amount of the policy, the owner or operator, within sixty (60) days of the increase, shall either cause the face amount to be increased to an amount at least equal to the current closure cost estimate and submit evidence of such increase to the cabinet, or obtain other financial assurance as specified in this administrative regulation to cover the increase. Whenever the current closure cost estimate decreases, the face amount may be reduced to the amount of the current closure cost estimate following written approval by the cabinet.

(10) The cabinet shall give written consent to the owner or operator that he may terminate the insurance policy when:

(a) An owner or operator substitutes alternate financial assurance as specified in this administrative regulation; or

(b) The cabinet releases the owner or operator from the requirements of this administrative regulation in accordance with Section 12 of this administrative regulation.

Section 8. Financial Test and Corporate Guarantee for Closure. (1) An owner or operator may satisfy the requirements of this administrative regulation by demonstrating that he passes a financial test as specified in this section. To pass this test the owner or operator shall meet the criteria of either paragraph of this subsection:

(a) The owner or operator shall have:

1. Two (2) of the following three (3) ratios: a ratio of total liabilities to net worth less than 2.0; a ratio of the sum of net income plus depreciation, depletion, and amortization to total liabilities greater than 0.1; and a ratio of current assets to current liabilities greater than 1.5; and

2. Net working capital and tangible net worth each at least six (6) times the sum of the current closure and postclosure cost estimates and the current plugging and abandonment cost estimates; and

3. Tangible net worth of at least $10 million; and

4. Assets located in the United States amounting to at least ninety (90) percent of total assets or at least six (6) times the sum of the current closure and postclosure cost estimates and the current plugging and abandonment cost estimates.

(b) The owner or operator shall have:

1. A current rating for his most recent bond issuance of AAA, AA, A or BBB as issued by Standard and Poor's or Aaa, Aa, A, or Baa as issued by Moody's; and

2. Tangible net worth at least six (6) times the sum of the current closure and postclosure cost estimates and the current plugging and abandonment cost estimates; and

3. Tangible net worth of at least $10 million; and

4. Assets located in the United States amounting to at least ninety (90) percent of total assets or at least six (6) times the sum of the current closure and postclosure cost estimates and the current

plugging and abandonment cost estimates.

(2) The phrase "current closure and postclosure cost estimates" as used in subsection (1) of this section refers to the cost estimates required to be shown in paragraphs 1 to [~~through~~] 4 of the letter from the owner's or operator's chief financial officer [~~(see 401 KAR 34:159)~~]. The phrase "current plugging and abandonment cost estimates" as used in subsection (1) of this section refers to the cost estimates required to be shown in paragraphs 1 to [~~through~~] 4 of the letter from the owner's or operator's chief financial officer (see 40 CFR 144.70(f)).

(3) To demonstrate that he meets this test, the owner or operator shall submit the following three (3) items to the cabinet:

(a) A letter executed on the form incorporated by reference in Section 4 of 401 KAR 34:080 provided by the cabinet, signed by the owner's or operator's chief financial officer [~~and worded as specified in 401 KAR 34:159~~]; and

(b) A copy of the independent certified public accountant's report on examination of the owner's or operator's financial statements for the latest completed fiscal year; and

(c) A special report from the owner's or operator's independent certified public accountant to the owner or operator stating that:

1. He has compared the data which the letter from the chief financial officer specifies as having been derived from the independently audited, year-end financial statements for the latest fiscal year with the amounts in such financial statements; and

2. In connection with that procedure, no matters came to his attention which caused him to believe that the specified data **will** [~~shall~~] be adjusted.

(4) An owner or operator of a new facility shall submit the items specified in subsection (3) of this section to the cabinet at least sixty (60) days before the date on which hazardous waste is first received for treatment, storage, or disposal.

(5) After the initial submission of items specified in subsection (3) of this section, the owner or operator shall send updated information to the cabinet within ninety (90) days after the close of each succeeding fiscal year. This information shall consist of all three (3) items specified in subsection (3) of this section.

(6) If the owner or operator no longer meets the requirements of subsection (1) of this section, he shall send notice to the cabinet of intent to establish alternate financial assurance as specified in this administrative regulation. The notice shall be sent by certified mail within ninety (90) days after the end of the fiscal year for which the year-end financial data show that the owner or operator no longer meets the requirements. The owner or operator shall provide alternate financial assurance within 120 days after the end of such fiscal year.

(7) The cabinet may, based on a reasonable belief that the owner or operator may no longer meet the requirements of subsection (1) of this section, require reports of financial condition at any time from the owner or operator in addition to those specified in subsection (3) of this section. If the cabinet finds, on the basis of such reports or other information, that the owner or operator no longer meets the requirements of subsection (1) of this section, the owner or operator shall provide alternate financial assurance as specified in this administrative regulation within thirty (30) days after notification of such a finding.

(8) The cabinet may disallow use of this test on the basis of qualifications in the opinion expressed by the independent certified public accountant in his report on examination of the owner's or operator's financial statements (see subsection (3)(c) of this section). An adverse opinion or a disclaimer of opinion shall be cause for disallowance. The cabinet shall evaluate other qualifications on an individual basis. The owner or operator shall provide alternate financial assurance as specified in this administrative regulation within thirty (30) days after notification of the disallowance.

(9) The owner or operator is no longer required to submit the items specified in subsection (3) of this section when:

(a) An owner or operator substitutes alternate financial assurance as specified in this administrative regulation;

(b) The cabinet releases the owner or operator from the requirements of this administrative regulation by terminating the financial requirements in accordance with Section 12 of this administrative regulation.

(10) An owner or operator may meet the requirements of this administrative regulation by obtaining a written guarantee, hereafter referred to as the "corporate guarantee." The guarantor shall be the direct or higher-tier parent corporation of the owner or operator, a firm whose parent corporation is also the parent corporation of the owner or operator, or a firm with a "substantial business relationship" with the owner or operator. The guarantor shall meet the requirements for owners or operators in subsections (1) to [~~through~~] (8) of this section and shall comply with the terms of the corporate guarantee. The corporate guarantee shall be executed on the [a] form incorporated by reference in Section 4 of 401 KAR 34:080 [~~provided by the cabinet containing wording identical to the wording specified in 401 KAR 34:165~~]. The corporate guarantee shall accompany the items sent to the cabinet as specified in subsection (3) of this section. One (1) of these items shall be the letter from the guarantor's chief financial officer. If the guarantor's parent corporation is also the parent corporation of the owner or operator, the letter shall describe the value received in consideration of the guarantee. If the guarantor is a firm with a "substantial business relationship" with the owner or operator, this letter shall describe this "substantial business relationship" and the value received in consideration of the guarantee. The terms of the corporate guarantee shall provide that:

(a) If the owner or operator fails to perform final closure of a facility covered by the corporate guarantee in accordance with the closure plans and other permit requirements whenever required to do so, the guarantor shall do so or establish a trust fund as specified in Section 3 of this administrative regulation in the name of the owner or operator.

(b) The corporate guarantee shall remain in force unless the guarantor sends notice of cancellation by certified mail to the owner or operator and to the cabinet. Cancellation may not occur, however, during the 120 days beginning on the date of receipt of the notice of cancellation by both the owner or operator and the cabinet, as evidenced by the return receipts.

(c) If the owner or operator fails to provide alternate financial assurance as specified in this administrative regulation and obtain the written approval of such alternate assurance from the cabinet within ninety (90) days after receipt by both the owner or operator and the cabinet of a notice of cancellation of the corporate guarantee from the guarantor, the guarantor shall provide such alternate financial assurance in the name of the owner or operator.

Section 9. Cash Account and Certificates of Deposit. (1) An owner or operator may satisfy the requirements of this administrative regulation by submitting to the cabinet by certified mail, a bond guaranteeing compliance with KRS Chapter 224 and administrative regulations promulgated pursuant thereto. The bond is to be supported by a cash account or certificate of deposit. The cash account or the certificate of deposit are to be held in escrow pursuant to an escrow agreement. An owner or operator of a new facility shall submit the bond to the cabinet at least sixty (60) days before the date on which hazardous waste is first received for treatment, storage, or disposal. The bank or financial institution holding the cash account or certificate of deposit in escrow shall be regulated and examined by a federal or state agency.

(2) The bond shall be executed on the [a] form incorporated by reference in Section 4 of 401 KAR 34:080 [~~provided by the cabinet which has wording identical to the wording specified in Section 1 of 401 KAR 34:168~~]. The escrow agreement for the cash account or certificate of deposit shall be executed on the [a] form incorporated by reference in Section 4 of 401 KAR 34:080 [~~provided by the cabinet which has wording identical to the wording specified in Section 2 of~~

~~401 KAR 34:168~~].

(3) The cabinet shall be the beneficiary of the escrow agreement for the cash account or certificate of deposit. The cabinet shall be empowered to draw upon the funds if the owner or operator fails to perform closure or postclosure care in accordance with the closure plan and other permit requirements.

(4) The sum of the cash account or certificate of deposit shall be in an amount at least equal to the amount of the current closure cost estimate, except as provided in Section 10 of this administrative regulation.

(5) After each interest period is completed, whenever the current closure cost estimate changes, the owner or operator shall compare the new estimate with the trustee's most recent annual valuation of the cash accounts or the certificate of deposit. If the value of the cash accounts or certificate of deposit is less than the amount of the new estimate, the owner or operator, within sixty (60) days of the change in the cost estimate, shall either deposit an amount into the cash accounts or the certificate of deposit so that its value after this deposit at least equals the amount of the current closure cost estimate, or obtain other financial assurance as specified in this section to cover the difference.

(6) If the value of the cash account or the certificate of deposit is greater than the total amount of the current closure cost estimate, the owner or operator may submit a written request to the cabinet for release of the amount in excess of the current closure cost estimate.

(7) Under the terms of the cash account or certificate of deposit, the bank or financial institution may cancel the cash account or certificate of deposit by sending a notice of cancellation by certified mail to the owner or operator and to the cabinet. Cancellation cannot occur, however, during the 120 days beginning on the date of receipt of the notice of cancellation by both the owner or operator and the cabinet, as evidenced by return receipt.

(8) The owner or operator may terminate the cash account or certificate of deposit if the cabinet has given prior written consent based on the cabinet's receipt of evidence of alternate financial assurance as specified in this administrative regulation.

(9) An owner or operator or any other person authorized to perform closure may request reimbursement for closure expenditures by submitting itemized bills to the cabinet. Within sixty (60) days after receiving bills for closure activities, the cabinet shall determine whether the closure expenditures are in accordance with the closure plan or otherwise justified, and if so, the cabinet may instruct the bank or financial institution to make reimbursements in those amounts as the cabinet specifies in writing if the cabinet determines that the closure expenditures are in accordance with the closure plan or otherwise justified.

Section 10. Use of Multiple Financial Mechanisms. An owner or operator may satisfy the requirements of this administrative regulation by establishing more than one (1) financial mechanism per facility. These mechanisms are limited to trust funds, surety bonds guaranteeing payment into a trust fund, letters of credit, insurance, certificates of deposit and cash. The mechanisms shall be as specified in Sections 3, 4, 6, 7, and 9, respectively, of this administrative regulation, except that it is the combination of mechanisms rather than each single mechanism, which shall provide financial assurance for an amount at least equal to the current closure cost estimate. If an owner or operator uses a trust fund in combination with a surety bond or a letter of credit, he may use the trust fund as the standby trust fund for other mechanisms. A single standby trust fund may be established for two (2) or more mechanisms. The cabinet may use any or all of the mechanisms to provide for closure of the facility.

Section 11. Use of a Financial Mechanism for Multiple Facilities. An owner or operator may use a financial assurance mechanism specified in this administrative regulation to meet the requirements of this administrative regulation for more than one (1) facility. Evidence of financial assurance submitted to the cabinet shall include a list showing, for each facility, the EPA Identification Number, name, address, and the amount of funds for closure assured by the mechanism. The amount of funds available through the mechanism shall be no less than the sum of funds that **will** [~~shall~~] be available if a separate mechanism had been established and maintained for each facility. In directing funds available through the mechanism for closure of any of the facilities covered by the mechanism, the cabinet may direct only the amount of funds designated for that facility, unless the owner or operator agrees to the use of additional funds available under the mechanism.

Section 12. Release of the Owner or Operator from the Requirements of this Administrative Regulation. Within sixty (60) days after approving [~~receiving~~] certifications from the owner or operator and an [~~independent professional~~] engineer [~~who is registered in Kentucky~~] that final closure has been completed in accordance with the approved closure plan, the cabinet shall notify the owner or operator in writing that he is no longer required by this administrative regulation to maintain financial assurance for final closure of the facility, unless the cabinet has reason to believe that final closure has not been in accordance with the approved closure plan. The cabinet shall provide the owner or operator a detailed written statement of any such reason to believe that closure has not been in accordance with the approved closure plan.

PHILLIP J. SHEPHERD, Secretary
E. DOUGLAS STEPHAN, Commissioner
APPROVED BY AGENCY: December 13, 1993
FILED WITH LRC: December 14, 1993 at 10 a.m.

NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION CABINET
Department for Environmental Protection
Division of Waste Management
(Amended After Hearing)

401 KAR 34:100. Postclosure financial requirements.

RELATES TO: KRS 224.01, 224.10, 224.40, 224.43, 224.46, 224.99

STATUTORY AUTHORITY: KRS 224.10-100, 224.46-505, 224.46-520

NECESSITY AND FUNCTION: To implement provisions of KRS 224.46-520 and to [~~requires that persons engaging in the storage, treatment, and disposal of hazardous waste obtain a permit. KRS 224.46-520 requires the cabinet to establish standards for these permits, to require adequate financial responsibility, and to establish minimum standards for closure for all facilities and the postclosure monitoring and maintenance of hazardous waste disposal facilities. This chapter establishes minimum standards for new hazardous waste sites or facilities. This regulation~~] establish[~~es the~~] postclosure financial requirements.

Section 1. Cost Estimate for Postclosure Care. (1) The owner or operator of a disposal surface impoundment, disposal miscellaneous unit, land treatment unit, or landfill unit, or of a surface impoundment or waste pile required under Section 6 of 401 KAR 34:200 and Section 8 of 401 KAR 34:210 to prepare a contingent closure and postclosure plan, shall have a detailed written estimate, in current dollars, of the annual cost of postclosure monitoring and maintenance of the facility in accordance with the applicable postclosure administrative regulations in Sections 8 to [~~through~~] 11 of 401 KAR 34:070, Section 6 of 401 KAR 34:200, Section 8 of 401 KAR 34:210, Section 8 of 401 KAR 34:220 and Section 6 of 401 KAR 34:230 and Section 4 of 401 KAR 34:250.

(a) The postclosure cost estimate shall be based on the costs to the owner or operator of hiring a third party to conduct postclosure care activities. A third party is a party who is neither a parent nor a subsidiary of the owner or operator (see definition of parent corporation in Section 1 [3](1)(d) [(e)] of 401 KAR 34:080.

(b) The postclosure cost estimate is calculated by multiplying the annual postclosure cost estimate by the number of years of postclosure care required under 401 KAR 34:070.

(2) During the active life of the facility, the owner or operator shall adjust the postclosure cost estimate for inflation within sixty (60) days prior to the anniversary date of the establishment of the financial instrument(s) used to comply with Section 2 of this administrative regulation. For owners or operators using the financial test or corporate guarantee, the postclosure cost estimate shall be updated for inflation within thirty (30) days after the close of the firm's fiscal year and before the submission of updated information to the cabinet as specified in Section 8(5) of this administrative regulation. The adjustment may be made by recalculating the postclosure cost estimate in current dollars or by using an inflation factor derived from the most recent Implicit Price Deflator for Gross National Product as published by the U.S. Department of Commerce in its Survey of Current Business as specified in Section 4(1) and (2) of this administrative regulation. The inflation factor is the result of dividing the latest published annual Deflator by the Deflator for the previous year.

(a) The first adjustment is made by multiplying the postclosure cost estimate by the inflation factor. The result is the adjusted postclosure cost estimate.

(b) Subsequent adjustments are made by multiplying the latest adjusted postclosure cost estimate by the latest inflation factor.

(3) During the active life of the facility, the owner or operator shall revise the postclosure cost estimate within thirty (30) days after the cabinet has approved the request to modify the postclosure plan, if the change in the postclosure plan increases the cost of postclosure care. The revised postclosure cost estimate shall be adjusted for inflation as specified in subsection (2) of this section.

(4) The owner or operator shall keep the following at the facility during the operating life of the facility: the latest postclosure cost estimate prepared in accordance with subsections (1) and (3) of this section and, when this estimate has been adjusted in accordance with subsection (2) of this section, the latest adjusted postclosure cost estimate.

Section 2. Financial Assurance for Postclosure Care. The owner or operator of a hazardous waste management unit subject to the requirements in Section 1 of this administrative regulation shall establish financial assurance for postclosure care in accordance with the approved postclosure plan for the facility sixty (60) days prior to the initial receipt of hazardous waste or the effective date of this administrative regulation, whichever is later. He shall choose from the options in Sections 3 to [through] 11 of this administrative regulation.

Section 3. Postclosure Trust Fund. (1) An owner or operator may satisfy the requirements of this administrative regulation by establishing a postclosure trust fund which conforms to the requirements of this section and by submitting an originally signed duplicate of the trust agreement to the cabinet. An owner or operator of a new facility shall submit the originally signed duplicate of the trust agreement to the cabinet at least sixty (60) days before the date on which hazardous waste is first received for disposal. The trustee shall be an entity which has the authority to act as a trustee and whose trust operations are regulated and examined by a federal or state agency.

(2) The trust agreement shall be executed on the form incorporated by reference in Section 4 of 401 KAR 34:080 [provided by the cabinet containing wording identical to the wording specified in Section 1 of 401 KAR 34:140, and the trust agreement shall be accompanied by a formal certification of acknowledgment (for an example, see Section 2 of 401 KAR 34:140)]. Schedule A of the trust agreement shall be updated within sixty (60) days after a change in the amount of the current postclosure cost estimate covered by the agreement.

(3) Payments into the trust fund shall be made annually by the owner or operator over the term of the initial permit or over the remaining operating life of the facility as estimated in the closure plan, whichever period is shorter; this period is hereafter referred to as the "pay-in period." The payments into the postclosure trust fund shall be made as follows:

(a) For a new facility, the first payment shall be made before the initial receipt of hazardous waste for disposal. A receipt from the trustee for this payment shall be submitted by the owner or operator to the cabinet before this initial receipt of hazardous waste. The first payment shall be at least equal to the current postclosure cost estimate, except as provided in Section 10 of this administrative regulation, divided by the number of years in the pay-in period. Subsequent payments shall be made no later than thirty (30) days after each anniversary date of the first payment. The amount of each subsequent payment shall be determined by this formula:

$$\text{NEXT payment} = \frac{CE - CV}{Y}$$

where CE is the current postclosure cost estimate, CV is the current value of the trust fund, and Y is the number of years remaining in the pay-in period.

(b) If an owner or operator establishes a trust fund as specified in this section, and the value of that trust fund is less than the current postclosure cost estimate when a permit is awarded for the facility, the amount of the current postclosure cost estimate still to be paid into the fund shall be paid in over the pay-in period as defined in subsection (3) of this section. Payments shall continue to be made no later than thirty (30) days after each anniversary date of the first payment made pursuant to 401 KAR Chapter 35. The amount of each payment shall be determined by this formula:

$$\text{NEXT payment} = \frac{CE - CV}{Y}$$

where CE is the current postclosure cost estimate, CV is the current value of the trust fund, and Y is the number of years remaining in the pay-in period.

(4) The owner or operator may accelerate payments into the trust fund or he may deposit the full amount of the current postclosure cost estimate at the time the fund is established. However, he shall maintain the value of the fund at no less than the value that the fund would [shall] have been if annual payments were made as specified in subsection (3) of this section.

(5) If the owner or operator establishes a postclosure trust fund after having used one (1) or more alternate mechanisms specified in this administrative regulation or in 401 KAR 35:100, his first payment shall be in at least the amount that the fund would [shall] contain if the trust fund were established initially and annual payments made according to specifications of this paragraph and Section 3 of 401 KAR 35:100, as applicable.

(6) After the pay-in period is completed, whenever the current postclosure cost estimate changes during the operating life of the facility, the owner or operator shall compare the new estimate with the trustee's most recent annual valuation of the trust fund. If the value of the fund is less than the amount of the new estimate, the owner or operator, within sixty (60) days after the change in the cost estimate, shall either deposit an amount into the fund so that its value after this deposit at least equals the amount of the current postclosure cost estimate, or obtain other financial assurance as specified in this administrative regulation to cover the difference.

(7) During the operating life of the facility, if the value of the trust fund is greater than the total amount of the current postclosure cost estimate, the owner or operator may submit a written request to the

cabinet for release of the amount in excess of the current postclosure cost estimate.

(8) If an owner or operator substitutes other financial assurance as specified in this administrative regulation for all or part of the trust fund, he may submit a written request to the cabinet for release of the amount in excess of the current postclosure cost estimate covered by the trust fund.

(9) Within sixty (60) days after receiving a request from the owner or operator for release of funds as specified in subsections (7) and (8) of this section, the cabinet shall instruct the trustee to release to the owner or operator such funds as the cabinet specifies in writing.

(10) During the period of postclosure care, the cabinet may approve a release of funds if the owner or operator demonstrates to the cabinet that the value of the trust fund exceeds the remaining cost of postclosure care.

(11) An owner or operator or any other person authorized to conduct postclosure care may request reimbursement for postclosure care expenditures by submitting itemized bills to the cabinet. Within sixty (60) days after receiving bills for postclosure activities, the cabinet shall instruct the trustee to make reimbursement in those amounts as the cabinet specifies in writing, if the cabinet determines that the postclosure care expenditures are in accordance with the approved postclosure plan or otherwise justified. If the cabinet does not instruct the trustee to make such reimbursements, he shall provide the owner or operator with a detailed written statement of reasons.

(12) The cabinet shall agree to termination of the trust when:

(a) An owner or operator substitutes alternate financial assurance as specified in this administrative regulation; or

(b) The cabinet releases the owner or operator from the requirements of this administrative regulation in accordance with Section 12 of this administrative regulation.

Section 4. Surety Bond Guaranteeing Payment into a Postclosure Trust Fund. (1) An owner or operator may satisfy the requirements of this administrative regulation by obtaining a surety bond which conforms to the requirements of this section and submitting the bond to the cabinet. An owner or operator of a new facility shall submit the bond to the cabinet at least sixty (60) days before the date on which hazardous waste is first received for disposal. The bond shall be effective before this initial receipt of hazardous waste. The surety company issuing the bond shall, at a minimum, be among those listed as acceptable sureties on federal bonds in Circular 570 of the U.S. Department of the Treasury.

(2) The surety bond shall be executed on the form incorporated by reference in Section 4 of 401 KAR 34:080 [~~provided by the cabinet containing wording identical to the wording specified in 401 KAR 34:144~~].

(3) The owner or operator who uses a surety bond to satisfy the requirements of this administrative regulation shall also establish a standby trust fund. Under the terms of the bond, all payments made thereunder shall be deposited by the surety directly into the standby trust fund in accordance with instructions from the cabinet. This standby trust fund shall meet the requirements specified in Section 3 of this administrative regulation, except that:

(a) An originally signed duplicate of the trust agreement shall be submitted to the cabinet with the surety bond; and

(b) Until the standby trust fund is funded pursuant to the requirements of this administrative regulation, the following are not required by these administrative regulations:

1. Payments into the trust fund as specified in Section 3 of this administrative regulation;

2. Updating of Schedule A of the trust agreement (see 401 KAR 34:140) to show current postclosure cost estimates;

3. Annual valuations as required by the trust agreement; and

4. Notices of nonpayment as required by the trust agreement.

(4) The bond shall guarantee that the owner or operator will [~~shall~~]:

(a) Fund the standby trust fund in an amount equal to the penal sum of the bond before the beginning of final closure of the facility; or

(b) Fund the standby trust fund in an amount equal to the penal sum within fifteen (15) days after an order to begin final closure issued by the cabinet becomes final, or within fifteen (15) days after an order to begin final closure is issued by a circuit court or other court of competent jurisdiction; or

(c) Provide alternate financial assurance as specified in this administrative regulation, and obtain the cabinet's written approval of the assurance provided, within ninety (90) days after receipt by both the owner or operator and the cabinet of a notice of cancellation of the bond from the surety.

(5) Under the terms of the bond, the surety shall become liable on the bond obligation when the owner or operator fails to perform as guaranteed by the bond.

(6) The penal sum of the bond shall be in an amount at least equal to the amount of the current postclosure cost estimate, except as provided in Section 10 of this administrative regulation.

(7) Whenever the current postclosure cost estimate increases to an amount greater than the penal sum, the owner or operator, within sixty (60) days after the increase, shall either cause the penal sum to be increased to an amount at least equal to the current postclosure cost estimate and submit evidence of such increase to the cabinet, or obtain other financial assurance as specified in this administrative regulation to cover the increase. Whenever the current postclosure cost estimate decreases, the penal sum may be reduced to the amount of the current postclosure cost estimate following written approval by the cabinet.

(8) Under the terms of the bond, the surety may cancel the bond by sending notice of cancellation by certified mail to both the owner or operator and to the cabinet. Cancellation cannot occur, however, during the 120 days beginning on the date of receipt of the notice of cancellation by both the owner or operator and the cabinet, as evidenced by return receipt.

(9) The owner or operator may cancel the bond if the cabinet has given prior written consent based on his receipt of evidence of alternate financial assurance as specified in this administrative regulation.

Section 5. Surety Bond Guaranteeing Performance of Postclosure. (1) An owner or operator may satisfy the requirements of this administrative regulation by obtaining a surety bond which conforms to the requirements of this section and submitting the bond to the cabinet. An owner or operator of a new facility shall submit the bond to the cabinet at least sixty (60) days before the date on which hazardous waste is first received for disposal. The bond shall be effective before this initial receipt of hazardous waste. The surety company issuing the bond shall, at a minimum, be among those listed as acceptable sureties on federal bonds in Circular 570 of the U.S. Department of the Treasury.

(2) The surety bond shall be executed on the form incorporated by reference in Section 4 of 401 KAR 34:080 [~~provided by the cabinet containing wording identical to the wording specified in 401 KAR 34:148~~].

(3) The owner or operator who uses a surety bond to satisfy the requirements of this administrative regulation shall also establish a standby trust fund. Under the terms of the bond, all payments made thereunder shall be deposited by the surety directly into the standby trust fund in accordance with the instructions of the cabinet. This standby trust shall meet the requirements specified in Section 3 of this administrative regulation, except that:

(a) An originally signed duplicate of the trust agreement shall be submitted to the cabinet with the surety bond; and

(b) Unless the standby trust fund is funded pursuant to the requirements of this administrative regulation, the following are not

required by these administrative regulations:

1. Payments into the trust fund as specified in Section 3 of this administrative regulation;

2. Updating of Schedule A of the trust agreement [~~(see 401 KAR 34:140)~~] to show current postclosure cost estimates;

3. Annual valuations as required by the trust agreement; and

4. Notices of nonpayment as required by the trust agreement.

(4) The bond shall guarantee that the owner or operator shall:

(a) Perform postclosure care in accordance with the postclosure plan and other requirements of the permit for the facility; or

(b) Provide alternate financial assurance as specified in this administrative regulation and obtain the cabinet's written approval of the assurance provided, within ninety (90) days of receipt by both the owner or operator and the cabinet of a notice of cancellation of the bond from the surety.

(5) Under the terms of the bond, the surety shall become liable on the bond obligation when the owner or operator fails to perform as guaranteed by the bond. Following a final administrative determination pursuant to KRS 224.46-520 that the owner or operator has failed to perform postclosure care in accordance with the postclosure plan and other permit requirements, under the terms of the bond the surety shall perform postclosure care in accordance with the approved postclosure plan and other permit requirements or shall deposit the amount of the penal sum into the standby trust fund.

(6) The penal sum of the bond shall be in an amount at least equal to the amount of the current postclosure cost estimate.

(7) Whenever the current postclosure cost estimate increases to an amount greater than the penal sum during the operating life of the facility, the owner or operator, within sixty (60) days after the increase, shall either cause the penal sum to be increased to an amount at least equal to the current postclosure cost estimate and submit evidence of such increase to the cabinet, or obtain other financial assurance as specified in this administrative regulation. Whenever the current postclosure cost estimate decreases during the operating life of the facility, the penal sum may be reduced to the amount of the current postclosure cost estimate following written approval by the cabinet.

(8) During the period of postclosure care, the cabinet may approve a decrease in the penal sum if the owner or operator demonstrates to the cabinet that the amount exceeds the remaining cost of postclosure care.

(9) Under the terms of the bond, the surety may cancel the bond by sending notice of cancellation by certified mail to the owner or operator and to the cabinet. Cancellation may not occur, however, during the 120 days beginning on the date of receipt of the notice of cancellation by both the owner or operator and the cabinet, as evidenced by the return receipts.

(10) The owner or operator may cancel the bond if the cabinet has given prior written consent. The cabinet shall provide such written consent when:

(a) An owner or operator substitutes alternate financial assurance as specified in this administrative regulation; or

(b) The cabinet releases the owner or operator from the requirements of this administrative regulation in accordance with Section 12 of this administrative regulation.

(11) The surety shall not be liable for deficiencies in the performance of postclosure care by the owner or operator after the cabinet releases the owner or operator from the requirements of this administrative regulation in accordance with Section 12 of this administrative regulation.

Section 6. Postclosure Letter of Credit. (1) An owner or operator may satisfy the requirements of this administrative regulation by obtaining an irrevocable standby letter of credit which conforms to the requirements of this section and by submitting the letter to the cabinet. An owner or operator of a new facility shall submit the letter of credit to the cabinet at least sixty (60) days before the date on which hazardous waste is first received for disposal. The letter of credit shall be effective before this initial receipt of hazardous waste. The issuing institution shall be an entity which has the authority to issue letters of credit and whose letter of credit operations are regulated and examined by a federal or state agency.

(2) The [~~wording of the~~] letter of credit shall be executed on the form incorporated by reference in Section 13 of 401 KAR 34:090 and in accordance with [~~identical to the wording specified in~~] Section 2 of 401 KAR 34:152. The owner or operator may use his own document, provided the language is identical to that specified in 401 KAR 34:152. However, the trust agreement required to be filed with the letter of credit shall be executed on the form incorporated by reference in Section 13 of 401 KAR 34:090 and in accordance with 401 KAR 34:140.

(3) An owner or operator who uses a letter of credit to satisfy the requirements of this administrative regulation shall also establish a standby trust fund. Under the terms of the letter of credit, all amounts paid pursuant to a draft by the cabinet shall be deposited by the issuing institution directly into the standby trust fund in accordance with instructions from the cabinet. The standby trust fund shall meet the requirements of the trust fund specified in Section 3 of this administrative regulation, except that:

(a) An originally signed duplicate of the trust agreement shall be submitted to the cabinet with the letter of credit; and

(b) Unless the standby trust fund is funded pursuant to the requirements of this administrative regulation, the following are not required by these administrative regulations:

1. Payments into the trust fund as specified in Section 3 of this administrative regulation;

2. Updating the Schedule A of the trust agreement [~~(see 401 KAR 34:140)~~] to show current postclosure cost estimates;

3. Annual valuations as required by the trust agreement; and

4. Notices of nonpayment as required by the trust agreement.

(4) The letter of credit shall be accompanied by a letter from the owner or operator referring to the letter of credit by number, issuing institution, and date, and providing the following information: the EPA identification number, name and address of the facility, and the amount of funds assured for postclosure care of the facility by the letter of credit [~~(see Section 1 of 401 KAR 34:152 for an example)~~].

(5) The letter of credit shall be irrevocable and issued for a period of at least one (1) year. The letter of credit shall provide that the expiration date **will** [~~shall~~] be automatically extended for a period of at least one (1) year unless, at least 120 days before the current expiration date, the issuing institution notifies both the owner or operator and the cabinet by certified mail of a decision not to extend the expiration date. Under the terms of the letter of credit the 120 days shall begin on the date when both the owner or operator and the cabinet have received the notice, as evidenced by the return receipts.

(6) The letter of credit shall be issued in an amount at least equal to the current postclosure cost estimate, except as provided in Section 10 of this administrative regulation.

(7) Whenever the current postclosure cost estimate increases to an amount greater than the amount of the credit during the operating life of the facility, the owner or operator, within sixty (60) days after the increase, shall either cause the amount of the credit to be increased so that it at least equals the current postclosure cost estimate and submit evidence of such increase to the cabinet, or obtain other financial assurance as specified in this administrative regulation to cover the increase. Whenever the current postclosure cost estimate decreases during the operating life of the facility, the amount of the credit may be reduced to the amount of the current postclosure cost estimate following written approval by the cabinet.

(8) During the period of postclosure care, the cabinet may approve a decrease in the amount of the letter of credit if the owner or operator demonstrates to the cabinet that the amount exceeds the remaining cost of postclosure care.

(9) Following a final administrative determination pursuant to KRS

224.46-520 that the owner or operator has failed to perform postclosure care in accordance with the approved postclosure plan and other permit requirements, the cabinet may draw on the letter of credit.

(10) If the owner or operator does not establish alternate financial assurance as specified in this administrative regulation and obtain written approval of such alternate assurance from the cabinet within ninety (90) days after receipt by both the owner or operator and the cabinet of a notice from the issuing institution that it has decided not to extend the letter of credit beyond the current expiration date, the cabinet shall draw on the letter of credit. The cabinet may delay the drawing if the issuing institution grants an extension of the term of the credit. During the last thirty (30) days of any such extension, the cabinet shall draw on the letter of credit if the owner or operator has failed to provide alternate financial assurance as specified in this administrative regulation and obtain written approval of such financial assurance from the cabinet.

(11) The cabinet shall return the letter of credit to the issuing institution for termination when:

(a) An owner or operator substitutes alternate financial assurance as specified in this administrative regulation; or

(b) The cabinet releases the owner or operator from the requirements of this administrative regulation in accordance with Section 12 of this administrative regulation.

Section 7. Postclosure Insurance. (1) An owner or operator may satisfy the requirements of this administrative regulation by obtaining postclosure insurance which conforms to the requirements of this section and submitting a certificate of such insurance to the cabinet. An owner or operator of a new facility shall submit a certificate of insurance to the cabinet at least sixty (60) days before the date on which hazardous waste is first received for disposal. The insurance shall be effective before this initial receipt of hazardous waste. Each insurance policy providing primary coverage shall be issued by an insurer who is authorized [~~licensed~~] to transact [~~the business of~~] insurance in [~~the Commonwealth of~~] Kentucky except as KRS 304.11-030 provides otherwise. Each insurance policy providing excess coverage shall be issued by an insurer who is authorized [~~licensed~~] to transact [~~the business of~~] insurance in a state.

(2) The certificate of insurance shall be executed on the [~~a~~] form incorporated by reference in Section 4 of 401 KAR 34:080 [~~provided by the cabinet containing wording identical to the wording specified in 401 KAR 34:156~~].

(3) The postclosure insurance policy shall be issued for a face amount at least equal the current postclosure cost estimate, except as provided in Section 10 of this administrative regulation. The term "face amount" means the total amount the insurer is obligated to pay under the policy. Actual payments by the insurer shall not change the face amount, although the insurer's future liability shall be lowered by the amount of the payments.

(4) The postclosure insurance policy shall guarantee that funds **will** [~~shall~~] be available to provide postclosure care of the facility whenever the postclosure care period begins. The policy shall also guarantee that once postclosure care begins, the insurer **will** [~~shall~~] be responsible for paying out funds, up to an amount equal to the face amount of the policy, upon the direction of the cabinet to such party or parties as the cabinet specifies.

(5) An owner or operator or any other person authorized to conduct postclosure care may request reimbursement for postclosure care expenditures by submitting itemized bills to the cabinet. Within sixty (60) days after receiving bills for postclosure care activities, the cabinet shall instruct the insurer to make reimbursements in those amounts as the cabinet specifies in writing, if the cabinet determines that the postclosure care expenditures are in accordance with the approved postclosure plan or otherwise justified. If the cabinet does not instruct the insurer to make such reimbursements, he shall provide the owner or operator with a detailed written statement of reasons.

(6) The owner or operator shall maintain the policy in [~~full force and~~] effect until the cabinet consents to termination of the policy by the owner or operator as specified in subsection (11) of this section. Failure to pay the premium, without substitution of alternate financial assurance as specified in this administrative regulation, shall constitute a significant violation of these administrative regulations, warranting such remedy as the cabinet deems necessary. Such violation shall be deemed to begin upon receipt by the cabinet of a notice of future cancellation, termination, or failure to renew due to nonpayment of the premium, rather than upon the date of expiration.

(7) Each policy shall contain a provision allowing assignment of the policy to a successor owner or operator. Such assignment may be conditional upon consent of the insurer provided such consent is not unreasonably refused.

(8) The policy shall provide that the insurer may not cancel, terminate, or fail to renew the policy except for failure to pay the premium. The automatic renewal of the policy shall, at a minimum, provide the insured with the option of renewal at the face amount of the expiring policy. If there is a failure to pay the premium, the insurer may elect to cancel, terminate, or fail to renew the policy by sending notice by certified mail to the owner or operator and the cabinet. Cancellation, termination, or failure to renew may not occur, however, during the 120 days beginning with the date of receipt of the notice by the cabinet and the owner or operator, as evidenced by the return receipts. Cancellation, termination, or failure to renew may not occur and the policy shall remain in [~~full force and~~] effect in the event that on or before the date of expiration:

(a) The cabinet deems the facility abandoned; or

(b) The permit is terminated or revoked or a new permit is denied; or

(c) Closure is ordered by the cabinet or a circuit court or other court of competent jurisdiction; or

(d) The owner or operator is named as debtor in a voluntary or involuntary proceeding under Title 11 (Bankruptcy), U.S. Code; or

(e) The premium due is paid.

(9) Whenever the current postclosure cost estimate increases to an amount greater than the face amount of the policy during the operating life of the facility, the owner or operator, within sixty (60) days after the increase, shall either cause the face amount to be increased to an amount at least equal to the current postclosure cost estimate and submit evidence of such increase to the cabinet, or obtain other financial assurance as specified in this administrative regulation to cover the increase. Whenever the current postclosure cost estimate decreases during the operating life of the facility, the face amount may be reduced to the amount of the current postclosure cost estimate following written approval by the cabinet.

(10) Commencing on the date that liability to make payments pursuant to the policy accrues, the insurer shall thereafter annually increase the face amount of the policy. Such increase shall be equivalent to the face amount of the policy, less any payments made, multiplied by an amount equivalent to eighty-five (85) percent of the most recent investment rate or of the equivalent coupon-issue yield announced by the U.S. Treasury for twenty-six (26) week Treasury securities.

(11) The cabinet shall give written consent to the owner or operator that he may terminate the insurance policy when:

(a) An owner or operator substitutes alternate financial assurance as specified in this administrative regulation; or

(b) The cabinet releases the owner or operator from the requirements of this administrative regulation in accordance with Section 12 of this administrative regulation.

Section 8. Financial Test with Corporate Guarantee for Postclosure Care. (1) An owner or operator may satisfy the requirements of this administrative regulation by demonstrating that he passes a financial test as specified in this section. To pass this test the owner or operator shall meet the criteria of either paragraph (a) or (b) of this

subsection:

(a) The owner or operator shall have:

1. Two (2) of the three (3) ratios: a ratio of total liabilities to net worth less than 2.0; a ratio of the sum of net income plus depreciation, depletion, and amortization to total liabilities greater than 0.1; and a ratio of current assets to current liabilities greater than 1.5; and

2. Net working capital and tangible net worth each at least six (6) times the sum of the current closure and postclosure cost estimates and the current plugging and abandonment cost estimates; and

3. Tangible net worth of at least $10 million; and

4. Assets in the United States amounting to at least ninety (90) percent of his total assets or at least six (6) times the sum of the current closure and postclosure cost estimates and the current plugging and abandonment cost estimates.

(b) The owner or operator shall have:

1. A current rating for his most recent bond issuance of AAA, AA, A or BBB as issued by Standard and Poor's or Aaa, Aa, A, or Baa as issued by Moody's; and

2. Tangible net worth at least six (6) times the sum of the current closure and postclosure cost estimates and the current plugging and abandonment cost estimates; and

3. Tangible net worth of at least $10 million; and

4. Assets located in the United States amounting to at least ninety (90) percent of his total assets or at least six (6) times the sum of the current closure and postclosure cost estimates and the current plugging and abandonment cost estimates.

(2) The phrase "current closure and postclosure cost estimates" as used in subsection (1) of this section refers to the cost estimates required to be shown in paragraphs 1 to [~~through~~] 4 of the letter from the owner's or operator's chief financial officer [~~(see 401 KAR 34:159)~~]. The phrase "current plugging and abandonment cost estimates" as used in subsection (1) of this section refers to the cost estimates required to be shown in paragraphs 1 to [~~through~~] 4 of the letter from the owner's or operator's chief financial officer (see 40 CFR 144.70(f)).

(3) To demonstrate that he meets this test, the owner or operator shall submit the following three (3) items to the cabinet:

(a) A letter executed on the form provided by the cabinet and incorporated by reference in Section 4 of 401 KAR 34:080, signed by the owner's or operator's chief financial officer [~~and worded as specified in 401 KAR 34:159~~]; and

(b) A copy of the independent certified public accountant's report on examination of the owner's or operator's financial statements for the latest completed fiscal year; and

(c) A special report from the owner's or operator's independent certified public accountant to the owner or operator stating that:

1. He has compared the data which the letter from the chief financial officer specifies as having been derived from the independently audited, year-end financial statements for the latest fiscal year with the amounts in such financial statements; and

2. In connection with that procedure, no matters came to his attention which caused him to believe that the specified data **will** [~~shall~~] be adjusted.

(4) An owner or operator of a new facility shall submit the items specified in subsection (3) of this section to the cabinet at least sixty (60) days before the date on which hazardous waste is first received for treatment, storage, or disposal.

(5) After the initial submission of items specified in subsection (3) of this section, the owner or operator shall send updated information to the cabinet within ninety (90) days after the close of each succeeding fiscal year. This information shall consist of all three (3) items specified in subsection (3) of this section.

(6) If the owner or operator no longer meets the requirements of subsection (1) of this section, he shall send notice to the cabinet of intent to establish alternate financial assurance as specified in this administrative regulation. The notice shall be sent by certified mail within ninety (90) days after the end of the fiscal year for which the year-end financial data show that the owner or operator no longer meets the requirements. The owner or operator shall provide alternate financial assurance within 120 days after the end of such fiscal year.

(7) The cabinet may, based on a reasonable belief that the owner or operator may no longer meet the requirements of subsection (1) of this section, require reports of financial condition at any time from the owner or operator in addition to those specified in subsection (3) of this section. If the cabinet finds, on the basis of such reports or other information, that the owner or operator no longer meets the requirements of subsection (1) of this section, the owner or operator shall provide alternate financial assurance as specified in this administrative regulation within thirty (30) days after notification of such a finding.

(8) The cabinet may disallow use of this test on the basis of qualifications in the opinion expressed by the independent certified public accountant in his report on examination of the owner's or operator's financial statements (see subsection (3) of this section). An adverse opinion or a disclaimer of opinion shall be cause for disallowance. The cabinet shall evaluate other qualifications on an individual basis. The owner or operator shall provide alternate financial assurance as specified in this administrative regulation within thirty (30) days after notification of the disallowance.

(9) During the period of postclosure care, the cabinet may approve a decrease in the current postclosure cost estimate for which this test demonstrates financial assurance if the owner or operator demonstrates to the cabinet that the amount of the cost estimate exceeds the remaining cost of postclosure care.

(10) The owner or operator is no longer required to submit the items specified in subsection (3) of this section when:

(a) An owner or operator substitutes alternate financial assurance as specified in this administrative regulation;

(b) The cabinet releases the owner or operator from the requirements of this administrative regulation by terminating the financial requirements in accordance with Section 12 of this administrative regulation.

(11) An owner or operator may meet the requirements of this administrative regulation by obtaining a written guarantee hereafter referred to as "corporate guarantee." The guarantor shall be the direct or higher-tier parent corporation of the owner or operator, a firm whose parent corporation is also the parent corporation of the owner or operator, or a firm with a "substantial business relationship" with the owner or operator as defined in Section 1 of 401 KAR 34:080. The guarantor shall meet the requirements for owners or operators in subsections (1) to [~~through~~] (9) of this section and shall comply with the terms of the corporate guarantee. The corporate guarantee shall be executed on the [a] form incorporated by reference in Section 4 of 401 KAR 34:080 [~~provided by the cabinet containing wording identical to the wording specified in 401 KAR 34:165~~]. The corporate guarantee shall accompany the items sent to the cabinet as specified in subsection (3) of this section. One (1) of these items shall be the letter from the guarantor's chief financial officer. If the guarantor's parent corporation is also the parent corporation of the owner or operator, the letter shall describe the value received in consideration of the guarantee. If the guarantor is a firm with a "substantial business relationship" with the owner or operator, this letter shall describe this "substantial business relationship" and the value received in consideration of the guarantee. The terms of the corporate guarantee shall provide that:

(a) If the owner or operator fails to perform postclosure care of a facility covered by the corporate guarantee in accordance with the postclosure plan and other permit requirements whenever required to do so, the guarantor shall do so or establish a trust fund as specified in Section 3 of this administrative regulation in the name of the owner or operator.

(b) The corporate guarantee shall remain in force unless the guarantor sends notice of cancellation by certified mail to the owner or operator and to the cabinet. Cancellation may not occur, however,

during the 120 days beginning on the date of receipt of the notice of cancellation by both the owner or operator and the cabinet, as evidenced by the return receipts.

(c) If the owner or operator fails to provide alternate financial assurance as specified in this administrative regulation and obtain the written approval of such alternate assurance from the cabinet within ninety (90) days after receipt by both the owner or operator and the cabinet of a notice of cancellation of the corporate guarantee from the guarantor, the guarantor shall provide such alternate financial assurance in the name of the owner or operator.

Section 9. Cash and Certificates of Deposit. (1) An owner or operator may satisfy the requirements of this administrative regulation by submitting to the cabinet a bond guaranteeing compliance with KRS Chapter 224 and administrative regulations promulgated pursuant thereto. The bond is to be supported by a cash account or certificate(s) of deposit. The cash account or the certificate(s) of deposit are to be held in escrow pursuant to an escrow agreement. An owner or operator of a new facility shall submit the bond to the cabinet at least sixty (60) days before the date on which hazardous waste is first received for disposal. The bank or other financial institution holding the cash account or certificate of deposit in escrow shall be regulated and examined by a federal or state agency.

(2) The bond shall be executed on the [a] form incorporated by reference in Section 4 of 401 KAR 34:080 [~~provided by the cabinet which has wording identical to the wording specified in Section 1 of 401 KAR 34:168~~]. The escrow agreement for the cash account or certificate(s) of deposit shall be executed on the [a] form incorporated by reference in Section 13 of 401 KAR 34:090 and in accordance with [~~provided by the cabinet which has wording identical to the wording specified in~~] Section 2 of 401 KAR 34:168.

(3) The cabinet shall be the beneficiary of the escrow agreement for the cash account or certificate(s) of deposit. The cabinet shall be empowered to draw upon the funds if the owner or operator fails to perform postclosure care in accordance with the postclosure care plan and other permit requirements.

(4) The sum of the cash account or certificate of deposit shall be in an amount at least equal to the amount of the current postclosure cost estimate, except as provided in Section 10 of this administrative regulation.

(5) Whenever the current postclosure cost estimate increases to an amount greater than the sum of the cash account or certificate(s) of deposit, the owner or operator, within sixty (60) days after the increase, shall either cause the sum of the deposit to be increased to an amount at least equal to the current postclosure cost estimate and submit evidence of such increase to the cabinet or obtain other financial assurance as specified in this administrative regulation to cover the increase. Whenever the current postclosure cost estimate decreases, the sum of the deposit may be reduced to the amount of the current postclosure cost estimate following written approval by the cabinet.

(6) If the value of the cash account or the certificate of deposit is greater than the total amount of the current closure cost estimate, the owner or operator may submit a written request to the cabinet for release of the amount in excess of the current closure cost estimate.

(7) Under the terms of the cash account or certificate of deposit, the bank or financial institution may cancel the cash account or certificate of deposit by sending notice of cancellation by certified mail to the owner or operator and to the cabinet. Cancellation cannot occur, however, during the 120 days beginning on the date of receipt of the notice of cancellation by both the owner or operator and the cabinet, as evidenced by return receipt.

(8) The owner or operator may terminate the cash account or certificate of deposit in accordance with Section 12 of this administrative regulation if the cabinet has given prior written consent on his receipt of evidence of alternate financial assurance as specified in this administrative regulation.

(9) An owner or operator or any other person authorized to conduct postclosure may request reimbursement for postclosure expenditures by submitting itemized bills to the cabinet. Within sixty (60) days after receiving bills for postclosure activities, the cabinet may instruct the bank or financial institution to make reimbursements in those amounts as the cabinet specifies in writing if the cabinet determines that the postclosure expenditures are in accordance with the postclosure plan or otherwise justified.

Section 10. Use of Multiple Financial Mechanisms. An owner or operator may satisfy the requirements of this administrative regulation by establishing more than one (1) financial mechanism per facility. These mechanisms are limited to trust funds, surety bonds guaranteeing payment into a trust fund, letters of credit, insurance and cash. The mechanisms shall be as specified in Sections 3, 4, 6, 7, and 9 of this administrative regulation, respectively, except that it is the combination of mechanisms rather than the single mechanism which shall provide financial assurance for an amount at least equal to the current postclosure cost estimate. If an owner or operator uses a trust fund in combination with a surety bond or a letter of credit, he may use the trust fund as the standby trust fund for the other mechanisms. A single standby trust fund may be established for two (2) or more mechanisms. The cabinet may use any or all of the mechanisms to provide for postclosure care of the facility.

Section 11. Use of a Financial Mechanism or Multiple Facilities. An owner or operator may use a financial assurance mechanism specified in this administrative regulation to meet the requirements of this administrative regulation for more than one (1) facility of which he is the owner or operator provided the facilities are all within the Commonwealth. Evidence of financial assurance submitted to the cabinet shall include a list showing for each facility the EPA Identification Number, name, address, and the amount of funds for postclosure care assured by the mechanism. The amount of funds available through the mechanism shall be no less than the sum of funds that **would** [~~shall~~] be available if a separate mechanism had been established and maintained for each facility. In directing funds available through the mechanism for postclosure care of any of the facilities covered by the mechanism, the cabinet may direct only the amount of funds designated for that facility, unless the owner or operator agrees to the use of additional funds available under the mechanism.

Section 12. Release of the Owner or Operator from the Requirements of this Administrative regulation. Within sixty (60) days after approving [~~receiving~~] certifications from the owner or operator and an [~~independent professional~~] engineer [~~registered in the Commonwealth of Kentucky~~] that the postclosure care period has been completed for a hazardous waste disposal unit in accordance with the approved plan, the cabinet shall notify the owner or operator that he is no longer required to maintain financial assurance for postclosure care of that unit, unless the cabinet has reason to believe that postclosure care has not been in accordance with the approved postclosure plan. The cabinet shall provide the owner or operator with a detailed written statement of any such reason to believe that postclosure care has not been in accordance with the approved postclosure plan.

PHILLIP J. SHEPHERD, Secretary
E. DOUGLAS STEPHAN, Commissioner
APPROVED BY AGENCY: December 13, 1993
FILED WITH LRC: December 14, 1993 at 10 a.m.

NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION CABINET
Department for Environmental Protection
Division of Waste Management
(Amended After Hearing)

401 KAR 34:120. Liability requirements.

RELATES TO: KRS 224.01, 224.10, 224.40, 224.43, 224.46, 224.99

STATUTORY AUTHORITY: KRS 224.46-505, 224.46-520, 224.46-530

NECESSITY AND FUNCTION: To implement provisions of KRS 224.46-505, 224.46-520, and 224.46-530 and to [~~KRS 224.46-520 requires that persons engaging in the storage, treatment, and disposal of hazardous waste obtain a permit. KRS 224.46-520 requires the cabinet to establish standards for these permits, to require adequate financial responsibility, and to establish minimum standards for closure for all facilities and the postclosure monitoring and maintenance of hazardous waste disposal facilities. This chapter establishes minimum standards for new hazardous waste sites or facilities. This regulation~~] establish[~~es~~] the liability requirements for hazardous waste sites or facilities.

Section 1. Coverage for Sudden Accidental Occurrences. An owner or operator of a hazardous waste treatment, storage, or disposal facility, or a group of such facilities, shall demonstrate financial responsibility for bodily injury and property damage to third parties caused by sudden accidental occurrences arising from operations of the facility or group of facilities. The owner or operator shall have and maintain liability coverage for sudden or accidental occurrences in the amount of at least $1,000,000 per occurrence with an annual aggregate of at least $2,000,000, exclusive of legal defense costs. This liability coverage may be demonstrated [~~in one (1) of three (3) ways,~~] as specified in subsections (1) to (6) [~~, (2) and (3)~~] of this section:

(1) An owner or operator may demonstrate the required liability coverage by having liability insurance as specified in this section.

(a) Each insurance policy shall be amended by attachment of the "Hazardous Waste Facility Liability Endorsement" or evidenced by a **"Hazardous Waste Facility** Certificate of Liability Insurance**", using the forms by these titles** [~~. The liability endorsement shall be executed on the~~] [a] [~~form~~] incorporated by reference in Section **4** [~~14~~] of 401 KAR 34:080. [~~provided by the cabinet containing wording identical to the wording specified in 401 KAR 34:172.~~] [~~The Certificate of Liability Insurance shall be on the~~] [a] [~~form incorporated by reference in Section 14 of 401 KAR 34:080.~~] [~~provided by the cabinet containing wording identical to the wording specified in 401 KAR 34:176.~~] The owner or operator shall submit an originally signed duplicate of the endorsement or the certificate of insurance to the cabinet. If requested by the cabinet, the owner or operator shall provide an originally signed duplicate of the insurance policy. An owner or operator of a new facility shall submit the originally signed duplicate of the "Hazardous Waste Facility Liability Endorsement" or the **"Hazardous Waste Facility** Certificate of Liability Insurance" to the cabinet at least sixty (60) days before the date on which hazardous waste is first received for treatment, storage or disposal. The insurance shall be effective before this initial receipt of hazardous waste.

(b) Each primary insurance policy shall be issued by an insurer which, at a minimum, is authorized [~~licensed~~] to transact [~~the business of~~] primary insurance in Kentucky except as KRS 304.11-030 provides otherwise. Each excess insurance policy shall be issued by an insurer which, at a minimum, is authorized [~~licensed~~] to provide insurance as an excess or surplus lines insurer in one (1) state.

(2) An owner or operator may meet the requirements of this administrative regulation by passing a financial test or using the corporate guarantee for liability coverage as specified in Section 7 of this administrative regulation

(3) An owner or operator may meet the requirements of this section by obtaining a letter of credit for liability coverage as specified in Section 8 of this administrative regulation.

(4) An owner or operator may meet the requirements of this section by obtaining a surety bond for liability coverage as specified in Section 9 of this administrative regulation.

(5) An owner or operator may meet the requirements of this section by obtaining a trust fund for liability coverage as specified in Section 10 of this administrative regulation.

(6) [~~(3)~~] An owner or operator may demonstrate the required liability coverage through use of combinations of the financial test, insurance, the corporate guarantee, of insurance, financial test, guarantee, fund, except that the owner or operator may not combine a financial test covering part of the liability coverage requirement with a guarantee unless the financial statement of the owner or operator is not consolidated with the financial statement of the guarantor. [~~a combination of the financial test and insurance, or a combination of the corporate guarantee and insurance.~~] The amounts of coverage demonstrated shall total at least the minimum amounts required by this section. If the owner or operator demonstrates the required coverage through the use of a combination of financial assurances under this subsection, the owner or operator shall specify at least one (1) such assurance as "primary" coverage and shall specify other assurance as "excess" coverage.

(7) An owner or operator shall notify the cabinet in writing within thirty (30) days whenever:

(a) A claim for bodily injury or property damages caused by the operation of a hazardous waste treatment, storage, or disposal facility is made against the owner or operator;

(b) Whenever a claim results in the reduction of the amount of financial assurance for liability coverage under this section provided by a financial instrument authorized by subsection (1) **to** [~~through~~] (6) of this section; or

(c) A final court order establishing a judgment for bodily injury or property damage caused by a sudden or nonsudden accidental occurrence arising from the operation of a hazardous waste treatment, storage, or disposal facility is issued against the owner or operator or against an instrument that is providing financial assurance for liability coverage under subsection (1) to (6) of this section.

Section 2. Coverage for Nonsudden Accidental Occurrences. An owner or operator of a surface impoundment, landfill, land treatment facility, facility for land disposal as specified in KRS 224.01-010 [~~005~~] or miscellaneous unit for disposal that is used to manage hazardous waste, or a group of such facilities, shall demonstrate financial responsibility for bodily injury and property damage to third parties caused by nonsudden accidental occurrences arising from operations of the facility or group of facilities. The owner or operator shall have and maintain additional liability coverage for nonsudden accidental occurrences in the amount of at least $3,000,000 per occurrence with an annual aggregate of at least $6,000,000, exclusive of legal defense costs. An owner or operator who is required to comply with the requirements of this section may combine the required per-occurrence coverage levels for sudden and nonsudden accidental occurrences into a single per-occurrence level, and combine the required annual aggregate coverage levels for sudden and nonsudden accidental occurrences into a singe annual aggregate level. Owners and operators who combine coverage levels for sudden and nonsudden accidental occurrences must maintain liability coverage in the amount of at least $4 million per occurrence and $8 million annual aggregate. This liability coverage may be demonstrated [~~in one (1) of three (3) ways,~~] as specified in subsections (1) to (6) [~~, (2), and (3)~~] of this section:

(1) An owner or operator may demonstrate the required liability coverage by having liability insurance as specified in this section.

(a) Each insurance policy shall be amended by attachment of the "Hazardous Waste Facility Liability Endorsement" or evidenced by a **"Hazardous Waste Facility** Certificate of Liability Insurance**", using the forms by these titles** [~~. The liability endorsement shall be on the form~~] incorporated by reference in Section **4** [~~14~~] of 401 KAR 34:080 [~~a form provided by the cabinet containing wording identical to the wording specified in 401 KAR 34:172~~]. [~~The certificate of liability insurance shall be on the~~] [a] [~~form incorporated by reference in Section 14 of 401 KAR 34:080.~~] [~~provided by the cabinet containing wording identical to the wording specified in 401 KAR 34:176.~~] The owner or operator shall submit an originally signed duplicate of the endorsement or the certificate of insurance to the cabinet. If requested by the cabinet, the owner or operator shall provide an originally signed duplicate of the insurance policy. An owner or operator of a new facility shall submit the originally signed duplicate of the Hazardous Waste Facility Liability Endorsement or the Certificate of Liability Insurance to the cabinet at least sixty (60) days before the date on which hazardous waste is first received for treatment, storage or disposal. The insurance shall be effective before this initial receipt of hazardous waste.

(b) Each primary insurance policy shall be issued by an insurer which, at a minimum, is authorized [~~licensed~~] to transact [~~the business of~~] primary insurance in Kentucky except as KRS 304.11-030 provides otherwise. Each excess insurance policy shall be issued by an insurer which, at a minimum, is authorized [~~licensed~~] to provide insurance as an excess or surplus lines insurer in one (1) state.

(2) An owner or operator may meet the requirements of this administrative regulation by passing a financial test or using the corporate guarantee for liability coverage as specified in Sections 6 and 7 of this administrative regulation.

(3) An owner or operator may meet the requirements of this section by obtaining a letter of credit for liability coverage as specified in Section 8 of this administrative regulation.

(4) An owner or operator may meet the requirements of this section by obtaining a surety bond for liability coverage as specified in Section 9 of this administrative regulation.

(5) An owner or operator may meet the requirements of this section by obtaining a trust fund for liability coverage as specified in Section 10 of this administrative regulation.

(6) [~~(3)~~] An owner or operator may demonstrate the required liability coverage through use of combinations of the financial test, insurance, the corporate guarantee, letter of credit, surety bond, and trust bond, except that the owner or operator may not combine a financial test covering part of the liability coverage requirement with a guarantee unless the financial statement of the owner or operator is not consolidated with the financial statement of the guarantor. [~~a combination of the financial test and insurance, or a combination of the corporate guarantee and insurance.~~] The amounts of coverage demonstrated shall total at least the minimum amounts required by this section. If the owner or operator demonstrates the required coverage through the use of a combination of financial assurances under this subsection, the owner or operator shall specify at least one (1) such assurance as "primary" coverage and shall specify other assurance as "excess" coverage.

(7) An owner or operator shall notify the cabinet in writing within thirty (30) days whenever:

(a) A claim for bodily injury or property damages caused by the operation of a hazardous waste treatment, storage, or disposal facility is made against the owner or operator;

(b) Whenever a claim results in the reduction of the amount of financial assurance for liability coverage under this section provided by a financial instrument authorized by subsections (1) to (6) of this section; or

(c) A final court order establishing a judgment for bodily injury or property damage caused by a sudden or nonsudden accidental occurrence arising from the operation of a hazardous waste treatment, storage, or disposal facility is issued against the owner or operator or against an instrument that is providing financial assurance for liability coverage under subsections (1) to (6) of this section.

(8) [~~(4)~~] For existing facilities, the required liability coverage for nonsudden accidental occurrences shall be demonstrated by the dates listed below. The total sales or revenues of the owner or operator in all lines of business, in the fiscal year preceding the effective date of these administrative regulations, shall determine which of the dates apply. If the owner and operator of a facility are two (2) different parties, or if there is more than one (1) owner or operator, the sales or revenues of the owner or operator with the largest sales or revenues shall determine the date by which the coverage shall be demonstrated. The dates are as follows:

(a) For an owner or operator with sales or revenues totaling $10,000,000 or more, February 24, 1983.

(b) For an owner or operator with sales or revenues greater than $5,000,000 but less than $10,000,000, February 24, 1984.

(c) All other owners or operators, February 24, 1985.

Section 3. Adjustments by the Cabinet. If the cabinet determines that the levels of financial responsibility required by Sections 1 and 2 of this administrative regulation are not consistent with the degree and duration of risks associated with treatment, storage, or disposal at any facility or group of facilities, the cabinet may increase the level of financial responsibility required under Sections 1 and 2 of this administrative regulation as may be necessary to protect human health and the environment. This adjusted level shall be based on the cabinet's assessment of the degree and duration of risks associated with the ownership or operation of each facility or group of such facilities. If the cabinet determines that there is a significant risk to human health and the environment from nonsudden accidental occurrences from the operations of a facility that is not a surface impoundment, landfill, or land treatment facility, the cabinet may require that the owner or operator of the facility comply with Section 2 of this administrative regulation. An owner or operator shall furnish to the cabinet, within a reasonable time, any information which the cabinet requests to determine whether cause exists for such adjustments of the level or type of coverage. Any adjustment of the level of required coverage for a facility that has a permit shall be treated as a permit modification under Section 2(1)(e) of 401 KAR 38:040 and Section 2 of 401 KAR 38:050.

Section 4. Request for a Variance. If an owner or operator can demonstrate to the satisfaction of the cabinet that the increased level of financial responsibility required by Section 1 or 2 [~~3~~] of this administrative regulation is not consistent with the degree and duration of risk associated with the treatment, storage, or disposal at each facility or group of facilities, the owner or operator may obtain a variance from the cabinet. The cabinet shall not grant any requests for a variance which seek to decrease the level of financial responsibility below the minimums required by KRS 224.46-520(3)(c). If granted, the variance shall take the form of an adjusted level of required liability coverage, such level to be based on the cabinet's assessment of the degree and duration of risk associated with the ownership or operation of each facility or group of facilities. The cabinet may require an owner or operator who requests a variance to provide such technical and engineering information as is deemed necessary by the cabinet to determine a level of financial responsibility other than that required by Sections 1 and 2 of this administrative regulation. Any request for a variance for a permitted facility shall be treated as a request for a permit modification under Section 2(1)(e) of 401 KAR 38:040 and Section 2 of 401 KAR 38:050.

Section 5. Period of Coverage. An owner or operator shall continuously provide liability coverage for a facility as required by this administrative regulation until **certification of termination pursuant to the requirements of KRS 224.46-520.** [~~the cabinet approves the certification of the owner or operator and an engineer that final~~

~~closure has been completed in accordance with the approved closure plan. The cabinet shall then notify the owner or operator in writing that he is no longer required by this section to maintain liability coverage for that facility, unless the cabinet has reason to believe that closure has not been in accordance with the approved closure plan.~~] [~~certification of termination pursuant to the requirements of KRS 224.46-520.~~]

Section 6. Liability Self-Insurance. (1) An owner or operator may satisfy the requirements of this administrative regulation by demonstrating that he passes a financial test as specified in this section. To pass this test the owner or operator shall demonstrate that the level of self-insurance does not exceed ten (10) percent of equity and shall meet the criteria of either paragraph (a) or (b) of this subsection:

(a) The owner or operator shall have:

1. Net working capital and tangible net worth each at least six (6) times the amount of liability coverage to be demonstrated by this test; and

2. Tangible net worth of at least $10 million; and

3. Assets in the United States amounting to either, at least, ninety (90) percent of his total assets or at least six (6) times the sum of the appropriate liability coverage to be demonstrated by this test.

(b) The owner or operator shall have:

1. A current rating for his most recent bond issuance of AAA, AA, A or BBB as issued by Standard and Poor's or Aaa, Aa, A, or Baa as issued by Moody's; and

2. Tangible net worth of at least $10 million; and

3. Tangible net worth at least six (6) times the amount of the liability coverage to be demonstrated by this test; and

4. Assets located in the United States amounting to either, at least, ninety (90) percent of his total assets or at least six (6) times the amount of the liability coverage to be demonstrated by this test.

(2) The phrase "amount of liability coverage" as used in subsection (1) of this section refers to the annual aggregate amounts for which coverage is required under Sections 1 and 2 of this administrative regulation.

(3) To demonstrate that he meets this test, the owner or operator shall submit the following three (3) items to the cabinet:

(a) A letter signed by the owner's or operator's chief financial officer and executed on the [a] form **entitled "Letter from Chief Financial Officer to Demonstrate Liability Coverage or to Demonstrate Liability Coverage and Assurance of Closure or Postclosure Care",** as incorporated by reference in Section 14 of 401 KAR 34:080. If the owner or operator is using the financial test to demonstrate both assurance for closure or postclosure as specified in Section 8 of 401 KAR 34:090, Section 8 of 401 KAR 34:100, Section 7 of 401 KAR 35:090 or Section 7 of 401 KAR 35:100 and liability coverage, he shall submit the letter on the form **entitled "Letter from Chief Financial Officer to Demonstrate Liability Coverage or to Demonstrate Liability Coverage and Assurance of Closure or Postclosure Care", as** incorporated by reference in Section **4** [~~14~~] of 401 KAR 34:080 to cover both forms of financial responsibility; [~~provided by the cabinet which is worded as specified in 401 KAR 34:162;~~]

(b) A copy of the independent certified public accountant's report on examination of the owner's or operator's financial statements for the latest completed fiscal year; and

(c) A special report from the owner's or operator's independent certified public accountant to the owner or operator stating that:

1. He has compared the data which the letter from the chief financial officer specifies as having been derived from the independently audited, year-end financial statements for the latest fiscal year with the amounts in such financial statements; and

2. In connection with that procedure, no matters came to his attention which caused him to believe that the specified data should be adjusted.

(4) An owner or operator of a new facility shall submit the items specified in subsection (3) of this section to the cabinet at least sixty (60) days before the date on which hazardous waste is first received for treatment, storage or disposal.

(5) After the initial submission of items specified in subsection (3) of this section, the owner or operator shall send updated information to the cabinet within ninety (90) days after the close of each succeeding fiscal year. This information shall consist of all three (3) items specified in subsection (3) of this section.

(6) If the owner or operator no longer meets the requirements of subsection (1) of this section, he shall obtain insurance, a letter of credit, a surety bond, a trust fund, or a corporate guarantee for the entire amount of required liability coverage as specified in this administrative regulation. Evidence of insurance shall be submitted to the cabinet within ninety (90) days after the end of the fiscal year for which the year-end financial data show that the owner or operator no longer meets the test requirements.

(7) The cabinet may, based on a reasonable belief that the owner or operator may no longer meet the requirements of subsection (1) of this section, require reports of financial condition at any time from the owner or operator in addition to those specified in subsection (3) of this section. If the cabinet finds, on the basis of such reports or other information, that the owner or operator no longer meets the requirements of subsection (1) of this section, the owner or operator shall provide liability insurance as specified in this administrative regulation within thirty (30) days after notification of such a finding.

(8) The cabinet may disallow use of this test on the basis of qualifications in the opinion expressed by the independent certified public accountant in his report on examination of the owner's or operator's financial statements (see subsection (3)(c) of this section). An adverse opinion or a disclaimer of opinion shall be cause for disallowance. The cabinet shall evaluate other qualifications on an individual basis. The owner or operator shall provide liability insurance for the entire amount of liability coverage as specified in this administrative regulation within thirty (30) days after notification of the disallowance.

Section 7. Corporate Guarantee for Liability Coverage. (1) Subject to subsection (2) of this section, an owner or operator may meet the requirements of this administrative regulation by obtaining a written guarantee, referred to as "corporate guarantee." The guarantor shall be the direct or higher-tier parent corporation of the owner or operator, a firm whose parent corporation is also the parent corporation of the owner or operator, or a firm with a "substantial business relationship" as defined in Section 1 of 401 KAR 34:080 with the owner or operator. The guarantor [~~guarantee~~] shall meet the requirements for owners or operators in Section 6(1) to [~~through~~] (8) of this administrative. The wording of the corporate guarantee shall be on the form **entitled "Corporate Guarantee for Closure or Postclosure Care", as** incorporated by reference in Section **4** [~~14~~] of 401 KAR 34:080 [~~identical to the wording specified in Section 1(2) of 401 KAR 34:165~~]. A certified copy of the corporate guarantee shall accompany the items sent to the cabinet as specified in Section 6(3) of this administrative regulation. One (1) of these items shall be the letter from the guarantor's chief financial officer. If the guarantor's parent corporation is also the parent corporation of the owner or operator, this letter shall describe the value received in consideration of the guarantee. If the guarantor is a firm with a "substantial business relationship" with the owner or operator, this letter shall describe this "substantial business relationship" and the value received in consideration of the guarantee. The terms of the corporate guarantee shall provide that:

(a) If the owner or operator fails to satisfy a judgment based on a determination of liability for bodily injury or property damage to third parties caused by sudden or nonsudden accidental occurrences (or both as the case may be), arising from the operation of facilities covered by this corporate guarantee, or fails to pay an amount agreed to in settlement of claims arising from or alleged to arise from such

injury or damage, the guarantor shall do so up to the limits of coverage.

(b) The corporate guarantee shall remain in force unless the guarantor sends notice of cancellation by certified mail to the owner or operator and to the cabinet. This guarantee may not be terminated unless and until the cabinet approves alternate liability coverage complying with this administrative regulation or 401 KAR 35:120.

(2)(a) In the case of corporations incorporated in the United States, a corporate guarantee may be used to satisfy the requirements of this administrative regulation only if the Attorney General or insurance commissioner of the state in which the guarantor is incorporated, each state in which a facility covered by the guarantee is located and in the state in which it has its principle place of business, have submitted a written statement to the director that a corporate guarantee executed as described in this administrative regulation and incorporated by reference in Section 4 of 401 KAR 34:080 [~~Section 1(2) of 401 KAR 34:165~~] is a legally valid and enforceable obligation in that state and in [~~the Commonwealth of~~] Kentucky.

(b) In the case of corporations incorporated outside of the United States, a corporate guarantee may be used to satisfy the requirements of this section only if the non-United States corporation has identified a registered agent for service of process in each state in which a facility covered by the guarantee is located and in the state in which it has its principle place of business, and the attorney general or insurance commissioner of each state in which a facility covered by the guarantee is located, and the state in which the guarantor corporation has its principle place of business, and the Department of Law or the Insurance Commissioner of the Commonwealth of Kentucky has [~~have~~] submitted a written statement to the director that a corporate guarantee executed as described in this section and Section 1(2) of 401 KAR 34:165 is a legally valid and enforceable obligation in that state and in [~~the Commonwealth of~~] Kentucky.

(c) A corporate guarantee may be used to satisfy the requirements of this administrative regulation only if the assets to be collected are located in the United States. Failure to provide the written statement referenced in paragraphs (a) and (b) of this subsection shall be grounds for denial of the instrument.

Section 8. Letter of Credit for Liability Coverage. (1) An owner or operator may satisfy the requirements of this administrative regulation by obtaining an irrevocable stand-by letter of credit that conforms to the requirements of this section and submitting a copy of the letter of credit to the cabinet.

(2) The financial institution issuing the letter of credit shall be an entity that has the authority to issue letters of credit and whose letter of credit operations are regulated and examined by a federal or state agency.

(3) A letter of credit may be used to satisfy the requirements of this administrative regulation only if the assets to be collected are located in the United States. Failure to provide the written statement referenced in subsections (1) and (2) of this section shall be grounds for denial of the instrument.

(4) An owner or operator who uses a letter of credit to satisfy the requirements of this section may also establish a standby trust fund. Under the terms of such a letter of credit all amounts paid pursuant to a draft by the trustee of the standby trust shall be deposited by the issuing institution into the standby trust in accordance with instructions from the trustee. The trustee of the standby trust fund shall be an entity which has the authority to act as a trustee and whose trust operations are regulated and examined by a federal or state agency.

(5) The standby trust shall be submitted on the form **entitled "Irrevocable Standby Letter of Credit with Cover Letter for Letter of Credit", as** incorporated by reference in Section **4** [~~14~~] of 401 KAR 34:080.

Section 9. Surety Bond for Liability Coverage. (1) An owner or operator may satisfy the requirements of this administrative regulation by obtaining a surety bond that conforms to the requirements of this section and submitting a copy of the bond to the cabinet.

(2) The surety company issuing the bond shall be among those listed as acceptable sureties on federal bonds in the most recent Circular 570 of the U.S. Department of the Treasury.

(3) A surety bond may be used to satisfy the requirements of this administrative regulation only if the assets to be collected are located in the United States. Failure to provide the written statement referenced in subsection (4) of this section shall be grounds for denial of the instrument.

(4) A surety bond may be used to satisfy the requirements of this section only if the attorney general or insurance commissioner of the state in which the surety is incorporated, and each state in which a facility covered by the surety bond is located have provided a written statement to the cabinet that a surety bond executed as described in this section and executed on the form incorporated by reference in Section 4 of 401 KAR 34:080 is legally valid and enforceable obligation in that state.

Section 10. Trust Fund for Liability Coverage. (1) An owner or operator may satisfy the requirements of this administrative regulation by establishing a trust fund that conforms to the requirements of this section and submitting an originally signed duplicate of the trust agreement to the cabinet.

(2) The trustee shall be an entity which has the authority to act as a trustee and whose trust operations are regulated and examined by a federal or state agency.

(3) The trust fund for liability coverage shall be funded for the full amount of the liability coverage to be provided by the trust fund before it may be relied upon to satisfy the requirements of this section. If at any time after the trust fund is created the amount of funds in the trust fund is reduced below the full amount of the liability coverage to be provided, the owner or operator, by the anniversary date of the establishment of the fund must either add sufficient funds to the trust fund to cause its value to equal the full amount of liability coverage to be provided, or obtain other financial assurance as specified in this section to cover the difference. For purposes of this subsection, "the full amount of the liability coverage to be provided" means the amount of coverage for sudden and/or nonsudden occurrences required to be provided by the owner or operator by this section, less the amount of financial assurance for liability coverage that is being provided by other financial assurance mechanisms being used to demonstrate financial assurance by the owner or operator.

(4) A trust fund may be used to satisfy the requirements of this administrative regulation only if the assets to be collected are located in the United States. Notwithstanding any other provisions of this part, an owner or operator using liability insurance to satisfy the requirements of this section may use, until October 16, 1982, a hazardous waste facility liability endorsement or certificate of liability insurance that does not certify that the insurer is licensed to transact the business of insurance, or eligible as an excess or surplus lines insurer, in one or more states.

PHILLIP J. SHEPHERD, Secretary
E. DOUGLAS STEPHAN, Commissioner
APPROVED BY AGENCY: December 13, 1993
FILED WITH LRC: December 14, 1993 at 10 a.m.

NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION CABINET
Department for Environmental Protection
Division of Waste Management
(Amended After Hearing)

401 KAR 34:190. Tanks.

RELATES TO: KRS 224.01, 224.10, 224.40, 224.43, 224.46, 224.70, 224.99

STATUTORY AUTHORITY: KRS 224.10-100, 224.46-520

NECESSITY AND FUNCTION: To implement provisions of KRS 224.46-520 and to establish [~~KRS 224.46-520 requires that persons engaging in the storage, treatment, and disposal of hazardous waste obtain a permit. KRS 224.46-520 requires the Cabinet to establish standards for these permits, to require adequate financial responsibility, to establish minimum standards for closure for all facilities and the postclosure monitoring and maintenance of hazardous waste disposal facilities. This chapter establishes minimum standards for new hazardous waste sites or facilities. This regulation establishes~~] minimum standards for tanks.

Section 1. Applicability. The requirements of this administrative regulation apply to owners and operators of hazardous waste sites or facilities that use tank systems for storing or treating hazardous waste, except as otherwise provided in subsections (1) to (3) [~~and (2)~~] of this section or in Section 1 of 401 KAR 34:010.

(1) Tank systems that are used to store or treat hazardous waste which contains no free liquids and are situated inside a building with an impermeable floor are exempted from the requirements in Section 4 of this administrative regulation. To demonstrate the absence or presence of free liquids in the stored or treated waste, EPA Method 9095 (paint filter liquids test) as described in "Test Methods for Evaluating Solid Wastes: Physical Chemical Methods" (EPA Publication No. SW-846) referenced in Section 3 of 401 KAR 30:010 shall [~~must~~] be used.

(2) Tank systems, including sumps, as defined in Section 1 of 401 KAR 30:010, that serve as part of a secondary containment system to collect or contain releases of hazardous wastes are exempted from the requirements in Section 4(1) of this administrative regulation.

(3) Tanks, sumps, and other collection devices or systems used in conjunction with drip pads, as defined in 401 KAR 30:010, and regulated under 401 KAR 34:285, shall meet the requirements of this administrative regulation.

Section 2. Assessment of Existing Tank System's Integrity. (1) For each existing tank system that does not have secondary containment meeting the requirements of Section 4 of this administrative regulation, the owner or operator shall determine that the tank system is not leaking or is unfit for use. Except as provided in subsection (3) of this section, the owner or operator shall obtain and keep on file at the facility a written assessment reviewed and certified by an [~~independent, qualified professional~~] engineer [~~registered in the Commonwealth of Kentucky~~], in accordance with Section 7(4) of 401 KAR 38:070, that attests to the tank system's integrity no later than 180 days from the date of promulgation of this administrative regulation.

(2) This assessment shall determine that the tank system is adequately designed and has sufficient structural strength and compatibility with the waste(s) to be stored or treated, to ensure that it will not collapse, rupture, or fail. At a minimum, this assessment shall consider the following:

(a) Design standard(s), if available, according to which the tank and ancillary equipment were constructed;

(b) Hazardous characteristics of the waste(s) that have been and will be handled;

(c) Existing corrosion protection measures;

(d) Documented age of the tank system, if available (otherwise, an estimate of the age); and

(e) Results of a leak test, internal inspection, or other tank integrity examination such that:

1. For nonenterable underground tanks, the assessment shall include a leak test that is capable of taking into account the effects of temperature variations, tank end deflection, vapor pockets, and high water table effects; and

2. For other than nonenterable underground tanks and for ancillary equipment, this assessment shall include either a leak test, as described above, or other integrity examination, that is certified by an [~~independent, qualified, professional~~] engineer, [~~registered in the Commonwealth of Kentucky~~] in accordance with Section 7(4) of 401 KAR 38:070, that addresses cracks, leaks, corrosion, and erosion.

(3) Tank systems that store or treat materials that become hazardous wastes subsequent to the date of promulgation of this administrative regulation, shall conduct the assessment within twelve (12) months after the date that the waste becomes a hazardous waste.

(4) If, as a result of the assessment conducted in accordance with subsection (1) of this section, a tank system is found to be leaking or unfit for use, the owner or operator shall comply with the requirements of Section 7 of this administrative regulation.

Section 3. Design and Installation of New Tank Systems or Components. (1) Owners or operators of new tank systems or components shall obtain and submit to the cabinet, at the time of submittal of Part B information, a written assessment, reviewed and certified by an [~~independent, qualified professional~~] engineer [~~registered in the Commonwealth of Kentucky~~], in accordance with Section 7(4) of 401 KAR 38:070, attesting that the tank system has sufficient structural integrity and is acceptable for the storing and treating of hazardous waste. The assessment shall show that the foundation, structural support, seams, connections, and pressure controls (if applicable) are adequately designed and that the tank system has sufficient structural strength, compatibility with the waste(s) to be stored or treated, and corrosion protection to ensure that it will not collapse, rupture, or fail. This assessment, which shall be used by the cabinet to review and approve or disapprove the acceptability of the tank system design, shall include, at a minimum, the following information:

(a) Design standards according to which tanks or the ancillary equipment are constructed;

(b) Hazardous characteristics of the wastes to be handled;

(c) For new tank systems or components in which the external shell of a metal tank or any external metal component of the tank system will be in contact with the soil or with water, a determination by a corrosion expert of:

1. Factors affecting the potential for corrosion, including but not limited to:

a. Soil moisture content;

b. Soil pH;

c. Soil sulfides level;

d. Soil resistivity;

e. Structure to soil potential;

f. Influence of nearby underground metal structures (for example, [~~e.g.,~~] piping);

g. Existence of stray electric current;

h. Existing corrosion-protection measures (for example, [~~e.g.,~~] coating, cathodic protection); and

2. The type and degree of external corrosion protection that are needed to ensure the integrity of the tank system during the use of the tank system or component, consisting of one (1) or more of the following:

a. Corrosion-resistant materials of construction such as special alloys, and fiberglass reinforced plastic[~~, etc.~~];

b. Corrosion-resistant coating (such as epoxy and fiberglass[~~, etc.~~]) with cathodic protection (for example, [~~e.g.,~~] impressed current or sacrificial anodes); and

c. Electrical isolation devices such as insulating joints and flanges[~~, etc~~].

(d) For underground tank system components that are likely to be adversely affected by vehicular traffic, a determination of design or operational measures that will protect the tank system against potential damage; and

(e) Design considerations to ensure that:

1. Tank foundations are able to maintain the load of a full tank;

2. Tank systems will be anchored to prevent flotation or dislodgment where the tank system is placed in a saturated zone, or is located within a seismic fault zone subject to the standards of Section 9(1) of 401 KAR 34:020; and

3. Tank systems will withstand the effects of frost heave.

(2) The owner or operator of a new tank system shall ensure that proper handling procedures are adhered to in order to prevent damage to the system during installation. Prior to covering, enclosing, or placing a new tank system or component in use, an independent, qualified installation inspector or an [~~independent, qualified professional~~] engineer [~~registered in the Commonwealth of Kentucky~~], either of whom is trained and experienced in the proper installation of tank systems or components, shall inspect the system for the presence of any of the following items:

(a) Weld breaks;

(b) Punctures;

(c) Scrapes of protective coatings;

(d) Cracks;

(e) Corrosion; or

(f) Other structural damage or inadequate construction and [~~/~~] installation.

All discrepancies (for example, [~~e.g.,~~] structural damage or inadequate construction and [~~/~~] installation) shall be remedied before the tank system is covered, enclosed, or placed in use.

(3) New tank systems or components, that are placed underground and that are backfilled shall be provided with a backfill material that is a noncorrosive, porous, homogeneous substance and that is installed so that the backfill is placed completely around the tank and compacted to ensure that the tank and piping are fully and uniformly supported.

(4) All new tanks and ancillary equipment shall be tested for tightness prior to being covered, enclosed, or placed in use. If a tank system is found not to be tight, all repairs necessary to remedy the leak(s) in the system shall be performed prior to the tank system being covered, enclosed, or placed into use.

(5) Ancillary equipment shall be supported and protected against physical damage and excessive stress due to settlement, vibration, expansion, or contraction.

(6) The owner or operator shall provide the type and degree of corrosion protection recommended by an independent corrosion expert, based on the information provided under subsection (1)(c) of this section, or other corrosion protection if the cabinet believes other corrosion protection is necessary to ensure the integrity of the tank system during use of the tank system. The installation of a corrosion protection system that is field fabricated shall be supervised by an independent corrosion expert to ensure proper installation.

(7) The owner or operator shall obtain and keep on file at the facility written statements by those persons required to certify the design of the tank system and supervise the installation of the tank system in accordance with the requirements of subsections (2) to [~~through~~] (6) of this section, that attest that the tank system was properly designed and installed and that repairs, pursuant to subsections (2) and (4) of this section, were performed. These written statements shall also include the certification statement as required in Section 7(4) of 401 KAR 38:070.

Section 4. Containment and Detection of Releases. (1) In order to prevent the release of hazardous waste or hazardous constituents to the environment, secondary containment that meets the requirements of this section shall be provided (except as provided in subsections (6) and (7) of this section):

(a) For all new tank systems or components, prior to their being put into service;

(b) For all existing tank systems used to store or treat EPA Hazardous Waste Nos. F020, F021, F022, F023, F026, and F027, by January 12, 1991;

(c) For those existing tank systems of known and documented age, by January 12, 1991 or when the tank system has reached fifteen (15) years of age, whichever comes later;

(d) For those existing tank systems for which the age cannot be documented, within eight (8) years of January 12, 1987, but if the age of the facility is greater than seven (7) years, secondary containment shall be provided by the time the facility reaches fifteen (15) years of age, or within two (2) years of January 12, 1987, whichever comes later; and

(e) For tank systems that store or treat materials that become hazardous wastes subsequent to the date of promulgation of this administrative regulation within the time intervals required in paragraphs (a) to [~~through~~] (d) of this subsection, except that the date that a material becomes a hazardous waste shall be used in place of the date of promulgation of this administrative regulation.

(2) Secondary containment systems shall be:

(a) Designed, installed, and operated to prevent any migration of wastes or accumulated liquid out of the system to the soil, groundwater, or surface water at any time during the use of the tank system; and

(b) Capable of detecting and collecting releases and accumulated liquids until the collected material is removed.

(3) To meet the requirements of subsection (2) of this section, secondary containment systems shall be at a minimum:

(a) Constructed of or lined with materials that are compatible with the waste(s) to be placed in the tank system and shall have sufficient strength and thickness to prevent failure owing to pressure gradients (including static head and external hydrological forces), physical contact with the waste to which it is exposed, climatic conditions, and the stress of daily operation (including stresses from nearby vehicular traffic);

(b) Placed on a foundation or base capable of providing support to the secondary containment system, resistance to pressure gradients above and below the system, and capable of preventing failure due to settlement, compression, or uplift;

(c) Provided with a leak-detection system that is designed and operated so that it will detect the failure of either the primary or secondary containment structure or the presence of any release of hazardous waste or accumulated liquid in the secondary containment system within twenty-four (24) hours, or at the earliest practicable time if the owner or operator can demonstrate to the cabinet that existing detection technologies or site conditions will not allow detection of a release within twenty-four (24) hours; and

(d) Sloped or otherwise designed or operated to drain and remove liquids resulting from leaks, spills, or precipitation. Spilled or leaked waste and accumulated precipitation shall be removed from the secondary containment system within twenty-four (24) hours, or in as timely a manner as is possible to prevent harm to human health and the environment, if the owner or operator can demonstrate to the cabinet that removal of the released waste or accumulated precipitation cannot be accomplished within twenty-four (24) hours.

(e) If the collected material is a hazardous waste under 401 KAR Chapter 31 it is subject to management as a hazardous waste in accordance with all applicable requirements of 401 KAR Chapters 32 to [~~through~~] 35. If the collected material is discharged through a point source to waters of the Commonwealth, it is subject to the requirements of KRS Chapter 224 and 401 KAR Chapter 5. If discharged to

a publicly owned treatment works (POTW), it is subject to the requirements of KRS Chapter 224 and 401 KAR Chapter 5. If the collected material is released to the environment it may be subject to the reporting requirements of 40 CFR Part 302 and KRS 224.01-400.

(4) Secondary containment for tanks shall include one (1) or more of the following devices:

(a) A liner (external to the tank);

(b) A vault;

(c) A double-walled tank; or

(d) An equivalent device as approved by the cabinet.

(5) In addition to the requirements of subsections (2), (3), and (4) of this section, secondary containment systems shall satisfy the following requirements:

(a) External liner systems shall be:

1. Designed and operated to contain 100 percent of the capacity of the largest tank within its boundary;

2. Designed and operated to prevent run-on or infiltration of precipitation into the secondary containment system unless the collection system has sufficient excess capacity to contain run-on or infiltration. Such additional capacity shall be sufficient to contain precipitation from a twenty-five (25) year, twenty-four (24) hour rainfall event;

3. Free of cracks or gaps; and

4. Designed and installed to surround the tank completely and to cover all surrounding earth likely to come into contact with the waste if the waste is released from the tank(s) (that is, [i.e.,] capable of preventing lateral as well as vertical migration of the waste).

(b) Vault systems shall be:

1. Designed and operated to contain 100 percent of the capacity of the largest tank within its boundary;

2. Designed and operated to prevent run-on or infiltration of precipitation into the secondary containment system unless the collection system has sufficient excess capacity to contain run-on or infiltration. Such additional capacity shall be sufficient to contain precipitation from a twenty-five (25) year, twenty-four (24) hour rainfall event;

3. Constructed with chemical-resistant water stops in place at all joints (if any);

4. Provided with an impermeable interior coating or lining that is compatible with the stored waste and that will prevent migration of waste into the concrete;

5. Provided with a means to protect against the formation of and ignition of vapors within the vault, if the waste being stored or treated:

a. Meets the definition of ignitable waste under Section 2 of 401 KAR 31:030; or

b. Meets the definition of reactive waste under Section 4 of 401 KAR 31:030 and may form an ignitable or explosive vapor.

6. Provided with an exterior moisture barrier or be otherwise designed or operated to prevent migration of moisture into the vault if the vault is subject to hydraulic pressure.

(c) Double-walled tanks shall be:

1. Designed as an integral structure (that is, [i.e.,] an inner tank completely enveloped within an outer shell) so that any release from the inner tank is contained by the outer shell;

2. Protected, if constructed of metal, from both corrosion of the primary tank interior and of the external surface of the outer shell; and

3. Provided with a built-in continuous leak detection system capable of detecting a release within twenty-four (24) hours, or at the earliest practicable time, if the owner or operator can demonstrate to the cabinet, and the cabinet concludes, that the existing detection technology or site conditions would not allow detection of a release within twenty-four (24) hours.

(6) Ancillary equipment shall be provided with secondary containment (for example, [e.g.,] trench, jacketing, double-walled piping) that meets the requirements of subsections (2) and (3) of this section except for:

(a) Aboveground piping (exclusive of flanges, joints, valves, and other connections) that are visually inspected for leaks on a daily basis;

(b) Welded flanges, welded joints, and welded connections, that are visually inspected for leaks on a daily basis;

(c) Sealless or magnetic coupling pumps and all sealless valves, that are visually inspected for leaks on a daily basis; and

(d) Pressurized aboveground piping systems with automatic shutoff devices (for example, [e.g.,] excess flow check valves, flow metering shutdown devices, or loss of pressure actuated shutoff devices) that are visually inspected for leaks on a daily basis.

(7) The owner or operator may obtain a variance from the requirements of this section if the cabinet finds, as a result of a demonstration by the owner or operator that alternative design and operating practices, together with location characteristics, will prevent the migration of any hazardous waste or hazardous constituents into the groundwater or surface water at least as effectively as secondary containment during the active life of the tank system; or that in the event of a release that does migrate to groundwater or surface water, no substantial present or potential hazard will be posed to human health or the environment. New underground tank systems may not, per a demonstration in accordance with paragraph (b) of this subsection, be exempted from the secondary containment requirements of this section.

(a) In deciding whether to grant a variance based on a demonstration of equivalent protection of groundwater and surface water, the cabinet will consider:

1. The nature and quantity of the wastes;

2. The proposed alternate design and operation;

3. The hydrogeologic setting of the facility, including the thickness of soils between the tank system and groundwater; and

4. All other factors that would influence the quality and mobility of the hazardous constituents and the potential for them to migrate to groundwater or surface water.

(b) In deciding whether to grant a variance based on a demonstration of no substantial present or potential hazard, the cabinet will consider:

1. The potential adverse effects on groundwater, surface water and land quality taking into account:

a. The physical and chemical characteristics of the waste in the tank system, including its potential for migration;

b. The hydrogeological characteristics of the facility and surrounding land;

c. The potential for health risks caused by human exposure to waste constituents;

d. The potential for damage to wildlife, crops, vegetation, and physical structures caused by exposure to waste constituents; and

e. The persistence and permanence of the potential adverse effects;

2. The potential adverse effects of a release on groundwater quality, taking into account:

a. The quantity and quality of groundwater and the direction of groundwater flow;

b. The proximity and withdrawal rates of groundwater in the area;

c. The current and future uses of groundwater in the area; and

d. The existing quality of groundwater, including other sources of contamination and their cumulative impact on the groundwater quality;

3. The potential adverse effects of a release on surface water quality taking into account:

a. The quantity and quality of groundwater and the direction of groundwater flow;

b. The patterns of rainfall in the region;

c. The proximity of the tank system to surface waters;

d. The current and future uses of surface waters in the area and any water quality standards established for those surface waters; and

e. The existing quality of surface water, including other sources of contamination and the cumulative impact on surface water quality; and

4. The potential adverse effects of a release on the land surrounding the tank system, taking into account:

a. The patterns of rainfall in the region; and

b. The current and future uses of the surrounding land;

(c) The owner or operator of a tank system, for which a variance from secondary containment had been granted in accordance with the requirements of paragraph (a) of this subsection, at which a release of hazardous waste has occurred from the primary tank system but has not migrated beyond the zone of engineering control (as established in the variance), shall:

1. Comply with the requirements of Section 7 of this administrative regulation except subsection (4) of that section; and

2. Decontaminate or remove contaminated soil to the extent necessary to:

a. Enable the tank system for which the variance was granted to resume operation with the capability for the detection of releases at least equivalent to the capability it had prior to the release; and

b. Prevent the migration of hazardous waste or hazardous constituents to groundwater or surface water; and

3. If contaminated soil cannot be removed or decontaminated in accordance with subparagraph 2 of this paragraph, comply with the requirement of Section 8(2) of this administrative regulation.

(d) The owner or operator of a tank system, for which a variance from secondary containment had been granted in accordance with the requirements of paragraph (a) of this subsection, at which a release of hazardous waste has occurred from the primary tank system and has migrated beyond the zone of engineering control (as established in the variance), shall:

1. Comply with the requirements of Sections 7(1) to [~~, (2), (3), and~~] (4) of this administrative regulation; and

2. Prevent the migration of hazardous waste or hazardous constituents to groundwater or surface water, if possible, and decontaminate or remove contaminated soil. If contaminated soil cannot be decontaminated or removed or if groundwater has been contaminated, the owner or operator shall comply with the requirements of Section 8(2) of this administrative regulation; and

3. If repairing, replacing, or reinstalling the tank system, provide secondary containment in accordance with the requirements of subsections (1) to [~~through~~] (6) of this section or reapply for a variance from secondary containment and meet the requirements for new tank systems in Section 3 of this administrative regulation if the tank system is replaced. The owner or operator shall comply with these requirements even if contaminated soil can be decontaminated or removed and groundwater or surface water has not been contaminated.

(8) The following procedures shall be followed in order to request a variance from secondary containment:

(a) The owner or operator shall notify the cabinet in writing that he intends to conduct and submit a demonstration for a variance from secondary containment as allowed in subsection (7) according to the following schedule:

1. For existing tank systems, at least twenty-four (24) months prior to the date that secondary containment **will** [~~shall~~] be provided in accordance with subsection (1) of this section.

2. For new tank systems, at least thirty (30) days prior to entering into a contract for installation.

(b) As part of the notification, the owner or operator shall also submit to the cabinet a description of the steps necessary to conduct the demonstration and a timetable for completing each of the steps. The demonstration shall address each of the factors listed in subsection (7)(a) or [~~subsection (7)~~](b) of this section.

(c) The demonstration for a variance shall be completed within 180 days after notifying the cabinet of an intent to conduct the demonstration; and

(d) If a variance is granted under this subsection, the cabinet will require the permittee to construct and operate the tank system in the manner that was demonstrated to meet the requirements for the variance.

(9) All tank systems, until such time as secondary containment that meets the requirements of this section is provided, shall comply with the following:

(a) For nonenterable underground tanks, a leak test that meets the requirements of Section 2(1) of this administrative regulation or other tank integrity method, as approved or required by the cabinet shall be conducted at least annually.

(b) For other than nonenterable underground tanks, the owner or operator shall either conduct a leak test as in paragraph (a) of this subsection or develop a schedule and procedure for an assessment of the overall condition of the tank system by an [~~independent, qualified professional~~] engineer [~~registered in the Commonwealth of Kentucky~~]. The schedule and procedure shall be adequate to detect obvious cracks, leaks, and corrosion or erosion that may lead to cracks and leaks. The owner or operator shall remove the stored waste from the tank, if necessary, to allow the condition of all internal tank surfaces to be assessed. The frequency of these assessments shall be based on the material of construction of the tank and its ancillary equipment, the age of the system, the type of corrosion or erosion protection used, the rate of corrosion or erosion observed during the previous inspection, and the characteristics of the waste being stored or treated.

(c) For ancillary equipment, a leak test or other integrity assessment as approved by the cabinet shall be conducted at least annually.

(d) The owner or operator shall maintain on file at the facility a record of the results of the assessments conducted in accordance with subsection (1)(a) to [~~through~~] (c) of this section.

(e) If a tank system or component is found to be leaking or unfit for use as a result of the leak test or assessment in paragraphs (a) to [~~through~~] (c) of this subsection, the owner or operator shall comply with the requirements of Section 7 of this administrative regulation.

Section 5. General Operating Requirements. (1) Hazardous wastes or treatment reagents shall not be placed in a tank system if they may cause the tank, its ancillary equipment, or the secondary containment system to rupture, leak, corrode, or otherwise fail.

(2) The owner or operator shall use appropriate controls and practices to prevent spills and overflows from tank or secondary containment systems. These include at a minimum:

(a) Spill prevention controls (for example, [~~e.g.,~~] check valves or dry disconnect couplings);

(b) Overfill prevention controls (for example, [~~e.g.,~~] level sensing devices, high level alarms, automatic feed cutoff, or bypass to a standby tank); and

(c) Maintenance of sufficient freeboard in uncovered tanks to prevent overtopping by wave or wind action or by precipitation.

(3) The owner or operator shall comply with the requirements of Section 7 of this administrative regulation if a leak or spill occurs in the tank system.

Section 6. Inspections. (1) The owner or operator shall develop and follow a schedule and procedure for inspecting overfill controls.

(2) The owner or operator shall inspect at least once each operating day:

(a) Aboveground portions of the tank system, if any, to detect corrosion or releases of waste;

(b) Data gathered from monitoring and leak detection equipment (for example, [~~e.g.,~~] pressure or temperature gauges, and monitoring wells) to ensure that the tank system is being operated according to its design; and

(c) The construction materials and the area immediately surrounding the externally accessible portion of the tank system, including the secondary containment system (for example, [~~e.g.,~~] dikes) to detect erosion or signs of releases of hazardous waste (for example, [~~e.g.,~~] wet spots or dead vegetation).

(3) The owner or operator shall inspect cathodic protection

systems, if present, according to, at a minimum, the following schedule to ensure that they are functioning properly:

(a) The proper operation of the cathodic protection system shall be confirmed within six (6) months after initial installation and annually thereafter; and

(b) All sources of impressed current shall be inspected and tested as appropriate, at least every other month.

(4) The owner or operator shall document in the operating record of the facility an inspection of those items in subsections (1) to [~~through~~] (3) of this section.

Section 7. Response to Leaks or Spills and Disposition of Leaking or Unfit-for-Use Tank Systems. A tank system or secondary containment system from which there has been a leak or spill, or which is unfit for use shall be removed from service immediately, and the owner or operator shall satisfy the following requirements:

(1) Cessation of use: prevent flow or addition of wastes. The owner or operator shall immediately stop the flow of hazardous waste into the tank system or secondary containment system and inspect the system to determine the cause of the release.

(2) Removal of waste from tank system or secondary containment system.

(a) If the release was from the tank system, the owner or operator shall, within twenty-four (24) hours after detection of the leak or, if the owner or operator demonstrates that it is not possible, at the earliest practicable time, remove as much of the waste as is necessary to prevent further release of hazardous waste to the environment and to allow inspection and repair of the tank system to be performed.

(b) If the material released was to a secondary containment system all released materials shall be removed within twenty-four (24) hours or in as timely a manner as is possible to prevent harm to human health and the environment.

(3) Containment of visible releases to the environment. The owner or operator shall immediately conduct a visual inspection of the release and based upon that inspection shall:

(a) Prevent further migration of the leak or spill to soils or surface water; and

(b) Remove, and properly dispose of, any visible contamination of the soil or surface water.

(4) Notifications and reports.

(a) Any release to the environment except as provided in paragraph (b) of this subsection, shall be reported to the cabinet within twenty-four (24) hours of its detection. If the release has been reported pursuant to 40 CFR Part 302 that report will satisfy this requirement.

(b) A leak or spill of hazardous waste is exempted from the requirements of this subsection if it is:

1. Less than or equal to a quantity of one (1) pound; and

2. Immediately contained and cleaned up.

(c) Within thirty (30) days of detection of a release to the environment, a report containing the following information shall be submitted to the cabinet:

1. Likely route of migration of the release;

2. Characteristics of the surrounding soil (soil composition, geology, hydrogeology, climate);

3. Results of any monitoring or sampling conducted in connection with the release (if available). If sampling or monitoring data relating to the release are not available within thirty (30) days, these data shall be submitted to the cabinet as soon as they become available;

4. Proximity to downgradient drinking water, surface water, and populated areas; and

5. Description of response actions taken or planned.

(5) Provision of secondary containment, repair or closure.

(a) Unless the owner or operator satisfies the requirements of paragraphs (b) to [~~through~~] (d) of this subsection, the tank system shall be closed in accordance with Section 8 of this administrative regulation.

(b) If the cause of the release was a spill that has not damaged the integrity of the system, the owner or operator may return the system to service as soon as the released waste is removed and repairs, if necessary, are made.

(c) If the cause of the release was a leak from the primary tank system into the secondary containment system, the system shall be repaired prior to returning the tank system to service.

(d) If the source of the release was a leak to the environment from a component of a tank system without secondary containment, the owner or operator shall provide the component of the system from which the leak occurred with secondary containment that satisfies the requirements of Section 4 of this administrative regulation before it can be returned to service, unless the source of the leak is an aboveground portion of a tank system that can be inspected visually. If the source is an aboveground component that can be inspected visually, the component shall be repaired and may be returned to service without secondary containment as long as the requirements of subsection (6) of this section are satisfied. If a component is replaced to comply with the requirements of this paragraph that component shall satisfy the requirements for new tank systems or components in Sections 3 and 4 of this administrative regulation. Additionally, if a leak has occurred in any portion of a tank system component that is not readily accessible for visual inspection (for example, [~~e.g.,~~] the bottom of an in-ground or on-ground tank), the entire component shall be provided with secondary containment in accordance with Section 4 of this administrative regulation prior to being returned to use.

(6) Certification of major repairs. If the owner or operator has repaired a tank system in accordance with subsection (5) of this section, and the repair has been extensive (for example, [~~e.g.,~~] installation of an internal liner, repair of a ruptured primary containment or secondary containment vessel), the tank system shall not be returned to service unless the owner or operator has obtained a certification by an [~~independent, qualified professional~~] engineer, [~~registered in the Commonwealth of Kentucky~~] in accordance with Section 7(4) of 401 KAR 38:070 that the repaired system is capable of handling hazardous wastes without release for the intended life of the system. This certification shall be submitted to the cabinet within seven (7) days after returning the tank system to use.

Section 8. Closure and Postclosure Care. (1) At closure of a tank system, the owner or operator shall remove or decontaminate all waste residues, contaminated containment system components (for example, liners [~~, etc.~~]), contaminated soils, and structures and equipment contaminated with waste, and manage them as hazardous waste, unless Section 3(4) of 401 KAR 31:010 applies. The closure plan, closure activities, cost estimates for closure, and financial responsibility for tank systems shall meet all of the requirements specified in 401 KAR 34:070 to [~~through~~] 34:176.

(2) If the owner or operator demonstrates that not all contaminated soil can be practicably removed or decontaminated as required in subsection (1) of this section, then the owner or operator shall close the tank system and perform postclosure care in accordance with the closure and postclosure care requirements that apply to landfills (Section 6 of 401 KAR 34:230). In addition, for the purposes of closure, postclosure, and financial responsibility, such a tank system is then considered to be a landfill, and the owner or operator shall meet all of the requirements for landfills specified in 401 KAR 34:070 to [~~through~~] 34:176.

(3) If an owner or operator has a tank system that does not have secondary containment that meets the requirements of Section 4(2) to [~~through~~] (6) of this administrative regulation and it is not exempt from the secondary containment requirements in accordance with Section 4(7) of this administrative regulation then:

(a) The closure plan for the tank system shall include both a plan for complying with subsection (1) of this section and a contingent plan for complying with subsection (2) of this section;

(b) A contingent postclosure plan for complying with subsection (2) of this section shall be prepared and submitted as part of the permit application;

(c) The cost estimates calculated for closure and postclosure care shall reflect the costs of complying with the contingent closure plan and the contingent postclosure plan, if those costs are greater than the costs of complying with the closure plan prepared for the expected closure under subsection (1) of this section;

(d) Financial assurance shall be based on the cost estimates in paragraph (c) of this subsection;

(e) For the purposes of the contingent closure and postclosure plans, such a tank system is considered to be a landfill, and the contingent plans shall meet all of the closure, postclosure, and financial responsibility requirements for landfills under 401 KAR 34:070 to [~~through~~] 34:176; and

(f) For new tank systems that **will** [~~shall~~] close in accordance with subsection (2) of this section, the owner or operator shall demonstrate compliance with 401 KAR 38:500.

Section 9. Special Requirements for Ignitable or Reactive Wastes. (1) Ignitable or reactive waste shall not be placed in a tank unless:

(a) The waste is treated, rendered, or mixed before or immediately after placement in the tank so that:

1. The resulting waste, mixture or dissolved material no longer meets the definition of ignitable or reactive waste under Section 2 or 4 of 401 KAR 31:030; and

2. Section 8(2) of 401 KAR 34:020 is complied with; or

(b) The waste is stored or treated in such a way that it is protected from any material or conditions that may cause the waste to ignite or react; or

(c) The tank system is used solely for emergencies.

(2) The owner or operator of a facility where ignitable or reactive waste is stored or treated in a tank shall comply with the requirements for the maintenance of protective distances between the waste management area and any public ways, streets, alleys, or an adjoining property line that can be built upon as required in Tables 2-1 to [~~through~~] 2-6 of the National Fire Protection Association's "Flammable and Combustible Liquids Code" (1977 or 1981), referenced in Section 3 of 401 KAR 30:010.

Section 10. Special Requirements for Incompatible Wastes. (1) Incompatible wastes, or incompatible wastes and materials, shall not be placed in the same tank system unless Section 8(2) of 401 KAR 34:020 is complied with.

(2) Hazardous waste shall not be placed in a tank system that has not been decontaminated and that previously held an incompatible waste or material, unless Section 8(2) of 401 KAR 34:020 is complied with.

PHILLIP J. SHEPHERD, Secretary
E. DOUGLAS STEPHAN, Commissioner
APPROVED BY AGENCY: December 13, 1993
FILED WITH LRC: December 14, 1993 at 10 a.m.

NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION CABINET
Department for Environmental Protection
Division of Waste Management
(Amended After Hearing)

401 KAR 34:200. Surface impoundments.

RELATES TO: KRS 224.10, 224.40, 224.43, 224.46, 224.70, 224.99

STATUTORY AUTHORITY: KRS 224.10-100, 224.46-520

NECESSITY AND FUNCTION: To implement provisions of KRS 224.46-520 relative to surface impoundments. [~~KRS 224.46-520 requires that persons engaging in the storage, treatment, and disposal of hazardous waste obtain a permit. KRS 224.46-520 requires the Cabinet to establish standards for these permits, to require adequate financial responsibility, to establish minimum standards for closure for all facilities and the postclosure monitoring and maintenance of hazardous waste disposal facilities. This chapter establishes minimum standards for new hazardous waste sites or facilities. This regulation establishes minimum standards for surface impoundments.~~]

Section 1. Applicability. This administrative regulation applies to owners and operators of hazardous waste sites or facilities that use surface impoundments to treat, store or dispose of hazardous waste, except as Section 1 of 401 KAR 34:010 provides otherwise.

Section 2. Design and Operating Requirements. (1) Any surface impoundment that is not covered by subsection (3) of this section or Section 1 of 401 KAR 35:200 shall [~~must~~] have a liner for all portions of the impoundment (except for existing portions of such impoundments). The liner shall [~~must~~] be designed, constructed, and installed to prevent any migration of wastes out of the impoundment to the adjacent subsurface soil or ground water or surface water at any time during the active life (including the closure period) of the impoundment. The liner may be constructed of materials that may allow wastes to migrate into the liner (but not into the adjacent subsurface soil or ground water or surface water) during the active life of the facility, provided that the impoundment is closed in accordance with Section 6(1)(a) of this administrative regulation. For impoundments that will be closed in accordance with Section 6(1)(b) of this administrative regulation, the liner shall [~~must~~] be constructed of materials that can prevent wastes from migrating into the liner during the active life of the facility. The liner shall [~~must~~] be:

(a) Constructed of materials that have appropriate chemical properties and sufficient strength and thickness to prevent failure due to pressure gradients (including static head and external hydrogeologic forces), physical contact with the waste or leachate to which they are exposed, climatic conditions, geological conditions including, where applicable, karst features, the stress of installation, and the stress of daily operation; and

[~~(b) Placed upon a foundation or base capable of providing support to the liner and resistance to pressure gradients above and below the liner to prevent failure of the liner due to settlement, compression, uplift or geological conditions including, where applicable, karst features. At a minimum, synthetic liners shall be placed upon a one (1) foot thick soil liner of 1 x 10^{-7} centimeters per second permeability; and~~]

(b) [~~(c)~~] Installed to cover all surrounding earth likely to be in contact with the waste or leachate.

(2) The owner or operator may [~~will~~] be exempted from the requirements of subsection (1) of this section if the cabinet finds, based on a demonstration by the owner or operator, that alternate design and operating practices, together with location characteristics, will prevent the migration of any hazardous constituents (see Section 4 of 401 KAR 34:060) into the ground water or surface water at any future time. In deciding whether to grant an exemption, the cabinet shall [~~will~~] consider:

(a) The nature and quantity of the wastes;

(b) The proposed alternate design and operation;

(c) The hydrogeologic setting of the facility, including the attenuative capacity and thickness of the liners and soils present between the impoundment and ground water or surface water; and

(d) All other factors which would influence the quality and mobility of the leachate produced and the potential for it to migrate to ground water or surface water.

(3) The owner or operator of each new surface impoundment unit on which construction commences after January 29, 1992, each

lateral expansion of a surface impoundment unit on which construction commences after July 29, 1992 and each replacement of an existing surface impoundment unit that is to commence reuse after July 29, 1992 shall install two (2) or more liners and a leachate collection and removal system between such liners. "Construction commences" is defined in 401 KAR 30:010 under "existing facility".

(a)1. The liner system shall include:

a. A top liner designed and constructed of materials (for example, a geomembrane) to prevent the migration of hazardous constituents into such liner during the active life and postclosure care period; and

b. A composite bottom liner, consisting of at least two (2) components. The upper component shall be designed and constructed of materials (for example, a geomembrane) to prevent the migration of hazardous constituents into this component during the active life and postclosure care period. The lower component shall be designed and constructed of materials to minimize the migration of hazardous constituents if a breach in the upper component were to occur. The lower component shall be constructed of at least three (3) feet (91 cm) of compacted soil material with a hydraulic conductivity of no more than $1X10^{-7}$cm/sec.

2. The liners shall comply with subsection (1)(a) and (b) of this section.

(b) The leachate collection and removal system between the liners, and immediately above the bottom composite liner in the case of multiple leachate collection and removal systems, shall also be a leak detection system. This leak detection system shall be capable of detecting, collecting, and removing leaks of hazardous constituents at the earliest practicable time through all areas of the top liner likely to be exposed to waste or leachate during the active life and postclosure care period. The requirements for a leak detection system in this paragraph are satisfied by installation of a system that is, at a minimum:

1. Constructed with a bottom slope of one (1) percent or more;

2. Constructed of granular drainage materials with a hydraulic conductivity of $1X10^{-1}$cm/sec or more and a thickness of twelve (12) inches (30.5 cm) or more; or constructed of synthetic or geonet drainage materials with a transmissivity of $3X10^{-4}m^2$sec or more;

3. Constructed of materials that are chemically resistant to the waste managed in the surface impoundment and the leachate expected to be generated, and of sufficient strength and thickness to prevent collapse under the pressures exerted by overlying wastes and any waste cover materials or equipment used at the surface impoundment;

4. Designed and operated to minimize clogging during the active life and postclosure care period; and

5. Constructed with sumps and liquid removal methods (for example, pumps) of sufficient size to collect and remove liquids from the sump and prevent liquids from backing up into the drainage layer. Each unit shall have its own sump(s). The design of each sump and removal system shall provide a method for measuring and recording the volume of liquids present in the sump and of liquids removed from the sump.

(c) The owner or operator shall collect and remove pumpable liquids in the sumps to minimize the head on the bottom liner.

(d) Surface impoundments for the disposal of hazardous waste shall be located entirely above the seasonal high-water table in accordance with Section 9(2) of 401 KAR 34:020.

(4) The cabinet may approve alternative design or operating practices to those specified in subsection (3) of this section if the owner or operator demonstrates to the cabinet that such design and operating practices, together with location characteristics:

(a) **Will** [~~Shall~~] prevent the migration of any hazardous constituent into the groundwater or surface water at least as effectively as the liners and leachate collection and removal system specified in subsection (3) of this section; and

(b) **Will** [~~Shall~~] allow detection of leaks of hazardous constituents through the top liner at least as effectively.

[~~(3) The owner or operator of each new surface impoundment, each new surface impoundment unit at an existing facility, each replacement of an existing surface impoundment unit, and each lateral expansion of an existing surface impoundment unit must install two (2) or more liners and a leachate collection system between such liners. The liners and leachate collection system must protect human health and the environment. The requirements of this subsection shall apply with respect to all waste received after the issuance of the permit. The requirement for the installation of two (2) or more liners in this subsection may be satisfied by the installation of a top liner designed, operated and constructed of materials to prevent the migration of any constituent into such liner during the period such facility remains in operation (including any postclosure monitoring period), and a lower liner designed, operated, and constructed to prevent the migration of any constituent through such liner during such period. For the purpose of the preceding sentence, a lower liner shall be deemed to satisfy such requirement if it is constructed of at least a three (3) foot thick layer of recompacted clay or other natural material with a permeability of no more than 1×10^{-7} centimeters per second.~~

~~(4) Subsection (3) of this section will not apply if the owner or operator demonstrates to the cabinet, and the cabinet finds for such surface impoundment, that alternative design and operating practices, together with location characteristics, will prevent the migration of any hazardous constituent into the ground water or surface water at least as effectively as such liners and leachate collection systems.~~]

(5) The double liner requirement set forth in subsection (3) of this section may be waived by the cabinet for any monofill, if:

(a) The monofill contains only hazardous wastes from foundry furnace emission controls or metal casting molding sand, and such wastes do not contain constituents which would render the wastes hazardous for reasons other than the [~~EP~~] toxicity characteristics in Section 5 of 401 KAR 31:030; and

(b)1.a. The monofill has at least one (1) liner for which there is no evidence that such liner is leaking. For the purposes of this subsection the term "liner" means a liner designed, constructed, installed, and operated to prevent hazardous waste from passing into the liner at any time during the active life of the facility, or a liner designed, constructed, installed, and operated to prevent hazardous waste from migrating beyond the liner to adjacent subsurface soil, ground water, or surface water at any time during the active life of the facility. In the case of any surface impoundment which has been exempted from the requirements of subsection (3) of this section on the basis of a liner designed, constructed, installed, and operated to prevent hazardous waste from passing beyond the liner, at the closure of such impoundment, the owner or operator shall [~~must~~] remove or decontaminate all waste residues, all contaminated liner material, and contaminated soil to the extent practicable. If all contaminated soil is not removed or decontaminated, the owner or operator of such impoundment shall [~~will~~] comply with appropriate postclosure requirements, including but not limited to ground water monitoring and corrective action;

b. The monofill is located more than one-fourth (1/4) mile from an underground source of drinking water (as that term is defined in Section 1 of 401 KAR 30:010); and

c. The monofill is in compliance with generally applicable ground water monitoring requirements for facilities with permits under KRS 224.40-310 and 224.46-520; or

2. The owner or operator demonstrates that the monofill is located, designed and operated so as to assure that there will be no migration of any hazardous constituent into ground water or surface water at any future time.

(6) The owner or operator of any replacement surface impoundment unit is exempt from subsection (3) of this section if:

(a) The existing unit was constructed in compliance with design standards of this administrative regulation; and

(b) There is no reason to believe that the liner is not functioning as designed.

(7) A surface impoundment shall [~~must~~] be designed, constructed, maintained, and operated to prevent overtopping resulting from normal or abnormal operations; overfilling; wind and wave action; rainfall; run-on; malfunctions of level controllers, alarms, and other equipment; and human error.

(8) [~~(7)~~] A surface impoundment shall [~~must~~] have dikes that are designed, constructed, and maintained with sufficient structural integrity to prevent massive failure of the dikes. In insuring structural integrity, it shall [~~must~~] not be presumed that the liner system will function without leakage during the active life of the unit.

(9) [~~(8)~~]A new surface impoundment shall not be constructed in a floodway in accordance with Section 9(2) of 401 KAR 34:020[~~, Section 9(2)~~].

(10) [~~(9)~~] A surface impoundment (including its underlying liners) for the treatment or storage of hazardous waste shall [~~must~~] be protected from inundation by waters of the 100-year flood in accordance with Section 9(2) of 401 KAR 34:020[~~, Section 9(2)~~].

(11) [~~(10)~~] New surface impoundments for the disposal of hazardous waste shall [~~must~~] be located entirely above the seasonal high-water table, in accordance with Section 9(2) of 401 KAR 34:020[~~, Section 9(2)~~].

(12) [~~(11)~~] The cabinet shall [~~will~~] specify in the permit all design and operating practices that are necessary to ensure that the requirements of this section are satisfied.

Section 3. Action Leakage Rate. [~~Double-lined Surface Impoundments.~~] (1) The cabinet shall approve an action leakage rate for surface impoundment units subject to Section 2(3) or (4) of this administrative regulation. The action leakage rate is the maximum design flow rate that the leak detection system (LDS) can remove without the fluid head on the bottom liner exceeding one (1) foot. The action leakage rate shall include an adequate safety margin to allow for uncertainties in the design (for example, slope, hydraulic conductivity, thickness of drainage material), construction, operation, and location of the LDS, waste and leachate characteristics, likelihood and amounts of other sources of liquids in the LDS, and proposed response actions (for example, the action leakage rate shall consider decreases in the flow capacity of the system over time resulting from factors including siltation and clogging, rib layover and creep of synthetic components of the system, overburden pressures).

(2) To determine if the action leakage rate has been exceeded, the owner or operator shall convert the weekly or monthly flow rate from the monitoring data obtained under Section 4(4) of this administrative regulation to an average daily flow rate (gallons per acre per day) for each sump. Unless the cabinet approves a different calculation, the average daily flow rate for each sump shall be calculated weekly during the active life and closure period, and if the unit is closed in accordance with Section 6(2) of this regulation, monthly during the postclosure care period when monthly monitoring is required under Section 4(4) of this administrative regulation.

(3) 401 KAR 34:060 Ground water protection requirements apply to all surface impoundments including those with double-liner systems.

Section 4. Monitoring and Inspection. (1) During construction and installation, liners (except in the case of existing portions of surface impoundments exempt from Section 2 of this administrative regulation) and cover systems (e.g., membranes, sheets, or coatings) shall [~~must~~] be inspected for uniformity, damage, and imperfections (e.g., holes, cracks, thin spots, or foreign materials). Immediately after construction or installation:

(a) Synthetic liners and covers shall [~~must~~] be inspected to ensure tight seams and joints and the absence of tears, punctures, or blisters; and

(b) Soil-based and admixed liners and covers shall [~~must~~] be inspected for imperfections including lenses, cracks, channels, root holes, or other structural nonuniformities that may cause an increase in the permeability of the liner or cover.

(2) While a surface impoundment is in operation, it shall [~~must~~] be inspected weekly and after storms to detect evidence of any of the following:

(a) Deterioration, malfunctions, or improper operation of overtopping control systems;

(b) Sudden drops in the level of the impoundment's contents as computed by the water balance calculations required in 401 KAR 34:050 and as observed by flow measuring devices [~~etc.~~]; and

(c) Severe erosion or any other signs of deterioration in dikes or other containment devices.

(3) Prior to the issuance of a permit, and after any extended period of time (at least six (6) months) during which the impoundment was not in service, the owner or operator shall [~~must~~] obtain a certification from a qualified engineer registered in Kentucky that the impoundment's dike, including that portion of any dike which provides freeboard, has structural integrity. The certification shall [~~must~~] establish, in particular, that the dike:

(a) Will withstand the stress of the pressure exerted by the types and amounts of wastes to be placed in the impoundment; and

(b) Will not fail due to scouring or piping, without dependence on any liner system included in the surface impoundment construction.

(4)(a) An owner or operator required to have a leak detection system under Section 2(3) or (4) of this administrative regulation shall record the amount of liquids removed from each leak detection system sump at least once each week during the active life and closure period.

(b) The amount of liquids removed from each leak detection system sump shall be recorded at least monthly throughout the postclosure care period.

Section 5. Emergency Repairs; Contingency Plans. (1) A surface impoundment shall [~~must~~] be removed from service in accordance with subsection (2) of this section when:

(a) The level of liquids in the impoundment suddenly drops and the drop is not known to be caused by changes in the flows into or out of the impoundment; or

(b) The dike leaks.

(2) When a surface impoundment is [~~must be~~] removed from service as required by subsection (1) of this section, the owner or operator shall [~~must~~]:

(a) Immediately shut off the flow or stop the addition of wastes into the impoundment;

(b) Immediately contain any surface leakage which has occurred or is occurring;

(c) Immediately stop the leak;

(d) Take any other necessary steps to stop or prevent catastrophic failure;

(e) If a leak cannot be stopped by any other means, empty the impoundment; and

(f) Notify the cabinet of the problem in writing within seven (7) days after detecting the problem.

(3) As part of the contingency plan required in 401 KAR 34:040 the owner or operator shall [~~must~~] specify a procedure for complying with the requirements of this section.

(4) No surface impoundment that has been removed from service in accordance with the requirements of this section may be restored to service unless the portion of the impoundment which was failing is repaired and the following steps are taken:

(a) If the impoundment was removed from service as the result of actual or imminent dike failure, the dike's structural integrity shall [~~must~~] be recertified in accordance with Section 4(3) of this administrative regulation.

(b) If the impoundment was removed from service as the result of a sudden drop in the liquid level, then:

1. For any existing portion of the impoundment, a liner shall [~~must~~] be installed in compliance with Section 2 of this administrative

regulation; and

2. For any other portion of the impoundment, the repaired liner system shall [~~must~~] be certified by a qualified engineer as meeting the design specifications approved in the permit.

3. Determine, using water balance calculations in accordance with 401 KAR 34:050, how much liquid was lost, where the liquid went and take appropriate actions.

(5) A surface impoundment that has been removed from service in accordance with the requirements of this section and that is not being repaired within six (6) months time, as specified by the cabinet, shall [~~must~~] be closed in accordance with the provisions of Section 6 of this administrative regulation.

Section 6. Closure and Postclosure Care. (1) At closure, the owner or operator shall [~~must~~]:

(a) Remove or decontaminate all waste residues, contaminated containment system components [~~(liners, etc.)~~], contaminated subsoils, and structures and equipment contaminated with waste and leachate, and manage them as hazardous waste unless Section 3 of 401 KAR 31:010 applies; or

(b) Treat in such a manner so as to:

1. Eliminate free liquids by removing liquid wastes or solidifying the remaining wastes and waste residues;

2. Stabilize remaining wastes to a bearing capacity sufficient to support final cover; and

3. Cover the surface impoundment with a final cover designed and constructed to:

a. Provide long-term minimization of the migration of liquids through the closed impoundment;

b. Function with minimum maintenance;

c. Promote drainage and minimize erosion or abrasion of the final cover;

d. Accommodate settling and subsidence so that the cover's integrity is maintained; and

e. Have a permeability less than or equal to the permeability of any bottom liner system or natural subsoils present.

(2) If some waste residues or contaminated materials are left in place at final closure, the owner or operator shall [~~must~~] comply with all postclosure requirements contained in Sections 8 to [~~through~~] 11 of 401 KAR 34:070, including maintenance and monitoring throughout the postclosure care period (specified in the permit under Section 9 of 401 KAR 34:070). The owner or operator shall [~~must~~]:

(a) Maintain the integrity and effectiveness of the final cover, including making repairs to the cap as necessary to correct the effects of settling, subsidence, erosion, or other events;

(b) Maintain and monitor the leak detection system in accordance with Sections 2(3)(b)4 and (c) and 4(4)(a) and (b) of this administrative regulation, and comply with all other applicable leak detection system requirements of this chapter;

(c) [~~(b)~~] Maintain and monitor the ground water monitoring system and comply with all other applicable requirements of 401 KAR 34:060; and

(d) [~~(c)~~] Prevent run-on and run-off from eroding or otherwise damaging the final cover.

(3)(a) If an owner or operator plans to close a surface impoundment in accordance with subsection (1)(a) of this section, and the impoundment does not comply with the liner requirements of Section 2(1) of this administrative regulation and is not exempt from them in accordance with Section 2(2) of this administrative regulation, then:

1. The closure plan for the impoundment under Section 3 of 401 KAR 34:070 shall [~~must~~] include both a plan for complying with subsection (1)(a) of this section and a contingent plan for complying with subsection (1)(b) of this section, which is also in compliance with 401 KAR 38:500 and KRS 224.40-310(3) [~~855(3)~~], in case not all contaminated subsoils can be practicably removed at closure; and

2. The owner or operator shall [~~must~~] prepare a contingent postclosure plan under Section 9 of 401 KAR 34:070 for complying with subsection (2) of this section, which is also in compliance with 401 KAR 38:500 and KRS 224.855(3), in case not all contaminated subsoils can be practicably removed at closure.

(b) The cost estimates calculated under Section 1 of 401 KAR 34:090 and Section 1 of 401 KAR 34:100 for closure and postclosure care of an impoundment subject to this paragraph shall [~~must~~] include separate analyses of the cost of complying with the contingent closure plan and the contingent postclosure plan in addition to the cost of expected closure under subsection (1)(a) of this section.

Section 7. Special Requirements for Ignitable or Reactive Waste. Ignitable or reactive waste shall [~~must~~] not be placed in a surface impoundment, unless the waste and impoundment satisfy all applicable requirements of 401 KAR Chapter 37 and:

(1) The waste is treated, rendered, or mixed before or immediately after placement in the impoundment so that:

(a) The resulting waste [~~or mixture~~] no longer meets the definition of ignitable or reactive waste under 401 KAR Chapter 31;and

(b) Section 8 of 401 KAR 34:020 is complied with; or

(2) The surface impoundment is used solely for emergencies.

Section 8. Special Requirements for Incompatible Wastes. Incompatible wastes, or incompatible wastes and materials (see 401 KAR 34:330 for examples) shall [~~must~~] not be placed in the same surface impoundment.

Section 9. Special Requirements for Hazardous Wastes F020, F021, F022, F023, F026, and F027. (1) Hazardous wastes F020, F021, F022, F023, F026, and F027 (chlorinated dioxins, chlorinated dibenzofurans, and chlorinated phenols) shall [~~must~~] not be placed in surface impoundment[s] unless the owner or operator operates the surface impoundment[s] in accordance with a management plan for these wastes that is approved by the cabinet [~~secretary~~] pursuant to the standards set out in this section, and in accordance with all other applicable requirements of this chapter. The factors to be considered are:

(a) The volume, physical, and chemical characteristics of the wastes, including their potential to migrate through soil or to volatilize or escape into the atmosphere;

(b) The attenuative properties of underlying and surrounding soils or other materials;

(c) The mobilizing properties of other materials codisposed with these wastes; and

(d) The effectiveness of additional treatment, design, or monitoring techniques.

(2) The cabinet [~~secretary~~] may determine that additional design, operating, and monitoring requirements are necessary for surface impoundments managing hazardous wastes F020, F021, F022, F023, F026, and F027 in order to reduce the possibility of migration of these wastes to ground water, surface water, or air so as to protect human health and the environment.

Section 10. Response Actions. (1) The owner or operator of surface impoundment units subject to Section 2(3) or (4) of this administrative regulation shall have an approved response action plan before receipt of waste. The response action plan shall set forth the actions to be taken if the action leakage rate has been exceeded. At a minimum, the response action plan shall describe the actions specified in subsection (2) of this section.

(2) If the flow rate into the leak detection system exceeds the action leakage rate for any sump, the owner or operator shall:

(a) Notify the cabinet in writing of the excess within seven (7) days of the determination;

(b) Submit a preliminary written assessment to the cabinet within fourteen (14) days of the determination, as to the amount of liquids, likely sources of liquids, possible location, size, and cause of any leaks, and short-term actions taken and planned;

(c) Determine to the extent practicable the location, size, and cause of any leak;

(d) Determine whether waste receipt shall cease or be curtailed, whether any waste should be removed from the unit for inspection, repairs, or controls, and whether or not the unit should be closed;

(e) Determine any other short-term and longer-term actions to be taken to mitigate or stop any leaks; and

(f) Within thirty (30) days after the notification that the action leakage rate has been exceeded, submit to the cabinet the results of the analyses specified in paragraphs (c), (d), and (e) of this subsection, the results of actions taken, and actions planned. Monthly thereafter, as long as the flow rate in the leak detection system exceeds the action leakage rate, the owner or operator shall submit to the cabinet a report summarizing the results of any remedial actions taken and actions planned.

(3) To make the leak and remediation determinations in subsection (2)(c), (d), and (e) of this section, the owner or operator shall:

(a)1. Assess the source of liquids and amounts of liquids by source;

2. Conduct a fingerprint, hazardous constituent, or other analysis of the liquids in the leak detection system to identify the source of liquids and possible location of any leaks, and the hazard and mobility of the liquid; and

3. Assess the seriousness of any leaks in terms of potential for escaping into the environment; or

(b) Document why such assessments are not needed.

PHILLIP J. SHEPHERD, Secretary
E. DOUGLAS STEPHAN, Commissioner
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NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION CABINET
Department for Environmental Protection
Division of Waste Management
(Amended After Hearing)

401 KAR 34:210. Waste piles.

RELATES TO: KRS 224.10, 224.40, 224.43, 224.46, 224.70, 224.99

STATUTORY AUTHORITY: KRS 224.10-100, 224.46-520

NECESSITY AND FUNCTION: To implement provisions of KRS 224.46-520 and to establish [~~KRS 224.46-520 requires that persons engaging in the storage, treatment, and disposal of hazardous waste obtain a permit. KRS 224.46-520 requires the Cabinet to establish standards for these permits, to require adequate financial responsibility, to establish minimum standards for closure for all facilities and the postclosure monitoring and maintenance of hazardous waste disposal facilities. This chapter establishes minimum standards for new hazardous waste sites or facilities. This regulation establishes~~] minimum standards for waste piles.

Section 1. Applicability. (1) This administrative regulation applies to owners and operators of hazardous waste sites or facilities that store or treat hazardous waste in piles, except as Section 1 of 401 KAR 34:010 provides otherwise.

(2) This administrative regulation does not apply to owners or operators of waste piles that are closed with wastes left in place. Such waste piles are subject to administrative regulation under 401 KAR 34:230 (Landfills).

(3) The owner or operator of any waste pile that is inside or under a structure that provides protection from precipitation so that neither run-off nor leachate is generated is not subject to administrative regulation under Section 2 of this administrative regulation or under 401 KAR 34:060, provided that:

(a) Liquids or materials containing free liquids are not placed in the pile;

(b) The pile is protected from surface water run-on by the structure or in some other manner;

(c) The pile is designed and operated to control dispersal of the waste by wind, where necessary, by means other than wetting; and

(d) The pile will not generate leachate through decomposition or other reactions.

Section 2. Design and Operating Requirements. (1) A waste pile (except for an existing portion of a waste pile) shall [~~must~~] have:

(a) A liner that is designed, constructed, and installed to prevent any migration of wastes out of the pile into the adjacent subsurface soil or groundwater or surface water at any time during the active life (including the closure period) of the waste pile. The liner may be constructed of materials that may allow waste to migrate into the liner itself (but not into the adjacent subsurface soil or groundwater or surface water) during the active life of the facility. The liner shall [~~must~~] be:

1. Constructed of materials that have appropriate chemical properties and sufficient strength and thickness to prevent failure due to pressure gradients (including static head and external hydrogeologic forces), physical contact with the waste or leachate to which they are exposed, climatic conditions, the stress of installation, and the stress of daily operation; and

2. [~~Placed upon a foundation or base capable of providing support to the liner and resistant to pressure gradients above and below the liner to prevent failure of the liner due to settlement, compression, or uplift. At a minimum, synthetic liners shall be placed upon a one (1) foot thick soil liner of 1 x 10-7 cm/sec permeability.~~

~~3.~~] Installed to cover all surrounding earth likely to be in contact with the waste or leachate. [~~; and~~]

(b) A leachate collection and removal system immediately above the liner that is designed, constructed, maintained, and operated to collect and remove leachate from the pile. The cabinet shall [~~will~~] specify design and operating conditions in the permit to ensure that the leachate depth over the liner does not exceed thirty (30) cm (approximately one (1) foot). The leachate collection and removal system shall [~~must~~] be:

1. Constructed of materials that are:

a. Chemically resistant to the waste managed in the pile and the leachate expected to be generated; and

b. Of sufficient strength and thickness to prevent collapse under the pressures exerted by waste placement, overlying wastes, waste cover materials, and by any equipment used at the pile; and

2. Designed and operated to function without clogging through the scheduled closure of the waste pile.

(2) The owner or operator may be exempted from the requirements of subsection (1) of this section if the cabinet finds, based on a demonstration by the owner or operator, that alternate design and operating practices, together with location characteristics, will prevent the migration of any hazardous constituents (see Section 4 of 401 KAR 34:060) into the groundwater or surface water at any future time. In deciding whether to grant an exemption, the cabinet shall [~~will~~] consider:

(a) The nature and quantity of the wastes;

(b) The proposed alternate design and operation;

(c) The hydrogeologic setting of the facility, including attenuative capacity and thickness of the liners and soils present between the pile and groundwater or surface water; and

(d) All other factors which would influence the quality and mobility of the leachate produced and the potential for it to migrate to groundwater or surface water.

(3) The owner or operator of each new waste pile unit on which construction commences after January 29, 1992, each lateral expansion of a waste pile unit on which construction commences after

July 29, 1992, and each replacement of an existing waste pile unit that is to commence reuse after July 29, 1992 shall install two (2) or more liners and a leachate collection and removal system above and between such liners. "Construction commences" is defined in 401 KAR 30:010 under "existing facility".

(a)1. The liner system shall include:

a. A top liner designed and constructed of materials (for example, a geomembrane) to prevent the migration of hazardous constituents into such liner during the active life and postclosure care period; and

b. A composite bottom liner, consisting of at least two (2) components. The upper component shall be designed and constructed of materials (for example, a geomembrane) to prevent the migration of hazardous constituents into this component during the active life and postclosure care period. The lower component shall be designed and constructed of materials to minimize the migration of hazardous constituents if a breach in the upper component were to occur. The lower component shall be constructed of at least three (3) feet (91 cm) of compacted soil material with a hydraulic conductivity of no more than $1X10^{-7}$ cm/sec.

2. The liners shall comply with subsections (1)(a)1, 2, and 3 of this section.

(b) The leachate collection and removal system immediately above the top liner shall be designed, constructed, operated, and maintained to collect and remove leachate from the waste pile during the active life and postclosure care period. The cabinet shall specify design and operating conditions in the permit to ensure that the leachate depth over the liner does not exceed thirty (30) cm (one (1) foot). The leachate collection and removal system shall comply with paragraph (c)3 and 4 of this subsection.

(c) The leachate collection and removal system between the liners, and immediately above the bottom composite liner in the case of multiple leachate collection and removal systems, shall also be a leak detection system. This leak detection system shall be capable of detecting, collecting, and removing leaks of hazardous constituents at the earliest practicable time through all areas of the top liner likely to be exposed to waste or leachate during the active life and postclosure care period. The requirements for a leak detection system in this administrative regulation are satisfied by installation of a system that is, at a minimum:

1. Constructed with a bottom slope of one (1) percent or more;

2. Constructed of granular drainage materials with a hydraulic conductivity of $1X10^{-2}$ cm/sec or more and a thickness of twelve (12) inches (30.5 cm) or more; or constructed of synthetic or geonet drainage materials with a transmissivity of $3X10^{-5}$ m^2/sec or more;

3. Constructed of materials that are chemically resistant to the waste managed in the waste pile and the leachate expected to be generated, and of sufficient strength and thickness to prevent collapse under the pressures exerted by overlying wastes, waste cover materials, and equipment used at the waste pile;

4. Designed and operated to minimize clogging during the active life and postclosure care period; and

5. Constructed with sumps and liquid removal methods (for example, pumps) of sufficient size to collect and remove liquids from the sump and prevent liquids from backing up into the drainage layer. Each unit shall have its own sump(s). The design of each sump and removal system shall provide a method for measuring and recording the volume of liquids present in the sump and of liquids removed from the sump.

(d) The owner or operator shall collect and remove pumpable liquids in the leak detection system sumps to minimize the head on the bottom liner.

(e) A leak detection system shall be located completely above the seasonal high water table.

(4) The cabinet may approve alternative design or operating practices to those specified in subsection (3) of this section if the owner or operator demonstrates to the cabinet that such design and operating practices, together with location characteristics:

(a) Will [~~Shall~~] prevent the migration of any hazardous constituent into the ground water or surface water at least as effectively as the liners and leachate collection and removal systems specified in subsection (3) of this section; and

(b) Will [~~Shall~~] allow detection of leaks of hazardous constituents through the top liner at least as effectively.

(5) Subsection (3) of this section does not apply to monofills that are granted a waiver by the cabinet in accordance with Section 2(5) of 401 KAR 34:200.

(6) The owner or operator of any replacement waste pile unit is exempt from subsection (3) of this section if:

(a) The existing unit was constructed in compliance with the design standards of this administrative regulation; and

(b) There is no reason to believe that the liner is not functioning as designed.

(7) [~~(3)~~] The owner or operator shall [~~must~~] design, construct, operate, and maintain a run-on control system capable of preventing flow onto the active portion of the pile during peak discharge from at least a twenty-five (25) year storm.

(8) [~~(4)~~] The owner or operator shall [~~must~~] design, construct, operate, and maintain a run-off management system to collect and control at least the water volume resulting from a twenty-four (24) hour, twenty-five (25) year storm.

(9) [~~(5)~~] Collection and holding facilities ([~~e.g.,~~] tanks or basins for example) associated with run-on and run-off control systems shall [~~must~~] be emptied or otherwise managed expeditiously after storms to maintain design capacity of the system.

(10) [~~(6)~~] If the pile contains any particulate matter which may be subject to wind dispersal, the owner or operator shall [~~must~~] cover or otherwise manage the pile to control wind dispersal.

(11) [~~(7)~~] A new waste pile shall not be constructed in a floodway in accordance with Section 9(2) of 401 KAR 34:020.

(12) [~~(8)~~] Any waste pile (including its underlying liners) for the treatment or storage of hazardous waste shall [~~must~~] be protected from inundation by waters of the 100-year flood in accordance with Section 9(2) of 401 KAR 34:020.

(13) [~~(9)~~] The cabinet shall [~~will~~] specify in the permit all design and operating practices that are necessary to ensure that the requirements of this section are satisfied.

Section 3. Action Leakage Rate. [~~Double-lined Piles: Groundwater Protection Requirements of 401 KAR 34:060.~~] (1) The cabinet shall approve an action leakage rate for waste piles subject to Section 2(3) or (4) of this administrative regulation. The action leakage rate is the maximum design flow rate that the leak detection system (LDS) can remove without the fluid head on the bottom liner exceeding one (1) foot. The action leakage rate shall include an adequate safety margin to allow for uncertainties in the design (for example, slope, hydraulic conductivity, thickness of drainage material), construction, operation, and location of the LDS, waste and leachate characteristics, likelihood and amounts of other sources of liquids in the LDS, and proposed response actions (for example, the action leakage rate shall consider decreases in the flow capacity of the system over time resulting from factors including siltation and clogging, rib layover and creep of synthetic components of the system, overburden pressures).

(2) To determine if the action leakage rate has been exceeded, the owner or operator shall convert the weekly flow rate from the monitoring data obtained under Section 5(3) of 401 KAR 34:210 to an average daily flow rate (gallons per acre per day) for each sump. Unless the cabinet approves a different calculation, the average daily flow rate for each sump shall be calculated weekly during the active life and closure period. The owner or operator of a double-lined waste pile is subject to administrative regulation under 401 KAR 34:060.

Section 4. Response Actions. [~~Inspection of Liners.~~] (1) The owner or operator of waste pile units subject to Section 2(3) or (4) of this administrative regulation shall have an approved response action

plan before receipt of waste. The response action plan shall set forth the actions to be taken if the action leakage rate has been exceeded. At a minimum, the response action plan shall describe the actions specified in subsection (2) of this section.

(2) If the flow rate into the leak detection system exceeds the action leakage rate for any sump, the owner or operator shall:

(a) Notify the cabinet in writing of the exceedance within seven (7) days of the determination;

(b) Submit a preliminary written assessment to the cabinet within fourteen (14) days of the determination, as to the amount of liquids, likely sources of liquids, possible location, size, and cause of any leaks, and short-term actions taken and planned;

(c) Determine to the extent practicable the location, size, and cause of any leak;

(d) Determine whether waste receipt shall cease or be curtailed, whether any waste shall be removed from the unit for inspection, repairs, or controls, and whether or not the unit shall be closed;

(e) Determine any other short-term and long-term actions to be taken to mitigate or stop any leaks; and

(f) Within thirty (30) days after the notification that the action leakage rate has been exceeded, submit to the cabinet the results of the analyses specified in paragraphs (c), (d), and (e) of this subsection, the results of actions taken, and actions planned. Monthly thereafter, as long as the flow rate in the leak detection system exceeds the action leakage rate, the owner or operator shall submit to the cabinet a report summarizing the results of any remedial actions taken and actions planned.

(3) To make the leak and remediation determinations in subsection (2)(c), (d), and (e) of this section, the owner or operator shall:

(a)1. Assess the source of liquids and amounts of liquids by source;

2. Conduct a fingerprint, hazardous constituent, or other analyses of the liquids in the leak detection system to identify the source of liquids and possible location of any leaks, and the hazard and mobility of the liquid; and

3. Assess the seriousness of any leaks in terms of potential for escaping into the environment; or

(b) Document why such assessments are not needed. [~~If, during inspection of the liner, deterioration, a crack, or other condition is identified that is causing or could cause a leak, the owner or operator must:~~

~~(a) Notify the cabinet of the condition in writing within seven (7) days after detecting the condition; and~~

~~(b) Repair or replace the liner (base) and obtain a certification from a qualified engineer registered in Kentucky that, to the best of his knowledge and opinion, the liner (base) has been repaired and leakage will not occur.~~

~~(2) The cabinet will specify in the permit all design and operating practices that are necessary to ensure that the requirements of this section are satisfied.~~]

Section 5. Monitoring and Inspection. (1) During construction or installation, liners (except in the case of existing portions of piles exempt from Section 2(1) of this administrative regulation) and cover systems ([~~e.g.,~~] membranes, sheets, or coatings for example) shall [~~must~~] be inspected for uniformity, damage and imperfections (examples are, [~~e.g.,~~] holes, cracks, thin spots, or foreign materials). Immediately after construction or installation:

(a) Synthetic liners and covers shall [~~must~~] be inspected to ensure tight seams and joints and the absence of tears, punctures, or blisters;

and

(b) Soil-based and admixed liners and covers shall [~~must~~] be inspected for imperfections including lenses, cracks, channels, root holes, or other structural nonuniformities that may cause an increase in the permeability of the liner or cover.

(2) While a waste pile is in operation, it shall [~~must~~] be inspected at least weekly and after storms to detect evidence of any of the following:

(a) Deterioration, malfunctions, or improper operation of run-on and run-off control systems;

(b) Proper functioning of wind dispersal control systems, where present; and

(c) The presence of leachate in and proper functioning of leachate collection and removal systems, where present.

(3) An owner or operator required to have a leak detection system under Section 2(3) of this administrative regulation shall record the amount of liquids removed from each leak detection system sump at least once each week during the active life and closure period.

Section 6. Special Requirements for Ignitable or Reactive Waste. (1) Ignitable or reactive waste shall [~~must~~] not be placed in a waste pile unless the waste and waste pile satisfy all applicable requirements of 401 KAR Chapter 37; and

(2) The waste is treated, rendered or mixed before placement in the pile so that: [~~is treated, rendered or mixed before placement in the pile so that:~~]

(a) [~~(1)~~] The resulting waste, mixture, or dissolution of material [~~or mixture~~] no longer meets the definition of ignitable or reactive waste under Section 2 or 4 of 401 KAR 31:030; and

(b) [~~(2)~~] Section 8(2) of 401 KAR 34:020 is complied with.

Section 7. Special Requirements for Incompatible Wastes. (1) Incompatible wastes, or incompatible wastes and materials (see 401 KAR 34:330 for examples), shall [~~must~~] not be placed in the same pile.

(2) A pile of hazardous waste that is incompatible with any waste or other material stored nearby in other containers, other piles, open tanks, or surface impoundments shall [~~must~~] be separated from the other materials, or protected from them by means of a dike, berm, wall, or other device.

(3) Hazardous waste shall [~~must~~] not be piled on the same base where incompatible wastes or materials were previously piled, unless the base has been decontaminated sufficiently to ensure compliance with Section 8(2) of 401 KAR 34:020.

Section 8. Closure and Postclosure Care. (1) At closure, the owner or operator shall [~~must~~] remove or decontaminate all waste residues, contaminated containment system components [~~(liner, etc.)~~], contaminated subsoils, and structures and equipment contaminated with waste and leachate, and manage them as hazardous waste unless Section 3(4) of 401 KAR 31:010 applies.

(2) If, after removing or decontaminating all residues and making all reasonable efforts to effect removal or decontamination of contaminated components, subsoils, structures, and equipment as required in subsection (1) of this section, the owner or operator finds that not all contaminated subsoils can be practicably removed or decontaminated, he shall [~~must~~] close the facility and perform postclosure care in accordance with the closure and postclosure care requirements that apply to landfills (Section 6 of 401 KAR 34:230).

(3)(a) The owner or operator of a waste pile that does not comply with the liner requirements of Section 2(1)(a) of this administrative regulation and is not exempt from them in accordance with Section 1(3) or 2(2) of this administrative regulation shall [~~must~~]:

1. Include in the closure plan for the pile under Section 3 of 401 KAR 34:070 both a plan for complying with subsection (1) of this section and a contingent plan for complying with subsection (2) of this section which is subject to the requirements of 401 KAR 38:500 in case not all contaminated subsoils can be practicably removed at closure; and

2. Prepare a contingent postclosure plan under Section 9 of 401 KAR 34:070 for complying with subsection (2) of this section in case not all contaminated subsoils can be practicably removed at closure, which is subject to the requirements of 401 KAR 38:500.

(b) The cost estimates calculated under Section 1 of 401 KAR 34:090 and Section 1 of 401 KAR 34:100 for closure and postclosure care of a pile subject to this section shall [~~must~~] include both a cost estimate for complying with the contingent closure plan and the cost estimate for complying with the contingent postclosure plan and the cost of expected closure under subsection (1) of this section.

Section 9. Special Requirements for Hazardous Wastes F020, F021, F022, F023, F026, and F027. (1) Hazardous waste numbers F020, F021, F022, F023, F026, and F027 (chlorinated dioxins, chlorinated dibenzofurans, and chlorinated phenols) shall [~~must~~] not be placed in waste piles that are not enclosed (as defined in Section 1(3) of this administrative regulation) unless the owner or operator operates the waste pile in accordance with a management plan for these wastes that is approved by the cabinet pursuant to the standards set out in this section, and in accordance with all other applicable requirements of this chapter. The factors to be considered are:

(a) The volume, physical, and chemical characteristics of the wastes, including their potential to migrate through soil or to volatilize or escape into the atmosphere;

(b) The attenuative properties of underlying and surrounding soils or other materials;

(c) The mobilizing properties of other materials codisposed with these wastes; and

(d) The effectiveness of additional treatment, design, or monitoring techniques.

(2) The cabinet may determine that additional design, operating, and monitoring requirements are necessary for piles managing hazardous waste numbers F020, F021, F022, F023, F026, and F027 in order to reduce the possibility of migration of these wastes to ground water, surface water, or air so as to protect human health and the environment.

PHILLIP J. SHEPHERD, Secretary
E. DOUGLAS STEPHAN, Commissioner
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NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION CABINET
Department for Environmental Protection
Division of Waste Management
(Amended After Hearing)

401 KAR 34:220. Land treatment.

RELATES TO: KRS 224.10, 224.40, 224.43, 224.46, 224.70, 224.99

STATUTORY AUTHORITY: KRS 224.10-100, 224.46-520

NECESSITY AND FUNCTION: To implement provisions of KRS 224.46-520 and to establish [~~requires that persons engaging in the storage, treatment, and disposal of hazardous waste obtain a permit. KRS 224.46-520 requires the cabinet to establish standards for these permits, to require adequate financial responsibility, to establish minimum standards for closure for all facilities and the postclosure monitoring and maintenance of hazardous waste disposal facilities. This chapter establishes minimum standards for new hazardous waste sites or facilities. This regulation establishes the~~] minimum standards for hazardous waste land treatment facilities.

Section 1. Applicability. This administrative regulation applies to owners and operators of facilities that treat and dispose of hazardous waste in land treatment units, except as Section 1 of 401 KAR 34:010 provides otherwise.

Section 2. Treatment Program. (1) An owner or operator subject to this administrative regulation shall [~~must~~] establish a land treatment program that is designed to ensure that hazardous constituents placed in or on the treatment zone are degraded, transformed, or immobilized within the treatment zone. The cabinet shall [~~will~~] specify in the facility permit the elements of the treatment program, including:

(a) The wastes that are capable of being treated at the unit based on a demonstration under Section 3 of this administrative regulation;

(b) Design measures and operating practices necessary to maximize the success of degradation, transformation, and immobilization processes in the treatment zone in accordance with Section 4(1) of this administrative regulation; and

(c) Unsaturated zone monitoring provisions meeting the requirements of Section 6 of this administrative regulation.

(2) The cabinet shall [~~will~~] specify in the facility permit the hazardous constituents that shall [~~must~~] be degraded, transformed, or immobilized under this administrative regulation. Hazardous constituents are constituents identified in 401 KAR 31:170 that are reasonably expected to be in, or derived from, waste placed in or on the treatment zone, and all maximum groundwater contaminant levels as identified in Table I of Section 5 of 401 KAR 34:060 [~~30:060, Section 5~~].

(3) The cabinet shall [~~will~~] specify the vertical and horizontal dimensions of the treatment zone in the facility permit. The treatment zone is the portion of the unsaturated zone below and including the land surface in which the owner or operator intends to maintain the conditions necessary for effective degradation, transformation, or immobilization of hazardous constituents. The maximum depth of the treatment zone shall [~~must~~] be:

(a) No more than 1.5 meters (approximately five (5) feet) from the initial soil surface; and

(b) More than one (1) meter (approximately three (3) feet) above the seasonal high water table.

Section 3. Treatment Demonstration. (1) For each waste that **will** [~~shall~~] [~~will~~] be applied to the treatment zone, the owner or operator shall [~~must~~] demonstrate, prior to application of the waste, that hazardous constituents in the waste can be completely degraded, transformed, or immobilized in the treatment zone.

(2) In making this demonstration, the owner or operator may use field tests, laboratory analyses, available data, or, in the case of existing units, operating data. If the owner or operator intends to conduct field tests or laboratory analyses in order to make the demonstration required under subsection (1) of this section, he shall [~~must~~] obtain a treatment or disposal permit under Section 4 of 401 KAR 38:060. The cabinet shall [~~will~~] specify in this permit the testing, analytical, design, and operating requirements (including the duration of the tests and analyses, and, in the case of field tests, the horizontal and vertical dimensions of the treatment zone, monitoring procedures, closure and cleanup activities) necessary to meet the requirements in subsection (3) of this section.

(3) Any field test or laboratory analysis conducted in order to make a demonstration under subsection (1) of this section shall [~~must~~]:

(a) Accurately simulate the characteristics and operating conditions for the proposed land treatment unit including:

1. The characteristics of the waste (including the presence of constituents from 401 KAR 31:170);

2. The climate in the area;

3. The topography of the surrounding area;

4. The characteristics of the soil in the treatment zone (including depth); and

5. The operating practices to be used at the unit.

(b) Be likely to show that hazardous constituents in the waste to be tested **will** [~~shall~~] [~~will~~] be completely degraded, transformed, or immobilized in the treatment zone of the proposed land treatment unit; and

(c) Be conducted in a manner that protects human health and the environment considering:

1. The characteristics of the waste to be tested;

2. The operating and monitoring measures taken during the course of the test;

3. The duration of the test;

4. The volume of waste used in the test; and

5. In the case of field tests, the potential for migration of hazardous constituents to groundwater or surface water.

Section 4. Design and Operating Requirements. The cabinet shall [~~will~~] specify in the facility permit how the owner or operator shall [~~will~~] design, construct, operate, and maintain the land treatment unit in compliance with this section.

(1) The owner or operator shall [~~must~~] design, construct, operate, and maintain the unit to maximize the degradation, transformation, and immobilization of hazardous constituents in the treatment zone. The owner or operator shall [~~must~~] design, construct, operate, and maintain the unit in accord with all design and operating conditions that were used in the treatment demonstration under Section 3 of this administrative regulation. At a minimum, the cabinet shall [~~will~~] specify the following in the facility permit:

(a) The rate and method of waste application to the treatment zone;

(b) Measures to control soil pH;

(c) Measures to enhance microbial or chemical reactions ([~~e.g.,~~] fertilization, tilling, for example); and

(d) Measures to control the moisture content of the treatment zone.

(2) The owner or operator shall [~~must~~] design, construct, operate, and maintain the treatment zone to minimize run-off of hazardous constituents during the active life of the land treatment unit.

(3) The owner or operator shall [~~must~~] design, construct, operate, and maintain a run-on control system capable of preventing flow onto the treatment zone during peak discharge from at least a twenty-five (25) year storm.

(4) The owner or operator shall [~~must~~] design, construct, operate, and maintain a run-off management system to collect and control at least the water volume resulting from a twenty-four (24) hour, twenty-five (25) year storm.

(5) Collection and holding facilities ([~~e.g.,~~] tanks or basins, for example) associated with run-on and run-off control systems shall [~~must~~] be emptied or otherwise managed expeditiously after storms to maintain the design capacity of the system.

(6) If the treatment zone contains particulate matter which may be subject to wind dispersal, the owner or operator shall [~~must~~] manage the unit to control wind dispersal.

(7) The owner or operator shall [~~must~~] inspect the unit weekly and after storms to detect evidence of:

(a) Deterioration, malfunctions, or improper operation of run-on and run-off controls systems; and

(b) Improper functioning of wind dispersal control measures.

(8) New land treatment facilities shall [~~must~~] be located entirely above the seasonal high-water table and out of the 100-year flood plain, in accordance with Section 9(2) of 401 KAR 34:020.

Section 5. Food Chain Crops. The cabinet may allow the growth of food chain crops in or on the treatment zone only if the owner or operator satisfies the conditions of this section. The cabinet shall [~~will~~] specify in the facility permit the specific food chain crops which may be grown.

(1)(a) The owner or operator shall [~~must~~] demonstrate that there is no risk to human health caused by the growth of such crops in or on the treatment zone by demonstrating, prior to the planting of such crops, that hazardous constituents other than cadmium:

1. **Will** [~~Shall~~] [~~Will~~] not be transferred to the food or feed portions of the crop by plant uptake or direct contact, and **will** [~~shall~~] [~~will~~] not otherwise be ingested by food chain animals ([~~e.g.,~~] by grazing for example); or

2. **Will** [~~Shall~~] [~~Will~~] not occur in greater concentrations in or on the food or feed portions of crops grown on the treatment zone than in or on identical portions of the same crops grown on untreated soils under similar conditions in the same region.

(b) The owner or operator shall [~~must~~] make the demonstration required under this subsection prior to the planting of crops at the facility of all constituents identified in 401 KAR 31:170 that are reasonably expected to be in, or derived from, waste placed in or on the treatment zone. The owner or operator shall [~~must~~] determine all maximum groundwater contaminant levels as identified in Table I of Section 5 of 401 KAR 34:060[~~, Section 5~~], and soil pH and submit test results as part of the demonstration required by this subsection.

(c) In making a demonstration under this subsection, the owner or operator may use field tests, greenhouse studies, available data, or, in the case of existing units, operating data, and shall [~~must~~]:

1. Base the demonstration on conditions similar to those present in the treatment zone, including soil characteristics (for example, [~~e.g.,~~] pH, cation exchange capacity), specific wastes, application rates, application methods, and crops to be grown; and

2. Describe the procedures used in conducting any tests, including the sample selection criteria, sample size, analytical methods, and statistical procedures.

(d) If the owner or operator intends to conduct field tests or greenhouse studies in order to make the demonstration required under this subsection, he shall [~~must~~] obtain a permit for conducting such activities.

(2) The owner or operator shall [~~must~~] comply with the following conditions if cadmium is contained in wastes applied to the treatment zone:

(a)1. The pH of the waste and soil mixture shall [~~must~~] be six and five-tenths (6.5) or greater at the time of each waste application, except for waste containing cadmium at concentrations of two (2) mg/kg (dry weight) or less;

2. The annual application of cadmium from waste shall [~~must~~] not exceed five-tenths (0.5) kilograms per hectare (kg/ha) on land used for production of tobacco, leafy vegetables, or root crops grown for human consumption. For other food chain crops, the annual cadmium application rate shall [~~must~~] not exceed the rates in Table I.

Table I

Time Period	Annual Cd application rate (kilograms per hectare)
Present to June 30, 1984	2.0
July 1, 1984-December 31, 1986	1.25
Beginning Jan. 1, 1987	0.5

3. The cumulative application of cadmium from waste shall [~~must~~] not exceed five (5) kg/ha if the waste and soil mixture has a pH of less than six and five-tenths (6.5); and

4. If the waste and soil mixture has a pH of six and five-tenths (6.5) or greater or is maintained at a pH of six and five-tenths (6.5) or greater during crop growth, the cumulative application of cadmium from waste shall [~~must~~] not exceed: five (5) kg/ha if soil cation exchange capacity (CEC) is less than five (5) meq/100g; ten (10) kg/ha if soil CEC is 5-15 meq/100g; and twenty (20) kg/ha if soil CEC is greater than fifteen (15) meq/100g; or

(b) 1. Animal feed shall [~~must~~] be the only food chain crop produced;

2. The pH of the waste and soil mixture shall [~~must~~] be six and five-tenths (6.5) or greater at the time of waste application or at the time the crop is planted, whichever occurs later, and this pH level shall [~~must~~] be maintained whenever food chain crops are grown;

3. There shall [~~must~~] be an operating plan which demonstrates how the animal feed **will** [~~shall~~] [~~will~~] be distributed to preclude

ingestion by humans. The operating plan shall [~~must~~] describe the measures to be taken to safeguard against possible health hazards from cadmium entering the food chain, which may result from alternative land uses; and

4. Future property owners shall [~~must~~] be notified by a stipulation in the land record or property deed which states that the property has received waste at high cadmium application rates and that food chain crops shall [~~must~~] not be grown except in compliance with subsection (2)(b) of this section.

Section 6. Unsaturated Zone Monitoring. An owner or operator subject to this administrative regulation shall [~~must~~] establish an unsaturated zone monitoring program to discharge the following responsibilities:

(1) The owner or operator shall [~~must~~] monitor the soil and soil-pore liquid to determine whether hazardous constituents migrate out of the treatment zone.

(a) The cabinet will specify the hazardous constituents to be monitored in the facility permit. The hazardous constituents to be monitored are those specified under Section 2(2) of this administrative regulation.

(b) The cabinet may require monitoring for principal hazardous constituents (PHCs) in lieu of the constituents specified under Section 2(2) of this administrative regulation. PHCs are hazardous constituents contained in the wastes to be applied at the unit that are the most difficult to treat, considering the combined effects of degradation, transformation, and immobilization. The cabinet shall [~~will~~] establish PHCs, based on waste analyses, treatment demonstrations, or other data, that demonstrate effective degradation, transformation, or immobilization of the PHCs will [~~shall~~] [~~will~~] assure treatment at least equivalent levels for the other hazardous constituents in the wastes.

(2) The owner or operator shall [~~must~~] install an unsaturated zone monitoring system that includes soil monitoring using soil cores and soil-pore liquid monitoring using devices such as lysimeters. The unsaturated zone monitoring system shall [~~must~~] consist of a sufficient number of sampling points at appropriate locations and depths to yield samples that:

(a) Represent the quality of background soil-pore liquid quality and the chemical make-up of soil that has not been affected by leakage from the treatment zone; and

(b) Indicate the quality of soil-pore liquid and the chemical make-up of the soil below the treatment zone.

(3) The owner or operator shall [~~must~~] establish a background value for each hazardous constituent to be monitored under subsection (1) of this section. The permit shall [~~will~~] specify the background values for each constituent or specify the procedures to be used to calculate the background values.

(a) Background soil values may be based on a one (1) time sampling at a background plot having characteristics similar to those of the treatment zone.

(b) Background soil-pore liquid values shall [~~must~~] be based on at least quarterly sampling for one (1) year at a background plot having characteristics similar to those of the treatment zone.

(c) The owner or operator shall [~~must~~] express all background values in a form necessary for the determination of statistically significant increases under subsection (6) of this section.

(d) In taking samples used in the determination of all background values, the owner or operator shall [~~must~~] use an unsaturated zone monitoring system that complies with subsection (2)(a) of this section.

(4) The owner or operator shall [~~must~~] conduct soil monitoring and soil-pore liquid monitoring immediately below the treatment zone. The cabinet shall [~~will~~] specify the frequency and timing of soil and soil-pore liquid monitoring in the facility permit after considering the frequency, timing, and rate of waste application, and the soil permeability. The owner or operator shall [~~must~~] express the results of soil and soil-pore liquid monitoring in a form necessary for the determination of statistically significant increases under subsection (6) of this section.

(5) The owner or operator shall [~~must~~] use consistent sampling and analysis procedures that are designed to ensure sampling results that provide a reliable indication of soil-pore liquid quality and the chemical make-up of the soil below the treatment zone. At a minimum, the owner or operator shall [~~must~~] implement procedures and techniques for:

(a) Sample collection;

(b) Sample preservation and shipment;

(c) Analytical procedures; and

(d) Chain of custody control.

(6) The owner or operator shall [~~must~~] determine whether there is a statistically significant change over background values for any hazardous constituent to be monitored under subsection (1) of this section below the treatment zone each time he conducts soil monitoring and soil-pore liquid monitoring under subsection (4) of this section.

(a) In determining whether a statistically significant increase has occurred, the owner or operator shall [~~must~~] compare the value of each constituent, as determined under subsection (4) of this section, to the background value for that constituent according to the statistical procedures specified in the facility permit under this subsection.

(b) The owner or operator shall [~~must~~] determine whether there has been a statistically significant increase below the treatment zone within a reasonable time period after completion of sampling. The cabinet shall [~~will~~] specify that time period in the facility permit after considering the complexity of the statistical test and the availability of laboratory facilities to perform the analysis of soil and soil-pore liquid samples.

(c) The owner or operator shall [~~must~~] determine whether there is a statistically significant increase below the treatment zone using a statistical procedure that provides reasonable confidence that migration from the treatment zone will be identified. The cabinet shall [~~will~~] specify a statistical procedure in the facility permit that:

1. Is appropriate for the distribution of the data used to establish background values; and

2. Provides a reasonable balance between the probability of falsely identifying migration from the treatment zone and the probability of failing to identify real migration from the treatment zone.

(7) If the owner or operator determines, pursuant to subsection (6) of this section, that there is a statistically significant increase of hazardous constituents below the treatment zone, he shall [~~must~~]:

(a) Notify the cabinet of this finding in writing within seven (7) days. The notification shall [~~must~~] indicate what constituents have shown statistically significant increases.

(b) Within ninety (90) days, submit to the cabinet an application for a permit modification to modify the operating practices at the facility in order to maximize the success of degradation, transformation, or immobilization processes in the treatment zone.

(8) If the owner or operator determines, pursuant to subsection (6) of this section, that there is a statistically significant increase of hazardous constituents below the treatment zone, he may demonstrate that a source other than regulated units caused the increase or that the increase resulted from an error in sampling, analysis, or evaluation. While the owner or operator may make a demonstration under this subsection in addition to submitting a permit modification application under subsection (7)(b) of this section, he is only relieved of the requirement to submit a permit modification application within the time specified in subsection (7)(b) of this section if the cabinet approves the demonstration made under this subsection showing that a source other than the regulated unit caused the increase or that the increase resulted from error in sampling, analysis, or evaluation. In making a demonstration under this subsection, the owner or operator shall [~~must~~]:

(a) Notify the cabinet in writing within seven (7) days of determining a statistically significant increase below the treatment zone that he

intends to make a determination under this subsection;

(b) Within ninety (90) days, submit a report to the cabinet demonstrating that a source other than the regulated units caused the increase or that the increase resulted from error in sampling, analysis, or evaluation;

(c) Within ninety (90) days, submit to the cabinet an application for a permit modification to make any appropriate changes to the unsaturated zone monitoring program at the facility; and

(d) Continue to monitor in accordance with the unsaturated zone monitoring program established under this section.

Section 7. Recordkeeping. The owner or operator shall [~~must~~] include hazardous waste application dates and rates in the operating record required under Section 4 of 401 KAR 34:050.

Section 8. Closure and Postclosure Care. (1) During the closure period the owner or operator shall [~~must~~]:

(a) Continue all operations (including pH control) necessary to maximize degradation, transformation, or immobilization of hazardous constituents within the treatment zone as required under Section 4(1) of this administrative regulation, except to the extent such measure are inconsistent with subsection (1)(h) of this section;

(b) Continue all operations in the treatment zone to minimize run-off of hazardous constituents as required under Section 4(2) of this administrative regulation;

(c) Maintain the run-on control system required under Section 4(3) of this administrative regulation;

(d) Maintain the run-off management system required under Section 4(4) of this administrative regulation;

(e) Control wind dispersal of hazardous waste if required under Section 4(6) of this administrative regulation;

(f) Continue to comply with any prohibitions or conditions concerning growth of food chain crops under Section 5 of this administrative regulation;

(g) Continue unsaturated zone monitoring in compliance with Section 6 of this administrative regulation; and

(h) Establish a vegetative cover on the portion of the facility being closed at such time that the cover will not substantially impede degradation, transformation, or immobilization of hazardous constituents in the treatment zone. The vegetative cover shall [~~must~~] be capable of maintaining growth without extensive maintenance.

(2) For the purpose of complying with Section 6 of 401 KAR 34:070, when closure is completed the owner or operator may submit to the cabinet certification by an independent qualified soil scientist, in lieu of an [~~independent registered professional~~] engineer, that the facility has been closed in accordance with the specifications in the approved closure plan.

(3) During the postclosure care period the owner or operator shall [~~must~~]:

(a) Continue all operations (including pH control) necessary to enhance degradation and transformation and sustain immobilization of hazardous constituents in the treatment zone to the extent that such measures are consistent with other postclosure care activities.

(b) Maintain a vegetative cover over closed portions of the facility;

(c) Maintain the run-on control system required under Section 4(3) of this administrative regulation;

(d) Maintain the run-off management system required under Section 4(4) of this administrative regulation;

(e) Control wind dispersal of hazardous waste if required under Section 4(6) of this administrative regulation;

(f) Continue to comply with any prohibitions or conditions concerning growth of food chain crops under Section 5 of this administrative regulation;
and

(g) Continue unsaturated zone monitoring in compliance with Section 6 of this administrative regulation.

(4) The owner or operator shall [~~is~~] not be subject to administrative regulation under subsections (1)(h) and (3) of this section if the cabinet finds that the level of hazardous constituents in the treatment zone soil does not exceed the background value of those constituents by an amount that is statistically significant when using the test specified in subsection (4)(c) of this section. The owner or operator may submit such a demonstration to the cabinet for approval at any time during the closure of postclosure care periods. For the purposes of this subsection:

(a) The owner or operator shall [~~must~~] establish background soil values and determine whether there is a statistically significant increase over those values for all hazardous constituents specified in the facility permit under Section 2(2) of this administrative regulation.

1. Background soil values may be based on a one (1) time sampling of a background plot having characteristics similar to those of the treatment zone.

2. The owner or operator shall [~~must~~] express background values and values for hazardous constituents in the treatment zone in a form necessary for the determination of statistically significant increases under subsection (4)(c) of this section.

(b) In taking samples used in the determination of background and treatment zone values, the owner or operator shall [~~must~~] take samples at a sufficient number of sampling points and at appropriate locations and depths to yield samples that represent the chemical make-up of soil that has not been affected by leakage from the treatment zone and the soil within the treatment zone, respectively.

(c) In determining whether a statistically significant increase has occurred, the owner or operator shall [~~must~~] compare the value of each constituent in the treatment zone to the background value for that constituent using a statistical procedure that provides reasonable confidence that constituent presence in the treatment zone will be identified. The owner or operator shall [~~must~~] use a statistical procedure that:

1. Is appropriate for the distribution of the data used to establish background values; and

2. Provides a reasonable balance between the probability of falsely identifying hazardous constituent presence in the treatment zone and the probability of failing to identify real presence in the treatment zone.

(5) The owner or operator shall [~~is~~] not be subject to the requirements of 401 KAR 34:060 if the cabinet finds that the owner or operator satisfies subsection (4) of this section and if unsaturated zone monitoring under Section 6 of this administrative regulation indicates that hazardous constituents have not migrated beyond the treatment zone during the active life of the land treatment unit.

Section 9. Special Requirements for Ignitable or Reactive Waste. The owner or operator shall [~~must~~] not apply ignitable or reactive waste to the treatment zone unless:

(1) The waste and the treatment zone meet all applicable requirements of 401 KAR Chapter 37; and

(2) The waste is immediately incorporated into the soil so that:

(a) [~~(1)~~] The resulting waste, mixture, or dissolution of material no longer meets the definition of ignitable or reactive waste under Sections 4 and 5 [~~2 or 4~~] of 401 KAR 31:030; and

(b) [~~(2)~~] Section 8(2) of 401 KAR 34:020 is complied with.

Section 10. Special Requirements for Incompatible Wastes. The owner or operator shall [~~must~~] not place incompatible wastes, or incompatible wastes and materials (see 401 KAR 34:030 for examples), in or on the same treatment zone.

Section 11. Special Requirements for Hazardous Wastes F020, F021, F022, F023, F026, and F027. (1) Hazardous wastes numbers F020, F021, F022, F023, F026, and F027 (chlorinated dibenzo-p-dioxins, dibenzofurans, and phenols) shall [~~must~~] not be placed in a land treatment unit unless the owner or operator operates the facility in accordance with a management plan for these wastes that is

approved by the cabinet pursuant to the standards set out in this subsection, and in accordance with all other applicable requirements of this chapter. The factors to be considered are:

(a) The volume, physical, and chemical characteristics of the wastes, including their potential to migrate through soil or to volatilize or escape into the atmosphere;

(b) The attenuative properties of underlying and surrounding soils or other materials;

(c) The mobilizing properties of other materials codisposed with these wastes; and

(d) The effectiveness of additional treatment, design or monitoring techniques.

(2) The cabinet may determine that additional design, operating, and monitoring requirements are necessary for land treatment facilities managing hazardous wastes F020, F021, F022, F023, F026, and F027 in order to reduce the possibility of migration of these wastes to ground water, surface water, or air so as to protect human health and the environment.

PHILLIP J. SHEPHERD, Secretary
E. DOUGLAS STEPHAN, Commissioner
APPROVED BY AGENCY: December 13, 1993
FILED WITH LRC: December 14, 1993 at 10 a.m.

NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION CABINET
Department for Environmental Protection
Division of Waste Management
(Amended After Hearing)

401 KAR 34:230. Landfills.

RELATES TO: KRS 224.10, 224.40, 224.43, 224.46, 224.70, 224.99, 49 CFR 173, 178, 179 (1990)

STATUTORY AUTHORITY: KRS 224.10-100, 224.46-520

NECESSITY AND FUNCTION: To implement provisions of KRS 224.46-520 and to establish [~~requires that persons engaging in the storage, treatment, and disposal of hazardous waste obtain a permit. KRS 224.46-520 requires the Cabinet to establish standards for these permits, to require adequate financial responsibility, to establish minimum standards for closure for all facilities and the postclosure monitoring and maintenance of hazardous waste disposal facilities. This chapter establishes minimum standards for hazardous waste sites or facilities. This regulation establishes~~] the minimum standards for hazardous waste landfills.

Section 1. Applicability. This administrative regulation applies to owners and operators of facilities that dispose of hazardous waste in landfills, except as Section 1 of 401 KAR 34:010 provides otherwise.

Section 2. Design and Operating Requirements. (1) Any landfill that is not covered by subsection (3) of this section or Section 10(1) of 401 KAR 35:230 shall have a liner system for all portions of the landfill (except for portions in existence prior to November 8, 1984). The liner system shall have:

(a) A liner that is designed, constructed, and installed to prevent any migration of wastes out of the landfill to the adjacent subsurface soil or groundwater or surface water at anytime during the active life (including the closure period) of the landfill. The liner shall be constructed of materials that prevent wastes from passing into the liner during the active life of the facility. The liner shall be:

1. Constructed of materials that have appropriate chemical properties and sufficient strength and thickness to prevent failure due to pressure gradients (including static head and external hydrogeologic forces), physical contact with the waste or leachate to which they are exposed, climatic conditions, the stress of installation, and the stress of daily operation;

2. Placed upon a foundation or base capable of providing support to the liner and resistant to pressure gradients above and below the liner to prevent failure of the liner due to settlement, compression, or uplift. At a minimum, synthetic liners shall be placed upon a one (1) foot thick soil liner of 1 x 10^{-7}cm/sec permeability; and

3. Installed to cover all surrounding earth likely to be in contact with the waste or leachate; and

(b) A leachate collection and removal system immediately above the liner that is designed, constructed, maintained, and operated to collect and remove leachate from the landfill. The cabinet shall specify design and operating conditions in the permit to ensure that the leachate depth over the liner does not exceed thirty (30) cm (approximately one (1) foot). The leachate collection and removal system shall be:

1. Constructed of materials that are:

a. Chemically resistant to the waste managed in the landfill and the leachate expected to be generated; and

b. Of sufficient strength and thickness to prevent collapse under the pressures exerted by overlying wastes, waste cover materials, and by any equipment used at the landfill; and

2. Designed and operated to function without clogging through the scheduled closure of the landfill.

(2) The owner or operator shall be exempted from the requirements of subsection (1) of this section if the cabinet finds, based on a demonstration by the owner or operator, that alternative design and operating practices, together with location characteristics, **will** [~~shall~~] prevent the migration of any hazardous constituents (see Section 4 of 401 KAR 34:060) into the groundwater or surface water at any future time. In deciding whether to grant an exemption, the cabinet shall consider:

(a) The nature and quantity of the wastes;

(b) The proposed alternate design and operation;

(c) The hydrogeologic setting of the facility, including the attenuative capacity and thickness of the liners and soils present between the landfill and groundwater or surface water; and

(d) All other factors which would influence the quality and mobility of the leachate produced and the potential for it to migrate to groundwater or surface water.

(3) The owner or operator of each new landfill on which construction commences after January 29, 1992, each lateral expansion of a landfill on which construction commences after July 29, 1992, and each replacement of an existing landfill unit that is to commence reuse after July 29, 1992 shall install two (2) or more liners and a leachate collection and removal system above and between such liners. "Construction commences" is as defined in 401 KAR 30:010 under "existing facility".

(a)1. The liner system shall include:

a. A top liner designed and constructed of materials (such as a geomembrane) to prevent the migration of hazardous constituents into the liner during the active life and postclosure care period; and

b. A composite bottom liner, consisting of at least two (2) components. The upper component shall be designed and constructed of materials (such as a geomembrane) to prevent the migration of hazardous constituents into this component during the active life and postclosure care period. The lower component shall be designed and constructed of materials to minimize the migration of hazardous constituents if a breach in the upper component occurs. The lower component shall be constructed of at least three (3) feet (91 cm) of compacted soil material with a hydraulic conductivity of no more than $1X10^{-7}$ cm/sec.

2. The liners shall comply with subsections (1)(a)1, 2, and 3. of this section.

(b) The leachate collection and removal system immediately above the top liner shall be designed, constructed, operated, and maintained to collect and remove leachate from the landfill during the active life and postclosure care period. The cabinet shall specify

design and operating conditions in the permit to ensure that the leachate depth over the liner does not exceed thirty (30) cm (one (1) foot). The leachate collection and removal system shall comply with paragraph (c)3 and 4 of this subsection.

(c) The leachate collection and removal system between the liners, and immediately above the bottom composite liner in the case of multiple leachate collection and removal systems, is also a leak detection system. This leak detection system shall be capable of detecting, collecting, and removing leaks of hazardous constituents at the earliest practicable time through all areas of the top liner likely to be exposed to waste or leachate during the active life and postclosure care period. The requirements for a leak detection system in this administrative regulation are satisfied by installation of a system that is, at a minimum:

1. Constructed with a bottom slope of one (1) percent or more;

2. Constructed of granular drainage materials with a hydraulic conductivity of $1X10^{-2}$ cm/sec or more and a thickness of twelve (12) inches (30.5 cm) or more; or constructed of synthetic or geonet drainage materials with a transmissivity of $3X10^{-5}$ m^2/sec or more;

3. Constructed of materials that are chemically resistant to the waste managed in the landfill and the leachate expected to be generated, and of sufficient strength and thickness to prevent collapse under the pressures exerted by overlying wastes, waste cover materials, and equipment used at the landfill.

4. Designed and operated to minimized clogging during the active life and postclosure care period; and

5. Constructed with sumps and liquid removal methods (for example, pumps) of sufficient size to collect and remove liquids from the sump and prevent liquids from backing up into the drainage layer. Each unit shall have its own sump(s). The design of each sump and removal system shall provide a method for measuring and recording the volume of liquids present in the sump and of liquids removed.

(d) The owner or operator shall collect and remove pumpable liquids in the leak detection system sumps to minimize the head on the bottom liner.

(e) A leak detection system shall be located completely above the seasonal high water table.

(4) The cabinet may approve alternative design or operating practices to those specified in subsection (3) of this section if the owner or operator demonstrates to the cabinet that such design and operating practices, together with location characteristics:

(a) **Will** ~~[Shall]~~ prevent the migration of any hazardous constituent into the ground water or surface water at least as effectively as the liners and leachate collection and removal systems specified in subsection (3) of this section; and

(b) **Will** ~~[Shall]~~ allow detection of leaks of hazardous constituents through the top line at least as effectively.

~~[(3) The owner or operator of each new landfill, each new landfill unit at an existing facility, each replacement of an existing landfill unit, and each lateral expansion of an existing landfill unit, shall install two (2) or more liners and a leachate collection system above and between liners. The liners and leachate collection system shall protect human health and the environment. The requirements of this subsection shall apply with respect to all waste received after issuance of the permit for units for which the Part B of the permit application was received by the cabinet after November 8, 1984. The requirement for the installation of two (2) or more liners in this subsection may be satisfied by the installation of a top liner designed, operated and constructed of materials to prevent the migration of any constituent into the liner during the period the facility remains in operation (including any postclosure monitoring period), and a lower liner designed, operated, and constructed to prevent the migration of any constituent through the liner during the period. For the purpose of the preceding sentence, a lower liner shall be deemed to satisfy the requirement if it is constructed of at least a three (3) foot thick layer of recompacted clay or other natural material with a permeability of no more than 1 x 10^{-7} centimeter per second.~~

~~(4) Subsection (3) of this section shall not apply if the owner or operator demonstrates to the cabinet, and the cabinet finds for such landfill, that alternative design and operating practices, together with location characteristics, shall prevent the migration of any hazardous constituent into the ground water or surface water at least as effectively as the liners and leachate collection systems.~~]

(5) The double liner requirement set forth in subsection (3) of this section may be waived by the cabinet for any monofill, if:

(a) The monofill contains only hazardous wastes from foundry furnace emission controls or metal casting molding sand, and the wastes do not contain constituents which would render the wastes hazardous for reasons other than the toxicity characteristic in Section 5 of 401 KAR 31:030, with EPA hazardous waste numbers D004 through D017; and

(b)1.a. The monofill has at least one (1) liner for which there is no evidence that the liner is leaking;

b. The monofill is located more than one-fourth (1/4) mile from an underground source of drinking water (as that term is defined in Section 1 of 401 KAR 30:010); and

c. The monofill is in compliance with generally applicable ground water monitoring requirements for facilities with permits under KRS 224.40-310 ~~[855]~~ and 224.46-520 ~~[866]~~; or

2. The owner or operator demonstrates that the monofill is located, designed and operated so as to assure that there **will** ~~[shall]~~ be no migration of any hazardous constituent into ground water or surface water at any future time.

(6) The owner or operator of any replacement landfill unit is exempt from subsection (3) of this section if:

(a) The existing unit was constructed in compliance with the design standards of 401 KAR 34:200, Section 2(1) and (3), or 401 KAR 34:230, Section 2(1) and (3); and

(b) There is no reason to believe that the liner is not functioning as designed.

(7) The owner or operator shall design, construct, operate, and maintain a run-on control system capable of preventing flow onto the active portion of the landfill during peak discharge from at least a twenty-five (25) year storm.

(8) [~~(7)~~] The owner or operator shall design, construct, operate, and maintain a run-off management system to collect and control at least the water volume resulting from a twenty-four (24) hour, twenty-five (25) year storm.

(9) [~~(8)~~] Collection and holding facilities ([~~e.g.,~~] tanks or basins for example) associated with run-on and run-off control systems shall be emptied or otherwise managed expeditiously after storms to maintain design capacity of the system.

(10) [~~(9)~~] If the landfill contains any particulate matter which may be subject to wind dispersal, the owner or operator shall cover or otherwise manage the landfill to control wind dispersal.

(11) [~~(10)~~] A new landfill shall not be constructed in a floodway, the 100-year flood plain or in an area of seasonal high water table in accordance with Section 9(2) of 401 KAR 34:020.

(12) [~~(11)~~] Existing landfills within the 100-year flood plain shall be protected from inundation by waters of the 100-year flood in accordance with Section 9(2) of 401 KAR 34:020.

(13) [~~(12)~~] The cabinet shall specify in the permit all design and operating practices that are necessary to ensure that the requirements of this section are satisfied.

Section 3. Action Leakage Rate. ~~[Double-lined Landfills: Ground-water Protection Requirements.]~~ (1) The cabinet shall approve an action leakage rate for landfill units subject to Section 2(3) or (4) of this administrative regulation. The action leakage rate is the maximum design flow rate that the leak detection system (LDS) can remove without the fluid head on the bottom liner exceeding one (1) foot. The action leakage rate shall include an adequate safety margin to allow for uncertainties in the design (such as slope, hydraulic conductivity, thickness of drainage material), construction, operation, and location

of the LDS, waste and leachate characteristics, likelihood and amounts of other sources of liquids in the LDS, and proposed response actions. (The action leakage rate shall consider decreases in the flow capacity of the system over time resulting from such factors as siltation and clogging, rib layover and creep of synthetic components of the system, and overburden pressures.)

(2) To determine if the action leakage rate has been exceeded, the owner or operator shall convert the weekly or monthly flow rate from the monitoring data obtained under Section 4(3) of this administrative regulation, to an average daily flow rate (gallons per acre per day) for each sump. Unless the cabinet approves a different calculation, the average daily flow rate for each sump shall be calculated weekly during the active life and closure period, and monthly during the postclosure care period when monthly monitoring is required under Section 4(3) of this administrative regulation. [~~The owner or operator of a double-lined landfill shall be subject to the requirements of 401 KAR 34:060.~~]

Section 4. Monitoring and Inspection. (1) During construction or installation, liners (except in the case of existing portions of landfills exempt from Section 2(1) of this administrative regulation) and cover systems ([~~e.g.,~~] membranes, sheets, or coatings for example) shall be inspected for uniformity, damage, and imperfections (for example, [~~e.g.,~~] holes, cracks, thin spots, or foreign materials). Immediately after construction or installation:

(a) Synthetic liners and covers shall be inspected to ensure tight seams and joints and the absence of tears, punctures, or blisters; and

(b) Soil-based and admixed liners and covers shall be inspected for imperfections including lenses, cracks, channels, root holes, or other structural nonuniformities that may cause an increase in the permeability of the liner or cover.

(2) While a landfill is in operation, it shall be inspected weekly and after storms to detect evidence of any of the following:

(a) Deterioration, malfunctions, or improper operation of run-on and run-off control systems;

(b) Proper functioning of wind dispersal control systems, where present; and

(c) The presence of leachate in and proper functioning of leachate collection and removal systems, where present.

(3)(a) The owner or operator of landfill units subject to Section 2(3) or (4) of this administrative regulation shall have an approved response action plan before receipt of waste. The response action plan shall set forth the actions to be taken if the action leakage rate has been exceeded. At a minimum, the response action plan shall describe the actions specified in Section 13 of this administrative regulation.

Section 5. Surveying and Recordkeeping. The owner or operator of a landfill shall maintain the following items in the operating record required under Section 4 of 401 KAR 34:050:

(1) On a map, the exact location and dimensions, including depth, of each cell with respect to permanently surveyed benchmarks;

(2) The contents of each cell and the approximate location of each hazardous waste type within each cell; and

(3) Any other information specified by the cabinet in the permit.

Section 6. Closure and Postclosure Care. (1) At final closure of the landfill or upon closure of any cell, the owner or operator shall cover the landfill or cell with a final cover designed and constructed to:

(a) Provide long-term minimization of migration of liquids through the closed landfill;

(b) Function with minimum maintenance;

(c) Promote drainage and minimize erosion or abrasion of the cover;

(d) Accommodate settling and subsidence so that the cover's integrity is maintained; and

(e) Have a permeability less than or equal to 1×10^{-7} centimeters per second.

(2) After final closure, the owner or operator shall comply with all postclosure requirements contained in Sections 8 to [~~through~~] 11 of 401 KAR 34:070, including maintenance and monitoring throughout the postclosure care period (specified in the permit under Section 8 of 401 KAR 34:070). The owner or operator shall:

(a) Maintain the integrity and effectiveness of the final cover, including making repairs to the cap as necessary to correct the effects of settling, subsidence, erosion, or other events;

(b) Continue to operate the leachate collection and removal system until leachate is no longer detected;

(c) Maintain and monitor the leak detection system in accordance with Sections 2(3)(c)4 and (4) and 4(3) of this administrative regulation, and comply with all other applicable leak detection system requirements;

(d) [~~(c)~~] Maintain and monitor the groundwater monitoring system and comply with all other applicable requirements of this administrative regulation;

(e) [~~(d)~~] Prevent run-on and run-off from eroding or otherwise damaging the final cover; and

(f) [~~(e)~~] Protect and maintain surveyed benchmarks used in complying with Section 5 of this administrative regulation.

(3) In the closure and postclosure plans, the owner or operator shall address the following objectives and indicate how they shall be achieved:

(a) Control of pollutant migration from the facility via ground water, surface water and air;

(b) Control of surface water infiltration, including prevention of pooling; and

(c) Prevention of erosion.

(4) The owner or operator shall consider at least the following factors in addressing the closure and postclosure care objectives of subsection (3) of this section.

(a) Type and amount of hazardous waste and hazardous waste constituents in the landfill;

(b) The mobility and the expected rate of migration of the hazardous waste and hazardous waste constituents;

(c) Site location, topography and surrounding land use, with respect to the potential effects of pollutant migration ([~~e.g.,~~] proximity to ground water, surface water, and drinking water sources for example);

(d) Climate, including amount, frequency and pH of precipitation;

(e) Characteristics of the cover including material, final surface contours, thickness, porosity and permeability, slope, length of run of slope and type of vegetation on the cover; and

(f) Geological and soil profiles, and surface and subsurface hydrology of the site.

(5) In addition to the requirements of Section 8 of 401 KAR 34:070, during the postclosure care period, the owner or operator of a hazardous waste landfill shall:

(a) Maintain and monitor the gas collection and control system (if there is one present in the landfill) to control the vertical and horizontal escape of gases; and

(b) Restrict access to the landfill as appropriate for its postclosure use.

Section 7. Special Requirements for Ignitable or Reactive Waste. Except as provided in subsection (2) of this section, and in Section 11 of this administrative regulation, ignitable or reactive waste shall not be placed in a landfill, unless the waste and landfill meet all applicable requirements of 401 KAR Chapter 37 and: [~~is treated, rendered, or mixed before placement in a landfill so that:~~]

(1) The resulting waste, mixture, or dissolution of material [~~or mixture~~] no longer meets the definition of ignitable or reactive waste under Section 2 or 4 of 401 KAR 31:030; and

(2) Section 8 of 401 KAR 34:020 is complied with.

Section 8. Special Requirements for Incompatible Wastes. Incompatible wastes, or incompatible wastes and materials, (see 401 KAR 34:330 for examples) shall not be placed in the same landfill cell.

Section 9. Special Requirements for Bulk and Containerized Liquids. (1) Bulk or noncontainerized liquid waste or waste containing free liquids shall not be placed in a landfill.

(2) After May 8, 1985, liquid waste or waste containing free liquids whether or not absorbents have been added, shall not be placed in landfills.

(3) Containers holding free liquids shall not be placed in a landfill unless:

(a) All freestanding liquid:

1. Has been removed by decanting, or other methods; or

2. Has been otherwise eliminated; or

(b) The container is very small, such as an ampule; or

(c) The container is designed to hold free liquids for use other than storage, such as a battery or capacitor; or

(d) The container is a lab pack as defined in Section 11 of this administrative regulation and is disposed of in accordance with Section 11 of this administrative regulation.

(4) To demonstrate the absence or presence of free liquids in either a containerized or a bulk waste, the following test shall be used: Method 9095 (Paint Filter Liquids Test) as described in "Test Methods for Evaluating Solid Wastes, Physical/Chemical Methods," (EPA Publication No. SW-846) which is referenced in Section 3 of 401 KAR 30:010.

Section 10. Special Requirements for Containers. Unless they are very small, such as an ampule, containers shall be either:

(1) At least ninety (90) percent full when placed in the landfill; or

(2) Crushed, shredded, or similarly reduced in volume to the maximum practical extent before burial in the landfill.

Section 11. Disposal of Small Containers of Hazardous Waste in Overpacked Drums (Lab Packs). Small containers of hazardous waste in overpacked drums (lab packs) may be placed in a landfill if the following requirements are met:

(1) Hazardous waste shall be packaged in nonleaking inside containers. The inside containers shall be of a design and constructed of a material that **will** ~~[shall]~~ not react dangerously with, be decomposed by, or be ignited by the contained waste. Inside containers shall be tightly and securely sealed. The inside containers shall be of the size and type specified in the U.S. Department of Transportation (DOT) hazardous materials regulations (49 CFR Parts 173, 178, and 179, 1990), if those regulations specify a particular inside container for the waste.

(2) The inside containers shall be overpacked in an open head DOT-specification metal shipping container (49 CFR Parts 178 and 179, 1990) of no more than 416-liter (approximately 110 gallon) capacity and surrounded by, at a minimum, a sufficient quantity of absorbent material to completely absorb all of the liquid contents of the inside containers. The metal outer container shall be full after packing with inside containers and absorbent material.

(3) The absorbent material used shall not be capable of reacting dangerously with, being decomposed by, or being ignited by the contents of the inside containers in accordance with Section 8(2) of 401 KAR 34:020.

(4) Incompatible wastes, as defined in 401 KAR 30:010, shall not be placed in the same outside container.

(5) Reactive wastes, other than cyanide-bearing or sulfide-bearing waste as defined in Section 4 of 401 KAR 31:030 shall be treated or rendered nonreactive prior to packaging in accordance with subsections (1) to ~~[through]~~ (4) of this section. Cyanide-bearing and sulfide-bearing reactive waste may be packed in accordance with subsections (1) to ~~[through]~~ (4) of this section upon approval of the cabinet without first being treated or rendered nonreactive.

(6) Such disposal shall be in compliance with the requirements of 401 KAR Chapter 37. Persons who incinerate lab packs according to the requirements of 401 KAR 37:040 may use fiber drums in place of metal outer containers. The fiber drums shall meet the U.S. Department of Transportation specifications in 49 CFR 173.12 and be overpacked according to the requirements in subsection 2 of this section.

Section 12. Special Requirements for Hazardous Wastes F020, F021, F022, F023, F026, and F027. (1) Hazardous waste numbers F020, F021, F022, F023, F026, and F027 (chlorinated dioxins, chlorinated dibenzofurans, and chlorinated phenols) shall not be placed in a landfill unless the owner or operator operates the landfill in accordance with a management plan for these wastes that is approved by the cabinet pursuant to the standards ~~[set out]~~ in this section, and in accordance with all other applicable requirements of this chapter. The factors to be considered are:

(a) The volume, physical, and chemical characteristics of the wastes, including their potential to migrate through soil or to volatilize or escape into the atmosphere;

(b) The attenuative properties of underlying and surrounding soils or other materials;

(c) The mobilizing properties of other materials codisposed with these wastes; and

(d) The effectiveness of additional treatment, design, or monitoring requirements.

(2) The cabinet may determine that additional design, operating, and monitoring requirements are necessary for landfills managing hazardous wastes F020, F021, F022, F023, F026, and F027 in order to reduce the possibility of migration of these wastes to ground water, surface water, or air so as to protect human health and the environment.

Section 13. Response Actions. (1) The owner or operator of landfill units subject to Section 2(3) or (4) of this administrative regulation shall have an approved response action plan before receipt of waste. The response action plan shall set forth the actions to be taken if the action leakage rate has been exceeded. At a minimum, the response action plan shall describe the actions specified in subsection (2) of this section.

(2) If the flow rate into the leak detection system exceeds the action leakage rate for any sump, the owner or operator shall:

(a) Notify the cabinet in writing of the exceedance within seven (7) days of the determination;

(b) Submit a preliminary written assessment to the cabinet within fourteen (14) days of the determination, as to the amount of liquids, likely sources of liquids, possible location, size, and cause of any leaks, and short-term actions taken and planned;

(c) Determine to the extent practicable the location, size, and cause of any leak;

(d) Determine whether waste receipt shall cease or be curtailed, whether any waste shall be removed from the unit for inspection, repairs, or controls, and whether or not the unit shall be closed;

(e) Determine any other short-term and longer-term actions to be taken to mitigate or stop any leaks; and

(f) Within thirty (30) days after the notification that the action leakage rate has been exceeded, submit to the cabinet the results of the analyses specified in paragraph (c), (d), and (e) of this subsection, the results of actions taken, and actions planned. Monthly thereafter, as long as the flow rate in the leak detection system exceeds the action leakage rate, the owner or operator shall submit to the cabinet reports summarizing the results of any remedial actions taken and actions planned.

(3) To make the leak and remediation determinations in subsec-

tions (2)(c), (d), and (e) of this section, the owner or operator shall:

(a)1. Assess the source of liquids and amounts of liquids by source;

2. Conduct a fingerprint, hazardous constituent, or other analyses of the liquids in the leak detection system to identify the source of liquids and possible location of any leaks, and the hazard and mobility of the liquid; and

3. Assess the seriousness of any leaks in terms of potential for escaping into the environment; or

(b) Document why such assessments are not needed.

PHILLIP J. SHEPHERD, Secretary
E. DOUGLAS STEPHAN, Commissioner
APPROVED BY AGENCY: December 13, 1993
FILED WITH LRC: December 14, 1993 at 10 a.m.

NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION CABINET
Department for Environmental Protection
Division of Waste Management
(Amended After Hearing)

401 KAR 34:240. Incinerators.

RELATES TO: KRS 224.10, 224.40, 224.43, 224.46, 224.70, 224.99

STATUTORY AUTHORITY: KRS 224.10-100, 224.46-520

NECESSITY AND FUNCTION: To implement provisions of KRS 224.46-520 and to establish [~~requires that persons engaging in the storage, treatment, and disposal of hazardous waste obtain a permit. KRS 224.46-520 requires the Cabinet to establish standards for these permits, to require adequate financial responsibility, to establish minimum standards for closure for all facilities and the postclosure monitoring and maintenance of hazardous waste disposal facilities. This chapter establishes minimum standards for hazardous waste sites or facilities except as 401 KAR Chapter 35 applies. This regulation establishes~~] minimum standards for incinerators.

Section 1. Applicability. (1) This administrative regulation applies to owners or operators of hazardous waste sites or facilities as defined in 401 KAR 30:010 that incinerate hazardous waste, except as Section 1 of 401 KAR 34:010 provides otherwise. [~~The following facility owners or operators are considered to incinerate hazardous waste:~~

~~(a) Owners or operators of hazardous waste incinerators (as defined in 401 KAR 30:010); and~~

~~(b) Owners or operators who burn hazardous wastes in boilers or in industrial furnaces in order to destroy them, or who burn hazardous waste in boilers or in industrial furnaces for any recycling purpose and elect to be regulated under this regulation.~~]

(2) After consideration of the waste analysis included with Part B of the permit application, the cabinet, in establishing the permit conditions, shall [~~may~~] exempt the applicant from all requirements of this administrative regulation except Sections 2 and 8:

(a) If the cabinet finds that the waste to be burned is:

1. Listed as a hazardous waste in 401 KAR 31:040 solely because it is ignitable (Hazard Code I), corrosive (Hazard Code C), or both; or

2. Listed as a hazardous waste in 401 KAR 31:040 solely because it is reactive (Hazard Code R) for characteristics other than those listed in Section 4(1)(d) and (e) of 401 KAR 31:030, and **will** [~~shall~~] [~~will~~] not be burned when other hazardous wastes are present in the combustion zone; or

3. A hazardous waste solely because it possesses the characteristic of ignitability, corrosivity, or both, as determined by the test for characteristics of hazardous wastes under 401 KAR 31:030; or

4. A hazardous waste solely because it possesses any of the reactivity characteristics described by Section 4(1)(a), (b), (c), (f), (g), and (h) of 401 KAR 31:030, and **will** [~~shall~~] [~~will~~] not be burned when other hazardous wastes are present in the combustion zone; and

(b) If the waste analysis shows that the waste contains none of the hazardous constituents listed in 401 KAR 31:170, which would reasonably be expected to be in the waste.

(3) If the waste to be burned is one which is described by subparagraphs (2)(a) 1, 2, 3, or 4 of this section and contains insignificant concentrations of the hazardous constituents listed in 401 KAR 31:170, then the cabinet may, but is not required to in establishing the permit conditions, exempt the applicant from all requirements of this administrative regulation except Section 2 and 8 of this administrative regulation, after consideration of the waste analysis included with Part B of the permit application, unless the cabinet finds that the waste [~~will~~] poses a threat to human health and the environment when burned in an incinerator.

(4) The owner or operator of an incinerator may conduct trial burns, subject only to the requirements of Section 3 of 401 KAR 38:060.

Section 2. Waste Analysis. (1) As a portion of a trial burn plan required by Section 3 of 401 KAR 38:060 or with Part B of his permit application, the owner or operator shall [~~must~~] have included an analysis of his waste feed sufficient to provide all information required by 401 KAR 38:060 or 401 KAR 38:090. Owners or operators of new hazardous waste incinerators shall [~~must~~] provide the information required by Section 3(2) of 401 KAR 38:060 and 401 KAR 38:090. If an owner or operator demonstrates to the satisfaction of the cabinet that any information required in 401 KAR 38:060 or 401 KAR 38:090 cannot reasonably be attained, the cabinet may waive the requirement to submit the information in accordance with Section 2 of 401 KAR 30:020.

(2) Throughout normal operation the owner or operator shall [~~must~~] conduct sufficient waste analysis to verify that waste feed to the incinerator is within the physical and chemical composition limits specified in his permit under Section 6(2) of this administrative regulation.

Section 3. Principal Organic Hazardous Constituents (POHCs). (1) Principal organic hazardous constituents (POHCs) in the waste feed shall [~~must~~] be treated to the extent required by the performance standards of Section 4 of this administrative regulation.

(2)(a) One (1) or more POHCs shall [~~will~~] be specified in the facility's permit from among those constituents listed in 401 KAR 31:170, for each waste feed to be burned. This specification shall [~~will~~] be based on the degree of difficulty of incineration of the organic constituents in the waste and on their concentration or mass in the waste feed, considering the results of waste analyses and trial burns or alternative data submitted with Part B of the facility's permit application. Organic constituents which represent the greatest degree of difficulty of incineration shall [~~will~~] be those most likely to be designated as POHCs. Constituents are more likely to be designated as POHCs if they are present in large quantities or concentrations in the waste.

(b) Trial POHCs shall [~~will~~] be designated for performance of trial burns in accordance with the procedures specified in 401 KAR 38:060, for obtaining trial burn permits.

Section 4. Performance Standards. An incinerator burning hazardous waste shall [~~must~~] be designed, constructed, and maintained so that, when operated in accordance with operating requirements specified under Section 6 of this administrative regulation, it **will** [~~shall~~] [~~will~~] meet the following performance standards:

(1)(a) Except as provided in paragraph (b) of this subsection, an incinerator burning hazardous waste shall [~~must~~] achieve a destruction and removal efficiency (DRE) of 99.99 percent for each principal

organic hazardous constituent (POHC) designated (under Section 3 of this administrative regulation) in its permit for each waste feed. DRE is determined for each POHC from the following equation:

$$DRE = \frac{(W_{in} - W_{out}) \times 100\%}{W_{in}}$$

Where: W_{in}= Mass feed rate of one (1) principal organic hazardous constituent (POHC) in the waste stream feeding the incinerator; and

W_{out}= Mass emission rate of the same POHC present in exhaust emissions prior to release to the atmosphere.

(b) An incinerator burning hazardous wastes F020, F021, F022, F023, F026, or F027 (chlorinated dioxins, chlorinated dibenzofurans, chlorinated phenols) shall [~~must~~] achieve a destruction and removal efficiency (DRE) of 99.9999 percent for each principal organic hazardous constituent (POHC) designated (under Section 3 of this administrative regulation) in its permit. This performance shall [~~must~~] be demonstrated on POHCs that are more difficult to incinerate than tetra-, penta-, and hexachlorodibenzo-p-dioxins and dibenzofurans. DRE is determined for each POHC from the equation in paragraph (a) of this subsection. In addition, the owner or operator of the incinerator shall [~~must~~] notify the secretary of his intent to incinerate hazardous wastes F020, F021, F022, F023, F026, or F027.

(2) An incinerator burning hazardous waste and producing stack emissions of more than 1.8 kilograms per hour (four (4) pounds per hour) of hydrogen chloride (HCl) shall [~~must~~] control HCl emissions such that the rate of emission is no greater than the larger of either 1.8 kilograms per hour or one (1) percent of the HCl in the stack gas prior to entering any pollution control equipment.

(3) An incinerator burning hazardous waste shall [~~must~~] not emit particulate matter exceeding 180 milligrams per dry standard cubic meter (0.08 grains per dry standard cubic foot) when corrected for the amount of oxygen in the stack gas according to the formula:

$$P_c = P_m \times \frac{14}{21 - Y}$$

When P_c is the corrected concentration of particulate matter, P_m is the measured concentration of particulate matter, and Y is the measured concentration of oxygen in the stack gas, using the Orsat method for oxygen analysis of dry flue gas, presented in 401 KAR 59:020, "new incinerators." This correction procedure is to be used by all hazardous waste incinerators except those operating under conditions of oxygen enrichment. For these facilities the cabinet shall [~~will~~] select an appropriate correction procedure to be specified in the facility permit.

(4) For purposes of permit enforcement, compliance with the operating requirements specified in the permit (under Section 6 of this administrative regulation) shall [~~will~~] be regarded as compliance with this section. However, evidence that compliance with those permit conditions is insufficient to ensure compliance with the performance requirements of this section may be "information" justifying modification, revocation, or reissuance of a permit under Section 2 of 401 KAR 38:040.

Section 5. Hazardous Waste Incinerator Permits. (1) The owner or operator of a hazardous waste incinerator may burn only wastes specified in his permit and only under operating conditions specified for those wastes under Section 6 of this administrative regulation except:

(a) In approved trial burns under Section 3 of 401 KAR 38:060[~~, Section 3~~]; or

(b) Under exemptions created by Section 1 of this administrative regulation.

(2) Other hazardous wastes may be burned only after operating conditions have been specified in a new permit or a permit modification as applicable. Operating requirements for new wastes may be based on either trial burn results or alternative data included with Part B of a permit application under 401 KAR 38:090.

(3) The permit for a new hazardous waste incinerator shall [~~must~~] establish appropriate conditions for each of the applicable requirements of this administrative regulation, including but not limited to allowable waste feeds and operating conditions necessary to meet the requirements of Section 6 of this administrative regulation, sufficient to comply with the following standards:

(a) For the period beginning with initial introduction of hazardous waste to the incinerator and ending with initiation of the trial burn, and only for the minimum time required to establish operating conditions required in paragraph (b) of this subsection, not to exceed a duration of 720 hours operating time for treatment of hazardous waste, the operating requirements shall [~~must~~] be those most likely to ensure compliance with the performance standards of Section 4 of this administrative regulation, based on the cabinet's engineering judgment. The cabinet may extend the duration of this period once for up to 720 additional hours when good cause for the extension is demonstrated by the applicant.

(b) For the duration of the trial burn, the operating requirements shall [~~must~~] be sufficient to demonstrate compliance with the performance standards of Section 4 of this administrative regulation and shall [~~must~~] be in accordance with the approved trial burn plan;

(c) For the period immediately following completion of the trial burn and only for the minimum period sufficient to allow sample analysis, data computation, and submission of the trial burn results by the applicant and review of the trial burn results and modification of the facility permit by the cabinet, the operating requirements shall [~~must~~] be those most likely to ensure compliance with the performance standards of Section 4 of this administrative regulation based on the cabinet's engineering judgment.

(d) For the remaining duration of the permit, the operating requirements shall [~~must~~] be those demonstrated, in a trial burn or by alternative data specified in Section 2(3) of 401 KAR 38:190, as sufficient to ensure compliance with the performance standards of Section 4 of this administrative regulation.

Section 6. Operating Requirements. (1) An incinerator shall [~~must~~] be operated in accordance with operating requirements specified in the permit. These shall [~~will~~] be specified on a case-by-case basis as those demonstrated (in a trial burn or in alternative data as specified in Section 5(2) of this administrative regulation and included with Part B of a facility's permit application) to be sufficient to comply with the performance standards for Section 4 of this administrative regulation.

(2) Each set of operating requirements shall [~~will~~] specify the composition of the waste feed (including acceptable variations in the physical or chemical properties of the waste feed) which **will** [~~shall~~] [~~will~~] not affect compliance with the performance standards of Section 4 of this administrative regulation to which the operating requirements apply. For each such waste feed, the permit shall [~~will~~] specify acceptable operating limits including the following conditions:

(a) Carbon monoxide (CO) level in the stack exhaust gas;

(b) Waste feed rate;

(c) Combustion temperature;

(d) An appropriate indicator of combustion gas velocity as specified by the cabinet;

(e) Allowable variations in incinerator system design or operating procedures; and

(f) Such other operating requirements as are necessary to ensure that the performance standards of Section 4 of this administrative regulation are met.

(3) During start-up and shutdown of an incinerator, hazardous waste (except ignitable waste exempted in accordance with Section 1 of this administrative regulation) shall [~~must~~] not be fed into the incinerator unless the incinerator is operating within the conditions of operation (examples are temperature and air feed rate[~~, etc.~~]) specified in the permit.

(4) Fugitive emissions from the combustion zone shall [~~must~~] be controlled by:

(a) Keeping the combustion zone totally sealed against fugitive emissions; or

(b) Maintaining a combustion zone pressure lower than atmospheric pressure; or

(c) An alternate means of control demonstrated (with Part B of the permit application) to provide fugitive emissions control equivalent to maintenance of combustion zone pressure lower than atmospheric pressure.

(5) An incinerator shall [~~must~~] be operated with a functioning system to automatically cut off waste feed to the incinerator when operating conditions deviate from limits established under subsection (1) of this section.

(6) An incinerator shall [~~must~~] cease operation when changes in waste feed, incinerator design, or operating conditions exceed limits designated in its permit.

Section 7. Monitoring and Inspections. (1) The owner or operator shall [~~must~~] conduct, as a minimum, the following monitoring while incinerating hazardous waste:

(a) Combustion temperature, waste feed rate, and the indicator of combustion gas velocity specified in the facility permit shall [~~must~~] be monitored on a continuous basis.

(b) CO shall [~~must~~] be monitored on a continuous basis at a point in the incinerator downstream of the combustion zone and prior to release to the atmosphere.

(c) Upon request by the cabinet, sampling and analysis of the waste and exhaust emissions shall [~~must~~] be conducted to verify that the operating requirements established in the permit achieve the performance standards of Section 4 of this administrative regulation.

(2) The incinerator and associated equipment (pumps, valves, conveyors, pipes for example [~~, etc.~~]) shall [~~must~~] be subjected to thorough visual inspection at least daily, for leaks, spills, and fugitive emissions, and signs of tampering.

(3) The emergency waste feed cutoff system and associated alarms shall [~~must~~] be tested at least weekly to verify operability, unless the applicant demonstrates to the cabinet that weekly inspections **will** [~~shall~~] [~~will~~] unduly restrict or upset operations and that less frequent inspection will be adequate. At a minimum, operational testing shall [~~must~~] be conducted at least monthly.

(4) This monitoring and inspection data shall [~~must~~] be recorded and the records shall [~~must~~] be placed in the operating log required by Section 4 of 401 KAR 34:050.

Section 8. Closure. At closure the owner or operator shall [~~must~~] remove all hazardous waste and hazardous waste residues (including, but not limited to, ash, scrubber waters, and scrubber sludges) from the incinerator site.

PHILLIP J. SHEPHERD, Secretary
E. DOUGLAS STEPHAN, Commissioner
APPROVED BY AGENCY: December 13, 1993
FILED WITH LRC: December 14, 1993 at 10 a.m.

NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION CABINET
Department for Environmental Protection
Division of Waste Management
(Amended After Hearing)

401 KAR 34:275. Air emission standards for process vents.

RELATES TO: KRS 224.01, 224.10, 224.40, 224.43, 224.46, 224.50, 224.70, 224.99
STATUTORY AUTHORITY: KRS 224.10-100, 224.46-520

NECESSITY AND FUNCTION: To implement provisions of KRS 224.46-520 and to establish air emission standards for process vents.

Section 1. Definitions. As used in this administrative regulation, all terms not defined herein shall have the meaning given them in 401 KAR Chapters 30 through 36:

(1) "Air stripping operation" is a desorption operation employed to transfer one (1) or more volatile components from a liquid mixture into a gas (air) either with or without the application of heat to the liquid. Packed towers, spray towers, and bubble-cap, sieve, or valve-type plate towers are among the process configurations used for contacting the air and a liquid.

(2) "Bottoms receiver" means a container or tank used to receive and collect heavier bottoms fractions of the distillation feed stream that remain in the liquid phase.

(3) "Closed-vent system" means a system that is not open to the atmosphere and that is composed of piping, connections, and, if necessary, flow-inducing devices that transport gas or vapor from a piece or pieces of equipment to a control device.

(4) "Condenser" means a heat-transfer device that reduces a thermodynamic fluid from its vapor phase to its liquid phase.

(5) "Connecter" means flanged, screwed, welded, or other joined fitting used to connect two (2) pipelines or a pipeline and a piece of equipment. For the purposes of reporting and recordkeeping, connecter means flanged fittings that are not covered by insulation or other materials that prevent location of the fittings.

(6) "Continuous recorder" means a data recording device recording an instantaneous data value at least once every 15 minutes.

(7) "Control device" means an enclosed combustion device, vapor recovery system, or flare. Any device the primary function of which is the recovery or capture of solvents or other organics for use, reuse, or sale (for example, a primary condenser on a solvent recovery unit) is not a control device.

(8) "Control device shutdown" means the cessation of operation of a control device for any purpose.

(9) "Distillate receiver" means a container or tank used to receive and collect liquid material (condensed) from the overhead condenser of a distillation unit and from which the condensed liquid is pumped to larger storage tanks or other process units.

(10) "Distillation operation" means an operation, either batch or continuous, separating one (1) or more feed stream(s) into two (2) or more exit streams, each exit stream having component concentrations different from those in the feed stream(s). The separation is achieved by the redistribution of the components between the liquid and vapor phase as they approach equilibrium within the distillation unit.

(11) "Double block and bleed system" means two (2) block valves connected in series with a bleed valve or line that can vent the line between the two (2) block valves.

(12) "Equipment" means each valve, pump, compressor, pressure relief device, sampling connection system, open-ended valve or line, or flange, and any control devices or systems required by this administrative regulation.

(13) "Flame zone" means the portion of the combustion chamber in a boiler occupied by the flame envelope.

(14) "Flow indicator" means a device that indicates whether gas flow is present in a vent stream.

(15) "First attempt at repair" means to take rapid action for the purpose of stopping or reducing leakage of organic material to the atmosphere using best practices.

(16) "Fractionation operation" means a distillation operation or method used to separate a mixture of several volatile components of different boiling points in successive stages, each stage removing from the mixture some proportion of one of the components.

(17) "Hazardous waste management unit shutdown" means a work practice or operational procedure that stops operation of a hazardous waste management unit or part of a hazardous waste

management unit. An unscheduled work practice or operational procedure that stops operation of a hazardous waste management unit or part of a hazardous waste management unit for less than twenty-four (24) hours is not a hazardous waste management unit shutdown. The use of spare equipment and technically feasible bypassing of equipment without stopping operation are not hazardous waste management unit shutdowns.

(18) "Hot well" means a container for collecting condensate as in a steam condenser serving a vacuum-jet or steam-jet ejector.

(19) "In gas service" or "in vapor service" means that the piece of equipment contains or contacts a hazardous waste stream that is in the gaseous state at operating conditions.

(20) "In heavy liquid service" means that the piece of equipment is not in gas service or in vapor service or in light liquid service.

(21) "In light liquid service" means that the piece of equipment contains or contacts a waste stream where the vapor pressure of one (1) or more of the components in the stream is greater than three-tenths (0.3) kilopascals (kPa) at twenty (20) degrees Centigrade, the total concentration of the pure components having a vapor pressure greater than three-tenths (0.3) kPa at twenty (20) degrees Centigrade is equal to or greater than twenty (20) percent by weight, and the fluid is a liquid at operating conditions.

(22) "In situ sampling systems" means nonextractive samplers or in-line samplers.

(23) "In vacuum service" means that equipment is operating at an internal pressure that is at least 5 kPa below ambient pressure.

(24) "Malfunction" means any sudden failure of a control device or a hazardous waste management unit or failure of a hazardous waste management unit to operate in a normal or usual manner, so that organic emissions are increased.

(25) "Open-ended valve or line" means any valve, except pressure relief valves, having one (1) side of the valve seat in contact with process fluid and one (1) side open to the atmosphere, either directly or through open piping.

(26) "Pressure release" means the emission of materials resulting from the system pressure being greater than the set pressure of the pressure relief device.

(27) "Process heater" means a device that transfers heat liberated by burning fuel to fluids contained in tubes, including all fluids except water that are heated to produce steam.

(28) "Process vent" means any open-ended pipe or stack that is vented to the atmosphere either directly, through a vacuum-producing system, or through a tank (distillate receiver, condenser, bottoms receiver, surge control tank, separator tank, or hot well) associated with hazardous waste distillation fractionation, thin-film evaporation, solvent extraction, or air or steam stripping operations.

(29) "Repaired" means that equipment is adjusted, or otherwise altered, to eliminate a leak.

(30) "Sensor" means a device that measures a physical quantity or the change in a physical quantity or the change in a physical quantity, such as temperature, pressure, flow rate, pH, or liquid level.

(31) "Separator tank" means a device used for separation of two immiscible liquids.

(32) "Solvent extraction operation" means an operation or method of separation in which a solid or solution is contacted with a liquid solvent (the two (2) being mutually insoluble) to preferentially dissolve and transfer one (1) or more components into the solvent.

(33) "Start-up" means the setting in operation of a hazardous waste management unit or control device for any purpose.

(34) "Steam stripping operation" means a distillation operation in which vaporization of a volatile constituents of a liquid mixture takes place by the introduction of steam directly into the charge.

(35) "Surge control tank" means a large-sized pipe or storage reservoir sufficient to contain the surging liquid discharge of the process tank to which it is connected.

(36) "Thin-film evaporation operation" means a distillation operation that employees a heating surface consisting of a large diameter tube that may be either straight or tapered, horizontal or vertical. Liquid is spread on the tube wall by a rotating assembly of blades that maintain a close clearance from the wall or actually ride on the film of liquid on the wall.

(37) "Vapor incinerator" means any enclosed combustion device that is used for destroying organic compounds and does not extract energy in the form of steam or process heat.

(38) "Vented" means discharged through an opening, typically an open-ended pipe or stack, allowing the passage of a stream of liquids, gases, or fumes into the atmosphere. The passage of liquids, gases, or fumes is caused by mechanical means such as compressors or vacuum-producing systems or by process-related means such as evaporation produced by heating and not caused by tank loading and unloading (work losses) or by natural means such as diurnal temperature changes.

Section 2. Applicability. (1) This administrative regulation applies to owners and operators of facilities that treat, store, or dispose of hazardous wastes (except as provided in Section 1 of 401 KAR 34:010).

(2) Except for Sections 5(4) and 6(5) of this administrative regulation applies to process vents associated with distillation, fractionation, thin-film evaporation, solvent extraction, or air or steam stripping operations that manage hazardous wastes with organic concentrations of at least 10-ppmw if these operations are conducted in:

(a) Units that are subject to the permitting requirements of 401 KAR Chapter 38; or

(b) Hazardous waste recycling units that are located on hazardous waste management facilities otherwise subject to the permitting requirements of 401 KAR Chapter 38.

(3) If the owner or operator of process vents subject to the requirements of Sections 3 to 7 of this administrative regulation has received a permit under KRS 224.46-520 or 224.46-530 prior to December 21, 1990, the requirements of Sections 3 to 7 of this administrative regulation shall be incorporated when the permit is reissued under Section 12 of 401 KAR 38:050 or reviewed under Section 5 of 401 KAR 38:040. The requirements of Sections 3 to 7 of this administrative regulation shall apply to process vents on hazardous waste recycling units previously exempt under Section 6(3)(a) of 401 KAR 31:010. Other exemptions under Section 4 of 401 KAR 31:010, Section 5 of 401 KAR 32:030, and Section 1 of 401 KAR 34:010 are not affected by these requirements.

Section 3. Standards: Process Vents. (1) The owner or operator of a facility with process vents associated with distillation, fractionation, thin-film evaporation, solvent extraction, or air or steam stripping operations managing hazardous wastes with organic concentrations of at least ten (10) ppmw shall either:

(a) Reduce total organic emissions from all affected process vents at the facility below one and four-tenths (1.4) kg/h (three (3) lb/h) and two and eight-tenths (2.8) Mg/yr (three and one-tenth (3.1) tons/yr); or

(b) Reduce, by use of a control device, total organic emissions from all affected process vents at the facility by ninety-five (95) weight percent.

(2) If the owner or operator installs a closed-vent system and control device to comply with the provisions of subsection (1) of this section the closed-vent system and control device shall meet the requirements of Section 4 of this administrative regulation.

(3) Determinations of vent emissions and emission reductions or total organic compound concentrations achieved by add-on control devices may be based on engineering calculations or performance tests. If performance tests are used to determine vent emissions, emission reductions, or total organic compound concentrations achieved by add-on control devices, the performance tests shall conform with the requirements of Section 5(3) of this administrative

regulation.

(4) When an owner or operator and the cabinet do not agree on determinations of vent emissions or emission reductions or total organic compound concentrations achieved by add-on control devices based on engineering calculations, the procedures in Section 5(3) of this administrative regulation shall be used to resolve the disagreement.

Section 4. Standards: Closed-vent Systems and Control Devices. (1)(a) Owners or operators of closed-vent systems and control devices used to comply with provisions of this administrative regulation shall comply with the provisions of this section.

(b) The owner or operator of an existing facility who cannot install a closed-vent system and control device to comply with the provisions of this administrative regulation on the effective date that the facility becomes subject to the provisions of this administrative regulation shall prepare an implementation schedule that includes dates by which the closed-vent system and control device **will** [~~shall~~] be installed and in operation. The controls shall be installed as soon as possible, but the implementation schedule may allow up to eighteen (18) months after the effective date that the facility becomes subject to this administrative regulation for installation and start-up. All units that begin operation after December 21, 1990, (that is, shall have control devices installed and operating on start-up of the affected unit and shall otherwise comply with this administrative regulation immediately); the two (2) year implementation schedule shall not apply to these units.

(2) A control device involving vapor recovery (a condenser or absorber) shall be designed and operated to recover the organic vapors vented to it with an efficiency of ninety-five (95) weight percent or greater unless the total organic emission limits of Section 3(1)(a) of this administrative regulation for all affected process vents can be attained at an efficiency less than ninety-five (95) weight percent.

(3) An enclosed combustion device (for example, a vapor incinerator, boiler, or process heater) shall be designed and operated to reduce the organic emissions vented to it by ninety-five (95) weight percent or greater, to achieve a total organic compound concentration of twenty (20) ppmv, expressed as the sum of the actual compounds, not carbon equivalents, on a dry basis corrected to three (3) percent oxygen; or to provide a minimum residence time of five-tenths (0.50) seconds at a minimum temperature of 760 degrees Centigrade. If a boiler or process heater is used as the control device, then the vent stream shall be introduced into the flame zone of the boiler or process heater.

(4)(a) A flare shall be designed for and operated with no visible emissions as determined by the methods specified in subsection (5)(a) of this section, except for periods not to exceed a total of five (5) minutes during any two (2) consecutive hours.

(b) A flare shall be operated with a flame present at all times, as determined by the methods specified in subsection (6)(b)3 of this section.

(c) A flare shall be used only if the net heating value of the gas being combusted in eleven and two-tenths (11.2) MJ/scm (300 Btu/scf) or greater if the flare is steam-assisted or air-assisted;or if the net heating value of the gas being combusted is 7.45 MJ/scm (200 Btu/scf) or greater if the flare is nonassisted. The net heating value of the gas being combusted shall be determined by the methods specified in subsection (5)(b) of this section.

(d)1. A steam-assisted or nonassisted flare shall be designed for and operated with an exit velocity, as determined by the methods specified in subsection (5)(c) of this section, less than eighteen and three-tenths (18.3) m/s (sixty (60) ft/s), except as provided in subparagraphs 2 and 3 of this paragraph.

2. A steam-assisted or nonassisted flare designed for and operated with an exit velocity, as determined by the methods specified in subsection (5)(c) of this section, equal to or greater than eighteen and three-tenths (18.3) m/s (sixty (60) ft/s) but less than 122 m/s (400 ft/s) shall be allowed if the net heating value of the gas being combusted is greater than thirty-seven and three-tenths (37.3) MJ/scm (1,000 Btu/scf).

3. A steam-assisted or nonassisted flare designed for and operated with an exit velocity, as determined by the methods specified in subsection (5)(c) of this section, less than the velocity, V_{max}, as determined in by the method specified in subsection (5)(d) of this section and less than 122 m/s (400 ft/s) shall be allowed.

(e) An air-assisted flare shall be designed and operated with an exit velocity less than the velocity, V_{max}, as determined by the method specified in subsection (5)(d) of this section.

(f) A flare used to comply with this section shall be steam-assisted, air-assisted, or nonassisted.

(5)(a) Reference Method 22 in 40 CFR Part 60 shall be used to determine the compliance of a flare with the visible emission provisions of this administrative regulation. The observation period is two (2) hours and shall be used according to Method 22.

(b) The net heating value of the gas being combusted in a flare shall be calculated using the following equation:

$$H_T=K\left(\sum_{i=1}^{n} C_iH_i\right)$$

where:

1. H_T = Net heating value of the sample, MJ/scm; where the net enthalpy per mole of off gas is based on combustion at twenty-five (25) degrees Centigrade and 760 mm Hg, but the standard temperature for determining the volume corresponding to 1 mol is twenty (20) degrees Centigrade;

2. K = Constant, $1.74X10^{-7}$ (1/ppm) (g/mol/scm) MJ/kcal) where standard temperature for (g/mol/scm) is twenty (20) degrees Centigrade;

3. C_i = Concentration of sample component i in ppm on a wet basis, as measured for organics by Reference Method 18 in 40 CFR Part 60 and measured for hydrogen and carbon monoxide by ASTM D 1946-82; and

4. H_i = Net beat of combustion of sample component i, kcal/9 mol at twenty-five (25) degrees Centigrade and 760 mm Hg. The beats of combustion may be determined using ASTM D 2382-83 if published values are not available or cannot be calculated.

(c) The actual exit velocity of a flare shall be determined by dividing the volumetric flow rate in units of standard temperature and pressure, as determined by Reference Methods 2, 2A, 2C, or 2D in 40 CFR Part 60 as appropriate, by unobstructed (free) cross-sectional area of the flare tip.

(d) The maximum allowed velocity in m/s, V_{max1} for a flare complying with paragraph (d)(4)(iii) of this section shall be determined by the following equation:

$$\text{Log}_{10}(V_{max})=(H_T+28.8)/31.7$$

where:

28.8 = Constant;

31.7=Constant;

H_T = The net heating value as determined in paragraph (e)(2) of this section.

(e) The maximum allowed velocity in m/s, V_{maxT} for an air-assisted flare shall be determined by the following equation:

$$V_{max}=8.706+0.7084\ (H_T)$$

where:

8.706 = Constant;

0.7084 = Constant;

H_T = The net heating value as determined in paragraph (e)(2) of this section.

(6) The owner or operator shall monitor and inspect each control device required to comply with this section to ensure proper operation

and maintenance of the control device by implementing the following requirements:

(a) Install, calibrate, maintain, and operate according to the manufacturer's specifications a flow indicator that provides a record of vent stream flow from each affected process vent to the control device at least once every hour. The flow indicator sensor shall be installed in the vent stream at the nearest feasible point to the control device inlet but before the point at which the vent streams are combined.

(b) Install, calibrate, maintain, and operate according to the manufacturer's specifications a device to continuously monitor control device operation as specified below:

1. For a thermal vapor incinerator, a temperature monitoring device equipped with a continuous recorder. The device shall have an accuracy of plus or minus one (1) percent of the temperature being monitored in degrees Centigrade or plus or minus five-tenths (0.5) degrees Centigrade, whichever is greater. The temperature sensor shall be installed at a location in the combustion chamber downstream of the combustion zone.

2. For a catalytic vapor incinerator, a temperature monitoring device equipped with a continuous recorder. The device shall be capable of monitoring temperature at two (2) locations and have an accuracy of plus or minus one (1) percent of the temperature being monitored in degrees Centigrade or plus or minus five-tenths (0.5) degrees Centigirade, whichever is greater. One (1) temperature sensor shall be installed in the vent stream at the nearest feasible point to the catalyst bed inlet and a second temperature sensor shall be installed in the vent stream at the nearest feasible point to the catalyst bed outlet.

3. For a flare, a heat sensing monitoring device equipped with a continuous recorder that indicates the continuous ignition of the pilot flame.

4. For a boiler or process heater having a design heat input capacity less than forty-four (44) MW, a temperature monitoring device equipped with a continuous recorder. The device shall have an accuracy of plus or minus one (1) percent of the temperature being monitored in degrees Centigrade or plus or minus five-tenths (0.5) degrees Centigrade, whichever is greater. The temperature sensor shall be installed at a location in the furnace downstream of the combustion zone.

5. For a boiler or process heater having a design heat input capacity greater than or equal to forty-four (44) MW, a monitoring device equipped with a continuous recorder to measure a parameter(s) that indicates good combustion operating practices are being used.

6. For a condenser, either:

a. A monitoring device equipped with a continuous recorder to measure the concentration level of the organic compounds in the exhaust vent stream from the condenser; or

b. A temperature monitoring device equipped with a continuous recorder. The device shall be capable of monitoring temperature at two (2) locations and have an accuracy of plus or minus one (1) percent of the temperature being monitored in degrees Centigrade or plus or minus five-tenths (0.5) degrees Centigrade, whichever is greater. One (1) temperature sensor shall be installed at a location in the exhaust vent stream from the condenser, and a second temperature sensor shall be installed at a location in the coolant fluid exiting the condenser.

7. For a carbon adsorption system that regenerates the carbon bed directly in the control device such as a fixed-bed carbon absorber, either:

a. A monitoring device equipped with a continuous recorder to measure the concentration level of the organic compounds in the exhaust vent stream from the carbon bed; or

b. A monitoring device equipped with a continuous recorder to measure a parameter that indicates the carbon bed is regenerated on a regular predetermined time cycle.

c. Inspect the readings from each monitoring device required by subsection (1)(a) and (b) of this section at least once each operating day to check control device operation and, if necessary, immediately implement the corrective measures necessary to ensure the control device operates in compliance with the requirements of this section.

(7) An owner or operator using a carbon adsorption system such as a fixed-bed carbon absorber that regenerates the carbon bed directly on site in the control device shall replace the existing carbon in the control device with fresh carbon at a regular, predetermined time interval that is no longer than the carbon service life established as a requirement of Section 6(2)(d)3f of this administrative regulation.

(8) An owner or operator using a carbon adsorption system such as a carbon canister that does not regenerate the carbon bed directly on site in the control device shall replace the existing carbon in the control device with fresh carbon on a regular basis by using one (1) of the following procedures:

(a) Monitor the concentration level of the organic compounds in the exhaust vent stream from the carbon adsorption system on a regular schedule, and replace the existing carbon with fresh carbon immediately when carbon breakthrough is indicated. The monitoring frequency shall be daily or at an interval no greater than twenty (20) percent of the time required to consume the total carbon working capacity established as a requirement of Section 6(2)(d)3g of this administrative regulation, whichever is longer.

(b) Replace the existing carbon with fresh carbon at a regular, predetermined time interval that is less than the design carbon replacement interval established as a requirement of Section 6(2)(d)3g of this administrative regulation.

(9) An alternative operational or process parameter may be monitored if it can be demonstrated that another parameter will ensure that the control device is operated in conformance with these standards and the control device's design specifications.

(10) An owner or operator of an affected facility seeking to comply with the provisions of this administrative regulation by using a control device other than a thermal vapor incinerator, catalytic vapor incinerator, flare, boiler, process heater, condenser, or carbon adsorption system is required to develop documentation including sufficient information to describe the control device operation and identify the process parameter or parameters that indicate proper operation and maintenance of the control device.

(11)(a) Closed-vent systems shall be designed for and operated with no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background and by visual inspections, as determined by the methods specified in Section 5(2) of this administrative regulation.

(b) Closed-vent systems shall be monitored to determine compliance with this administrative regulation during the initial leak detection monitoring, which shall be conducted by the date that the facility becomes subject to the provisions of this administrative regulation, annually, and at other times as required by the cabinet.

(c) Detectable emissions, as indicated by an instrument reading greater than 500 ppm and visual inspections, shall be controlled as soon as practicable, but not later than fifteen (15) calendar days after the emission is detected.

(d) A first attempt at repair shall be made no later than five (5) calendar days after the emission is detected.

(12) Closed-vent systems and control devices used to comply with provisions of this section shall be operated at all times when emissions may be vented to them.

Section 5. Test methods and procedures. (1) Each owner or operator subject to the provisions of this section shall comply with the test methods and procedures requirements provided in this administrative regulation.

(2) When a closed-vent system is tested for compliance with no detectable emissions, as required in Section 4(11) of this administrative regulation, the test shall comply with the following requirements:

(a) Monitoring shall comply with Reference Method 21 in 40 CFR Part 60.

(b) The detection instrument shall meet the performance criteria of Reference Method 21.

(c) The instrument shall be calibrated before use on each day of its use by the procedures specified in Reference Method 21.

(d) Calibration gases shall be:

1. Zero air (less than ten (10) ppm of hydrocarbon in air).

2. A mixture of methane or n-hexane and air at a concentration of approximately, but less than, 10,000 ppm methane or n-hexane.

(e) The background level shall be determined as set forth in Reference Method 21.

(f) The instrument probe shall be traversed around all potential leak interfaces as close to the interface as possible as described in Reference Method 21.

(g) The arithmetic difference between the maximum concentration indicated by the instrument and the background level is compared with 500 ppm for determining compliance.

(3) Performance tests to determine compliance with Section 3(1) of this administrative regulation and with the total organic compound concentration limit of Section 4(3) of this administrative regulation shall comply with the following:

(a) Performance tests to determine total organic compound concentrations and mass flow rates entering and exiting control devices shall be conducted and data reduced in accordance with the following reference methods and calculation procedures:

1. Method 2 in 40 CFR Part 60 for velocity and Volumetric flow rate.

2. Method 18 in 40 CFR Part 60 for organic content.

3. Each performance test shall consist of three (3) separate runs; each run conducted for at least one (1) hour under the conditions that exist when the hazardous waste management unit is operating at the highest load or capacity level reasonably expected to occur. For the purpose of determining total organic compound concentrations and mass flow rates, the average of results of all run shall apply. The average shall be computed on a time-weighted basis.

4. Total organic mass flow rates shall be determined by the following equation:

$$E_b=Q_{sd}\left({}^{n}\Sigma_{i=1}\ C_iMW_i\right)(0.0416)\ (10^{-6})$$

where:

a. E_h = Total organic mass flow rate, kg/h;

b. Q_{sd} = Volumetric flow rate of gases entering or exiting control device, as determined by Method 2,dscm/h;

c. n = Number of organic compounds in the vent gas;

d. C_i = Organic concentration in ppm, dry basis, of compound i in the vent gas, as determined by Method 18;

e. MW_i = Molecular weight of organic compound i in the vent gas, kg/kg-mol;

f. 0.0416 = Conversion factor for molar volume, kg-mol/m^3 (@ 293 K and 760 mm Hg);

g. 10^{-6} = Conversion from ppm, ppm^{-1}.

5. The annual total organic emission rate shall be determined by the following equation:

$$E_A=(E_h)(H)$$

where:

a. E_A = Total organic mass emission rate, kg/y;

b. E_h = Total organic mass flow rate for the process vent, kg/h;

c. H = Total annual hours of operations for the affected unit, h.

6. Total organic emissions from all affected process vents at the facility shall be determined by summing the hourly total organic mass emission rates (E_h as determined in subparagraph 4 of this paragraph) and by summing the annual total organic mass emission rates (E_h, as determined in subparagraph 5 of this paragraph) for all affected process vents at the facility.

(b) The owner or operator shall record such process information as may be necessary to determine the conditions of the performance tests. Operations during periods of start-up, shutdown, and malfunction shall not constitute representative conditions for the purpose of a performance test.

(c) The owner or operator of an affected facility shall provide, or cause to be provided, performance testing facilities as follows:

1. Sampling ports adequate for test methods specified in paragraph (a) of this subsection;

2. Safe sampling platform(s);

3. Safe access to sampling platform(s); and

4. Utilities for sampling and testing equipment.

(d) For the purpose of making compliance determinations, the time-weighted average of the results of the three runs shall apply. If a sample is accidentally lost or conditions occur in which one (1) of the three (3) runs **is** ~~[shall be]~~ discontinued because of forced shutdown, failure of an irreplaceable portion of the sample train, extreme meteorological conditions, or other circumstances beyond the owner or operator's control, compliance may, upon the approval of the cabinet be determined using the average of the results of the two (2) other runs.

(4) To show that a process vent associated with a hazardous waste distillation, fractionation, thin-film evaporation, solvent extraction, or air or steam stripping operations is not subject to the requirements of this administrative regulation, the owner or operator shall make an initial determination that the time-weighted, annual average total organic concentration of the waste managed by the waste management unit is less than 10 ppmw using one (1) of the following two (2) methods:

(a) Direct measurement of the organic concentration of the waste using the following procedures:

1. The owner or operator shall take a minimum of four (4) grab samples of waste for each waste stream managed in the affected unit under process conditions expected to cause the maximum waste organic concentration.

2. For waste generated on site, the grab samples shall be collected at a point before the waste is exposed to the atmosphere such as in an enclosed pipe or other closed system that is used to transfer the waste after generation to the first affected distillation, fractionation, thin-film evaporation, solvent extraction, or air or steam stripping operation. For waste generated off site, the grab samples shall be collected at the inlet to the first waste management unit that receives the waste provided the waste has been transferred to the facility in a closed system such as a tank truck and the waste is not diluted or mixed with other waste.

3. Each sample shall be analyzed and the total organic concentration of the sample shall be computed using Method 9060 or 8240 of SW-846.

4. The arithmetic mean of the results of the analyses of the four (4) samples shall apply for each waste stream managed in the unit in determining the time-weighted, annual average total organic concentration of the waste. The time-weighted average shall be calculated using the annual quantity of each waste stream processed and the mean organic concentration of each waste stream managed in the unit.

(b) Using knowledge of the waste to determine that its total organic concentration is less than ten (10) ppmw. Documentation of the waste determination shall be required. Examples of documentation that shall be used to support a determination under this provision include production process information documenting that no organic compounds are used, information that the waste is generated by a process that is identical to a process at the same or another facility that has previously been demonstrated by direct measurement to generate a waste stream having a total organic content less than ten (10) ppmw, or prior specification analysis results on the same waste stream where it can also be documented that no process changes

have occurred since that analysis that could affect the waste total organic concentration.

(5) The determination that distillation fractionation, thin-film evaporation, solvent extraction, or air or steam stripping operations manage hazardous wastes with time-weighted, annual average total organic concentrations less than ten (10) ppmw shall be made as follows:

(a) By the effective date that the facility becomes subject to the provisions of this administrative regulation or by the date when the waste is first managed in a waste management unit, whichever is later; and

(b) For continuously generated waste, annually; or

(c) Whenever there is a change in the waste being managed or a change in the process that generates or treats the waste.

(6) When an owner or operator and the cabinet do not agree on whether a distillation, fractionation, thin-film evaporation, solvent extraction, or air or steam stripping operation manages a hazardous waste with organic concentrations of at least ten (10) ppmw based on knowledge of the waste, the procedures in Method 8240 may be used to resolve the dispute.

Section 6. Recordkeeping Requirements. (1)(a) Each owner or operator subject to the provisions of this administrative regulation shall comply with the recordkeeping requirements of this section.

(b) An owner or operator of more than one (1) hazardous waste management unit subject to the provisions of this administrative regulation may comply with the recordkeeping requirements for these hazardous waste management units in one (1) recordkeeping system if the system identifies each record by each hazardous waste management unit.

(2) Owners and operators shall record the following information in the facility operating record:

(a) For facilities that comply with the provisions of Section 4(1)(b) of this administrative regulation, an implementation schedule that includes dates by which the closed-vent system and control device will be installed and in operation. The schedule shall also include a rationale of why the installation cannot be completed at an earlier date. The implementation schedule shall be in the facility operating record by the effective date that the facility becomes subject to the provisions of this administrative regulation.

(b) Up-to-date documentation of compliance with the process vent standards in Section 3 of this administrative regulation, including:

1. Information and data identifying all affected process vents, annual throughput and operating hours of each affected unit, estimated emission rates for each affected vent and for the overall facility (that is, the total emissions for all affected vents at the facility), and the approximate location within the facility of each affected unit (for example, identify the hazardous waste management units on a facility plot plan).

2. Information and data supporting determinations of vent emissions and emission reductions achieved by add-on control devices based on engineering calculations or source tests. For the purpose of determining compliance, determinations of vent emissions and emission reductions shall be made using operating parameter values (temperatures, flow rates, or vent stream organic compounds and concentrations for example) that represent the conditions that result in maximum organic emissions, such as when the waste management unit is operating at the highest load or capacity level reasonably expected to occur. If the owner or operator takes any action (managing a waste of different composition or increasing operating hours of affected waste management units) that would result in an increase in total organic emissions from affected process vents at the facility, then a new determination is required.

(c) Where an owner or operator chooses to use test data to determine the organic removal efficiency or total organic compound concentration achieved by the control device, a performance test plan. The test plan shall include:

1. A description of how it is determined that the planned test is going to be conducted when the hazardous waste management unit is operating at the highest load or capacity level reasonably expected to occur. This shall include the estimated or design flow rate and organic content of each vent stream and define the acceptable operating ranges of key process and control device parameters during the test program.

2. A detailed engineering description of the closed-vent system and control device including:

a. Manufacturer's name and model number of control device.

b. Type of control device.

c. Dimensions of the control device.

d. Capacity.

e. Construction materials.

3. A detailed description of sampling and monitoring procedures, including sampling and monitoring locations in the system, the equipment to be used, sampling and monitoring frequency, and planned analytical procedures for sample analysis.

(d) Documentation of compliance with Section 4 of this administrative regulation shall include the following information:

1. A list of all information references and sources used in preparing the documentation.

2. Records including the dates of each compliance test required by Section 4(11) of this administrative regulation.

3. If engineering calculations are used, a design analysis, specifications, drawings, schematics, and piping and instrumentation diagrams based on the appropriate sections of "APTI Course 415: Control of Gaseous Emissions" or other engineering texts acceptable to the cabinet that present basic control device design information. Documentation provided by the control device manufacturer or vendor that describes the control device design in accordance with clauses a to g of this subparagraph may be used to comply with this requirement. The design analysis shall address the vent stream characteristics and control device operation parameters as specified below.

a. For a thermal vapor incinerator, the design analysis shall consider the vent stream composition, constituent concentrations, and flow rate. The design analysis shall also establish the design minimum and average temperature in the combustion zone and the combustion zone residence time.

b. For a catalytic vapor incinerator, the design analysis shall consider the vent stream composition, constituent concentrations, and flow rate. The design analysis shall also establish the design minimum and average temperatures across the catalyst bed inlet and outlet.

c. For a boiler or process heater, the design analysis shall consider the vent stream composition, constituent concentrations, and flow rate. The design analysis shall also establish the design minimum and average flame zone temperatures, combustion zone residence time, and description of method and location where the vent stream is introduced into the combustion zone.

d. For a flare, the design analysis shall consider the vent stream composition, constituent concentrations, and flow rate. The design analysis shall also consider the requirements specified in Section 4(4) of this administrative regulation.

e. For a condenser, the design analysis shall consider the vent stream composition, constituent concentrations, flow rate, relative humidity, and temperature. The design analysis shall also establish the design outlet organic compound concentration level, design average temperature of the condenser exhaust vent stream, and design average temperatures of the coolant fluid at the condenser inlet and outlet.

f. For a carbon adsorption system such as a fixed-bed absorber that regenerates the carbon bed directly on site in the control device, the design analysis shall consider the vent stream composition, constituent concentrations, flow rate, relative humidity, and temperature. The design analysis shall also establish the design exhaust vent stream organic compound concentration level, number and capacity

of carbon beds, type and working capacity of activated carbon used for carbon beds, type and working capacity of activated carbon used for carbon beds, design total steam flow over the period of each complete carbon bed regeneration cycle, duration of the carbon bed steaming and cooling and drying cycles, design carbon bed temperature after regeneration, design carbon bed regeneration time, and design service life of carbon.

g. For a carbon adsorption system such as a carbon canister that does not regenerate the carbon bed directly on site in the control device, the design analysis shall consider the vent stream composition, constituent concentrations, flow rate, relative humidity, and temperature. The design analysis shall also establish the design outlet organic concentration level, capacity of carbon bed, type and working capacity of activated carbon used for carbon bed, and design carbon replacement interval based on the total carbon working capacity of the control device and source operating schedule.

4. A statement signed and dated by the owner or operator certifying that the operating parameters used in the design analysis reasonably represent the conditions that exist when the hazardous waste management unit is or would be operating at the highest load or capacity level reasonably expected to occur.

5. A statement signed and dated by the owner operator certifying that the control device is designed to operate at an efficiency of ninety-five (95) percent or greater unless the total organic emission limits of Section 3(1) of this administrative regulation is achieved at an efficiency less than ninety-five (95) weight percent or the total organic emission limits of Section 3(1) of this administrative regulation for affected process vents at the facility can be attained by a control device involving vapor recovery at an efficiency less than ninety-five (95) weight percent. A statement provided by the control device manufacturer or vendor certifying that the control equipment meets the design specifications may be used to comply with this requirement.

6. If performance tests are used to demonstrate compliance, all test results.

(3) Design documentation and monitoring, operation, and inspection information for each closed-vent system and control device required to comply with the provisions of this part shall be recorded and kept up-to-date in the facility operating record. The information shall include:

(a) Description and date of each modification that is made to the closed-vent system or control device design.

(b) Identification of operating parameter, description of monitoring device, and diagram of monitoring sensor location or locations used to comply with Section 4(6)(a) and (b) of this administrative regulation.

(c) Monitoring, operating, and inspection information required by Section 4(6) to (11) of this administrative regulation.

(d) Date, time, and duration of each period that occurs while the control device is operating when any monitored parameter exceeds the value established in the control device design analysis as specified below:

1. For a thermal vapor incinerator designed to operate with a minimum residence time of 0.50 second at a minimum temperature of 760 degrees Centigrade period when the combustion temperature is below 760 degrees Centigrade.

2. For a thermal vapor incinerator designed to operate with an organic emission reduction efficiency of ninety-five (95) weight percent or greater period when the combustion zone temperature is more than twenty-eight (28) degrees Centigrade below the design average combustion zone temperature established as a requirement of subsection (2)(d)3a of this section.

3. For a catalytic vapor incinerator, period when:

a. Temperature of the vent stream at the catalyst bed inlet is more than twenty-eight (28) degrees Centigrade below the average temperature of the inlet vent stream established as a requirement of subsection (2)(d)3b of this section; or

b. Temperature difference across the catalyst bed is less than eighty (80) percent of the design average temperature difference established as a requirement of subsection (2)(d)3b of this section.

4. For a boiler or process heater, period when:

a. Flame zone temperature is more than twenty-eight (28) degrees Centigrade below the design average flame zone temperature established as a requirement of subsection (2)(d)3c of this section; or

b. Position changes where the vent stream is introduced to the combustion zone from the location established as a requirement of subsection (d)3c of this section.

5. For a flare, period when the pilot flame is not ignited.

6. For a condenser that complies with Section 4(6)(b)6a of this administrative regulation, period when the organic compound concentration level or readings of organic compounds in the exhaust vent stream from the condenser are more than twenty (20) percent greater than the design outlet organic compound concentration level established as a requirement of subsection (2)(d)3e of this section.

7. For a condenser that complies with Section 4(6)(b)6b of this administrative regulation, period when:

a. Temperature of the exhaust vent stream from the condenser is more than six (6) degrees Centigrade above the design average exhaust vent stream temperature established as a requirement of subsection (2)(d)3e of this section; or

b. Temperature of the coolant fluid exiting the condenser is more than six (6) degrees Centigrade above the design average coolant fluid temperature at the condenser outlet established as a requirement of subsection (2)(d)3e of this section.

8. For a carbon adsorption system such as a fixed-bed carbon absorber that regenerates the carbon bed directly on site in the control device and complies with Section 4(6)(b)7a of this administrative regulation, period when the organic compound concentration level or readings of organic compounds in the exhaust vent stream from the carbon bed are more than twenty (20) percent greater than the design exhaust vent stream organic compound concentration level established as a requirement of subsection (2)(d)3f of this section.

9. For a carbon adsorption system such as a fixed-bed carbon absorber that regenerates the carbon bed directly on site in the control device and complies with Section 4(6)(b)7b of this administrative regulation, period when the vent stream continues to flow through the control device beyond the predetermined carbon bed regeneration time established as a requirement of subsection (2)(d)3f of this section.

(e) Explanation for each period recorded under paragraph (d) of this subsection of the cause for control device operating parameter exceeding the design value and the measures implemented to correct the control device operation.

(f) For a carbon adsorption system operated subject to requirements specified in Section 4(8)(b) of this administrative regulation, date when existing carbon the control device is replaced with fresh carbon.

(g) For a carbon adsorption system operated subject to requirements specified in Section 4(8)(a) of this administrative regulation, a log that records:

1. The date and time when the control device is monitored for carbon breakthrough and the monitoring device reading.

2. The date when the existing carbon in the control device is replaced with fresh carbon.

(h) The date of each control device start-up and shutdown.

(5) Records of the monitoring, operating, and inspection information required by subsection (3)(c) to (h) of this section need to be kept only three (3) years.

(6) For a control device other than a thermal vapor incinerator, catalytic vapor incinerator, flare, boiler, process heater, condenser, or carbon adsorption system, the cabinet shall specify the appropriate recordkeeping requirements.

(7) Up-to-date information and data used to determine whether or

not a process vent is subject to the requirements in Section 3 of this administrative regulation including supporting documentation as required by Section 5(4)(b) of this administrative regulation when application of the knowledge of the nature of the hazardous waste stream or the process by which it was produced is used, shall be recorded in a log that is kept in the facility operating record.

Section 7. Reporting Requirements. (1) A semiannual report shall be submitted by owners and operators subject to the requirements of this administrative regulation to the cabinet by dates specified by the cabinet. The report shall include the following information:

(a) The EPA identification number, name, and address of the facility; and

(b) For each month during the semiannual reporting period, the dates when the control device exceeded or operated outside of the design specifications as defined in Section 6(3)(d) of this administrative regulation and as indicated by the control device monitoring required by Section 4(6) of this administrative regulation and such exceedances were not corrected within twenty-four (24) hours, or that a flare operated with visible emissions as defined in Section 4(4) of this administrative regulation and as determined by Method 22 monitoring, the duration and cause of each exceedance or visible emissions, and any corrective measures taken.

(2) If, during the semiannual reporting period, the control device does not exceed or operate outside of the design specifications as defined in Section 6(3)(d) of this administrative regulation for more than twenty-four (24) hours or a flare does not operate with visible emissions as define in Section 4(4) of this administrative regulation, a report to the cabinet shall not be required.

PHILLIP J. SHEPHERD, Secretary
E. DOUGLAS STEPHAN, Commissioner
APPROVED BY AGENCY: December 13, 1993
FILED WITH LRC: December 14, 1993 at 10 a.m.

NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION CABINET
Department for Environmental Protection
Division of Waste Management
(Amended After Hearing)

401 KAR 34:280. Air emission standards for equipment leaks.

RELATES TO: KRS 224.01, 224.10, 224.40, 224.43, 224.46, 224.50, 224.70, 224.99

STATUTORY AUTHORITY: KRS 224.40-100, 224.46-520

NECESSITY AND FUNCTION: To implement provisions of KRS 224.46-520 and to establish air emission standards and equipment leaks.

Section 1. Definitions. As used in this administrative regulation, all terms shall have the meaning given them in 401 KAR Chapters 30 through 36.

Section 2. Applicability. (1) This administrative regulation applies to owners and operators of facilities that treat, store, or dispose of hazardous wastes except as provided in 401 KAR 34:010.

(2) Except as provided in Section 16 of this administrative regulation, this administrative regulation applies to equipment that contains or contacts hazardous wastes with organic concentrations of at least ten (10) percent by weight that are managed in:

(a) Units that are subject to the permitting requirements of 401 KAR Chapter 38; or

(b) Hazardous waste recycling units that are located on hazardous waste management facilities otherwise subject to the permitting requirements of 401 KAR Chapter 38.

(3) If the owner or operator of equipment subject to the requirements of Sections 3 to 16 of this administrative regulation has received a permit under KRS 224.46-520 or 224.46-530 prior to December 21, 1990, the requirements of Sections 3 to 16 of this administrative regulation shall be incorporated when the permit is reissued under Section 12 of 401 KAR 38:050 or reviewed under Section 5 of 401 KAR 38:040.

(4) Each piece of equipment to which this administrative regulation applies shall be marked in such a manner that it can be distinguished readily from other pieces of equipment.

(5) Equipment that is in vacuum service is excluded from the requirements of Sections 3 to 11 of this administrative regulation of it is identified as required in Section 16(7)(e) of this administrative regulation.

Section 3. Standards: Pumps in Light Liquid Service. (1)(a) Each pump in light liquid service shall be monitored monthly to detect leaks by the methods specified in Section 14(2) of this administrative regulation, except as provided in subsections (4), (5), and (6) of this section.

(b) Each pump in light liquid service shall be checked by visual inspection each calendar week for indications of liquids dripping from the pump seal.

(2)(a) If an instrument reading of 10,000 ppm or greater is measured, a leak is detected.

(b) If there are indications of liquids dripping from the pump seal, a leak is detected.

(3)(a) When a leak is detected, it shall be repaired as soon as practicable, but not later than fifteen (15) calendar days after it is detected, except as provided in Section 10 of this administrative regulation.

(b) A first attempt at repair (tightening the packing gland for example) shall be made no later than five (5) calendar days after each leak is detected.

(4) Each pump equipped with a dual mechanical seal system that includes a barrier fluid system that is exempt from the requirements of subsection (1) of this section, provided the following requirements are met:

(a) Each dual mechanical seal system shall be:

1. Operated with the barrier fluid at a pressure that is at all times greater than the pump stuffing box pressure; or

2. Equipped with a barrier fluid degassing reservoir that is connected by a closed-vent system to a control device that complies with the requirements of Section 11 of this administrative regulation; or

3. Equipped with a system that purges the barrier fluid into a hazardous waste stream with no detectable emissions to the atmosphere.

(b) The barrier fluid system shall not be a hazardous waste with organic concentrations ten (10) percent or greater by weight.

(c) Each barrier fluid system shall be equipped with a sensor that will detect failure of the seal system, the barrier fluid system, or both.

(d) Each pump shall be checked by visual inspection, each calendar week, for indications of liquids dripping from the pump seals.

(e)1. Each sensor as described in paragraph (c) of this subsection shall be checked daily or be equipped with an audible alarm that **will** **[~~shall~~]** be checked monthly to ensure that it is functioning properly.

2. The owner or operator shall determine, based on design considerations and operating experience, a criterion that indicates failure of the seal system, the barrier fluid system, or both.

(f)1. If there are indications of liquids dripping from the pump seal or the sensor indicates failure of the seal system, the barrier fluid system, or both based on the criterion determined in paragraph (e)2 of this sibsection, a leak is detected.

2. When a leak is detected, it shall be repaired as soon as practicable, but not later than fifteen (15) calendar days after it is

detected, except as provided in Section 10 of this administrative regulation.

3. A first attempt at repair (relapping the seal for example) shall be made no later than five (5) calendar days after each leak is detected.

(5) Any pump that is designated, as described in Section 15(7)(b) of this administrative regulation, for no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, is exempt from the requirements of subsections (1), (3), and (4) of this section if the pump meets the following requirements:

(a) Will [~~Shall~~] have no externally actuated shaft penetrating the pump housing.

(b) Will [~~Shall~~] operate with no detectable emissions as indicated by an instrument reading of less than 500 ppm above background as measured by the methods specified in Section 14(3) of this administrative regulation.

(c) Will [~~Shall~~] be tested for compliance with paragraph (b) of this subsection initially upon designating, annually, and at other times as requested by the cabinet.

(6) If any pump is equipped with a closed-vent system capable of capturing and transporting any leakage from the seal or seals to a control device that complies with the requirements of Section 11 of this administrative regulation, it is exempt from the requirements of subsections (1) to (5) of this section.

Section 4. Standards: Compressors. (1) Each compressor shall be equipped with a seal system that includes a barrier fluid system and that prevents leakage of total organic emissions to the atmosphere, except as provided in subsections (8) and (9) of this section.

(2) Each compressor seal system as required in subsection (1) of this section shall be:

(a) Operated with the barrier fluid at a pressure that is at all times greater than the compressor stuffing box pressure; or

(b) Equipped with a barrier fluid system that is connected by a closed-vent system to a control device that complies with the requirements of Section 11 of this administrative regulation; or

(c) Equipped with a system that purges the barrier fluid into a hazardous waste stream with no detectable emissions to atmosphere.

(3) The barrier fluid shall not be a hazardous waste with organic concentrations ten (10) percent or greater by weight.

(4) Each barrier fluid system as described in subsection (1) through (3) of this section shall be equipped with a sensor that will detect failure of the seal system, barrier fluid system, or both.

(5)(a) Each sensor as required in subsection (4) of this section shall be checked daily or shall be equipped with an audible alarm that will [~~shall~~] be checked monthly to ensure that it is functioning properly unless the compressor is located within the boundary of an unmanned plant site, in which case the sensor shall be checked daily.

(b) The owner or operator shall determine, based on design considerations and operating experience, a criterion that indicates failure of the seal system, the barrier fluid system, or both.

(6) If the sensor indicates failure of the seal system, the barrier fluid system, or both based on the criterion determined under subsection (5)(b) of this section, a leak is detected.

(7)(a) When a leak is detected, it shall be repaired as soon as practicable, but not later than fifteen (15) calendar days after it is detected, except as provided in Section 10 of this administrative regulation.

(b) A first attempt at repair (tightening the packing gland for example) shall be made no later than five (5) calendar days after each leak is detected.

(8) A compressor is exempt from the requirements of subsections (1) and (2) of this section if it is equipped with a closed-vent system capable of capturing and transporting any leakage from the seal to a control device that complies with the requirements of Section 11 of this administrative regulation, except as provided in subsection (9) of this section.

(9) Any compressor that is designated, as described in Section 15(7)(b) of this administrative regulation, for no detectable emissions as indicated by an instrument reading of less than 500 ppm above background is exempt from the requirements of subsections (1) to (8) of this section if the compressor:

(a) Is determined to be operating with no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, as measured by the method specified in Section 14(3) of this administrative regulation.

(b) Is tested for compliance with paragraph (a) of this subsection initially upon designation, annually, and at other times as requested by the cabinet.

Section 5. Standards: Pressure Relief Devices in Gas/Vapor Service. (1) Except during pressure releases, each pressure relief device in gas and vapor service shall be operated with no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, as measured by the method specified in Section 14(3) of this administrative regulation.

(2)(a) After each pressure release, the pressure relief device shall be returned to a condition of no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, as soon as practicable, but no later than five (5) calendar days after each pressure release, except as provided in Section 10 of this administrative regulation.

(b) No later than five (5) calendar days after the pressure release, the pressure relief device shall be monitored to confirm the condition of no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, as measured by the method specified in Section 14(3) of this administrative regulation.

(3) Any pressure relief device that is equipped with a closed-vent system capable of capturing and transporting leakage from the pressure relief device to a control device as described in Section 11 of this administrative regulation is exempt from the requirements of subsections (1) and (2) of this section.

Section 6. Standards: Sampling Connecting Systems. (1) Each sampling connection system shall be equipped with a closed purge system or closed-vent system.

(2) Each closed-purge system or closed-vent system as required in subsection (1) of this section shall:

(a) Return the purged hazardous waste stream directly to the hazardous waste stream directly to the hazardous waste management process line with no detectable emissions to atmosphere; or

(b) Collect and recycle the purged hazardous waste stream with no detectable emissions to atmosphere; or

(c) Be designed and operated to capture and transport all the purged hazardous waste stream to a control device that complies with the requirements of Section 11 of this administrative regulation.

(3) In situ sampling systems are exempt from the requirements of subsections (1) and (2) of this section.

Section 7. Standards: Open-ended Valves or Lines. (1)(a) Each open-ended valve or line shall be equipped with a cap, blind, flange, plug, or a second valve.

(b) The cap, blind flange, plug, or second valve shall seal the open end at all times except during operations requiring hazardous waste stream flow through the open-ended valve or line.

(2) Each open-ended valve or line equipped with a second valve shall be operated in a manner such that the valve on the hazardous waste stream end is closed before the second valve is closed.

(3) When a double block and bleed system is being used, the bleed valve or line may remain open during operations that require venting the line between the block valves but shall comply with subsection (1) of this section at all other times.

Section 8. Standards: Valves in Gas and Vapor Service or in

Light Liquid Service. (1) Each valve in gas and vapor or light liquid service shall be monitored monthly to detect leaks by the methods specified in Section 14(2) of this administrative regulation and shall comply with subsections (2) to (5) of this section, except as provided in subsections (6), (7), and (8) of this section, and Sections 12 and 13 of this administrative regulation.

(2) If an instrument reading of 10,000 ppm or greater is measured, a leak is detected.

(3)(a) Any valve for which a leak is not detected for two (2) successive months may be monitored the first month of every succeeding quarter, beginning with the next quarter, until a leak is detected.

(b) If a leak is detected, the valve shall be monitored monthly until a leak is not detected for two (2) successive months.

(4)(a) When a leak is detected, it shall be repaired as soon as practicable, but no later than fifteen (15) calendar days after each leak is detected, except as provided in Section 10 of this administrative regulation.

(b) A first attempt at repair shall be made no later than five (5) calendar days after each leak is detected.

(5) First attempts at repair include, but are not limited to, the following best practices where practicable:

(a) Tightening of bonnet bolts.

(b) Replacement of bonnet bolts.

(c) Tightening of packing gland nuts.

(d) Injection of lubricant into lubricated packing.

(7) Any valve that is designated, as described in Section 15(7)(b) of this administrative regulation, for no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, is exempt from the requirements of subsection (1) of this section if the valve:

(a) Has no external actuating mechanism in contact with the hazardous waste stream.

(b) Is operated with emissions less than 500 ppm above background as determined by the method specified in Section 14(3) of this administrative regulation.

(c) Is tested for compliance with subsection (6)(b) of this section initially upon designation, annually, and at other times as requested by the cabinet.

(8) Any valve that is designated, as described in Section 15(8)(a) of this administrative regulation, as an unsafe-to-monitor valve is exempt from the requirements of subsection (1) of this section if:

(a) The owner or operator of the valve determines that the valve is unsafe to monitor because monitoring personnel would be exposed to an immediate danger as a consequence of complying with subsection (1) of this section.

(b) The owner or operator of the valve adheres to a written plan that requires monitoring of the valve as frequently as practicable during safe-to-monitor times.

(9) Any valve that is designated, as described in Section 15(8)(b) of this administrative regulation, as a difficult-to-monitor valve is exempt from the requirements of subsection (1) of this section if:

(a) The owner or operator of the valve determines that the valve cannot be monitored without elevating the monitoring personnel more than two (2) meters above a support surface.

(b) The hazardous waste management unit within which the valve is located was in operation before June 21, 1990.

(c) The owner or operator of the valve follows a written plan that requires monitoring of the valve at least once per calendar year.

Section 9. Standards: Pumps and Valves in Heavy Liquid Service, Pressure Relief Devices in Light Liquid or Heavy Liquid Service, and Flanges and Other Connectors. (1) Pumps and valves in heavy liquid service, pressure relief devices in light liquid or heavy liquid service, and flanges and other connectors shall be monitored within five (5) days by the method specified in Section 14(2) of this administrative regulation if evidence of a potential leak is found by visual, audible, olfactory, or any other detection method.

(2) If an instrument reading of 10,000 ppm or greater is measured, a leak is detected.

(3)(a) When a leak is detected, it shall be repaired as soon as practicable, but not later than fifteen (15) calendar days after it is detected, except as provided in Section 10 of this administrative regulation.

(b) The first attempt at repair shall be made no later than five (5) calendar days after each leak is detected.

(c) First attempts at repair include, but are not limited to, the best practices described under Section 8(5) of this administrative regulation.

Section 10. Standards: Delay of Repair. (1) Delay of repair of equipment for which leaks have been detected shall be allowed if the repair is technically infeasible without a hazardous waste management unit shutdown. In such a case, repair of this equipment shall occur before the end of the next hazardous waste management unit shutdown.

(2) Delay of repair of equipment for which leaks have been detected shall be allowed for equipment that is isolated from the hazardous waste management unit and that does not continue to contain or contact hazardous waste with organic concentrations at least ten (10) percent by weight.

(3) Delay of repair for valves shall be allowed if:

(a) The owner or operator determines that emissions of purged material resulting from immediate repair are greater than the emissions likely to result from delay of repair.

(b) When repair procedures are effected, the purged material is collected and destroyed or recovered in a control device complying with Section 13 of this administrative regulation.

(4) Delay of repair for pumps shall be allowed if:

(a) Repair requires the use of a dual mechanical seal system that includes a barrier fluid system.

(b) Repair is completed as soon as practicable, but not later than six (6) months after the leak was detected.

(5) Delay of repair beyond a hazardous waste management unit shutdown shall be allowed for a valve if valve assembly replacement is necessary during the hazardous waste management unit shutdown, valve assembly supplies have been depleted, and valve assemblies had been sufficiently stocked before the supplies were depleted. Delay of repair beyond the next hazardous waste management unit shutdown shall not be allowed unless the next hazardous waste management unit shutdown occurs sooner than six (6) months after the first hazardous waste management unit shutdown.

Section 11. Standards: Closed-vent Systems and Control Devices. Owners or operators of closed-vent systems and control devices shall comply with the provisions of Section 4 of 401 KAR 34:240.

Section 12. Alternative Standards for Valves in Gas/Vapor Service or in Light Liquid Service; Percentage of Valves Allowed to Leak. (1) An owner or operator subject to the requirements of Section 8 of this administrative regulation may elect to have all valves within a hazardous waste management unit comply with an alternative standard that allows no greater than two (2) percent of the valves to leak.

(2) The following requirements shall be met if an owner or operator decides to comply with the alternative standard of allowing two (2) percent of valves to leak;

(a) An owner or operator shall notify the cabinet that the owner or operator has elected to comply with the requirements of this administrative regulation.

(b) A performance test as specified in subsection (3) of this section shall be conducted initially upon designation, annually, and at other times as requested by the cabinet.

(c) If a valve leak is detected, it shall be repaired in accordance with Section 8(4) and (5) of this administrative regulation.

(3) Performance tests shall be conducted in the following manner:

(a) All valves subject to the requirements in Section 8 of this administrative regulation within the hazardous waste management unit shall be monitored within one (1) week by the methods specified in Section 14(2) of this administrative regulation.

(b) If an instrument reading of 10,000 ppm or greater is measured, a leak is detected.

(c) The leak percentage shall be determined by dividing the number of valves subject to the requirements in Section 8 of this administrative regulation for which leaks are detected by the total number of valves subject to the requirements in Section 8 of this administrative regulation within the hazardous waste management unit.

(4) If an owner or operator decides to comply with this section no longer, the owner or operator shall notify the cabinet in writing that the work practice standard described in Section 8(1) to (5) of this administrative regulation **will** [~~shall~~] be followed.

Section 13. Alternative Standards for Valves in Gas/Vapor Service or in Light Liquid Service; Skip Period Leak Detection and Repair. (1)(a) An owner or operator subject to the requirements of Section 8 of this administrative regulation may elect for all valves within a hazardous waste management unit to comply with one of the alternative work practices specified in subsections (2)(b) and (c) of this section.

(b) An owner or operator shall notify the cabinet before implementing one (1) of the alternative work practices.

(2)(a) An owner or operator shall comply with the requirements for valves, as described in Section 8 of this administrative regulation, except as described in paragraphs (b) and (c) of this subsection.

(b) After two (2) consecutive quarterly leak detection periods with the percentage of valves leaking equal to or less than two (2) percent, an owner or operator may begin to skip one (1) of the quarterly leak detection periods for the valves subject to the requirements in Section 8 of this administrative regulation.

(c) After five (5) consecutive quarterly leak detection period with the percentage of valves leaking equal to or less than two (2) percent, an owner or operator may begin to skip three (3) of the quarterly leak detection periods for the valves subject to the requirements in Section 8 of this administrative regulation.

(d) If the percentage of valves leaking is greater than two (2) percent, the owner or operator shall monitor monthly in compliance with the requirements in Section 8 of this administrative regulation, but may again elect to use this section after meeting the requirements of Section 8(3)(a) of this administrative regulation.

Section 14. Test Methods and Procedures. (1) Each owner or operator subject to the provisions of this administrative regulation shall comply with the test methods and procedures requirements of this section.

(2) Leak detection monitoring, as required in Sections 3 to 13 of this administrative regulation, shall comply with the following requirements:

(a) Monitoring shall comply with Reference Method 21 in 40 CFR Part 60.

(b) The detection instrument shall meet the performance criteria of Reference Method 21.

(c) The instrument shall be calibrated before use on each day of its use by the procedures specified in Reference Method 21.

(d) Calibration gases shall be:

1. Zero air (less than ten (10) ppm of hydrocarbon in air).

2. A mixture of methane or n-hexene and air at a concentration of approximately, but less than, 10,000 ppm methane or n-hexene.

(e) The instrument probe shall be traversed around all potential leak interfaces as close to the interface as possible as described in Reference Method 21.

(3) When equipment is tested for compliance with no detectable emissions, as required in Sections 3(5), 4(10), 5, 8(6) of this administrative regulation, the test shall comply with the following requirements:

(a) The requirements of subsections (2)(a) to (d) of this section shall apply.

(b) The background level shall be determined as set forth in Reference Method 21.

(c) The instrument probe shall be traversed around all potential leak interfaces as close to the interface as possible as described in Reference Method 21.

(d) The arithmetic difference between the maximum concentration indicated by the instrument and the background level is compared with 500 ppm for determining compliance.

(4) In accordance with the waste analysis plan required by Section 4(2) of 401 KAR 34:020, an owner or operator of a facility shall determine, for each piece of equipment, whether the equipment contains or contacts a hazardous waste with organic concentration that equals or exceeds ten (10) percent by weight using the following:

(a) Methods described in ASTM Methods D 2267-88, E 169-87, E-168-88, E 260-85;

(b) Method 9060 or 8240 of SW-846; or

(c) Application of the knowledge of the nature of the hazardous waste stream or the process by which it was produced. Documentation of a waste determination by knowledge is required. Examples of documentation that shall be used to support a determination under this provision include production process information documenting that no organic compounds are used, information that the waste is generated by a process that is identical to a process at the same or another facility that has previously been demonstrated by direct measurement to have a total organic content less than ten (10) percent, or prior specification analysis results on the same waste stream where it can also be documented that no process changes have occurred since that analysis that could affect the waste total organic concentration.

(5) If an owner or operator determines that a piece of equipment contains or contacts a hazardous waste with organic concentrations at least ten (10) percent by weight, the determination can be revised only after following the procedures in subsection (4)(a) or (b) of this section.

(6) When an owner or operator and the cabinet do not agree on whether a piece of equipment contains or contacts a hazardous waste with organic concentrations at least ten (10) percent by weight, the procedures in subsection (4)(a) or (b) of this section can be used to resolve the dispute.

(7) Samples used in determining the percent organic content shall be representative of the highest total organic content hazardous waste that is expected to be contained in or contact the equipment.

(8) To determine if pumps or valves are in light liquid service, the vapor pressures of constituents may be obtained from standard reference texts or may be determined by ASTM D-2879-86.

(9) Performance tests to determine if a control device achieves 95 weight percent organic emission reduction shall comply with the procedures of Section 5(3)(a) to (d) of 401 KAR 34:275.

Section 15. Recordkeeping Requirements. (1)(a) Each owner or operator subject to the provisions of this administrative regulation shall comply with the recordkeeping requirements of this section.

(b) An owner or operator of more than one (1) hazardous waste management unit subject to the provisions of this administrative regulation may comply with the recordkeeping requirements for these hazardous waste management units in one (1) recordkeeping system if the system identifies each record by each hazardous waste management unit.

(2) Owners and operators shall record the following information in the facility operating record:

(a) For each piece of equipment to which this administrative regulation applies:

1. Equipment identification number and hazardous waste management unit identification.

2. Approximate locations within the facility (for example, identify the hazardous waste management unit on a facility plot plan).

3. Type of equipment (a pump or pipeline valve for example).

4. Percent-by-weight total organics in the hazardous waste stream at the equipment.

5. Hazardous waste state at the equipment (gas and vapor or liquid for example).

6. Method of compliance with the standard (for example "monthly leak detection and repair" or "equipped with dual mechanical seals").

(b) An implementation schedule as specified in Section 4(2) of 401 KAR 34:275 for facilities that comply with the provisions of Section 4(2) of 401 KAR 34:275.

(c) Where an owner or operator chooses to use test data to demonstrate the organic removal efficiency or total organic compound concentration achieved by the control device, a performance test plan as specified in Section 6(2)(c) of 401 KAR 34:275.

(d) Documentation of compliance with Section 11 of this administrative regulation, including the detailed design documentation or performance test result specified in Section 6(2)(d) of 401 KAR 34:275.

(3) When each leak is detected as specified in Sections 3, 4, 8, and 9 of this administrative regulation, the following requirements apply:

(a) A weatherproof and readily visible identification marked with the equipment identification number, the date evidence of a potential leak was found in accordance with Section 9(1) of this administrative regulation, and the date the leak was detected, shall be attached to the leaking equipment.

(b) The identification on equipment except on a valve, may be removed after it has been repaired.

(c) The identification on a valve may be removed after it has been monitored for two (2) successive months as specified in Section 8(3) of this administrative regulation and no leak has been detected during those two (2) months.

(4) When each leak is detected as specified in Sections 4, 8, and 9 of this administrative regulation, the following information shall be recorded in an inspection log and shall be kept in the facility operating record:

(a) The instrument and operator identification numbers and the equipment identification number.

(b) The date evidence of a potential leak was found in accordance with Section 9(1) of this administrative regulation;

(c) The date the leak was detected and the dates of each attempt to repair the leak;

(d) Repair methods applied in each attempt to repair the leak;

(e) "Above 10,000" if the maximum instrument reading measured by the methods specified in Section 14(2) of this administrative regulation after each repair attempt is equal to or greater than 10,000 ppm;

(f) "Repair delayed" and the reason for the delay if a leak is not repaired within fifteen (15) calendar days after discovery of the leak.

(g) Documentation supporting the delay of repair of a valve in compliance with Section 10(3) of this administrative regulation;

(h) The signature of the owner or operator (or designate) whose decision it was that repair could not be effected without hazardous waste management unit shutdown;

(i) The expected date of successful repair of the leak if a leak is not repaired within fifteen (15) calendar days; and

(j) The date of successful repair of the leak.

(5) Design documentation and monitoring, operating, and inspection information for each closed-vent system and control device required to comply with the provisions of Section 11 of this administrative regulation shall be recorded and kept up-to-date in the facility operating record as specified in Section 6(3) of 401 KAR 34:275. Design documentation is specified in Section 6(3)(a) and (b) of 401 KAR 34:275 and monitoring, operating, and inspection information in Section 6(3)(c) to (h) of 401 KAR 34:275.

(6) For a control device other than a thermal vapor incinerator, catalytic vapor incinerator, flare, boiler, process heater, condenser, or carbon adsorption system, the cabinet shall specify the appropriate recordkeeping requirements.

(7) The following information pertaining to all equipment subject to the requirements in Sections 3 to 11 of this administrative regulation shall be recorded in a log that is kept in the facility operating record:

(a) A list of identification numbers for equipment (except welded fittings) subject to the requirements of this administrative regulation.

(b)1. A list of identification numbers for equipment that the owner or operator elects to designate for no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, under the provisions of Sections 3(5), 4(9), and 8(6) of this administrative regulation.

2. The designation of this equipment as subject to the requirements of Sections 3(5), 4(9), and 8(6) of this administrative regulation shall be signed by the owner or operator.

(c) A list of equipment identification numbers for pressure relief devices required to comply with Section 5(1) of this administrative regulation.

(d)1. The dates of each compliance test required in Sections 3(5), 4(9), 5, and 8(6) of this administrative regulation.

2. The background level measured during each compliance test.

3. The maximum instrument reading measured at the equipment during each compliance test.

(e) A list of identification numbers for equipment in vacuum service.

(8) The following information pertaining to all valves subject to the requirements of Section 8(7) and (8) of this administrative regulation shall be recorded in a log that is kept in the facility operating record:

(a) A list of identification numbers for valves that are designated as unsafe to monitor, an explanation for each valve stating why the valve is unsafe to monitor, and the plan for monitoring each valve.

(b) A list of identification numbers for valves that are designated as difficult to monitor, an explanation for each valve stating why the valve is difficult to monitor, and the planned schedule for monitoring each valve.

(9) The following information shall be recorded in the facility operating record for valves complying with Section 13 of this administrative regulation:

(a) A schedule of monitoring:

(b) The percent of valves found leaking during each monitoring period.

(10) The following information shall be recorded in a log that is kept in the facility operating record:

(a) Criteria required in Sections 3(4)(e)2 and 4(5)(b) of this administrative regulation and an explanation of the design criteria.

(b) Any changes to these criteria and the reasons for the changes.

(11) The following information shall be recorded in a log that is kept in the facility operating record for use in determining exemptions as provided in Section 2 of this administrative regulation.

(a) An analysis determining the design capacity of the hazardous waste management unit.

(b) A statement listing the hazardous waste influent to and effluent from each hazardous waste management unit subject to the requirements in Sections 3 to 11 of this administrative regulation and an analysis determining whether these hazardous wastes are heavy liquids.

(c) An up-to-date analysis and the supporting information and data used to determine whether or not equipment is subject to the requirements in Sections 3 to 11 of this administrative regulation. The

record shall include supporting documentation as required by Section 14(4)(c) of this administrative regulation when application of the knowledge of the nature of the hazardous waste stream or the process by which it was produced is used. If the owner or operator takes any action (changing the process that produced the waste for example) that could result in an increase in the total organic content of the waste contained in or contacted by equipment determined not to be subject to the requirements in Sections 3 to 11 of this administrative regulation, than a new determination is required.

(12) Records of the equipment leak information required by subsection (4) of this section and the operating information required by subsection (5) of this section need be kept only three (3) years.

(13) The owner or operator of any facility that is subject to this administrative regulation and to regulations at 40 CFR 60 Subpart VV or 40 CFR 61 Subpart V, may elect to determine compliance with this subpart, or pursuant to Section 16 of this administrative regulation, or pursuant to those provisions of 40 CFR 60 or 40 CFR 61 to the extent that the documentation required under this section. The documentation under the regulation at 40 CFR 60 or 40 CFR 61 duplicates the documentation required under this section. The documentation under 40 CFR 60 or 40 CFR 61 shall be kept with or made readily available with the facility operating record.

Section 16. Reporting Requirements. (1) A semiannual report shall be submitted by owners and operators subject to the requirements of this subpart to the cabinet by dates specified by the cabinet. The report shall include the following information:

(a) The U.S. EPA identification number, name, and address of the facility.

(b) For each month during the semiannual reporting period:

1. The equipment identification number of each valve for which a leak was not repaired as required in Section 4(7) of this administrative regulation.

2. The equipment identification number of each compressor for which a leak was not repaired in Section 4(7) of 401 KAR 35:280.

3. The equipment identification number of each compressor for which a leak was not repaired as required in Section 4(7) of this administrative regulation.

(c) Dates of hazardous waste management unit shutdowns that occurred within the semiannual reporting period.

(d) For each month during the semiannual reporting period, dates when the control device installed as required by Sections 3 to 6 of this administrative regulation exceeded or operated outside of the design specifications as defined in Section 15(5) of this administrative regulation and as indicated by the control device monitoring required by Section 11 of this administrative regulation and was not corrected within twenty-four (24) hours, the duration and cause of each exceedance, and any corrective measures taken.

(2) If, during the semiannual reporting period, leaks from valves, pumps, and compressors are repaired as required in Sections 3(3), (4)(f), 4(7), and 8(4) of this administrative regulation, respectively, and the control device does not exceed or operate outside of the design specifications as defined in Section 15(5) of this administrative regulation for more than twenty-four (24) hours, a report to the cabinet shall not be required.

PHILLIP J. SHEPHERD, Secretary
E. DOUGLAS STEPHAN, Commissioner
APPROVED BY AGENCY: December 3, 1993
FILED WITH LRC: December 14, 1993 at 10 a.m.

NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION CABINET
Department for Environmental Protection
Division of Waste Management
(Amended After Hearing)

401 KAR 34:285. Drip pads.

RELATES TO: KRS 224.10-224.40, 224.46, 224.70, 224.99
STATUTORY AUTHORITY: KRS 224.10-100, 224.46-505, 224.46-520
NECESSITY AND FUNCTION: To implement provisions of KRS 224.46-505 and 224.46-520 and to establish standards for drip pads.

Section 1. Applicability. (1) The requirements of this administrative regulation apply to owners and operators of facilities that use new or existing drip pads to convey treated wood drippage, precipitation, and surface water run-on to an associated collection system. Existing drip pads are those constructed before the effective date of this administrative regulation and those for which the owner or operator has a design and has entered into binding financial or other agreements for construction prior to the effective date of this administrative regulation. All other drip pads are new drip pads. The requirements at Section 4(2)(c) of this administrative regulation to install a leak collection system applies only to those drip pads that are constructed after the effective date of this administrative regulation except for those constructed after the effective date of this administrative regulation for which the owner or operator has a design and has entered into binding financial or other agreements for construction prior to the effective date of this administrative regulation.

(2) The owner or operator of any drip pad that is inside or under a structure that provides protection from precipitation so that neither run-off nor run-on is generated is not subject to regulation under Section 4(5) or (6) of this administrative regulation as appropriate.

(3) The requirements of this administrative regulation are not applicable to the management of infrequent and incidental drippage in storage yards provided that:

(a) The owner or operator maintains and complies with a written contingency plan that describes how the owner or operator will respond immediately to the discharge of such infrequent and incidental drippage.

(b) At a minimum, the contingency plan shall describe how the owner or operator will do the following:

1. Clean up the drippage;
2. Document the cleanup of the drippage;
3. Retain documents regarding cleanup for three (3) years; and
4. Manage the contaminated media in a manner consistent with 401 KAR Chapters 31 to 38.

Section 2. Assessment of Existing Drip Pad Integrity. (1) For each existing drip pad as defined in Section 1 of this administrative regulation, the owner or operator shall evaluate the drip pad and determine that it meets all of the requirements of this administrative regulation, except the requirements for liners and leak detection systems of Section 4(2) of this administrative regulation. The owner or operator shall obtain and keep on file at the facility a written assessment of the drip pad, reviewed and certified by an engineer that attests to the results of the evaluation. The assessment shall be reviewed, updated and recertified annually until all upgrades, repairs, or modifications necessary to achieve compliance with all of the standards of Section 4 of this administrative regulation are complete. The evaluation shall document the extent to which the drip pad meets each of the design and operating standards of Section 4 of this administrative regulation, except the standards for liners and leak detection systems, specified in Section 4(2) of this administrative regulation.

(2) The owner or operator shall develop a written plan for

upgrading, repairing, and modifying the drip pad to meet the requirements of Section 4(2) of this administrative regulation, and submit the plan to the cabinet no later than two (2) years before the date that all repairs, upgrades, and modifications **will** ~~[shall]~~ be complete. This written plan shall describe all changes to be made to the drip pad in sufficient detail to document compliance with all the requirements of Section 4 of this administrative regulation. The plan shall be reviewed and certified by an engineer.

(3) Upon completion of all upgrades, repairs, and modifications, the owner or operator shall submit to the cabinet the as-built drawings for the drip pad together with a certification by an engineer attesting that the drip pad conforms to the drawings.

(4) If the drip pad is found to be leaking or unfit for use, the owner or operator shall comply with the provisions of Section 4(13) of this administrative regulation or close the drip pad in accordance with Section 6 of this administrative regulation.

Section 3. Design and Installation of New Drip Pads. Owners and operators of drip pads shall ensure that the pads are designed, installed, and operated in accordance with one (1) of the following:

(1) All of the requirements of Sections 4 (except Section 4(1)(d)), 5, and 6 of this administrative regulation; or

(2) All of the requirements of Sections 4 (except Section 4(2)), 5, and 6 of this administrative regulation.

Section 4. Design and Operating Requirements. (1) Drip pads shall:

(a) Be constructed of nonearthern materials, excluding wood and nonstructurally supported asphalt;

(b) Be sloped to free-drain treated wood drippage, rain and other waters, or solutions of drippage and water or other wastes to the associated collection system;

(c) Have a curb or berm around the perimeter;

(d) Be impermeable (concrete pads shall be sealed, coated, or covered with an impermeable material for example) such that the entire surface where drippage occurs or may run across is capable of containing such drippage and mixtures of drippage and precipitation, materials, or other wastes while being routed to an associated collection system; and

1. Have a hydraulic conductivity of less than or equal to $1x10^{-7}$ centimeters per second; (for example, existing concrete drip pads shall be sealed, coated, or covered with a surface material with a hydraulic conductivity of less than or equal to $1x10^{-7}$ centimeters per second) such that the entire surface where drippage occurs or may run across is capable of containing such drippage and mixtures of drippage and precipitation, materials, or other wastes while being routed to an associated collection system. This surface material shall be maintained free of cracks and gaps that could adversely affect its hydraulic conductivity, and the material shall be chemically compatible with the preservatives that contact the drip pad. The requirements of this provision apply only to existing drip pads and those drip pads for which the owner or operator elects to comply with Section 3(1) of this administrative regulation instead of Section 3(2) of this administrative regulation.

2. The owner or operator shall obtain and keep on file at the facility a written assessment of the drip pad, reviewed and certified by an engineer that attests to the results of the evaluation. The assessment shall be reviewed, updated, and recertified annually. The evaluation shall document the extent to which the drip pad meets the design and operating standards of this section, except for subsection (2) of this section.

(e) Be of sufficient structural strength and thickness to prevent failure due to physical contact, climatic conditions, the stress of daily operations, (for example, variable and moving loads such as vehicle traffic, movement of wood).

(2) A new drip pad or an existing drip pad, after the deadline established in Section 2(2) of this administrative regulation, shall have:

(a) A synthetic liner installed below the drip pad that is designed, constructed, and installed to prevent leakage from the drip pad into the adjacent subsurface soil or groundwater or surface water at any time during the active life (including the closure period) of the drip pad. The liner shall be constructed of materials that **will** ~~[shall]~~ prevent waste from being absorbed into the liner and to prevent releases into the adjacent subsurface soil or groundwater or surface water during the active life of the facility. The liner shall be:

1. Constructed of materials that have appropriate chemical properties and sufficient strength and thickness to prevent failure due to pressure gradients (including static head and external hydrogeologic forces), physical contact with the waste or drip pad leakage to which they are exposed, climatic conditions, the stress of installation, and the stress of daily operation (including stresses from vehicular traffic on the drip pad);

2. Placed upon a foundation or base capable of providing support to the liner and resistance to pressure gradients above and below the liner to prevent failure of the liner due to settlement, compression or uplift; and

3. Installed to cover all surrounding earth that could come in contact with the waste or leakage; and

(b) A leakage detection system immediately above the liner that is designed, constructed, maintained and operated to detect leakage from the drip pad. The leakage detection system shall be:

1. Constructed of materials that are:

a. Chemically resistant to the waste managed in the drip pad and the leakage that might be generated; and

b. Of sufficient strength and thickness to prevent collapse under the pressures exerted by overlaying materials and by any equipment used at the drip pad;

2. Designed and operated to function without clogging through the scheduled closure of the drip pad; and

3. Designed so that it **will** ~~[shall]~~ detect the failure of the drip pad or the presence of a release of hazardous waste or accumulated liquid at the earliest practicable time.

(c) A leakage collection system immediately above the liner that is designed, constructed, maintained and operated to collect leakage from the drip pad such that it can be removed from below the drip pad. The date, time, and quantity of any leakage collected in this system and removed shall be documented in the operating log.

1. The drip pad surface shall be cleaned thoroughly in a manner and frequency such that accumulated residues of hazardous waste or other materials are removed, with residues being properly managed as hazardous waste, so as to allow weekly inspections of the entire drip pad surface without interference or hindrance from accumulated residues of hazardous waste or other material on the drip pad.

2. The owner or operator shall document the date and time of each cleaning and the cleaning procedure used in the facility's operating log. The owner or operator shall determine if the residues are hazardous under Section 3 of 401 KAR 32:030 and, if so, shall manage them under 401 KAR Chapters 31 to 38 and Section 3010 of RCRA.

(3) Drip pads shall be maintained such that they remain free of cracks, gaps, corrosion, or other deterioration that could cause hazardous waste to be released from the drip pad.

(4) The drip pad and associated collection system shall be designed and operated to convey, drain, and collect liquid resulting from drippage or precipitation in order to prevent run-off.

(5) Unless protected by a structure, as described in Section 1(2) of this administrative regulation, the owner or operator shall design, construct, operate and maintain a run-on control system capable of preventing flow onto the drip pad during peak discharge from at least a twenty-four (24) hour, twenty-five (25) year storm, unless the system has sufficient excess capacity to contain any run-off that might enter the system.

(6) Unless protected by a structure or cover as described in Section 1(2) of this administrative regulation, the owner or operator shall design, construct, operate and maintain a run-off management system to collect and control at least the water volume resulting from a twenty-four (24) hour, twenty-five (25) year storm.

(7) The drip pad shall be evaluated to determine that it meets the requirements of subsections (1) to (6) of this section and the owner or operator shall obtain a statement from an engineer certifying that the drip pad design meets the requirements of this section.

(8) Drippage and accumulated precipitation shall be removed from the associated collection system as necessary to prevent overflow onto the drip pad.

(9) The drip pad surface shall be cleaned thoroughly at least once every seven (7) days such that accumulated residues of hazardous waste or other materials are removed, using an appropriate and effective cleaning technique, including but not limited to, rinsing, washing with detergents or other appropriate solvents, or steam cleaning. The owner or operator shall document the date and time of each cleaning and the cleaning procedure used in the facility's operating log.

(10) Drip pads shall be operated and maintained in a manner to minimize tracking of hazardous waste or hazardous waste constituents off the drip pad as a result of activities by personnel or equipment.

(11) After being removed from the treatment vessel, treated wood from pressure and nonpressure processes shall be held on the drip pad until drippage has ceased. The owner or operator shall maintain records sufficient to document that all treated wood is held on the pad following treatment in accordance with this requirement.

(12) Collection and holding units associated with run-on and run-off control systems shall be emptied or otherwise managed as soon as possible after storms to maintain design capacity of the system.

(13) Throughout the active life of the drip pad and as specified in the permit, if the owner or operator detects a condition that may have caused or has caused a release of hazardous waste, the condition shall be repaired within a reasonably prompt period of time following discovery, in accordance with the following procedures:

(a) Upon detection of a condition that may have caused or has caused a release of hazardous waste (**for example** **[~~e.g.~~]**, upon detection of leakage in the leak detection system), the owner or operator shall:

1. Enter a record of the discovery in the facility operating log;

2. Immediately remove the portion of the drip pad affected by the condition from service;

3. Determine what steps shall be taken to repair the drip pad and clean up any leakage from below the drip pad, and establish a schedule for accomplishing the repairs;

4. Within twenty-four (24) hours after discovery of the condition, notify the cabinet of the condition and, within ten (10) working days, provide written notice to the cabinet with a description of the steps that **will** **[~~shall~~]** be taken to repair the drip pad and clean up any leakage, and the schedule for accomplishing this work.

(b) The cabinet shall review the information submitted, make a determination regarding whether the pad **will** **[~~shall~~]** be removed from service completely or partially until repairs and clean up are complete and notify the owner or operator of the determination and the underlying rationale in writing.

(c) Upon completing all repairs and clean up, the owner or operator shall notify the cabinet in writing and provide a certification signed by an engineer that the repairs and clean up have been completed according to the written plan submitted in accordance with paragraph (a)4 of this subsection.

(14) If a permit is necessary, the cabinet shall specify in the permit all design and operating practices that are necessary to ensure that the requirements of this section are satisfied.

(15) The owner or operator shall maintain, as part of the facility operating log, documentation of past operating and waste handling practices. This shall include identification of preservative formulations used in the past, a description of drippage management practices, and a description of treated wood storage and handling practices.

Section 5. Inspections. (1) During construction or installation, liners and cover systems (membranes, sheets, or coatings for example) shall be inspected for uniformity, damage and imperfections (examples are, holes, cracks, thin spots, or foreign materials). Immediately after construction or installation, liners shall be inspected and certified as meeting the requirements of Section 4 of this administrative regulation by an engineer. This certification shall be maintained at the facility as part of the facility operating record. After installation, liners and covers shall be inspected to ensure tight seams and joints and the absence of tears, punctures, or blisters.

(2) While a drip pad is in operation, it shall be inspected weekly and after storms to detect evidence of any of the following:

(a) Deterioration, malfunctions or improper operation of run-on and run-off control systems;

(b) The presence of leakage in and proper functioning of leak detection system.

(c) Deterioration or cracking of the drip pad surface.

Section 6. Closure. (1) At closure, the owner or operator shall remove or decontaminate all waste residues, contaminated containment system components (examples are, pad, liners), contaminated subsoils, and structures and equipment contaminated with waste and leakage, and manage them as hazardous waste.

(2) If, after removing or decontaminating all residues and making all reasonable efforts to effect removal or decontamination of contaminated components, subsoils, structures, and equipment as required in subsection (1) of this section, the owner or operator finds that not all contaminated subsoils can be practicably removed or decontaminated, he shall close the facility and perform postclosure care in accordance with closure and postclosure care requirements that apply to landfills (Section 6 of 401 KAR 34:230). For permitted units, the requirement to have a permit continues throughout the postclosure period. In addition, for the purpose of closure, postclosure, and financial responsibility, such a drip pad is then considered to be a landfill, and the owner or operator shall meet all of the requirements for landfills specified in 401 KAR 34:070 and 34:080.

(3)(a) The owner or operator of an existing drip pad, as defined in Section 1 of this administrative regulation, that does not comply with the liner requirements of Section 4(2)(a) of this administrative regulation shall:

1. Include in the closure plan for the drip pad under Section 3 of 401 KAR 34:070 both a plan for complying with subsection (1) of this section and a contingent plan for complying with subsection (2) of this section in case not all contaminated subsoils can be practicably removed at closure; and

2. Prepare a contingent postclosure plan under of Section 9 of 401 KAR 34:070 for complying with subsection (2) of this section in case not all contaminated subsoils can be practicably removed at closure.

(b) The cost estimates calculated under Section 3 of 401 KAR 34:070 and Section 1 of 401 KAR 34:100 for closure and postclosure care of a drip pad subject to this section shall include the cost of complying with the contingent closure plan and the contingent postclosure plan, but are not required to include the cost of expected closure under subsection (1) of this section.

PHILLIP J. SHEPHERD, Secretary
E. DOUGLAS STEPHAN, Commissioner
APPROVED BY AGENCY: December 13, 1993
FILED WITH LRC: December 14, 1993 at 10 a.m.

NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION CABINET
Department for Environmental Protection
Division of Waste Management
(Amended After Hearing)

401 KAR 35:020. General facilities standards (IS).

RELATES TO: KRS 224.01, 224.10, 224.40, 224.43, 224.46, 224.50, 224.99

STATUTORY AUTHORITY: KRS 224.10-100, 224.46-520

NECESSITY AND FUNCTION: To implement provisions of KRS 224.46-520 relative to general standards for hazardous waste sites or facilities qualifying for interim status. [~~requires that persons engaging in the storage, treatment, and disposal of hazardous waste obtain a permit. KRS 224.46-520 requires the cabinet to establish standards for these permits, to require adequate financial responsibility, and to establish minimum standards for closure for all facilities and the postclosure monitoring and maintenance of hazardous waste disposal facilities. This chapter establishes minimum standards for hazardous waste sites or facilities qualifying for interim status. This regulation establishes the general standards for facilities.~~]

Section 1. Applicability. The requirements in this administrative regulation apply to owners and operators of all hazardous waste sites or facilities, except as Section 1 of 401 KAR 35:010 provides otherwise.

Section 2. Identification Number. Every facility owner or operator shall apply to the cabinet for an EPA identification number in accordance with the cabinet's notification procedures.

Section 3. Required Notices. (1) The owner or operator of a facility that has arranged to receive hazardous waste from a foreign source shall notify the cabinet in writing at least four (4) weeks in advance of the date the waste is expected to arrive at the facility. Notice of subsequent shipments of the same waste from the same foreign source is not required.

(2) Before transferring ownership or operation of a facility during its operating life, or of a disposal facility during the postclosure care period, the owner or operator shall notify the new owner or operator in writing of the requirements of this chapter and 401 KAR Chapter 38 (see also Section 3 of 401 KAR 38:020).

Section 4. General Waste Analysis. (1)(a) Before an owner or operator treats, stores, or disposes of any hazardous wastes, or nonhazardous wastes, if applicable, under Section 4(4) of 401 KAR 35:070, he shall obtain a detailed chemical and physical analysis of a representative sample of the waste. At a minimum, this analysis shall contain all the information which **will** [~~shall~~] be known to treat, store, or dispose of the waste in accordance with the requirements of this chapter and 401 KAR Chapter 37.

(b) The analysis may include data developed under 401 KAR Chapter 31 and existing published or documented data on the hazardous waste or on waste generated from similar processes.

(c) The analysis shall be repeated as necessary to ensure that it is accurate and up to date. At a minimum, the analysis shall be repeated:

1. When the owner or operator is notified, or has reason to believe, that the process or operation generating the hazardous waste or nonhazardous wastes, if applicable, under Section 4(4) of 401 KAR 35:070 has changed; and

2. For off-site facilities, when the results of the inspection required in paragraph (d) of this subsection indicate that the hazardous waste received at the site or facility does not match the waste designated on the accompanying manifest or shipping paper.

(d) The owner or operator of an off-site facility shall inspect and if necessary, analyze each hazardous waste movement received at the facility to determine whether it matches the identity of the waste specified on the accompanying manifest or shipping paper.

(2) The owner or operator shall develop and follow a written waste analysis plan which describes the procedures which he **will** [~~shall~~] carry out to comply with subsection (1) of this section. He shall keep this plan at the site or facility. At a minimum, the plan shall specify:

(a) The parameters for which each hazardous waste, or nonhazardous wastes, if applicable, under Section 4(4) of 401 KAR 35:070 **will** [~~shall~~] be analyzed and the rationale for the selection of these parameters (that is, [~~i.e.,~~] how analysis for these parameters **will** [~~shall~~] provide sufficient information on the waste's properties to comply with subsection (1) of this section);

(b) The test methods which **will** [~~shall~~] be used to test for these parameters;

(c) The sampling method which **will** [~~shall~~] be used to obtain a representative sample of the waste to be analyzed. A representative sample may be obtained using either:

1. One (1) of the sampling methods described in 401 KAR 31:100; or

2. An equivalent sampling method.

(d) The frequency with which the initial analysis of the waste **will** [~~shall~~] be reviewed or repeated to ensure that the analysis is accurate and up to date;

(e) For off-site facilities, the waste analyses that hazardous waste generators have agreed to supply; and

(f) Where applicable, the methods which **will** [~~shall~~] be used to meet the additional waste analysis requirements for specific waste management methods as specified in Section 4 of 401 KAR 35:190, Section 4 of 401 KAR 35:200, Section 3 of 401 KAR 35:210 and Section 3 of 401 KAR 35:220, Section 7 of 401 KAR 35:230, Section 2 of 401 KAR 35:240, Section 3 of 401 KAR 35:250, Section 3 of 401 KAR 35:260, [~~and~~] Section 7 of 401 KAR 37:010, Section 5(4) of 401 KAR 35:275, and Section 14(4) of 401 KAR 35:280.

(g) For surface impoundments exempted from land disposal restrictions under Section 4(1) of 401 KAR 37:010, the procedures and schedules for:

1. The sampling of impoundment contents;

2. The analysis of test data; and

3. The annual removal of residues which are not delisted under Section 2 of 401 KAR 31:060 or which exhibit a characteristic of hazardous waste and either:

a. Do not meet applicable treatment standards of 401 KAR 37:040; or

b. Where no treatment standards have been established:

(i) The residues are prohibited from land disposal under Section 4 of 401 KAR 37:030[~~, Section 4~~] or KRS 224.46-520; or

(ii) The residues are prohibited from land disposal under Section 5(6) of 401 KAR 37:030[~~, Section 5(6)~~].

(3) For off-site facilities, the waste analysis plan required in subsection (2) of this section shall also specify the procedures which **will** [~~shall~~] be used to inspect and, if necessary, analyze each movement of hazardous waste received at the facility to ensure that it matches the identity of the waste designated on the accompanying manifest or shipping paper. At a minimum, the plan shall describe:

(a) The procedures which **will** [~~shall~~] be used to determine the identity of each movement of waste managed at the facility; and

(b) The sampling method which **will** [~~shall~~] be used to obtain a representative sample of the waste to be identified, if the identification method includes sampling.

Section 5. Security. (1) The owner or operator shall prevent the unknowing entry and minimize the possibility for the unauthorized entry of persons or livestock onto the active portion of his facility, unless:

(a) Physical contact with the waste, structures, or equipment

within the active portion of the facility will [~~shall~~] not injure unknowing or unauthorized persons or livestock which may enter the active portion of a facility; and

(b) Disturbance of the waste or equipment by the unknowing or unauthorized entry of persons or livestock onto the active portion of a facility will [~~shall~~] not cause a violation of the requirements of this chapter.

(2) Unless exempt under subsection (1)(a) and (b) of this section, a site or facility shall have:

(a) A twenty-four (24) hour surveillance system (that is, [~~e.g.,~~] television monitoring or surveillance by guards or facility personnel) which continuously monitors and controls entry onto the active portion of the facility; or

(b)1. An artificial or natural barrier (that is, [~~e.g.,~~] a fence in good repair or a fence combined with a cliff) which completely surrounds the active portion of the facility; and

2. A means to control entry, at all times, through the gates or other entrances to the active portion of the facility ([~~e.g.,~~] an attendant, television monitors, locked entrance, or controlled roadway access to the facility for example).

(3) Unless exempt under subsection (1)(a) and (b) of this section, a sign with the legend, "Danger - Unauthorized Personnel Keep Out," shall be posted at each entrance to the active portion of a facility, and at other locations, in sufficient numbers to be seen from any approach to this active portion. The legend shall be written in English and in any other language predominant in the area surrounding the facility, and shall be legible from a distance of at least twenty-five (25) feet. Existing signs with a legend other than "Danger - Unauthorized Personnel Keep Out" may be used if the legend on the sign indicates that only authorized personnel are allowed to enter the active portion, and that entry onto the active portion can be dangerous (see Section 7(2) of 401 KAR 35:070 for security requirements at disposal facilities during the postclosure care period).

Section 6. General Inspection Requirements. (1)(a) The owner or operator shall inspect his facility for malfunctions and deterioration, operator errors and discharges which may be causing (or may lead to):

1. Release of hazardous waste constituents to the environment; or

2. A threat to human health.

(b) The owner or operator shall conduct these inspections often enough to identify problems in time to correct them before they harm human health or the environment.

(2)(a) The owner or operator shall develop and follow a written schedule for inspecting all monitoring equipment, safety and emergency equipment, security devices, and operating and structural equipment (such as dikes and sump pumps) that are important to preventing, detecting, or responding to environmental or human health hazards.

(b) The owner or operator shall keep this schedule at the facility.

(c) The schedule shall identify the types of problems (such as [~~e.g.,~~] malfunctions or deterioration) which are to be checked during the inspection (for example, an [~~e.g.,~~] inoperative sump pump, leaking fitting, eroding dike[~~, etc.~~]).

(d) The frequency of inspection may vary for the terms [~~items~~] on the schedule. However, it should be based on the rate of possible deterioration of the equipment and the probability of an environmental or human health incident if the deterioration, [~~or~~] malfunction, or any operator error goes undetected between inspections. Areas subject to spills, such as loading and unloading areas, shall be inspected daily when in use. At a minimum, the inspection schedule shall include the items and frequencies called for in Section 5 of 401 KAR 35:180, Sections 4 and 6 of 401 KAR 35:190[~~, Section 6 of 401 KAR 35:190~~], Section 5 of 401 KAR 35:200, Section 11 of 401 KAR 35:210, Section 5 of 401 KAR 35:220, Section 12 of 401 KAR 35:230, Section 4 of 401 KAR 35:240, Section 4 of 401 KAR 35:250, [~~and~~] Section 4 of 401 KAR 35:260, Section 14 of 401 KAR 35:275, and Sections 3, 4, and 9 of 401 KAR 35:280, where applicable.

(3) The owner or operator shall remedy any deterioration or malfunction of equipment or structures which the inspection reveals on a schedule which ensures that the problem does not lead to an environmental or human health hazard. Where a hazard is imminent or has already occurred, remedial action shall be taken immediately.

(4) The owner or operator shall record inspections in an inspection log or summary. He shall keep these records for at least three (3) years from the date of inspection. At a minimum, these records shall include the date and time of the inspection, the name of the inspector, a notation of the observations made, and the date and nature of any repairs or other remedial actions.

Section 7. Personnel Training. (1)(a) Facility personnel shall successfully complete a program of classroom instruction or on-the-job training that teaches them to perform their duties in a way that ensures the facility's compliance with the requirements of this chapter. The owner or operator shall ensure that this program includes all the elements described in the document required under subsection (4)(c) of this section.

(b) This program shall be directed by a person trained in hazardous waste management procedures, and shall include instruction which teaches facility personnel hazardous waste management procedures (including contingency plan implementation) relevant to the positions in which they are employed.

(c) At a minimum, the training program shall be designed to ensure that facility personnel are able to respond effectively to emergencies by familiarizing them with emergency procedures, emergency equipment, and emergency systems, including where applicable:

1. Procedures for using, inspecting, repairing, and replacing facility emergency and monitoring equipment;

2. Key parameters for automatic waste feed cutoff systems;

3. Communications or alarm systems;

4. Response to fires or explosions;

5. Response to groundwater contamination incidents; and

6. Shutdown of operations.

(2) Facility personnel shall successfully complete the program required in subsection (1) of this section within six (6) months after January 7, 1981, or six (6) months after the date of their employment or assignment to a site or facility, or to a new position at a facility, whichever is later. Employees hired after January 7, 1981, shall not work in unsupervised positions until they have completed the training requirements of subsection (1) of this section.

(3) Facility personnel shall take part in an annual review of the initial training required in subsection (1) of this section.

(4) The owner or operator shall maintain the following documents and records at the facility:

(a) The job title for each position at the facility related to hazardous waste management, and the name of the employee filling each position;

(b) A written job description for each position listed under paragraph (a) of this subsection. This description may be consistent in its degree of specificity with descriptions for other similar positions in the same company location or bargaining unit, but shall include the requisite skill, education, or other qualifications, and duties of facility personnel assigned to each position;

(c) A written description of the type and amount of both introductory and continuing training that will [~~shall~~] be given to each person filling a position listed under paragraph (a) of this subsection; and

(d) Records that document that the training or job experience required under subsections (1), (2) and (3) of this section has been given to, and completed by, facility personnel.

(5) Training records on current personnel shall be kept until closure of the site or facility. Training records on former employees shall be kept for at least three (3) years from the date the employee

last worked at the facility. Personnel training records may accompany personnel transferred within the same company.

Section 8. General Requirements for Ignitable, Reactive, or Incompatible Wastes. (1) The owner or operator shall take precautions to prevent accidental ignition or reaction of ignitable or reactive waste. This waste shall be separated and protected from sources of ignition or reaction including but not limited to: open flames, smoking, cutting and welding, hot surfaces, frictional heat, sparks (static, electrical, or mechanical), spontaneous ignition ([~~e.g.,~~] from heat-producing chemical reactions for example), and radiant heat. While ignitable or reactive waste is being handled, the owner or operator shall confine smoking and open flames to specially designated locations. "No Smoking" signs shall be conspicuously placed wherever there is a hazard from ignitable or reactive waste.

(2) Where specifically required by other sections of this administrative regulation, the treatment, storage or disposal of ignitable or reactive waste, and the mixture or commingling of incompatible wastes, or incompatible wastes and materials, shall be conducted so that it does not:

(a) Generate extreme heat or pressure, fire or explosion, or violent reaction;

(b) Produce uncontrolled toxic mists, fumes, dusts, or gases in sufficient quantities to threaten human health;

(c) Produce uncontrolled flammable fumes or gases in sufficient quantities to pose a risk of fire or explosion;

(d) Damage the structural integrity of the device or facility containing the waste; or

(e) Through other like means threaten human health or the environment.

Section 9. Location Standards. The placement of any hazardous waste in a salt dome, salt bed formation, underground mine or cave is prohibited.

Section 10. Construction Quality Assurance Program. (1)(a) A construction quality assurance (CQA) program is required for all surface impoundment, waste pile, and landfill units that are required to comply with Section 10(1) of 401 KAR 35:200, Section 8 of 401 KAR 35:210, and Section 10(3) of 401 KAR 35:230. The program shall ensure that the constructed unit meets or exceeds all design criteria and specifications in the permit. The program shall be developed and implemented under the direction of a CQA officer who is an engineer registered in Kentucky.

(b) The CQA program shall address the following physical components, where applicable:

1. Foundations;
2. Dikes;
3. Low-permeability soil liners;
4. Geomembranes (flexible membrane liners);
5. Leachate collection and removal systems and leak detection systems; and
6. Final cover systems.

(2) Before construction begins on a unit subject to the CQA program under subsection (1) of this section, the owner or operator shall develop a written CQA plan. The plan shall identify steps that will be used to monitor and document the quality of materials and the condition and manner of their installation. The CQA plan shall include:

(a) Identification of applicable units, and a description of how they will be constructed.

(b) Identification of key personnel in the development and implementation of the CQA plan, and CQA officer qualifications.

(c) A description of inspection and sampling activities for all unit components identified in subsection (1)(b) of this section, including observations and tests that will be used before, during, and after construction to ensure that the construction materials and the installed unit components meet the design specifications. The description shall cover:

1. Sampling size and locations;
2. Frequency of testing;
3. Data evaluation procedures;
4. Acceptance and rejection criteria for construction materials;
5. Plans for implementing corrective measures; and
6. Data or other information to be recorded and retained in the operating record under Section 4 of 401 KAR 35:050.

(3)(a) The CQA program shall include observations, inspections, tests, and measurements sufficient to ensure:

1. Structural stability and integrity of all components of the unit identified in subsection (1)(b) of this section;
2. Proper construction of all components of the liners, leachate collection and removal system, leak detection system, and final cover system, according to permit specifications and good engineering practices, and proper installation of all components (e.g., pipes) according to design specifications;
3. Conformity of all materials used with design and other material specifications under Section 10 of 401 KAR 34:200, Section 2 of 401 KAR 34:210, and Section 10 of 401 KAR 34:230.

(b) The CQA program shall include test fills for compacted soil liners, using the same compaction methods as in the full-scale unit, to ensure that the liners are constructed to meet the hydraulic conductivity requirements of Section 2(3)(a) of 401 KAR 34:200, Section 2(3)(a) of 401 KAR 34:210, and Section 2(3) of 401 KAR 34:230 in the field. Compliance with the hydraulic conductivity requirements shall be verified by using in-situ testing on the constructed test fill. The test fill requirement is waived where data are sufficient to show that a constructed soil liner meets the hydraulic conductivity requirements of Section 2(3)(a) of 401 KAR 34:200, Section 2(3)(a) of 401 KAR 34:210, and Section 2(3) of 401 KAR 34:230 in the field.

(4) The owner or operator of units subject to this section shall submit to the cabinet by certified mail or hand delivery, at least thirty (30) days prior to receiving waste, a certification signed by the CQA officer that the CQA plan has been successfully carried out and that the unit meets the requirements of Section 2(3)(a) of 401 KAR 34:200, Section 2(3)(a) of 401 KAR 34:210, and Section 2(3) of 401 KAR 34:230. The owner or operator may receive waste in the unit after thirty (30) days from the cabinet receipt of the CQA certification unless the cabinet determines in writing that the construction is not acceptable, or extends the review period for a maximum of thirty (30) more days, or seeks additional information from the owner or operator during this period. Documentation supporting the CQA officer's certification must be furnished to the cabinet upon request.

PHILLIP J. SHEPHERD, Secretary
E. DOUGLAS STEPHAN, Commissioner
APPROVED BY AGENCY: December 13, 1993
FILED WITH LRC: December 14, 1993 at 10 a.m.

NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION CABINET
Department for Environmental Protection
Division of Waste Management
(Amended After Hearing)

401 KAR 35:060. Groundwater monitoring (IS).

RELATES TO: KRS 224.10, 224.40, 224.43, 224.46, 224.99
STATUTORY AUTHORITY: KRS 224.10-100, 224.46-520
NECESSITY AND FUNCTION: To implement provisions of KRS 224.46-520 and to establish [~~requires that persons engaging in the storage, treatment, and disposal of hazardous waste obtain a permit. KRS 224.46-520 requires the cabinet to establish standards for these permits, to require adequate financial responsibility, and to establish minimum standards for closure for all facilities and the postclosure~~

~~monitoring and maintenance of hazardous waste disposal facilities. This chapter establishes minimum standards for hazardous waste sites or facilities qualifying for interim status. This regulation establishes the~~] standards for groundwater monitoring.

Section 1. Applicability. (1) **By November 19, 1981,** [~~By November 19, 1981,~~] the owner or operator of a surface impoundment, landfill, or land treatment facility which is used to manage hazardous waste shall [~~must~~] implement a groundwater monitoring program capable of determining the facility's impact on the quality of groundwater in the uppermost aquifer underlying the facility, except as Section 1 of 401 KAR 35:010 and subsection (3) of this section provide otherwise.

(2) Except as subsections (3) and (4) of this section provide otherwise, the owner or operator shall [~~must~~] install, operate and maintain a groundwater monitoring system which meets the requirements of Section 2 of this administrative regulation, and shall [~~must~~] comply with Sections 3 to [~~through~~] 5 of this administrative regulation. This groundwater monitoring program shall [~~must~~] be carried out during the active life of the facility and, for disposal facilities during the postclosure care period as well.

(3) All or part of the groundwater monitoring requirements of this chapter may be waived if the owner or operator can demonstrate that there is a low potential for migration of hazardous waste or hazardous waste constituents from the facility via the uppermost aquifer to water supply wells (domestic, industrial or agricultural) or to surface water. This demonstration shall [~~must~~] be in writing and shall [~~must~~] be kept at the facility. This demonstration shall [~~must~~] be certified by a qualified geologist or geotechnical engineer and shall [~~must~~] establish the following:

(a) The potential for migration of hazardous waste or hazardous waste constituents from the facility to the uppermost aquifer by an evaluation of:

1. A water balance of precipitation, evapotranspiration, run-off and infiltration; and

2. Unsaturated zone characteristics (that is, [~~i.e.,~~] geologic materials, physical properties and depth to groundwater); and

(b) The potential for hazardous waste or hazardous waste constituents which enter the uppermost aquifer to migrate to a water supply well or surface water by an evaluation of:

1. Saturated zone characteristics (that is, [~~i.e.,~~] geologic materials, physical properties and rate of groundwater flow), and

2. The proximity of the site or facility to water supply wells or surface water.

(4) If an owner or operator assumes (or knows) that groundwater monitoring of indicator parameters in accordance with Sections 2 and 3 of this administrative regulation would show statistically significant increases (or decreases in the case of pH) when evaluated under Section 4(2) of this administrative regulation, he may install, operate and maintain an alternate groundwater monitoring system (other than the one described in Sections 2 and 3 of this administrative regulation). If the owner or operator decides to use an alternate groundwater monitoring system he shall [~~must~~]:

(a) [~~By November 19, 1981,~~] Submit to the cabinet a specific plan, certified by a qualified geologist or geotechnical engineer, which satisfies the requirements of Section 4(4)(c) of this administrative regulation for an alternate groundwater monitoring system;

(b) [~~Not later than November 19, 1981,~~] Initiate the determinations specified in Section 4(4)(d) of this administrative regulation;

(c) Prepare and submit a written report in accordance with Section 4(4)(e) of this administrative regulation;

(d) Continue to make the determinations specified in Section 4(4)(d) of this administrative regulation on a quarterly basis until final closure of the facility; and

(e) Comply with the recordkeeping and reporting requirements in Section 5(2) of this administrative regulation.

(5)(a) The groundwater monitoring requirements of this administrative regulation may be waived with respect to any surface impoundment that:

1. Is used to neutralize wastes which are hazardous solely because they exhibit the corrosivity characteristic under Section 3 of 401 KAR 31:030 or are listed as hazardous wastes in 401 KAR 31:040 only for this reason; and

2. Contains no other hazardous wastes, if the owner or operator can demonstrate that there is no potential for migration of hazardous wastes from the impoundment.

(b) The demonstration shall [~~must~~] establish, based upon the consideration of the characteristics of the wastes and the impoundment, that the corrosive wastes **will** [~~shall~~] [~~will~~] be neutralized to the extent that they no longer meet the corrosivity characteristic before they can migrate out of the impoundment. The demonstration shall [~~must~~] be in writing and shall [~~must~~] be certified by a qualified professional.

Section 2. Groundwater Monitoring System. (1) A groundwater monitoring system shall [~~must~~] be capable of yielding groundwater samples for analysis and shall [~~must~~] consist of:

(a) Monitoring wells (at least one (1) well) installed hydraulically upgradient (that is, [~~i.e.,~~] in the direction of increasing static head) from the limit of the waste management area. Their number, locations and depths shall [~~must~~] be sufficient to yield groundwater samples that are:

1. Representative of background groundwater quality in the uppermost aquifer near the facility; and

2. Not affected by the facility; and

(b) Monitoring wells (at least three (3) wells) installed hydraulically downgradient (that is, [~~i.e.,~~] in the direction of decreasing static head) at the limit of the waste management area. Their number, locations and depths shall [~~must~~] ensure that they immediately detect any statistically significant amounts of hazardous waste or hazardous waste constituents that migrate from the waste management area to the uppermost aquifer.

(c) The facility owner or operator may demonstrate that an alternate hydraulically downgradient monitoring well location shall meet the criteria outlined below. The demonstration shall be in writing and kept at the facility. The demonstration shall be certified by a qualified groundwater scientist and establish that:

1. An existing physical obstacle prevents monitoring well installation at the hydraulically downgradient limit of the waste management area; and

2. The selected alternate downgradient location is as close to the limit of the waste management area as practical; and

3. The location ensures detection that, given the alternate location, is as early as possible of any statistically significant amounts of hazardous waste or hazardous waste constituents that migrate from the waste management area to the uppermost aquifer.

4. Lateral expansion, new, or replacement units are not eligible for an alternate downgradient location under this paragraph.

(2) Separate monitoring systems for each waste management component of a site or facility are not required provided that provisions for sampling upgradient and downgradient water quality will detect any discharge from the waste management area.

(a) In the case of a facility consisting of only one (1) surface impoundment, landfill or land treatment area, the waste management area is described by the waste boundary (perimeter).

(b) In the case of a facility consisting of more than one (1) surface impoundment, landfill or land treatment area, the waste management area is described by an imaginary boundary line which circumscribes the several waste management components.

(3) All monitoring wells shall [~~must~~] be cased in a manner that maintains the integrity of the monitoring well bore hole. This casing shall [~~must~~] be screened or perforated, and packed with gravel or sand where necessary, to enable sample collection at depths where appropriate aquifer flow zones exist. The annular space (that is, [~~i.e.,~~]

the space between the bore hole and well casing) above the sampling depth shall [~~must~~] be sealed with a suitable material ([~~e.g.,~~] cement grout or bentonite slurry for example) to prevent contamination of samples and the groundwater.

Section 3. Sampling and Analysis. (1) The owner or operator shall [~~must~~] obtain and analyze samples from the installed groundwater monitoring system. The owner or operator shall [~~must~~] develop and follow a groundwater sampling and analysis plan. He shall [~~must~~] keep this plan at the facility. The plan shall [~~must~~] include procedures and techniques for:

(a) Sample collection;

(b) Sample preservation and shipment;

(c) Analytical procedures; and

(d) Chain of custody control.

(2) The owner or operator shall [~~must~~] determine the concentration or value of the following parameters in groundwater samples in accordance with subsections (3) and (4) of this section:

(a) Parameters characterizing the suitability of the groundwater as a drinking water supply, as specified in 401 KAR 35:310.

(b) Parameters establishing groundwater quality:

1. Chloride;
2. Iron;
3. Manganese;
4. Phenols;
5. Sodium; and
6. Sulfate.

(c) Parameters used as indicators of groundwater contamination:

1. pH;
2. Specific conductance;
3. Total organic carbon;
4. Total organic halogen.

(3)(a) For all monitoring wells, the owner or operator shall [~~must~~] establish initial background concentrations or values of all parameters specified in subsection (2) of this section. He shall [~~must~~] do this quarterly for one (1) year.

(b) For each of the indicator parameters specified in subsection (2)(c) of this section, at least four (4) replicate measurements shall [~~must~~] be obtained for each sample and the initial background arithmetic mean and variance shall [~~must~~] be determined by pooling the replicate measurements for the respective parameter concentrations or values in samples obtained from upgradient wells during the first year.

(4) After the first year, all monitoring wells shall [~~must~~] be sampled and the samples analyzed with the following frequencies:

(a) Samples collected to establish groundwater quality shall [~~must~~] be obtained and analyzed for the parameters specified in subsection (2)(b) of this section at least annually.

(b) Samples collected to indicate groundwater contamination shall [~~must~~] be obtained and analyzed for the parameters specified in subsection (2)(c) of this section at least semiannually.

(5) Elevation of the groundwater surface at each monitoring well shall [~~must~~] be determined each time a sample is obtained.

Section 4. Preparation, Evaluation and Response. (1) By August 1, 1982 the owner or operator shall [~~must~~] prepare an outline of a groundwater quality assessment program. The outline shall [~~must~~] describe a more comprehensive groundwater monitoring program (than that described in Sections 2 and 3 of this administrative regulation) capable of determining:

(a) Whether hazardous waste or hazardous waste constituents have entered the groundwater;

(b) The rate and extent of migration of hazardous waste or hazardous waste constituents in the groundwater; and

(c) The concentrations of hazardous waste or hazardous waste constituents in the groundwater.

(2) For each indicator parameter specified in Section 3(2)(c) of this administrative regulation, the owner or operator shall [~~must~~] calculate the arithmetic mean and variance, based on at least four (4) replicate measurements on each sample, for each well monitored in accordance with Section 3(4)(b) of this administrative regulation, and compare these results with its initial background arithmetic mean. The comparison shall [~~must~~] consider individually each of the wells in the monitoring system, and shall [~~must~~] use the student's t-test at the 0.01 level of significance (see 401 KAR 35:320) to determine statistically significant increases (and decreases, in the case of pH) over initial background.

(3)(a) If the comparisons for the upgradient wells made under subsection (2) of this section show a significant increase (or pH decrease), the owner or operator shall [~~must~~] submit this information in accordance with Section 5(1)(b)2 of this administrative regulation.

(b) If the comparisons for downgradient wells made under subsection (2) of this section show a significant increase (or pH decrease), the owner or operator shall [~~must~~] then immediately obtain additional groundwater samples from those downgradient wells where a significant difference was detected, split the samples in two (2), and obtain analyses of all additional samples to determine whether the significant difference was a result of laboratory error.

(4)(a) If the analyses performed under subsection (3)(b) of this section confirm the significant increase (or pH decrease), the owner or operator shall [~~must~~] provide written notice to the cabinet within seven (7) days of the date of such confirmation that the site or facility may be affecting groundwater quality.

(b) Within fifteen (15) days after the notification under subsection (4)(a) of this section, the owner or operator shall [~~must~~] develop and submit to the cabinet [~~director~~] a specific plan, based on the outline required under subsection (1) of this section and certified by a qualified geologist or geotechnical engineer, for a groundwater quality assessment program at the facility.

(c) The plan to be submitted under Section 1(4)(a) of this administrative regulation or subsection (4)(b) of this section shall [~~must~~] specify:

1. The number, location and depth of wells;
2. Sampling and analytical methods for those hazardous wastes or hazardous waste constituents in the facility;
3. Evaluation procedures, including any use of previously gathered groundwater quality information; and
4. A schedule of implementation.

(d) The owner or operator shall [~~must~~] implement the groundwater quality assessment plan which satisfies the requirements of subsection (4)(c) of this section and, at a minimum, determine:

1. The rate and extent of migration of the hazardous wastes or hazardous waste constituents in the groundwater; and
2. The concentrations of the hazardous wastes or hazardous waste constituents in the groundwater.

(e) The owner or operator shall [~~must~~] make his first determination under subsection (4)(d) of this section as soon as technically feasible and, within fifteen (15) days after the determination, submit to the cabinet [~~director~~] a written report containing an assessment of the groundwater quality.

(f) If the owner or operator determines, based on the results of the first determination under subsection (4)(d) of this section, that no hazardous wastes or hazardous waste constituents from the facility have entered the groundwater, then he may reinstate the indicator evaluation program described in Section 3 of this administrative regulation and subsection (2) of this section. If the owner or operator reinstates the indicator evaluation program, he shall [~~must~~] so notify the cabinet [~~director~~] in the report submitted under subsection (4)(e) of this section.

(g) If the owner or operator determines, based on the first determination under subsection (4)(d) of this section, that hazardous wastes or hazardous waste constituents for the facility have entered the groundwater, then he:

1. Shall [~~must~~] continue to make the determinations required

under subsection (4)(d) of this section on a quarterly basis until final closure of the facility, if the groundwater quality assessment plan was implemented prior to final closure of the facility; or

2. May cease to make the determinations required under subsection (4)(d) of this section if the groundwater quality assessment plan was implemented during the postclosure care period.

(5) Notwithstanding any other provision of this administrative regulation, any groundwater quality assessment to satisfy the requirements of subsection (4)(d) of this section which is initiated prior to final closure of the facility shall [~~must~~] be completed and reported in accordance with subsection (4)(e) of this section.

(6) Unless the groundwater is monitored to satisfy the requirements of subsection (4)(d) of this section, at least annually the owner or operator shall [~~must~~] evaluate the data on groundwater surface elevations obtained under Section 3(5) of this administrative regulation to determine whether the requirements under Section 2(1) of this administrative regulation for locating the monitoring wells continues to be satisfied. If the evaluation shows that Section 2(1) of this administrative regulation is no longer satisfied, the owner or operator shall [~~must~~] immediately modify the number, location or depth of the monitoring wells to bring the groundwater monitoring system into compliance with this requirement.

Section 5. Recordkeeping and Reporting. (1) Unless the groundwater is monitored to satisfy the requirements of Section 4(4)(d) of this administrative regulation, the owner or operator shall [~~must~~]:

(a) Keep records of the analyses required in Section 3(3) and (4) of this administrative regulation, the associated groundwater surface elevations required in Section 3(5) of this administrative regulation and the evaluations required in Section 4(2) of this administrative regulation throughout the active life of the site or facility and, for disposal facilities, throughout the postclosure care period as well; and

(b) Report the following groundwater monitoring information to the cabinet [~~director~~]:

1. During the first year when initial background concentrations are being established for the facility, concentrations or values of the parameters listed in Section 3(2)(a) of this administrative regulation for each groundwater monitoring well within fifteen (15) days after completing each quarterly analysis. The owner or operator shall [~~must~~] separately identify for each monitoring well any parameters whose concentration or value has been found to exceed the maximum contaminant levels listed in 401 KAR 35:310.

2. Annually, concentrations or values of the parameters listed in Section 3(2)(c) of this administrative regulation for each groundwater monitoring well, along with the required evaluations for these parameters under Section 4(2) of this administrative regulation. The owner or operator shall [~~must~~] separately identify any significant differences from initial background found in the upgradient wells, in accordance with Section 4(3)(a) of this administrative regulation. During the active life of the facility, this information shall [~~must~~] be submitted as part of the annual report required under Section 6 of 401 KAR 35:050.

3. As a part of the annual report required under Section 6 of 401 KAR 35:050, results of the evaluation of groundwater surface elevations under Section 4(6) of this administrative regulation and a description of the response to that evaluation, where applicable.

(2) If the groundwater is monitored to satisfy the requirements of Section 4(4)(d) of this administrative regulation, the owner or operator shall [~~must~~]:

(a) Keep records of the analyses and evaluations specified in the plan which satisfies the requirements of Section 4(4)(c) of this administrative regulation throughout the active life of the facility and, for disposal facilities, throughout the postclosure care period as well; and

(b) Annually, until final closure of the facility, submit to the cabinet [~~director~~] a report containing the results of his groundwater quality assessment program which includes, but is not limited to, the calculated (or measured) rate of migration of hazardous wastes or hazardous waste constituents in the groundwater during the report period. This report shall [~~must~~] be submitted as part of the annual report required under Section 6 of 401 KAR 35:050.

PHILLIP J. SHEPHERD, Secretary
E. DOUGLAS STEPHAN, Commissioner
APPROVED BY AGENCY: December 13, 1993
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NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION CABINET
Department for Environmental Protection
Division of Waste Management
(Amended After Hearing)

401 KAR 35:070. Closure and postclosure (IS).

RELATES TO: KRS 224.01, 224.10, 224.40, 224.43, 224.46, 224.50, 224.99

STATUTORY AUTHORITY: KRS 224.10-100, 224.46-520, 224.46-530

NECESSITY AND FUNCTION: To implement provisions of KRS 224.46-520 and 224.46-530 and to establish [~~requires that persons engaging in the storage, treatment, and disposal of hazardous waste obtain a permit. KRS 224.46-520 requires the cabinet to establish standards for these permits, to require adequate financial responsibility, and to establish minimum standards for closure for all facilities and the postclosure monitoring and maintenance of hazardous waste disposal facilities. This chapter establishes minimum standards for hazardous waste sites or facilities qualifying for interim status. This regulation establishes~~] the standards for closure and postclosure of facilities qualifying for interim status.

Section 1. Applicability. Except as Section 1 of 401 KAR 35:010 provides otherwise:

(1) Sections 2 to [~~through~~] 6 of this administrative regulation (which concern closure) apply to the owners and operators of all hazardous waste sites or facilities; and

(2) Sections 7 to [~~through~~] 11 of this administrative regulation (which concern postclosure care) apply to the owners and operators of:

(a) All hazardous waste disposal facilities; and

(b) Waste piles and surface impoundments for which the owner or operator intends to remove the wastes at closure to the extent that these sections are made applicable to the facilities in Section 6 of 401 KAR 35:200[~~, Section 6,~~] or Section 7 of 401 KAR 35:210[~~, Section 7~~]; and

(c) Tank systems that are required under Section 8 of 401 KAR 35:190 to meet requirements for landfills.

Section 2. Closure Performance Standards. The owner or operator shall close the facility in a manner that:

(1) Minimizes the need for further maintenance;

(2) Controls, minimizes or eliminates, to the extent necessary to protect human health and the environment, postclosure escape of hazardous waste, hazardous constituents, leachate, contaminated run-off, or hazardous waste decomposition products to the ground or surface waters or to the atmosphere;

(3) Complies with the closure requirements of this chapter including, but not limited to, the requirements of Section 8 of 401 KAR 35:190, Section 6 of 401 KAR 35:200, Section 7 of 401 KAR 35:210, Section 7 of 401 KAR 35:220, Section 4 of 401 KAR 35:230, Section 5 of 401 KAR 35:240, Section 5 of 401 KAR 35:250, and Section 5 of 401 KAR 35:260;

(4) Includes any corrective action necessary to bringing the facility

into compliance with the applicable facility standards contained in Section 12 of 401 KAR 34:060; and

(5) Complies with KRS 224.46-520(8), requiring sites and facilities to be maintained in operational condition.

Section 3. Closure Plan; Amendment of Plan. (1) Written plan. By May 19, 1981 or by six (6) months after the effective date of the administrative regulation that first subjects a facility to the provisions of this section, the owner or operator of a hazardous waste site or facility shall have a written closure plan. Until final closure is completed and certified in accordance with Section 6 of this administrative regulation, a copy of the most current plan shall be furnished to the cabinet upon request, including request by mail. In addition, for facilities without approved plans, the most current plan shall also be provided during site inspections, on the day of inspection, to any officer, employee or representative of the cabinet who is duly designated by the secretary.

(2) Content of plan. The plan shall identify steps necessary to perform partial and final closure of the facility at any point during its active life. The closure plan shall include, at least:

(a) A description of how each hazardous waste management unit at the facility will be closed in accordance with Section 2 of this administrative regulation;

(b) A description of how final closure of the facility will be conducted in accordance with Section 2 of this administrative regulation. The description shall identify the maximum extent of the operation which will be unclosed during the active life of the facility;

(c) An estimate of the maximum inventory of hazardous wastes ever on site over the active life of the facility and a detailed description of the methods to be used during partial closures and final closure, including, but not limited to, methods for removing, transporting, recycling, treating, storing, or disposing of all hazardous wastes, identification of and the type(s) of the off-site hazardous waste management unit(s) to be used, if applicable;

(d) A detailed description of the steps needed to remove or decontaminate all hazardous waste residues and contaminated containment system components, equipment, structures, and soils during partial and final closure, including, but not limited to, procedures for cleaning equipment and removing contaminated soils, methods for sampling and testing surrounding soils, and criteria for determining the extent of decontamination necessary to satisfy the closure performance standard in Section 2 of this administrative regulation;

(e) A detailed description of other activities necessary during the partial and final closure period to ensure that all partial closures and final closure satisfy the closure performance standards in Section 2 of this administrative regulation, including, but not limited to, groundwater monitoring, leachate collection, and run-on and run-off control;

(f) A schedule for closure of each hazardous waste management unit and for final closure of the facility. The schedule shall include, at a minimum, the total time required to close each hazardous waste management unit and the time required for intervening closure activities which will allow tracking of the progress of partial and final closure. (For example, in the case of a landfill unit, estimates of the time required to treat or dispose of all hazardous waste inventory and of the time required to place a final cover shall be included); and

(g) An estimate of the expected year of final closure for facilities that use trust funds to demonstrate financial assurance under Sections 2 to [~~through~~] 11 of 401 KAR 35:090 or Sections 2 to [~~through~~] 11 of 401 KAR 35:100 and whose remaining operating life is less than twenty (20) years, and for facilities without approved closure plans.

(3) Amendment of plan. The owner or operator may amend the closure plan at any time prior to the notification of partial or final closure of the facility. An owner or operator with an approved closure plan shall submit a written request to the cabinet to authorize a change to the approved closure plan. The written request shall include a copy of the amended closure plan for approval by the cabinet.

(a) The owner or operator shall amend the closure plan whenever:

1. Changes in operating plans or facility design affect the closure plan; or

2. There is a change in the expected year of closure, if applicable; or

3. In conducting partial or final closure activities, unexpected events require a modification of the closure plan.

(b) The owner or operator shall amend the closure plan at least sixty (60) days prior to the proposed change in facility design or operation, or no later than sixty (60) days after an unexpected event has occurred which has affected the closure plan. If an unexpected event occurs during the partial or final closure period, the owner or operator shall amend the closure plan no later than thirty (30) days after the unexpected event. These provisions also apply to owners or operators of surface impoundments and waste piles who intended to remove all hazardous wastes at closure, but are required to close as landfills in accordance with Section 4 of 401 KAR 35:230.

(c) An owner or operator with an approved closure plan shall submit the modified plan to the cabinet at least sixty (60) days prior to the proposed change in facility design or operation, or no more than sixty (60) days after an unexpected event has occurred which has affected the closure plan. If an unexpected event has occurred during the partial or final closure period, the owner or operator shall submit the modified plan no more than thirty (30) days after the unexpected event. These provisions also apply to owners or operators of surface impoundments and waste piles who intended to remove all hazardous wastes at closure but are required to close as landfills in accordance with Section 4 of 401 KAR 35:230. If the amendment to the plan is a major modification according to the criteria in Sections 2 and 3 of 401 KAR 38:040, the modification to the plan shall be approved according to the procedures in subsection (4)(d) of this section.

(d) The cabinet may request modifications to the plan under the conditions described in paragraph (a) of this subsection. An owner or operator with an approved closure plan shall submit the modified plan within sixty (60) days of the request from the cabinet or within thirty (30) days if the unexpected event occurs during partial or final closure. If the amendment is considered a major modification according to the criteria in Sections 2 and 3 of 401 KAR 38:040, the modification to the plan shall be approved in accordance with the procedures in subsection (4)(d) of this section.

(4) Notification of partial closure and final closure.

(a) The owner or operator shall submit the closure plan to the cabinet at least 180 days prior to the date on which he expects to begin closure of the first surface impoundment, waste pile, land treatment or landfill unit, or final closure of a facility with such a unit, whichever is earlier. The owner or operator shall submit the closure plan to the cabinet at least forty-five (45) days prior to the date on which he expects to begin partial or final closure of a boiler or industrial furnace. The owner or operator shall submit the closure plan to the cabinet at least forty-five (45) days prior to the date on which he expects to begin final closure of a facility with only tanks, container storage, or incinerator units. An owner or operator with approved closure plans shall notify the cabinet in writing at least sixty (60) days prior to the date on which he expects to begin closure of a surface impoundment, waste pile, landfill, or land treatment unit, or final closure of a facility involving such a unit. An owner or operator with an approved closure plan shall notify the cabinet in writing at least forty-five (45) days prior to the date he expects to begin partial or final closure of a boiler or industrial furnace. An owner or operator with an approved closure plan[s] shall notify the cabinet in writing at least forty-five (45) days prior to the date on which he expects to begin final closure of a facility with only tanks, container storage, or incinerator units.

(b) The date when the owner or operator "expects to begin closure" shall be either:

1. Within thirty (30) days after the date on which any hazardous waste management unit receives the known final volume of hazardous wastes or, if there is a reasonable possibility that the hazardous waste management unit will receive additional hazardous wastes, no later than one (1) year after the date on which the unit received the most recent volume of hazardous waste. If the owner or operator of a hazardous waste management unit can demonstrate to the cabinet that the hazardous waste management unit or facility has the capacity to receive additional hazardous wastes and that he has taken, and will continue to take, all steps to prevent threats to human health and the environment, including compliance with all interim status requirements, the cabinet may approve an extension to this one (1) year limit; or [.]

2. For units meeting the requirements of Section 4(4) of this administrative regulation, no later than thirty (30) days after the date on which the hazardous waste management unit receives the known final volume of nonhazardous wastes, or if there is a reasonable possibility that the hazardous waste management unit will receive additional nonhazardous wastes, no later than one (1) year after the date on which the unit received the most recent volume of nonhazardous wastes. If the owner or operator can demonstrate to the cabinet that the hazardous waste management unit has the capacity to receive additional nonhazardous wastes and he has taken, and will continue to take, all steps to prevent threats to human health and the environment, including compliance with all applicable interim status requirements, the cabinet may approve an extension to this one (1) year limit.

(c) The owner or operator shall submit his closure plan to the cabinet no later than fifteen (15) days after:

1. Termination of interim status except when a permit is issued simultaneously with termination of interim status; or

2. Issuance of a judicial decree or final order under KRS 224.10-100, 224.10-420, and 224.46-530 or 224.99-010 to cease receiving hazardous wastes or close.

(d) The cabinet shall provide the owner or operator and the public, through a newspaper notice, the opportunity to submit written comments on the plan and request modifications to the plan no later than thirty (30) days from the date of the notice. The cabinet shall also, in response to a request or at its own discretion, hold a public hearing whenever such a hearing might clarify one (1) or more issues concerning a closure plan. The cabinet shall give public notice of the hearing at least thirty (30) days before it occurs. (Public notice of the hearing may be given at the same time as notice of the opportunity for the public to submit written comments, and the two (2) notices may be combined.) The cabinet shall approve, modify, or disapprove the plan within ninety (90) days of its receipt. If the cabinet does not approve the plan it shall provide the owner or operator with a detailed written statement of reasons for the refusal and the owner or operator shall modify the plan or submit a new plan for approval within thirty (30) days after receiving such written statement. The cabinet shall approve or modify this plan in writing within sixty (60) days. If the cabinet modifies the plan, this modified plan becomes the approved closure plan. The cabinet shall assure that the approved plan is consistent with Sections 2 to [~~through~~] 6 of this administrative regulation and the applicable requirements of [~~Section 1 of~~] 401 KAR 35:060 [~~et seq.~~], Section 5 of 401 KAR 35:190, Section 6 of 401 KAR 35:200, Section 7 of 401 KAR 35:210, Section 7 of 401 KAR 35:220, Section 4 of 401 KAR 35:230, Section 5 of 401 KAR 35:240, Section 5 of 401 KAR 35:250, and Section 5 of 401 KAR 35:260. A copy of the modified plan with a detailed statement of reasons for the modifications shall be mailed to the owner or operator.

(5) Removal of wastes and decontamination or dismantling of equipment. Nothing in this section shall preclude the owner or operator from removing hazardous wastes and decontaminating or dismantling equipment in accordance with the approved partial or final closure plan at any time before or after notification of partial or final closure. [~~If the owner or operator planned to begin closure before November 19, 1981, he was required to submit the closure plan by May 19, 1981.~~]

Section 4. Closure; Time Allowed for Closure. (1) Within ninety (90) days after receiving the final volume of hazardous wastes, or the final volume of nonhazardous wastes if the owner or operator complies with all applicable requirements in subsections (4) and (5) of this section, at a hazardous waste management unit or facility, or within ninety (90) days after approval of the closure plan, whichever is later, the owner or operator shall treat, remove from the unit or facility, or dispose of on site, all hazardous wastes in accordance with the approved closure plan. The cabinet may approve a longer period if the owner or operator demonstrates that:

(a)1. The activities required to comply with this subsection will, of necessity, take longer than ninety (90) days to complete; or

2.a. The hazardous waste management unit or facility has the capacity to receive additional hazardous wastes or has the capacity to receive nonhazardous wastes if the facility owner or operator complies with subsections (4) and (5) of this section; and

b. There is a reasonable likelihood that the owner or operator [~~he~~] or another person will recommence operation of the hazardous waste management unit or the facility within one (1) year; and

c. Closure of the hazardous waste management unit or facility would be incompatible with continued operation of the site; and

(b) The owner or operator [~~He~~] has taken and **will** [~~shall~~] continue to take all steps to prevent threats to human health and the environment, including compliance with all applicable interim status requirements.

(2) The owner or operator shall complete partial and final closure activities in accordance with the approved closure plan and within 180 days after receiving the final volume of hazardous wastes, or the final volume of nonhazardous wastes if the owner or operator complies with all applicable requirements of subsections (4) and (5) of this section, at the hazardous waste management unit or facility, or 180 days after approval of the closure plan, if that is later. The cabinet may approve an extension to the closure period if the owner or operator demonstrates that:

(a)1. The partial or final closure activities will, of necessity, take longer than 180 days to complete; or

2.a. The hazardous waste management unit or facility has the capacity to receive additional hazardous wastes or has the capacity to receive nonhazardous wastes if the facility owner or operator complies with subsections (4) and (5) of this section; and

b. There is reasonable likelihood that the owner or operator [~~he~~] or another person will recommence operation of the hazardous waste management unit or the facility within one (1) year; and

c. Closure of the hazardous waste management unit or facility would be incompatible with continued operation of the site; and

(b) The owner or operator [~~He~~] has taken and will continue to take all steps to prevent threats to human health and the environment from the unclosed but not operating hazardous waste management unit or facility, including compliance with all applicable interim status requirements.

(3) The demonstrations referred to in subsections (1)(a) and (2)(a) of this section shall be made as follows:

(a) The demonstrations in subsection (1)(a) of this section shall be made at least thirty (30) days prior to the expiration of the ninety (90) day period in subsection (1) of this section; and

(b) The demonstrations in subsection (2)(a) of this section shall be made at least thirty (30) days prior to the expiration of the 180 day period in subsection (2) of this section unless the owner or operator is otherwise subject to subsection (4) of this section.

(4) The cabinet may allow an owner or operator to receive nonhazardous wastes if a landfill, land treatment, or surface impoundment unit after the final receipt of hazardous wastes at that unit if:

(a) The owner or operator submits an amended part B application, or a part B application, if not previously required, and demonstrates that:

1. The unit has the existing design capacity as indicated on the part A application to receive nonhazardous wastes; and

2. There is a reasonable likelihood that the owner or operator or another person will receive nonhazardous wastes in the unit within one (1) year after the final receipt of hazardous wastes; and

3. The nonhazardous wastes will not be incompatible with any remaining wastes in the unit or with the facility design and operating requirements of the unit or facility under this administrative regulation; and

4. Closure of the hazardous waste management unit would be incompatible with continued operation of the unit or facility; and

5. The owner or operator is operating and will continue to operate in compliance with all applicable interim status requirements; and

(b) The part B application includes an amended waste analysis plan, groundwater monitoring and response program, human exposure assessment required under Section 9 of 401 KAR 38:070, and closure and postclosure plans, and updated cost estimates and demonstrations of financial assurance for closure and postclosure care as necessary and appropriate to reflect any changes due to the presence of hazardous constituents in the nonhazardous wastes, and changes in closure activities, including the expected year of closure if applicable under Section 3(2)(g) of this administrative regulation, as a result of the receipt of nonhazardous wastes following the final receipt of hazardous wastes; and

(c) The part B application is amended, as necessary and appropriate, to account for the receipt of nonhazardous wastes following receipt of the final volume of hazardous wastes; and

(d) The part B application and the demonstrations referred to in subparagraphs 1 and 2 of this paragraph are submitted to the cabinet no later than 180 days prior to the date on which the owner or operator of the facility receives the known final volume of hazardous wastes, or no later than ninety (90) days after the effective date of the administrative regulation, whichever is later.

(5) In addition to the requirements in subsection (4) of this section, an owner or operator of a hazardous waste surface impoundment that is not in compliance with the liner and leachate collection system requirements in 401 KAR 35:200 shall:

(a) Submit with the part B application:

1. A contingent corrective measures plan; and

2. A plan for removing hazardous wastes in compliance with paragraph (b) of this subsection; and

(b) Remove all hazardous wastes from the unit by removing all hazardous liquids and removing all hazardous waste sludges to the extent practicable without impairing the integrity of the liner(s), if any.

(c) Removal of hazardous wastes shall be completed no later than ninety (90) days after the final receipt of hazardous wastes. The cabinet may approve an extension to this deadline if the owner or operator demonstrates that the removal of hazardous wastes will, of necessity, take longer than the allotted period to complete and that an extension will not pose a threat to human health and the environment.

(d) If a release that is a statistically significant increase (or decrease in the case of pH) in hazardous constituents over background levels is detected in accordance with the requirements of 401 KAR 35:060, the owner or operator of the unit:

1. Shall comply with the reporting requirements of KRS 224.01-400, if applicable;

2. Shall implement corrective measures in accordance with the approved contingent corrective measures plan required by paragraph (a) of this subsection no later than one (1) year after detection of the release, or approval of the contingent corrective measures plan, whichever is later;

3. May receive wastes at the unit following detection of the release only if the approved corrective measures plan includes a demonstration that continued receipt of wastes will not impede corrective action; and

4. May be required by the cabinet to implement corrective measures in less than one (1) year or to cease receipt of wastes until corrective measures have been implemented if necessary to protect human health and the environment.

(e) During the period of corrective action, the owner or operator shall provide semiannual reports to the cabinet that describe the progress of the corrective action program, compile all groundwater monitoring data, and evaluate the effect of the continued receipt of nonhazardous wastes on the effectiveness of the corrective action.

(f) The cabinet may require the owner or operator to commence closure of the unit if the owner or operator fails to implement corrective action measures in accordance with the approved contingent corrective measures plan within one (1) year as required in paragraph (d) of this subsection, or fails to make substantial progress in implementing corrective action and achieving the facility's background levels.

(g) If the owner or operator fails to implement corrective measures as required in paragraph (d) of this subsection, or if the cabinet determines that substantial progress has not been made pursuant to paragraph (f) of this subsection he shall:

1. Notify the owner or operator in writing that the owner or operator shall begin closure in accordance with the deadline in subsections (1) and (2) of this section and provide a detailed statement of reasons for this determination; and

2. Provide the owner or operator and the public, through a newspaper notice, the opportunity to submit written comments on the decision no later than twenty (20) days after the date of the notice.

3. If the cabinet receives no written comments, the decision shall become final five (5) days after the close of the comment period. The cabinet shall notify the owner or operator that the decision is final, and that a revised closure plan, if necessary, shall be submitted within fifteen (15) days of the final notice and that closure shall begin in accordance with the deadlines in subsections (1) and (2) of this section.

4. If the cabinet receives written comments on the decision, a final decision shall be made within thirty (30) days after the end of the comment period. The cabinet shall provide the owner or operator in writing and the public through a newspaper notice, a detailed statement of reasons for the final decision. If the cabinet determines that substantial progress has not been made, closure shall be initiated in accordance with the deadlines in subsections (1) and (2) of this section.

5. The final determinations made by the cabinet under paragraph (g)3 and 4 of this subsection are not subject to administrative appeal.

Section 5. Disposal or Decontamination of Equipment, Structures and Soils. During the partial and final closure periods, all contaminated equipment, structures and soil shall be properly disposed of or decontaminated unless specified otherwise in Section 6 of 401 KAR 35:200, Section 7 of 401 KAR 35:210, Section 7 of 401 KAR 35:220, or Section 4 of 401 KAR 35:230. By removing all hazardous wastes or hazardous constituents during partial and final closure, the owner or operator may become a generator of hazardous waste and shall handle that hazardous waste in accordance with all applicable requirements of 401 KAR Chapter 32.

Section 6. Certification of Closure. Within sixty (60) days of completion of closure of each hazardous waste surface impoundment, waste pile, land treatment, and landfill unit, and within sixty (60) days of completion of final closure, the owner or operator shall submit to the cabinet, by registered mail, a certification that the hazardous waste management unit or facility, as applicable, has been closed in accordance with the specifications in the approved closure plan. The certification shall be signed by the owner or operator and by an independent professional engineer who is registered in the Commonwealth of Kentucky. Documentation supporting the [~~independent~~

~~registered professional~~] engineer's certification shall be furnished to the cabinet upon request until it releases the owner or operator from the financial assurance requirements for closure under Section 11 of 401 KAR 35:090.

Section 7. Survey Plat. No later than the submission of the certification of closure of each hazardous waste disposal unit, an owner or operator shall submit to the local zoning authority, or the authority with jurisdiction over local land use, and to the cabinet a survey plat indicating the location and dimensions of landfill cells or other hazardous waste disposal units with respect to permanently surveyed benchmarks. This plat shall be prepared and certified by a professional land surveyor registered in the Commonwealth of Kentucky. The plat filed with the local zoning authority, or the authority with jurisdiction over local land use shall contain a note, prominently displayed, which states the owner's or operator's obligation to restrict disturbance of the hazardous waste disposal unit in accordance with this administrative regulation.

Section 8. Postclosure Care and Use of Property. (1)(a) Postclosure care for each hazardous waste management unit subject to the requirements of Sections 8 to [~~through~~] 11 of this administrative regulation shall begin after completion of closure of the unit and continue for thirty (30) years after that date. It shall consist of at least the following:

1. Monitoring and reporting in accordance with the requirements of 401 KAR 35:060, 401 KAR 35:200, 401 KAR 35:210, 401 KAR 35:220 and 401 KAR 35:230; and

2. Maintenance and monitoring of waste containment systems in accordance with the requirements of 401 KAR 35:060, 401 KAR 35:200, 401 KAR 35:210, 401 KAR 35:220, and 401 KAR 35:230.

(b) Any time preceding closure of a hazardous waste management unit subject to postclosure care requirements or final closure, or any time during the postclosure period for a particular hazardous waste disposal unit, the cabinet may in accordance with the permit modification procedures in 401 KAR Chapter 38: **extend the postclosure care period applicable to the hazardous waste management unit or facility, if it finds that the extended period is necessary to protect human health and the environment (e.g., leachate or groundwater monitoring results indicate a potential for migration of hazardous wastes at levels which may be harmful to human health and the environment).** [~~extend the postclosure care period applicable to the hazardous waste management unit or facility, if it finds that the extended period is necessary to protect human health and the environment (e.g., leachate or groundwater monitoring results indicate a potential for migration of hazardous wastes at levels which may be harmful to human health and the environment).~~]

[~~1. Shorten the postclosure care period applicable to the hazardous waste management unit, or facility, if all disposal units have been closed, if the cabinet finds that the reduced period is sufficient to protect human health and the environment (leachate or groundwater monitoring results, characteristics of the hazardous waste, application of advanced technology, or alternative disposal, treatment, or reuse techniques indicate that the hazardous waste management unit or facility is secure) determined in accordance with risk assessment procedures pursuant to KRS 224.01-400; or~~

~~2. Extend the postclosure care period applicable to the hazardous waste management unit or facility, if the cabinet finds that the extended period is necessary to protect human health and the environment (leachate or groundwater monitoring results indicate a potential for migration of hazardous wastes at levels which may be harmful to human health and the environment) determined in accordance with risk assessment procedures pursuant to KRS 224.01-400.~~]

(2) The cabinet may require, at partial and final closure, continuation of any of the security requirements of Section 5 of 401 KAR 35:020 during part or all of the postclosure period when:

(a) Hazardous wastes may remain exposed after completion of partial or final closure; or

(b) Access by the public or domestic livestock may pose a hazard to human health.

(3) Postclosure use of property on or in which hazardous wastes remain after partial or final closure shall not be allowed to disturb the integrity of the final cover, liner(s), or any other component of the containment system, or the function of the facility's monitoring systems, unless the cabinet finds that the disturbance:

(a) Is necessary to the proposed use of the property, and will not increase the potential hazard to human health or the environment; or

(b) Is necessary to reduce a threat to human health or the environment.

(4) All postclosure care activities shall be in accordance with the provisions of the approved postclosure plan as specified in Section 9 [8] of this administrative regulation. (Note: KRS 224.46-520(4) establishes that the postclosure care period is a minimum of thirty (30) years after closure of the disposal facility.)

Section 9. Postclosure Plan; Amendment of Plan. (1) Written plan. By May 19, 1981, the owner or operator of a hazardous waste disposal unit shall have a written postclosure plan. An owner or operator of a surface impoundment or waste pile that intends to remove all hazardous wastes at closure shall prepare a postclosure plan and submit it to the cabinet within ninety (90) days of the date that the owner or operator or the cabinet determines that the hazardous waste management unit or facility shall be closed as a landfill, subject to the requirements of Sections 8 to [~~through~~] 11 of this administrative regulation.

(2) Until final closure of the facility, a copy of the most current postclosure plan shall be furnished to the cabinet upon request, including request by mail. In addition, for facilities without approved postclosure plans, the most current postclosure plan shall also be provided during site inspections, on the day of inspection, to any designated officer, employee or representative of the cabinet who is duly designated by the cabinet. After final closure has been certified, the person or office specified in subsection (3)(c) of this section shall keep the approved postclosure plan during the postclosure period.

(3) For each hazardous waste management unit subject to the requirements of this section, the postclosure plan shall identify the activities that will be carried on after closure of each disposal unit and the frequency of these activities, and include at least:

(a) A description of the planned monitoring activities and the frequencies at which they will be performed to comply with 401 KAR 35:060, 401 KAR 35:200, 401 KAR 35:210, 401 KAR 35:220, and 401 KAR 35:230 during the postclosure care period; and

(b) A description of the planned maintenance activities, and the frequencies at which they will be performed, to ensure:

1. The integrity of the cap and final cover or other containment systems in accordance with the requirements of 401 KAR 35:200, 401 KAR 35:210, 401 KAR 35:220, and 401 KAR 35:230; and

2. The function of the monitoring equipment in accordance with the requirements of 401 KAR 35:060, 401 KAR 35:200, 401 KAR 35:210, 401 KAR 35:220, and 401 KAR 35:230; and

(c) The name, address and phone number of the person or office to contact about the hazardous waste disposal unit or facility during the postclosure care period.

(4) Amendment of plan. The owner or operator may amend the postclosure plan any time during the active life of the facility or during the postclosure care period. An owner or operator with an approved postclosure plan shall submit a written request to the cabinet to authorize a change to the approved plan. The written request shall include a copy of the amended postclosure plan for approval by the cabinet.

(a) The owner or operator shall amend the postclosure plan whenever:

1. Changes in operating plans or facility design affect the postclosure plan; or

2. Events which occur during the active life of the facility, including partial and final closures, affect the postclosure plan.

(b) The owner or operator shall amend the postclosure plan at least sixty (60) days prior to the proposed change in facility design or operation, or no later than sixty (60) days after an unexpected event has occurred which has affected the postclosure plan.

(c) An owner or operator with an approved postclosure plan shall submit the modified plan to the cabinet at least sixty (60) days prior to the proposed change in facility design or operation, or no more than sixty (60) days after an unexpected event has occurred which has affected the postclosure plan. If an owner or operator of a surface impoundment or a waste pile who intended to remove all hazardous wastes at closure in accordance with Section 6(2) of 401 KAR 35:200 or Section 7(1) of 401 KAR 35:210 is required to close as a landfill in accordance with Section 4 of 401 KAR 35:230, the owner or operator shall submit a postclosure plan within ninety (90) days of the determination by the owner or operator or cabinet that the unit shall be closed as a landfill. If the amendment to the postclosure plan is a major modification according to the criteria in Sections 2 and 3 of 401 KAR 38:040, the modification to the plan shall be approved according to the procedures in subsection (6) of this section.

(d) The cabinet may request modifications to the plan under the conditions described in paragraph (a) of this subsection. An owner or operator with an approved postclosure plan shall submit the modified plan within no later than sixty (60) days of the request from the cabinet. If the amendment to the plan is considered a major modification according to the criteria in Sections 2 and 3 of 401 KAR 38:040, the modifications to the postclosure plan shall be approved in accordance with the procedures in subsection (6) of this section. If the cabinet determines that an owner or operator of a surface impoundment or waste pile who intended to remove all hazardous wastes at closure shall close the facility as a landfill, the owner or operator shall submit a postclosure plan for approval to the cabinet within ninety (90) days of the determination.

(5) The owner or operator of a facility with hazardous waste management units subject to these requirements shall submit his postclosure plan to the cabinet at least 180 days before the date he expects to begin partial or final closure of the first hazardous waste disposal unit. The date when he "expects to begin closure" of the first hazardous waste disposal unit shall be either within thirty (30) days after the date on which the hazardous waste management unit receives the known final volume of hazardous waste or, if there is a reasonable possibility that the hazardous waste management unit will receive additional hazardous wastes, no later than one (1) year after the date on which the unit received the most recent volume of hazardous waste. The owner or operator shall submit the postclosure plan to the cabinet no later than fifteen (15) days after:

(a) Termination of interim status (except when a permit is issued to the facility simultaneously with termination of interim status); or

(b) Issuance of a judicial decree or final orders under KRS Chapter 224 to cease receiving wastes or close.

(6) The cabinet shall provide the owner or operator and the public, through a newspaper notice, the opportunity to submit written comments on the postclosure plan and request modifications to the plan no later than thirty (30) days from the date of the notice. The cabinet shall also, in response to a request or at its own discretion hold a public hearing whenever a hearing might clarify one (1) or more issues concerning a postclosure plan. The cabinet shall give public notice of the hearing at least thirty (30) days before it occurs. (Public notice of the hearing may be given at the same time as notice of the opportunity for the public to submit written comments, and the two (2) notices may be combined). The cabinet shall approve, modify, or disapprove the plan within ninety (90) days of its receipt. If the cabinet does not approve the plan it shall provide the owner or operator with a detailed written statement of reasons for the refusal and the owner or operator shall modify the plan or submit a new plan for approval within thirty (30) days after receiving such written statement. The cabinet shall approve or modify this plan in writing within sixty (60) days. If the cabinet modifies the plan, this modified plan shall become the approved postclosure plan. The cabinet shall ensure that the approved postclosure plan is consistent with Sections 8 to [~~through~~] 11 of this administrative regulation. A copy of the modified plan with a detailed statement of reasons for the modifications shall be mailed to the owner or operator. [~~If an owner or operator planned to begin closure before November 19, 1981, he was required to submit the postclosure plan by May 19, 1981.~~]

(7) The postclosure plan and length of the postclosure care period may be modified any time prior to the end of the postclosure care period in either of the following two (2) ways:

(a) The owner or operator or any member of the public may petition the cabinet to extend or reduce the postclosure care period applicable to a hazardous waste management unit or facility based on cause, or alter the requirements of the postclosure care period based on cause.

1. The petition shall include evidence demonstrating that:

a. The secure nature of the hazardous waste management unit or facility makes the postclosure care requirement(s) unnecessary or supports reduction of the postclosure care period specified in the current postclosure plan (for example, [~~e.g.,~~] leachate or groundwater monitoring results, characteristics of the wastes, application of advanced technology, or alternative disposal, treatment, or reuse techniques indicate that the facility is secure) and the site has been closed for thirty (30) years; or

b. The requested extension in the postclosure care period or alteration of postclosure care requirements is necessary to prevent threats to human health and the environment (for example, [~~e.g.,~~] leachate or groundwater monitoring results indicate a potential for migration of hazardous wastes at levels which may be harmful to human health and the environment).

2. These petitions shall be considered by the cabinet only when they present new and relevant information not previously considered by the cabinet. Whenever the cabinet is considering a petition, it shall provide the owner or operator and the public, through a newspaper notice, the opportunity to submit written comments within thirty (30) days of the date of the notice. The cabinet shall also, in response to a request or at its own discretion, hold a public hearing whenever a hearing might clarify one (1) or more issues concerning the postclosure plan. The cabinet shall give the public notice of the hearing at least thirty (30) days before it occurs. (Public notice of the hearing may be given at the same time as notice of the opportunity for written public comments, and the two (2) notices may be combined). After considering the comments, the cabinet shall issue a final determination, based upon the criteria set forth in this paragraph.

3. If the cabinet denies the petition, it shall send the petitioner a brief written response giving a reason for the denial.

(b) The cabinet may tentatively decide to modify the postclosure plan if it deems it necessary to prevent threats to human health and the environment. The cabinet may propose to extend or reduce (except that the postclosure period shall not be less than thirty (30) years) the postclosure care period applicable to a hazardous waste management unit or facility based on cause or alter the requirements of the postclosure care period based on cause.

1. The cabinet shall provide the owner or operator and the affected public, through a newspaper notice, the opportunity to submit written comments within thirty (30) days of the date of the notice and the opportunity for a public hearing as in paragraph (a)2 of this subsection. After considering the comments, the cabinet shall issue a final determination.

2. The cabinet shall base its final determination upon the same criteria as required for petitions under paragraph (a)1 of this subsection. A modification of the postclosure plan may include, where appropriate, the temporary suspension rather than permanent deletion

of one (1) or more postclosure care requirements. At the end of the specified period of suspension, the cabinet shall then determine whether the requirement(s) should be permanently discontinued or reinstated to prevent threats to human health and the environment. The suspension or discontinuance shall be based on the risk assessment provisions in KRS 224.01-400.

Section 10. Postclosure Notices. (1) No later than sixty (60) days after certification of closure of each hazardous waste disposal unit, the owner or operator shall submit to the local zoning authority, or the authority with jurisdiction over local land use, and to the cabinet, a record of the type, location, and quantity of hazardous wastes disposed of within each cell or other disposal unit of the facility. For hazardous wastes disposed of before January 12, 1981, the owner or operator shall identify the type, location and quantity of the hazardous wastes to the best of his knowledge and in accordance with any records he has kept.

(2) Within sixty (60) days of certification of closure of the first hazardous waste disposal unit and within sixty (60) days of certification of closure of the last hazardous waste disposal unit, the owner or operator shall:

(a) Record, in accordance with state law, a notation on the deed to the facility property - or on some other instrument which is normally examined during title search - that **will** **[~~shall~~]** in perpetuity notify any potential purchaser of the property that:

1. The land has been used to manage hazardous wastes; and
2. Its use is restricted under this administrative regulation; and
3. The survey plat and record of the type, location, and quantity of hazardous wastes disposed of within each cell or other hazardous waste disposal unit of the facility required by Section 7 of this administrative regulation and subsection (1) of this section have been filed with the local zoning authority or the authority with jurisdiction over local land use and with the cabinet; and

(b) Submit to the cabinet a certification, signed by the owner or operator, that he has recorded the notation specified in paragraph (a) of this subsection, and a copy of the document in which the notation has been placed.

(3) If the owner or operator or any subsequent owner of the land upon which a hazardous waste disposal unit was located wishes to remove hazardous wastes and hazardous waste residues, the liner, if any, and all contaminated structures, equipment, and soils, he shall request a modification to the approved postclosure plan in accordance with the requirements of Section 9(7) of this administrative regulation. The owner or operator shall demonstrate that the removal of hazardous wastes will satisfy the criteria of Section 8(3) of this administrative regulation. By removing hazardous waste, the owner or operator may become a generator of hazardous waste and shall manage it in accordance with all applicable requirements of this chapter and 401 KAR Chapter 32. If the owner or operator is granted approval to conduct the removal activities, the owner or operator may request that the cabinet approve either:

(a) The removal of the notation on the deed to the facility property or other instrument normally examined during title search; or

(b) The addition of a notation to the deed or instrument indicating the removal of the hazardous waste.

Section 11. Certification of Completion of Postclosure Care. No later than sixty (60) days after the completion of the established postclosure care period for each hazardous waste disposal unit, the owner or operator shall submit to the cabinet by registered mail, a certification that the postclosure care period for the hazardous waste disposal unit was performed in accordance with the specifications in the approved postclosure plan. The certification shall be signed by the owner or operator and an independent professional engineer registered in the Commonwealth of Kentucky. Documentation supporting the independent registered professional engineer's certification shall be furnished to the cabinet upon request until it releases the owner or operator from the financial assurance requirements for postclosure care under Section 11 of 401 KAR 35:100.

PHILLIP J. SHEPHERD, Secretary
E. DOUGLAS STEPHAN, Commissioner
APPROVED BY AGENCY: December 13, 1993
FILED WITH LRC: December 14, 1993 at 10 a.m.

NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION CABINET
Department for Environmental Protection
Division of Waste Management
(Amended After Hearing)

401 KAR 35:090. Closure financial requirements (IS).

RELATES TO: KRS 224.10, 224.40, 224.43, 224.46, 224.99
STATUTORY AUTHORITY: KRS 224.10-100, 224.46-520
NECESSITY AND FUNCTION: To implement provisions of KRS 224.46-520 and to establish [~~requires that persons engaging in the storage, treatment, and disposal of hazardous waste obtain a permit. KRS 224.46-520 requires the cabinet to establish standards for these permits, to require adequate financial responsibility, and to establish minimum standards for closure for all facilities and the postclosure monitoring and maintenance of hazardous waste disposal facilities. This chapter establishes minimum standards for hazardous waste sites or facilities qualifying for interim status. This regulation establishes the~~] closure financial requirements for sites or facilities qualifying for interim status.

Section 1. Cost Estimate for Facility Closure. (1) The owner or operator shall [~~must~~] have a detailed written estimate, in current dollars, of the cost of closing the facility in accordance with the requirements in Sections 2 to [~~through~~] 6 of 401 KAR 35:070 and applicable closure requirements of Section 5 of 401 KAR 35:190, Section 6 of 401 KAR 35:200, Section 7 of 401 KAR 35:210, Section 7 of 401 KAR 35:220, Section 4 of 401 KAR 35:230, Section 5 of 401 KAR 35:240, Section 5 of 35:250, and Section 5 of 401 KAR 35:260.

(a) The estimate shall [~~must~~] equal the cost of final closure at the point in the facility's active life when the extent and manner of its operation would make closure the most expensive, as indicated by its closure plan (see Section 3(2) of 401 KAR 35:070); and

(b) The closure cost estimate shall [~~must~~] be based on the costs to the owner or operator of hiring a third party to close the facility. A third party is a party who is neither a parent nor a subsidiary of the owner or operator (see definition of parent corporation in Section 1[~~(e)~~] of 401 KAR 35:080). The owner or operator shall [~~may~~] use costs for on-site disposal if he can demonstrate that on-site disposal capacity will exist at all times over the life of the facility.

(c) The closure cost estimate shall [~~may~~] not incorporate any salvage value that may be realized by the sale of hazardous wastes, or nonhazardous wastes if applicable under Section 4(4) of 401 KAR 35:070, facility structures or equipment, land, or other facility assets at the time of partial or final closures.

(d) The owner or operator shall [~~may~~] not incorporate a zero cost for hazardous wastes, or nonhazardous wastes if applicable under Section 4(4) of 401 KAR 35:070, that might have economic value.

(2) During the active life of the facility, the owner or operator shall [~~must~~] adjust the closure cost estimate for inflation within sixty (60) days prior to the anniversary date of the establishment of the financial instrument(s) used to comply with Section 2 of this administrative regulation. For owners and operators using the financial test or corporate guarantee, the closure cost estimate shall [~~must~~] be updated for inflation within thirty (30) days after the close of the firm's fiscal year and before submission of updated information to the cabinet [~~director~~] as specified in Section 7(3) of this administrative

regulation. The adjustment may be made by recalculating the closure cost estimate in current dollars, or by using an inflation factor derived from the most recent Implicit Price Deflator for Gross National Product as published by the U.S. Department of Commerce in its Survey of Current Business, as specified in paragraphs (a) and (b) of this subsection. The inflation factor is the result of dividing the latest published annual Deflator by the Deflator for the previous year.

(a) The first adjustment shall be [~~is~~] made by multiplying the closure cost estimate by the inflation factor. The result shall be [~~is~~] the adjusted closure cost estimate.

(b) Subsequent adjustments shall be [~~are~~] made by multiplying the latest adjusted closure cost estimate by the latest inflation factor.

(3) During the active life of the facility, the owner or operator shall [~~must~~] revise the closure cost estimate no later than thirty (30) days after a revision has been made to the closure plan which increases the cost of closure. If the owner or operator has an approved closure plan, the closure cost estimate shall [~~must~~] be revised no later than thirty (30) days after the cabinet [~~director~~] has approved the request to modify the closure plan, if the change in the closure plan increases the cost of closure. The revised closure cost estimate shall [~~must~~] be adjusted for inflation as specified in subsection (2) of this section.

(4) The owner or operator shall [~~must~~] keep the following at the facility during the operating life of the facility:

(a) The latest closure cost estimate prepared in accordance with subsections (1) and (3) of this section; and

(b) When this estimate has been adjusted in accordance with subsection (2) of this section, the latest adjusted closure cost estimate.

Section 2. Financial Assurance for Facility Closure. An owner or operator of each facility shall [~~must~~] establish financial assurance for closure of the facility. He shall [~~must~~] choose from the options as specified in Sections 3 to [~~through~~] 8 of this administrative regulation.

Section 3. Closure Trust Fund. (1) An owner or operator may satisfy the requirements of this administrative regulation by establishing a closure trust fund which conforms to the requirements of this section and submitting an originally signed duplicate of the trust agreement to the cabinet [~~director~~]. The trustee shall [~~must~~] be an entity which has the authority to act as a trustee and whose trust operations are regulated and examined by a federal or state agency.

(2) The trust agreement, including the formal certification of acknowledgement, shall [~~must~~] be executed on the form incorporated by reference in Section **4** [~~14~~] of 401 KAR 34:080. [~~provided by the cabinet containing wording identical to the wording specified in Section 1 of 401 KAR 34:140 and the trust agreement shall [must] be accompanied by a formal certification of acknowledgment (for an example, see Section 2 of 401 KAR 34:140).~~] Schedule A of the trust agreement shall [~~must~~] be updated within sixty (60) days after a change in the amount of the current closure cost estimate covered by the agreement.

(3) Payments to the trust fund shall [~~must~~] be made annually by the owner or operator over twenty (20) years beginning with October 8, 1982, or over the remaining operating life of the facility as estimated in the closure plan, whichever period is shorter; this period is hereinafter referred to as the "pay-in period." The payments into the closure trust fund shall [~~must~~] be made as follows:

(a) The first payment shall [~~must~~] be made by October 8, 1982, except as provided in subsection (5) of this section. The first payment shall [~~must~~] be at least equal to the current closure cost estimate (see Section 1 of this administrative regulation), except as provided in Section 9 of this administrative regulation, divided by the number of years in the pay-in period.

(b) Subsequent payments shall [~~must~~] be made no later than thirty (30) days after each anniversary date of the first payment. The amount of each subsequent payment shall [~~must~~] be determined by this formula:

$$\text{NEXT payment} = \frac{CE - CV}{Y}$$

Where CE is the current closure cost estimate, CV is the current value of the trust fund, and Y is the number of years remaining in the pay-in period.

(4) The owner or operator may accelerate payments into the trust fund or he may deposit the full amount of the closure cost estimate at the time the fund is established. However, he shall [~~must~~] maintain the value of the fund at no less than the value the fund would have been if annual payments were made as specified in subsection (3) of this section.

(5) If the owner or operator establishes a closure trust fund after having used one (1) or more alternate mechanisms specified in this administrative regulation, his first payment shall [~~must~~] be at least the amount that the fund would have contained if the trust fund were established initially and annual payments made according to specifications of subsection (3) of this section.

(6) After the pay-in period is completed, whenever the current closure cost estimate changes, the owner or operator shall [~~must~~] compare the new estimate with the trustee's most recent annual valuation of the trust fund. If the value of the fund is less than the amount of the new estimate, the owner or operator, within sixty (60) days of the change in the cost estimate, shall [~~must~~] either deposit an amount into the fund so that its value after this deposit at least equals the amount of the current closure cost estimate, or obtain other financial assurance as specified in this section to cover the difference.

(7) If the value of the trust fund is greater than the total amount of the current closure cost estimate, the owner or operator may submit a written request to the cabinet [~~director~~] for release of the amount in excess of the current closure cost estimate.

(8) If an owner or operator substitutes other financial assurance as specified in this administrative regulation for all or part of the trust fund, he may submit a written request to the cabinet [~~director~~] for release of the amount in excess of the current closure cost estimate covered by the trust fund.

(9) Within sixty (60) days after receiving a request from the owner or operator for release of funds as specified in subsections (7) and (8) of this section, the cabinet [~~director~~] will instruct the trustee to release to the owner or operator such funds as the cabinet [~~director~~] specifies in writing.

(10) After beginning partial or final closure, an owner or operator or another person authorized to conduct partial or final closure may request reimbursements for partial or final closure expenditures by submitting itemized bills to the cabinet [~~director~~]. The owner or operator may request reimbursements for partial closure only if sufficient funds are remaining in the trust fund to cover the maximum costs of closing the facility over its remaining operating life. No later than sixty (60) days after receiving bills for partial or final closure activities, the cabinet [~~director~~] will instruct the trustees to make reimbursements in those amounts as the cabinet [~~director~~] specifies in writing, if the cabinet [~~director~~] determines that the partial or final closure expenditures are in accordance with the approved closure plan or otherwise justified. If the cabinet [~~director~~] has reason to believe that the maximum cost of closure over the remaining life of the facility will be significantly greater than the value of the trust fund, he may withhold reimbursements of such amounts as he deems prudent until he determines, in accordance with Section 11 of this administrative regulation, that the owner or operator is no longer required to maintain financial assurance for final closure of the facility. If the cabinet [~~director~~] does not instruct the trustee to make such reimbursements, he shall [~~will~~] provide to the owner or operator a detailed written statement of reasons.

(11) The cabinet shall [~~director will~~] agree to termination of the trust when:

(a) An owner or operator substitutes alternate financial assurance

for closure as specified in this section; or

(b) The cabinet [~~director~~] releases the owner or operator from the requirements of this administrative regulation in accordance with Section 11 of this administrative regulation.

Section 4. Surety Bond Guaranteeing Payment into a Closure Trust Fund. (1) An owner or operator may satisfy the requirements of this administrative regulation by obtaining a surety bond which conforms to the requirements of this section and submitting the bond to the cabinet [~~director~~]. The surety company issuing the bond shall [~~must~~], at a minimum, be among those listed as acceptable sureties on federal bonds in Circular 570 of the U.S. Department of the Treasury.

(2) The surety bond shall [~~must~~] be executed on the form incorporated by reference in Section 4 [~~14~~] of 401 KAR 34:080. [~~provided by the cabinet containing wording identical to the wording specified in 401 KAR 34:144.~~]

(3) The owner or operator who uses a surety bond to satisfy the requirements of this administrative regulation shall [~~must~~] also establish a standby trust fund. Under the terms of the bond, all payments made thereunder shall [~~will~~] be deposited by the surety directly into the standby trust fund in accordance with instructions from the cabinet [~~director~~]. This standby trust fund shall [~~must~~] meet the requirements specified in Section 3 of this administrative regulation, except that:

(a) An originally signed duplicate of the trust agreement shall [~~must~~] be submitted to the cabinet [~~director~~] with the surety bond; and

(b) Until the standby trust fund is funded pursuant to the requirements of this administrative regulation, the following are not required by these administrative regulations:

1. Payments into the trust fund as specified in Section 3 of this administrative regulation;

2. Updating of Schedule A of the trust agreement [~~(see Section 1 of 401 KAR 34:140)~~] to show current closure cost estimates;

3. Annual valuations as required by the trust agreement; and

4. Notices of nonpayment as required by the trust agreement.

(4) The bond shall [~~must~~] guarantee that the owner or operator will [~~shall~~] [~~will~~]:

(a) Fund the standby trust fund in an amount equal to the penal sum of the bond before the beginning of final closure of the facility; or

(b) Fund the standby trust fund in an amount equal to the penal sum within fifteen (15) days after an order to begin final closure issued by the secretary becomes final, or within fifteen (15) days after an order to begin final closure is issued by a circuit court or other court of competent jurisdiction pursuant to KRS Chapter 224, or within fifteen (15) days after issuance of a notice of termination of the permit pursuant to 401 KAR Chapter 38; or

(c) Provide alternate financial assurance as specified in this administrative regulation and obtain the cabinet's [~~director's~~] written approval of the assurance provided, within ninety (90) days after receipt by both the owner or operator and the cabinet [~~director~~] of a notice of cancellation of the bond from the surety.

(5) Under the terms of the bond, the surety shall [~~will~~] become liable on the bond obligation when the owner or operator fails to perform as guaranteed by the bond.

(6) The penal sum of the bond shall [~~must~~] be in an amount at least equal to the amount of the current closure cost estimate, except as provided in Section 9 of this administrative regulation.

(7) Whenever the current closure cost estimate increases to an amount greater than the amount of the penal sum, the owner or operator within sixty (60) days after the increase, shall [~~must~~] either cause the penal sum of the bond to be increased to an amount at least equal to the current closure cost estimate and submit evidence of such increase to the cabinet [~~director~~], or obtain other financial assurance as specified in this administrative regulation to cover the increase. Whenever the current closure cost estimate decreases, the penal sum may be reduced to the amount of the current closure cost estimate following written approval by the cabinet [~~director~~].

(8) Under the terms of the bond, the surety may cancel the bond by sending a notice of cancellation by certified mail to the owner or operator and to the cabinet [~~director~~]. Cancellation shall not [~~cannot~~] occur, however, during the 120 days beginning on the date of receipt of the notice of cancellation by both the owner or operator and the cabinet [~~director~~], as evidenced by return receipt.

(9) The owner or operator may cancel the bond if the cabinet [~~director~~] has given prior written consent based on the cabinet's [~~director's~~] receipt of evidence of alternate financial assurance as specified in this administrative regulation.

Section 5. Closure Letter of Credit. (1) An owner or operator may satisfy the requirements of this administrative regulation by obtaining an irrevocable standby letter of credit which conforms to the requirements of this section and by submitting the letter to the cabinet [~~director~~]. The issuing institution shall [~~must~~] be an entity which has the authority to issue letters of credit and whose letter of credit operations are regulated and examined by a federal or state agency.

(2) The [~~wording of the~~] letter of credit shall [~~must~~] be executed on the form incorporated by reference in Section 4 [~~14~~] of 401 KAR 34:080. The Trust Agreement required to be filed with the letter of credit shall be executed on the form incorporated by reference in Section 4 [~~14~~] of 401 KAR 34:080. [~~identical to the wording specified in Section 2 of 401 KAR 34:152.~~]

(3) An owner or operator who uses a letter of credit to satisfy the requirements of this administrative regulation shall [~~must~~] also establish a standby trust fund. Under the terms of the letter of credit, all amounts paid pursuant to a draft by the cabinet shall [~~director will~~] be deposited by the issuing institution directly into the standby trust fund in accordance with instructions from the cabinet [~~director~~]. This standby trust fund shall [~~must~~] meet the requirements of the trust fund specified in Section 3 of this administrative regulation, except that:

(a) An originally signed duplicate of the trust agreement shall [~~must~~] be submitted to the cabinet [~~director~~] with the letter of credit; and

(b) Unless the standby trust fund is funded pursuant to the requirements of this administrative regulation, the following are not required by these administrative regulations:

1. Payments into the trust fund as specified in Section 3 of this administrative regulation;

2. Updating the Schedule A of the trust agreement [~~(see Section 1 of 401 KAR 34:140)~~] to show current closure cost estimates;

3. Annual valuations as required by the trust agreement; and

4. Notices of nonpayment as required by the trust agreement.

(4) The letter of credit shall [~~must~~] be accompanied by a letter from the owner or operator referring to the letter of credit by number, issuing institution, and date, and providing the following information: the EPA identification number, name, and address of the facility, and the amounts of funds assured for closure of the facility by the letter of credit [~~(see Section 1 of 401 KAR 34:152 for an example)~~].

(5) The letter of credit shall [~~must~~] be irrevocable and issued for a period of at least one (1) year. The letter of credit shall [~~must~~] provide that the expiration date will be automatically extended for a period of at least one (1) year unless, at least 120 days before the current expiration date, the issuing institution notifies both the owner or operator and the cabinet [~~director~~] by certified mail of a decision not to extend the expiration date. Under the terms of the letter of credit, the 120 days shall [~~will~~] begin on the date when both the owner or operator and the cabinet [~~director~~] have received the notice, as evidenced by the return receipts.

(6) The letter of credit shall [~~must~~] be issued for at least the amount of the current closure cost estimate except as provided in Section 9 of this administrative regulation.

(7) Whenever the current closure cost estimate increases to an amount greater than the amount of the credit, the owner or operator,

within sixty (60) days of the increase, shall [~~must~~] either cause the amount of the credit to be increased so that it at least equals the current closure cost estimate and submit evidence of such increase to the cabinet [~~director~~], or obtain other financial assurance as specified in this administrative regulation to cover the increase. Whenever the adjusted closure cost estimate decreases, the amount of the credit may be reduced to the amount of the current closure cost estimate following written approval by the cabinet [~~director~~].

(8) Following a final administrative determination pursuant to KRS 224.10-100 that the owner or operator has failed to perform final closure in accordance with the approved closure plan when required to do so, the cabinet [~~director~~] may draw on the letter of credit.

(9) If the owner or operator does not establish alternate financial assurance as specified in this administrative regulation and obtain written approval of such alternate assurance from the cabinet [~~director~~] within ninety (90) days after receipt by both the owner or operator and the cabinet [~~director~~] of a notice from the issuing institution that it has decided not to extend the letter of credit beyond the current expiration date, the cabinet shall [~~director will~~] draw on the letter of credit. The cabinet [~~director~~] may delay the drawing if the issuing institution grants an extension of the term of credit. During the last thirty (30) days of any such extension, the cabinet shall [~~director will~~] draw on the letter of credit if the owner or operator has failed to provide alternate financial assurance as specified in this administrative regulation and obtain written approval of such assurance from the cabinet [~~director~~].

(10) The cabinet shall [~~director will~~] return the letter of credit to the issuing institution for termination when:

(a) An owner or operator substitutes alternate financial assurance as specified in this administrative regulation; or

(b) The cabinet [~~director~~] releases the owner or operator from the requirements of this administrative regulation in accordance with Section 11 of this administrative regulation.

Section 6. Closure Insurance. (1) An owner or operator may satisfy the requirements of this administrative regulation by obtaining closure insurance which conforms to the requirements of this section and by submitting a certificate of such insurance to the cabinet [~~director~~]. By October 8, 1982, the owner or operator shall [~~must~~] submit to the cabinet [~~director~~] a letter from the insurer stating that the insurer is considering issuance of closure insurance conforming to the requirements of this section to the owner or operator. By January 8, 1983, the owner or operator shall [~~must~~] submit the certificate of insurance to the cabinet [~~director~~] or establish other financial assurance as specified in this administrative regulation. Each insurance policy providing primary coverage shall [~~must~~] be issued by an insurer who is authorized [~~licensed~~] to transact [~~the business of~~] insurance in [~~the Commonwealth of~~] Kentucky except as KRS 304.11-030 provides otherwise. Each insurance policy providing excess coverage shall [~~must~~] be issued by an insurer who is licensed to transact [~~the business of~~] insurance in a state.

(2) The certificate of insurance shall [~~must~~] be executed on the [~~a~~] form incorporated by reference in Section 4 [~~14~~] of 401 KAR 34:080. [~~provided by the cabinet containing wording identical to the wording specified in 401 KAR 34:156.~~]

(3) The closure insurance policy shall [~~must~~] be issued for a face amount at least equal to the current closure cost estimate, except as provided in Section 9 of this administrative regulation. The term "face amount" means the total amount the insurer is obligated to pay under the policy. Actual payments by the insurer shall [~~will~~] not change the face amount, although the insurer's future liability shall [~~will~~] be lowered by the amount of the payments.

(4) The closure insurance policy shall [~~must~~] guarantee that funds **will** [~~shall~~] [~~will~~] be available to close a facility whenever final closure occurs. The policy shall [~~must~~] also guarantee that once final closure begins, the insurer **will** [~~shall~~] [~~will~~] be responsible for paying out funds, up to an amount equal to the face amount of the policy, upon the direction of the cabinet [~~director~~] to such party or parties as the cabinet [~~director~~] specifies.

(5) After beginning partial or final closure, an owner or operator or any other person authorized to conduct closure may request reimbursement for closure expenditures by submitting itemized bills to the cabinet [~~director~~]. The owner or operator may request reimbursements for partial closure only if the remaining value of the policy is sufficient to cover the maximum costs of closing the facility over its remaining operating life. Within sixty (60) days after receiving bills for closure activities, the cabinet shall [~~director will~~] instruct the insurer to make reimbursements in such amounts as the cabinet [~~director~~] specifies in writing if the cabinet [~~director~~] determines that the partial or final closure expenditures are in accordance with the approved closure plan or otherwise justified. If the cabinet [~~director~~] has reason to believe that the maximum cost of closure over the remaining life of the facility **will** [~~shall~~] [~~will~~] be significantly greater than the face amount of the policy, he may withhold reimbursement of such amounts as he deems prudent until he determines, in accordance with Section 11 of this administrative regulation, that the owner or operator is no longer required to maintain financial assurance for final closure of the particular facility. If the cabinet [~~director~~] does not instruct the insurer to make such reimbursements, he shall [~~will~~] provide to the owner or operator a detailed written statement of reasons.

(6) The owner or operator shall [~~must~~] maintain the policy in [~~full force and~~] effect until the cabinet [~~director~~] consents to termination of the policy by the owner or operator as specified in subsection (10) of this section. Failure to pay the premium, without substitution of alternate financial assurance as specified in this administrative regulation, shall [~~will~~] constitute a significant violation of these administrative regulations, warranting such remedy as the cabinet [~~director~~] deems necessary. Such violation will be deemed to begin upon receipt by the cabinet [~~director~~] of a notice of future cancellation, termination, or failure to renew due to nonpayment of the premium, rather than upon the date of expiration.

(7) Each policy shall [~~must~~] contain a provision allowing assignment of the policy to a successor owner or operator. Such assignment may be conditional upon consent of the insurer provided such consent is not unreasonably refused.

(8) The policy shall [~~must~~] provide that the insurer may not cancel, terminate, or fail to renew the policy except for failure to pay the premium. The automatic renewal of the policy shall [~~must~~], at a minimum, provide the insured with the option of renewal at the face amount of the expiring policy. If there is a failure to pay the premium, the insurer may elect to cancel, terminate, or fail to renew the policy by sending notice by certified mail to the owner or operator and the cabinet [~~director~~]. Cancellation, termination, or failure to renew may not occur, however, during the 120 days beginning with the date of receipt of the notice by both the cabinet [~~director~~] and the owner or operator, as evidenced by the return receipts. Cancellation, termination, or failure to renew may not occur and the policy shall [~~will~~] remain in [~~full force and~~] effect in the event that on or before the date of expiration:

(a) The cabinet [~~director~~] deems the facility abandoned; or

(b) Interim status is terminated or revoked; or

(c) Closure is ordered by the cabinet [~~director~~] or a circuit court or other court of competent jurisdiction; or

(d) The owner or operator is named as debtor in a voluntary or involuntary proceeding under Title 11 (Bankruptcy), U.S. Code; or

(e) The premium due is paid.

(9) Whenever the current closure cost estimate increases to an amount greater than the face amount of the policy, the owner or operator, within sixty (60) days of the increase, shall [~~must~~] either cause the face amount to be increased to an amount at least equal to the current closure cost estimate and submit evidence of such increase to the cabinet [~~director~~], or obtain other financial assurance as specified in this administrative regulation to cover the increase.

Whenever the current closure cost estimate decreases, the face amount may be reduced to the amount of the current closure cost estimate following written approval by the cabinet [~~director~~].

(10) The cabinet shall [~~director will~~] give written consent to the owner or operator that he may terminate the insurance policy when:

(a) An owner or operator substitutes alternate financial assurance as specified in this administrative regulation; or

(b) The cabinet [~~director~~] releases the owner or operator from the requirements of this administrative regulation in accordance with Section 11 of this administrative regulation.

Section 7. Financial Test and Corporate Guarantee for Closure. (1) An owner or operator may satisfy the requirements of this administrative regulation by demonstrating that he passes a financial test as specified in this section. To pass this test the owner or operator shall [~~must~~] meet the criteria of either paragraph of this subsection:

(a) The owner or operator shall [~~must~~] have:

1. Two (2) of the following three (3) ratios: a ratio of total liabilities to net worth less than 2.0; a ratio of the sum of net income plus depreciation, depletion, and amortization to total liabilities greater than 0.1; and a ratio of current assets to current liabilities greater than 1.5; and

2. Net working capital and tangible net worth each at least six (6) times the sum of the current closure and postclosure cost estimates and the current plugging and abandonment cost estimates; and

3. Tangible net worth of at least $10 million; and

4. Assets located in the United States amounting to at least ninety (90) percent of total assets or at least six (6) times the sum of the current closure and postclosure cost estimates and the current plugging and abandonment cost estimates.

(b) The owner or operator shall [~~must~~] have:

1. A current rating for his most recent bond issuance of AAA, AA, A or BBB as issued by Standard and Poor's or Aaa, Aa, A, or Baa as issued by Moody's; and

2. Tangible net worth at least six (6) times the sum of the current closure and postclosure cost estimates and the current plugging and abandonment cost estimates; and

3. Tangible net worth of at least $10 million; and

4. Assets located in the United States amounting to at least ninety (90) percent of his total assets or at least six (6) times the sum of the current closure and postclosure cost estimates and the current plugging and abandonment cost estimates.

(2) The phrase "current closure and postclosure cost estimates" as used in subsection (1) of this section refers to the cost estimates required to be shown in subparagraphs 1 to [~~through~~] 4 of the letter from the owner's or operator's chief financial officer [~~(see 401 KAR 34:159)~~]. The phrase "current plugging and abandonment cost estimates" as used in subsection (1) of this section refers to the cost estimates required to be shown in paragraphs 1 to [~~through~~] 4 of the letter from the owner's and operator's chief financial officer (see 40 CFR 144.0(f)).

(3) To demonstrate that he meets this test, the owner or operator shall [~~must~~] submit the following three (3) items to the cabinet [~~director~~]:

(a) A letter executed on the form incorporated by reference in Section 4 [~~14~~] of 401 KAR 34:080 [~~provided by the cabinet~~], signed by the owner's or operator's chief financial officer [~~and worded as specified in 401 KAR 34:159~~]; and

(b) A copy of the independent certified public accountant's report on examination of the owner's or operator's financial statements for the latest completed fiscal year; and

(c) A special report from the owner's or operator's independent certified public accountant to the owner or operator stating that:

1. He has compared the data which the letter from the chief financial officer specifies as having been derived from the independently audited, year-end financial statements for the latest fiscal year with the amounts in such financial statements; and

2. In connection with that procedure, no matters came to his attention which caused him to believe that the specified data should be adjusted.

(4) The owner or operator may obtain an extension of the time allowed for submission of the documents specified in subsection (3) of this section if the fiscal year of the owner or operator ends during the ninety (90) days prior to October 8, 1982 and if the year-end financial statements for that fiscal year **will** [~~shall~~] [~~will~~] be audited by an independent certified public accountant. The extension shall [~~will~~] end no later than ninety (90) days after the end of the owner's or operator's fiscal year. To obtain the extension, the owner's or operator's chief financial officer shall [~~must~~] send, by October 8, 1982, a letter to the cabinet [~~director~~]. This letter from the chief financial officer shall [~~must~~]:

(a) Request the extension;

(b) Certify that he has grounds to believe that the owner or operator meets the criteria of the financial test;

(c) Specify for each facility to be covered by the test the EPA identification number, name, address and current closure and postclosure estimates to be covered by the test;

(d) Specify the date ending the owner's or operator's last complete fiscal year before October 8, 1982;

(e) Specify the date, no later than ninety (90) days after the end of such fiscal year, when he will submit the documents specified in subsection (3) of this section; and

(f) Certify that the year-end financial statements of the owner or operator for such fiscal year **will** [~~shall~~] [~~will~~] be submitted by an independent certified accountant.

(5) After the initial submission of items specified in subsection (3) of this section, the owner or operator shall [~~must~~] send updated information to the cabinet [~~director~~] within ninety (90) days after the close of each succeeding fiscal year. This information shall [~~must~~] consist of all three (3) items specified in subsection (3) of this section.

(6) If the owner or operator no longer meets the requirements of subsection (1) of this section, he shall [~~must~~] send notice to the cabinet [~~director~~] of intent to establish alternate financial assurance as specified in this administrative regulation. The notice shall [~~must~~] be sent by certified mail within ninety (90) days after the end of the fiscal year for which the year-end financial data show that the owner or operator no longer meets the requirements. The owner or operator shall [~~must~~] provide alternate financial assurance within 120 days after the end of such fiscal year.

(7) The cabinet [~~director~~] may, based on a reasonable belief that the owner or operator may no longer meet the requirements of subsection (1) of this section, require reports of financial condition at any time from the owner or operator in addition to those specified in subsection (3) of this section. If the cabinet [~~director~~] finds, on the basis of such reports or other information, that the owner or operator no longer meets the requirements of subsection (1) of this section, the owner or operator shall [~~must~~] provide alternate financial assurance as specified in this administrative regulation within thirty (30) days after notification of such a finding.

(8) The cabinet [~~director~~] may disallow use of this test on the basis on qualifications in the opinion expressed by the independent certified public accountant in his report on examination of the owner's or operator's financial statements (see subsection (3)(c) of this section). An adverse opinion or a disclaimer of opinion shall [~~will~~] be cause for disallowance. The cabinet shall [~~director will~~] evaluate other qualifications on an individual basis. The owner or operator shall [~~must~~] provide alternate financial assurance as specified in this administrative regulation within thirty (30) days after notification of the disallowance.

(9) The owner or operator is no longer required to submit the items specified in subsection (3) of this section when:

(a) An owner or operator substitutes alternate financial assurance as specified in this administrative regulation;

(b) The cabinet [~~director~~] releases the owner or operator from the requirements of this administrative regulation by terminating the financial requirements in accordance with Section 11 of this administrative regulation.

(10) An owner or operator may meet the requirements of this administrative regulation by obtaining a written guarantee, hereafter referred to as the "corporate guarantee." The guarantor shall [~~must~~] be the direct or higher-tier parent corporation of the owner or operator, a firm whose parent corporation is also the parent corporation of the owner or operator, or a firm with a "substantial business relationship" as defined in Section 1 of 401 KAR 35:080 with the owner or operator. The guarantor shall [~~must~~] meet the requirements for owners or operators in subsections (1) to [~~through~~] (8) of this section and shall [~~must~~] comply with the terms of the corporate guarantee. The corporate guarantee shall [~~must~~] be executed on the [~~a~~] form incorporated by reference in Section **4** [~~14~~] of 401 KAR 34:080. [~~provided by the cabinet containing wording identical to the wording specified in 401 KAR 34:165.~~] The corporate guarantee shall [~~must~~] accompany the items sent to the cabinet [~~director~~] as specified in subsection (3) of this section. One (1) of the items shall be the letter from the guarantor's chief financial officer. If the guarantor's parent corporation is also the parent corporation of the owner or operator, the letter shall describe the value received in consideration of the guarantee. If the guarantor is a firm with a substantial business relationship with the owner or operator, this letter shall describe this substantial business relationship and the value received in consideration of the guarantee. The terms of the corporate guarantee shall [~~must~~] provide that:

(a) If the owner or operator fails to perform final closure of a facility covered by the corporate guarantee in accordance with the closure plans and other interim status requirements whenever required to do so, the guarantor shall [~~will~~] do so or establish a trust fund as specified in Section 3 of this administrative regulation in the name of the owner or operator.

(b) The corporate guarantee shall [~~will~~] remain in force unless the guarantor sends notice of cancellation by certified mail to the owner or operator and to the cabinet [~~director~~]. Cancellation may not occur, however, during the 120 days beginning on the date of receipt of the notice of cancellation by both the owner or operator and the cabinet [~~director~~], as evidenced by the return receipts.

(c) If the owner or operator fails to provide alternate financial assurance as specified in this administrative regulation and obtain the written approval of such alternate assurance from the cabinet [~~director~~] within ninety (90) days after receipt by both the owner or operator and the cabinet [~~director~~] of a notice of cancellation of the corporate guarantee from the guarantor, the guarantor shall [~~will~~] provide such alternate financial assurance in the name of the owner or operator.

Section 8. Cash Account and Certificates of Deposit. (1) An owner or operator may satisfy the requirements of this administrative regulation by submitting to the cabinet [~~director~~] a bond guaranteeing compliance with KRS Chapter 224 and administrative regulations promulgated pursuant thereto. The bond shall [~~is to~~] be supported by a cash account or certificate(s) of deposit. The cash account or the certificate(s) of deposit shall [~~are to~~] be held in escrow pursuant to an escrow agreement. The bank or financial institution holding the cash account or certificate(s) of deposit in escrow shall [~~must~~] be regulated and examined by a federal or state agency.

(2) The bond shall [~~must~~] be executed on the [a] form incorporated by reference in Section **4** [~~14~~] of 401 KAR 34:080. [~~provided by the cabinet which has wording identical to the wording specified in Section 1 of 401 KAR 34:168.~~] The escrow agreement for the cash account or certificate(s) of deposit shall [~~must~~] be executed on the [a] form incorporated by reference in Section **4** [~~14~~] of 401 KAR 34:080. [~~provided by the cabinet which has wording identical to the wording specified in Section 2 of 401 KAR 34:168.~~]

(3) The cabinet shall [~~must~~] be the beneficiary of the escrow agreement for the cash account or certificate(s) of deposit. The cabinet shall [~~director must~~] be empowered to draw upon the funds if the owner or operator fails to perform closure or postclosure care in accordance with the closure plan and other permit requirements.

(4) The sum of the cash account or certificate(s) of deposit shall [~~must~~] be in an amount at least equal to the amount of the current closure cost estimate, except as provided in Section 9 of this administrative regulation.

(5) After each interest period is completed, whenever the current closure cost estimate changes, the owner or operator shall [~~must~~] compare the new estimate with the trustee's most recent annual evaluation of the cash accounts or the certificate(s) of deposit. If the value of the cash accounts or the certificate(s) of deposit is less than the amount of the new estimate, the owner or operator, within sixty (60) days of the change in the cost estimate, shall [~~must~~] either deposit an amount into the cash account or the certificate(s) of deposit so that its value after this deposit at least equals the amount of the current closure cost estimate, or obtain other financial assurance as specified in this section to cover the difference.

(6) If the value of the cash account or the certificate(s) of deposit is greater than the total amount of the current closure cost estimate, the owner or operator may submit a written request to the cabinet [~~director~~] for release of the amount in excess of the current closure cost estimate.

(7) Under the terms of the cash account or certificate(s) of deposit, the bank or financial institution may cancel the cash account or certificate(s) of deposit by sending a notice of cancellation by certified mail to the owner or operator and to the cabinet [~~director~~]. Cancellation shall not [~~cannot~~] occur, however, during the 120 days beginning on the date of receipt of the notice of cancellation by both the owner or operator and the cabinet [~~director~~], as evidenced by return receipt.

(8) The owner or operator may terminate the cash account or certificate(s) of deposit if the cabinet [~~director~~] has given prior written consent based on the cabinet's [~~director's~~] receipt of evidence of alternate financial assurance as specified in this administrative regulation.

(9) After beginning final closure, an owner or operator or any other person authorized to perform closure may request reimbursement for closure expenditures by submitting itemized bills to the cabinet [~~director~~]. Within sixty (60) days after receiving bills for closure activities, the cabinet shall [~~director will~~] determine whether the closure expenditures are in accordance with the closure plan or otherwise justified, and if so, the cabinet shall [~~director will~~] instruct the trustee to make reimbursement in such amounts as the cabinet [~~director~~] specifies in writing. If the cabinet [~~director~~] has reason to believe that the cost of closure **will** [~~shall~~] [~~will~~] be significantly greater than the value of the trust fund, he may withhold reimbursement of such amounts as he deems prudent until he determines, in accordance with Section 11 of this administrative regulation, that the owner or operator is no longer required to maintain financial assurance for closure.

Section 9. Use of Multiple Financial Mechanisms. An owner or operator may satisfy the requirements of this administrative regulation by establishing more than one (1) financial mechanism per facility. These mechanisms shall be [~~are~~] limited to trust funds, surety bonds, letters of credit, insurance, certificate(s) of deposit and cash accounts. The mechanisms shall [~~must~~] be as specified in Sections 3, 4, 5, 6, and 8, respectively, of this administrative regulation, except that it is the combination of mechanisms rather than each single mechanism which shall [~~must~~] provide financial assurance for an amount at least equal to the current closure cost estimate. If an owner or operator uses a trust fund in combination with a surety bond or a letter of credit, he may use the trust fund as the standby trust fund for other mechanisms. A single standby trust fund may be established for two

(2) or more mechanisms. The cabinet [director] may use any or all of the mechanisms to provide for closure of the facility.

Section 10. Use of a Financial Mechanism for Multiple Facilities. An owner or operator may use a financial assurance mechanism specified in this administrative regulation to meet the requirements of this administrative regulation for more than one (1) facility. Evidence of financial assurance submitted to the cabinet shall [director must] include a list showing, for each facility, the EPA Identification Number, name, address, and the amount of funds for closure assured by the mechanism. The amount of funds available through the mechanism shall [must] be no less than the sum of funds that would be available if a separate mechanism had been established and maintained for each facility. In directing funds available through the mechanism for closure of any of the facilities covered by the mechanism, the cabinet [director] may direct only the amount of funds designated for that facility, unless the owner or operator agrees to the use of additional funds available under the mechanism.

Section 11. Release of the Owner or Operator from the Requirements of this administrative regulation. Within sixty (60) days after approving [receiving] certifications from the owner or operator and an [independent professional] engineer [who is registered in Kentucky] that final closure has been completed in accordance with the approved closure plan, the cabinet shall [director will] notify the owner or operator in writing that he is no longer required by this administrative regulation to maintain financial assurance for final closure of the facility, unless the cabinet [director] has reason to believe that final closure has not been in accordance with the approved closure plan. The cabinet [director] shall provide the owner or operator a detailed written statement of any such reason to believe that closure has not been in accordance with the approved closure plan.

PHILLIP J. SHEPHERD, Secretary
E. DOUGLAS STEPHAN, Commissioner
APPROVED BY AGENCY: December 13, 1993
FILED WITH LRC: December 14, 1993 at 10 a.m.

NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION CABINET
Department for Environmental Protection
Division of Waste Management
(Amended After Hearing)

401 KAR 35:100. Postclosure financial requirements (IS).

RELATES TO: KRS 224.10, 224.40, 224.43, 224.46, 224.99
STATUTORY AUTHORITY: KRS 224.46-505, 224.46-520
NECESSITY AND FUNCTION: To implement provisions of KRS 224.46-505 and 224.46-520 relative to postclosure financial requirements for hazardous waste sites or facilities qualifying for interim status. [requires that persons engaging in the storage, treatment, and disposal of hazardous waste obtain a permit. KRS 224.46-520 requires the cabinet to establish standards for these permits, to require adequate financial responsibility, and to establish minimum standards for closure for all facilities and the postclosure monitoring and maintenance of hazardous waste disposal facilities. This chapter establishes minimum standards for hazardous waste sites or facilities qualifying for interim status. This administrative regulation establishes the postclosure financial requirements.]

Section 1. Cost Estimate for Facility Postclosure Care. (1) The owner or operator of a hazardous waste disposal unit shall [must] have a detailed written estimate, in current dollars, of the annual cost of postclosure monitoring and maintenance of the facility in accordance with the applicable postclosure administrative regulations in Sections 8 to [through] 11 of 401 KAR 35:070, Section 6 of 401 KAR 35:200, Section 7 of 401 KAR 35:210, Section 7 of 401 KAR 35:220, and Section 4 of 401 KAR 35:230.

(a) The postclosure cost estimate shall [must] be based on the costs to the owner or operator of hiring a third party to conduct postclosure care activities. A third party is a party who is neither a parent nor subsidiary of the owner or operator (see definition of parent corporation in Section 1 [3(1)(c)] of 401 KAR 35:080.

(b) The postclosure cost estimate shall be [is] calculated by multiplying the annual postclosure cost estimate by the number of years of postclosure care required under Section 8 of 401 KAR 35:070.

(2) During the active life of the facility, the owner or operator shall [must] adjust the postclosure cost estimate for inflation within sixty (60) days prior to the anniversary date of the establishment of the financial instrument(s) used to comply with Sections 2 to [through] 11 of this administrative regulation. For owners or operators using the financial test or corporate guarantee, the postclosure care cost estimate shall [must] be updated for inflation no later than thirty (30) days after the close of the firm's fiscal year and before submission of updated information to the cabinet [director] as specified in Section 6(5) of this administrative regulation. The adjustment may be made by recalculating the postclosure cost estimate in current dollars or by using an inflation factor derived from the most recent Implicit Price Deflator for Gross National Product published by the U.S. Department of Commerce in its Survey of Current Business as specified in paragraphs (a) and (b) of this subsection. The inflation factor is the result of dividing the latest published annual Deflator by the Deflator for the previous year.

(a) The first adjustment is made by multiplying the postclosure cost estimate by the inflation factor. The result is the adjusted postclosure cost estimate.

(b) Subsequent adjustments are made by multiplying the latest adjusted postclosure cost estimate by the latest inflation factor.

(3) During the active life of the facility, the owner or operator shall [must] revise the postclosure cost estimate no later than thirty (30) days after a revision the postclosure plan which increases the cost of postclosure care. If the owner or operator has an approved postclosure plan, the postclosure cost estimate shall [must] be revised no later than thirty (30) days after the cabinet [director] has approved the request to modify the plan, if the change in the postclosure plan increases the cost of postclosure care. The revised postclosure cost estimate shall [must] be adjusted for inflation as specified in subsection (2) of this section.

(4) The owner or operator shall [must] keep the following at the facility during the operating life of the facility: The latest postclosure cost estimate prepared in accordance with subsections (1) and (3) of this section and, when this estimate has been adjusted in accordance with subsection (2) of this section, the latest adjusted postclosure cost estimate.

Section 2. Financial Assurance for Postclosure Care. [By May 2, 1986,] An owner or operator of a facility with a hazardous waste disposal unit shall [must] establish financial assurance for postclosure care of the disposal unit(s). Financial assurance shall [must] be established as specified in Sections 3 to [through] 8 of this administrative regulation.

Section 3. Postclosure Trust Fund. (1) An owner or operator may satisfy the requirements of this administrative regulation by establishing a postclosure trust fund which conforms to the requirements of this section and by submitting an originally signed duplicate of the trust agreement to the cabinet [director]. The trustee shall [must] be an entity which has the authority to act as a trustee and whose trust operations are regulated and examined by a federal or state agency.

(2) The trust agreement shall [must] be executed on the form incorporated by reference in Section 4 [14] of 401 KAR 34:080.

[~~provided by the cabinet containing wording identical to the wording specified in Section 1 of 401 KAR 34:140 and~~] The trust agreement shall [~~must~~] be accompanied by a formal certification of acknowledgment [~~(for an example, see Section 2 of 401 KAR 34:140)~~]. Schedule A of the trust agreement shall [~~must~~] be updated within sixty (60) days after a change in the amount of the current postclosure cost estimate covered by the agreement.

(3) Payments to the trust fund shall [~~must~~] be made annually by the owner or operator over the twenty (20) year period beginning with October 8, 1982, or over the remaining operating life of the facility as estimated in the closure plan, whichever period is shorter; this period is hereafter referred to as the "pay-in period." The payments into the postclosure trust fund shall [~~must~~] be made as follows:

(a) The first payment shall [~~must~~] be made by October 8, 1982, except as provided in subsection (5) of this section. The first payment shall [~~must~~] be at least equal to the current postclosure cost estimate, except as provided in Section 9 of this administrative regulation, divided by the number of years in the pay-in period.

(b) Subsequent payments shall [~~must~~] be made no later than thirty (30) days after each anniversary date of the first payment. The amount of each subsequent payment shall [~~must~~] be determined by this formula:

$$\text{NEXT payment} = \frac{CE - CV}{Y}$$

Where CE is the current postclosure cost estimate, CV is the current value of the trust fund, and Y is the number of years remaining in the pay-in period.

(4) The owner or operator may accelerate payments into the trust fund or he may deposit the full amount of the current postclosure cost estimate at the time the fund is established. However, he shall [~~must~~] maintain the value of the fund at no less than the value that the fund would have been if annual payments were made as specified in subsection (3) of this section.

(5) If the owner or operator establishes a postclosure trust fund after having used one (1) or more alternate mechanisms specified in this administrative regulation, his first payment shall [~~must~~] be at least the amount that the fund would contain if the trust fund were established initially and annual payments made according to specifications of subsection (3) of this section.

(6) After the pay-in period is completed, whenever the current postclosure cost estimate changes during the operating life of the facility, the owner or operator shall [~~must~~] compare the new estimate with the trustee's most recent annual valuation of the trust fund. If the value of the fund is less than the amount of the new estimate, the owner or operator, within sixty (60) days after the change in the cost estimate, shall [~~must~~] either deposit an amount into the fund so that its value after this deposit at least equals the amount of the current postclosure cost estimate, or obtain other financial assurance as specified in this administrative regulation to cover the difference.

(7) During the operating life of the facility, if the value of the trust fund is greater than the total amount of the current postclosure cost estimate, the owner or operator may submit a written request to the cabinet [~~director~~] for release of the amount in excess of the current postclosure cost estimate.

(8) If an owner or operator substitutes other financial assurance as specified in this administrative regulation for all or part of the trust fund, he may submit a written request to the cabinet [~~director~~] for release of the amount in excess of the current postclosure cost estimate covered by the trust fund.

(9) Within sixty (60) days after receiving a request from the owner or operator for release of funds as specified in subsections (7) and (8) of this section, the cabinet shall [~~director will~~] instruct the trustee to release to the owner or operator such funds as the cabinet [~~director~~] specifies in writing.

(10) During the period of postclosure care, the cabinet [~~director~~] may approve a release of funds if the owner or operator demonstrates to the cabinet [~~director~~] that the value of the trust fund exceeds the remaining cost of postclosure care.

(11) An owner or operator or any other person authorized to conduct postclosure care may request reimbursements for postclosure expenditures by submitting itemized bills to the cabinet [~~director~~]. Within sixty (60) days after receiving bills for postclosure care activities, the cabinet shall [~~director will~~] instruct the trustee to make reimbursement in those amounts as the cabinet [~~director~~] specifies in writing, if the cabinet [~~director~~] determines that the postclosure expenditures are in accordance with the approved postclosure plan or otherwise justified. If the cabinet [~~director~~] does not instruct the trustee to make such reimbursements, he shall [~~will~~] provide the owner or operator with a detailed written statement of reasons.

(12) The cabinet shall [~~director will~~] agree to termination of the trust when:

(a) An owner or operator substitutes alternate financial assurance as specified in this administrative regulation; or

(b) The cabinet [~~director~~] releases the owner or operator from the requirements of this administrative regulation in accordance with Section 11 of this administrative regulation.

Section 4. Surety Bond Guaranteeing Payment into a Postclosure Trust Fund. (1) An owner or operator may satisfy the requirements of this administrative regulation by obtaining a surety bond which conforms to the requirements of this section and submitting the bond to the cabinet [~~director~~]. The surety company issuing the bond shall [~~must~~], at a minimum, be among those listed as acceptable sureties on federal bonds in Circular 570 of the U.S. Department of the Treasury.

(2) The surety bond shall [~~must~~] be executed on the form incorporated by reference in Section 4 [~~14~~] of 401 KAR 34:080. [~~provided by the cabinet containing wording identical to the wording specified in 401 KAR 34:144.~~]

(3) The owner or operator who uses a surety bond to satisfy the requirements of this administrative regulation shall [~~must~~] also establish a standby trust fund. Under the terms of the bond, all payments made thereunder shall [~~will~~] be deposited by the surety directly into the standby trust fund in accordance with instructions from the cabinet [~~director~~]. This standby trust fund shall [~~must~~] meet the requirements specified in Section 3 of this administrative regulation, except that:

(a) An originally signed duplicate of the trust agreement shall [~~must~~] be submitted to the cabinet [~~director~~] with the surety bond; and

(b) Until the standby trust fund is funded pursuant to the requirements of this administrative regulation, the following are not required by these administrative regulations:

1. Payments into the trust fund as specified in Section 3 of this administrative regulation;

2. Updating of Schedule A of the trust agreement [~~(see Section 1 of 401 KAR 34:140)~~] to show current postclosure cost estimates;

3. Annual valuations as required by the trust agreement; and

4. Notices of nonpayment as required by the trust agreement.

(4) The bond shall [~~must~~] guarantee that the owner or operator will [~~shall~~] [~~will~~]:

(a) Fund the standby trust fund in an amount equal to the penal sum of the bond before the beginning of final closure of the facility; or

(b) Fund the standby trust fund in an amount equal to the penal sum within fifteen (15) days after an order to begin final closure issued by the secretary becomes final, or within fifteen (15) days after an order to begin final closure is issued by a circuit court or other court of competent jurisdiction; or

(c) Provide alternate financial assurance as specified in this administrative regulation, and obtain the cabinet's [~~director's~~] written approval of the assurance provided, within ninety (90) days after

receipt by both the owner or operator and the cabinet [~~director~~] of a notice of cancellation of the bond from the surety.

(5) Under the terms of the bond, the surety shall [~~will~~] become liable on the bond obligation when the owner or operator fails to perform as guaranteed by the bond.

(6) The penal sum of the bond shall [~~must~~] be in an amount at least equal to the amount of the current postclosure cost estimate, except as provided in Section 9 of this administrative regulation.

(7) Whenever the current postclosure cost estimate increases to an amount greater than the penal sum, the owner or operator, within sixty (60) days after the increase, shall [~~must~~] either cause the penal sum to be increased to an amount at least equal to the current postclosure cost estimate and submit evidence of such increase to the cabinet [~~director~~], or obtain other financial assurance as specified in this administrative regulation to cover the increase. Whenever the current postclosure cost estimate decreases, the penal sum may be reduced to the amount of the current postclosure cost estimate following written approval by the cabinet [~~director~~].

(8) Under the terms of the bond, the surety may cancel the bond by sending notice of cancellation by certified mail to both the owner or operator and to the cabinet [~~director~~]. Cancellation shall not [~~cannot~~] occur, however, during the 120 days beginning on the date of receipt of the notice of cancellation by both the owner or operator and the cabinet [~~director~~], as evidenced by return receipt.

(9) The owner or operator may cancel the bond if the cabinet [~~director~~] has given prior written consent based on his receipt of evidence of alternate financial assurance as specified in this administrative regulation.

Section 5. Postclosure Letter of Credit. (1) An owner or operator may satisfy the requirements of this administrative regulation by obtaining an irrevocable standby letter of credit which conforms to the requirements of this section and by submitting the letter to the cabinet [~~director~~]. The issuing institution shall [~~must~~] be an entity which has the authority to issue letters of credit and whose letter of credit operations are regulated and examined by a federal or state agency.

(2) The [~~wording of the~~] letter of credit shall [~~must~~] be executed on the form incorporated by reference in Section 4 [~~14~~] of 401 KAR 34:080. The Trust Agreement required to be filed with the letter of credit shall be executed on the form incorporated by reference in Section 4 [~~14~~] of 401 KAR 34:080. [~~identical to the wording specified in Section 2 of 401 KAR 34:152.~~]

(3) An owner or operator who uses a letter of credit to satisfy the requirements of this administrative regulation shall [~~must~~] also establish a standby trust fund. Under the terms of the letter of credit, all amounts paid pursuant to a draft by the cabinet shall [~~director will~~] be deposited by the issuing institution directly into the standby trust fund in accordance with instructions from the cabinet [~~director~~]. This standby trust fund shall [~~must~~] meet the requirements of the trust fund specified in Section 3 of this administrative regulation, except that:

(a) An originally signed duplicate of the trust agreement shall [~~must~~] be submitted to the cabinet [~~director~~] with the letter of credit; and

(b) Unless the standby trust fund is funded pursuant to the requirements of this administrative regulation, the following are not required by these administrative regulations:

1. Payments into the trust fund as specified in Section 3 of this administrative regulation;

2. Updating the Schedule A of the trust agreement [~~(see Section 1 of 401 KAR 34:140)~~] to show current postclosure cost estimates;

3. Annual valuations as required by the trust agreement; and

4. Notices of nonpayment as required by the trust agreement.

(4) The letter of credit shall [~~must~~] be accompanied by a letter from the owner or operator referring to the letter of credit by number, issuing institution, and date, and providing the following information: the EPA identification number, name, and address of the facility, and the amount of funds assured for postclosure care of the facility by the letter of credit [~~(see Section 1 of 401 KAR 34:152 for an example)~~].

(5) The letter of credit shall [~~must~~] be irrevocable and issued for a period of at least one (1) year. The letter of credit shall [~~must~~] provide that the expiration date will be automatically extended for a period of at least one (1) year unless, at least 120 days before the current expiration date, the issuing institution notifies both the owner or operator and the cabinet [~~director~~] by certified mail of a decision not to extend the expiration date. Under the terms of the letter of credit, the 120 days will begin on the date when both the owner or operator and the cabinet [~~director~~] have received the notice, as evidenced by the return receipts.

(6) The letter of credit shall [~~must~~] be issued in an amount at least equal to the current postclosure cost estimate, except as provided in Section 9 of this administrative regulation.

(7) Whenever the current postclosure cost estimate increases to an amount greater than the amount of the credit during the operating life of the facility, the owner or operator, within sixty (60) days after the increase, shall [~~must~~] either cause the amount of the credit to be increased so that it at least equals the current postclosure cost estimate and submit evidence of such increase to the cabinet [~~director~~], or obtain other financial assurance as specified in this administrative regulation to cover the increase. Whenever the current postclosure cost estimate decreases during the operating life of the facility, the amount of the credit may be reduced to the amount of the current postclosure cost estimate following written approval by the cabinet [~~director~~].

(8) During the period of postclosure care, the cabinet [~~director~~] may approve a decrease in the amount of the letter of credit if the owner or operator demonstrates to the cabinet [~~director~~] that the amount exceeds the remaining cost of postclosure care.

(9) Following a final administrative determination pursuant to KRS 224.46-520 that the owner or operator has failed to perform postclosure care in accordance with the approved postclosure plan and other permit requirements, the cabinet [~~director~~] may draw on the letter of credit.

(10) If the owner or operator does not establish alternate financial assurance as specified in this administrative regulation and obtain written approval of such alternate assurance from the cabinet [~~director~~] within ninety (90) days after receipt by both the owner or operator and the cabinet [~~director~~] of a notice from the issuing institution that it has decided not to extend the letter of credit beyond the current expiration date, the cabinet shall [~~director will~~] draw on the letter of credit. The cabinet [~~director~~] may delay the drawing if the issuing institution grants an extension of the term of credit. During the last thirty (30) days of any such extension, the cabinet shall [~~director will~~] draw on the letter of credit if the owner or operator has failed to provide alternate financial assurance as specified in this administrative regulation and obtain written approval of such financial assurance from the cabinet [~~director~~].

(11) The cabinet shall [~~director will~~] return the letter of credit to the issuing institution for termination when:

(a) An owner or operator substitutes alternate financial assurance as specified in this administrative regulation; or

(b) The cabinet [~~director~~] releases the owner or operator from the requirements of this administrative regulation in accordance with Section 11 of this administrative regulation.

Section 6. Postclosure Insurance. (1) An owner or operator may satisfy the requirements of this administrative regulation by obtaining postclosure insurance which conforms to the requirements of this section and submitting a certificate of such insurance to the cabinet [~~director~~]. By October 8, 1982, the owner or operator shall [~~must~~] submit to the cabinet [~~director~~] a letter from an insurer stating that the insurer is considering issuance of postclosure insurance conforming to the requirements of this section to the owner or operator. By January 8, 1983, the owner or operator shall [~~must~~] submit the certificate of insurance to the cabinet [~~director~~] or establish other

financial assurance as specified in this administrative regulation. Each insurance policy providing primary coverage shall [~~must~~] be issued by an insurer who is authorized [~~licensed~~] to transact [~~the business of~~] insurance in [~~the Commonwealth of~~] Kentucky except as KRS 304.11-030 provides otherwise. Each insurance policy providing excess coverage shall [~~must~~] be issued by an insurer who is authorized [~~licensed~~] to transact [~~the business of~~] insurance in a state.

(2) The certificate of insurance shall [~~must~~] be executed on the [a] form incorporated by reference in Section 4 [~~14~~] of 401 KAR 34:080. [~~provided by the cabinet containing wording identical to the wording specified in 401 KAR 34:156.~~]

(3) The postclosure insurance policy shall [~~must~~] be issued for a face amount at least equal to the current postclosure cost estimate, except as provided in Section 9 of this administrative regulation. The term "face amount" means the total amount the insurer is obligated to pay under the policy. Actual payments by the insurer shall [~~will~~] not change the face amount, although the insurer's future liability shall [~~will~~] be lowered by the amount of the payments.

(4) The postclosure insurance policy shall [~~must~~] guarantee that funds will [~~shall~~] [~~will~~] be available to provide postclosure care of the facility whenever the postclosure care period begins. The policy shall [~~must~~] also guarantee that once postclosure care begins, the insurer will [~~shall~~] [~~will~~] be responsible for paying out funds, up to an amount equal to the face amount of the policy, upon the direction of the cabinet [~~director~~] to such party or parties as the cabinet [~~director~~] specifies.

(5) An owner or operator or any other person authorized to perform postclosure care may request reimbursement for postclosure expenditures by submitting itemized bills to the cabinet [~~director~~]. Within sixty (60) days after receiving bills for postclosure care activities, the cabinet shall [~~director will~~] instruct the insurer to make reimbursements in such amounts as the cabinet [~~director~~] specifies in writing, if the cabinet [~~director~~] determines that the postclosure expenditures are in accordance with the approved postclosure plan or otherwise justified. If the cabinet [~~director~~] does not instruct the insurer to make such reimbursements, he shall [~~will~~] provide the owner or operator with a detailed written statement of reasons.

(6) The owner or operator shall [~~must~~] maintain the policy in [~~full force and~~] effect until the cabinet [~~director~~] consents to termination of the policy by the owner or operator as specified in subsection (11) of this section. Failure to pay the premium, without substitution of alternate financial assurance as specified in this administrative regulation, shall [~~will~~] constitute a significant violation of these administrative regulations, warranting such remedy as the cabinet [~~director~~] deems necessary. Such violation shall [~~will~~] be deemed to begin upon receipt by the cabinet [~~director~~] of a notice of future cancellation, termination, or failure to renew due to nonpayment of the premium, rather than upon the date of expiration.

(7) Each policy shall [~~must~~] contain a provision allowing assignment of the policy to a successor owner or operator. Such assignment may be conditional upon consent of the insurer provided such consent is not unreasonably refused.

(8) The policy shall [~~must~~] provide that the insurer may not cancel, terminate, or fail to renew the policy except for failure to pay the premium. The automatic renewal of the policy shall [~~must~~], at a minimum, provide the insured with the option of renewal at the face amount of the expiring policy. If there is a failure to pay the premium, the insurer may elect to cancel, terminate, or fail to renew the policy by sending notice by certified mail to the owner or operator and the cabinet [~~director~~]. Cancellation, termination, or failure to renew may not occur, however, during the 120 days beginning with the date of receipt of the notice by the cabinet [~~director~~] and the owner or operator, as evidenced by the return receipts. Cancellation, termination, or failure to renew may not occur and the policy will remain in [~~full force and~~] effect in the event that on or before the date of expiration:

(a) The cabinet [~~director~~] deems the facility abandoned; or

(b) Interim status is terminated or revoked; or

(c) Closure is ordered by the cabinet [~~director~~] or a circuit court or other court of competent jurisdiction; or

(d) The owner or operator is named as debtor in a voluntary or involuntary proceeding under Title 11 (Bankruptcy), U.S. Code; or

(e) The premium due is paid.

(9) Whenever the current postclosure cost estimate increases to an amount greater than the face amount of the policy during the operating life of the facility, the owner or operator, within sixty (60) days after the increase, shall [~~must~~] either cause the face amount to be increased to an amount at least equal to the current postclosure cost estimate and submit evidence of such increase to the cabinet [~~director~~], or obtain other financial assurance as specified in this administrative regulation to cover the increase. Whenever the current postclosure cost estimate decreases during the operating life of the facility, the face amount may be reduced to the amount of the current postclosure cost estimate following written approval by the cabinet [~~director~~].

(10) Commencing on the date that liability to make payments pursuant to the policy accrues, the insurer shall [~~will~~] thereafter annually increase the face amount of the policy. Such increase shall [~~must~~] be equivalent to the face amount of the policy, less any payments made, multiplied by an amount equivalent to eighty-five (85) percent of the most recent investment rate or of the equivalent coupon-issue yield announced by the U.S. Treasury for twenty-six (26) week Treasury securities.

(11) The cabinet shall [~~director will~~] give written consent to the owner or operator that he may terminate the insurance policy when:

(a) An owner or operator substitutes alternate financial assurance as specified in this administrative regulation; or

(b) The cabinet [~~director~~] releases the owner or operator from the requirements in accordance with Section 11 of this administrative regulation.

Section 7. Financial Test with Corporate Guarantee for Postclosure Care. (1) An owner or operator may satisfy the requirements of this administrative regulation by demonstrating that he passes a financial test as specified in this section. To pass this test the owner or operator shall [~~must~~] meet the criteria of either paragraph (a) or (b) of this subsection:

(a) The owner or operator shall [~~must~~] have:

1. ~~Two~~ (2) of the following three (3) ratios: a ratio of total liabilities to net worth less than 2.0; a ratio of the sum of net income plus depreciation, depletion, and amortization to total liabilities greater than 0.1; and a ratio of current assets to current liabilities greater than 1.5; and

2. Net working capital and tangible net worth each at least six (6) times the sum of the current closure and postclosure cost estimates and the current plugging and abandonment cost estimates; and

3. Tangible net worth of at least $10 million; and

4. Assets in the United States amounting to at least ninety (90) percent of his total assets or at least six (6) times the sum of the current closure and postclosure cost estimates and the current plugging and abandonment cost estimates.

(b) The owner or operator shall [~~must~~] have:

1. A current rating for his most recent bond issuance of AAA, AA, A or BBB as issued by Standard and Poor's or Aaa, Aa, A, or Baa as issued by Moody's; and

2. Tangible net worth at least six (6) times the sum of the current closure and postclosure cost estimates and the current plugging and abandonment cost estimates; and

3. Tangible net worth of at least $10 million; and

4. Assets located in the United States amounting to at least ninety (90) percent of his total assets or at least six (6) times the sum of the current closure and postclosure cost estimates and the current plugging and abandonment cost estimates.

(2) The phrase "current closure and postclosure cost estimates"

as used in subsection (1) of this section refers to the cost estimates required to be shown in paragraphs 1 to [through] 4 of the letter from the owner's or operator's chief financial officer [(see 401 KAR 34:159)]. The phrase "current plugging and abandonment cost estimates" as used in subsection (1) of this section refers to the cost estimates required to be shown in paragraphs 1 to 4 of the letter from the owner's or operator's chief financial officer (see 40 CFR 144.70(f).

(3) To demonstrate that he meets this test, the owner or operator shall [must] submit the following three (3) items to the cabinet [director]:

(a) A letter executed on the form incorporated by reference in Section 4 [14] of 401 KAR 34:080 [provided by the cabinet], signed by the owner's or operator's chief financial officer [and worded as specified in 401 KAR 34:159]; and

(b) A copy of the independent certified public accountant's report on examination of the owner's or operator's financial statements for the latest completed fiscal year; and

(c) A special report from the owner's or operator's independent certified public accountant to the owner or operator stating that:

1. He has compared the data which the letter from the chief financial officer specifies as having been derived from the independently audited, year-end financial statements for the latest fiscal year with the amounts in such financial statements; and

2. In connection with that procedure, no matters came to his attention which caused him to believe that the specified data should be adjusted.

(4) The owner or operator may obtain an extension of the time allowed for submission of the documents specified in subsection (3) of this section if the fiscal year of the owner or operator ends during the ninety (90) days prior to October 8, 1982 and if the year-end financial statements for that fiscal year **will** [shall] [will] be audited by an independent certified public accountant. The extension will end no later than ninety (90) days after the end of the owner's or operator's fiscal year. To obtain the extension, the owner's or operator's chief financial officer shall [must] send, by October 8, 1982, a letter to the cabinet [director]. This letter from the chief financial officer shall [must]:

(a) Request the extension;

(b) Certify that he has grounds to believe that the owner or operator meets the criteria of the financial test;

(c) Specify for each facility to be covered by the test the EPA identification number, name, address, and the current closure and postclosure cost estimates to be covered by the test;

(d) Specify the date ending the owner's or operator's latest complete fiscal year before October 8, 1982;

(e) Specify the date, no later than ninety (90) days after the end of such fiscal year, when he **will** [shall] [will] submit the documents specified in subsection (3) of this section; and

(f) Certify that the year-end financial statements of the owner or operator for such fiscal year **will** [shall] [will] be audited by an independent
certified public accountant.

(5) After the initial submission of items specified in subsection (3) of this section, the owner or operator shall [must] send updated information to the cabinet [director] within ninety (90) days after the close of each succeeding fiscal year. This information shall [must] consist of all three (3) items specified in subsection (3) of this section.

(6) If the owner or operator no longer meets the requirements of subsection (1) of this section, he shall [must] send notice to the cabinet [director] of intent to establish alternate financial assurance as specified in this administrative regulation. The notice shall [must] be sent by certified mail within ninety (90) days after the end of the fiscal year for which the year-end financial data show that the owner or operator no longer meets the requirements. The owner or operator shall [must] provide alternate financial assurance within 120 days after the end of such fiscal year.

(7) The cabinet [director] may, based on a reasonable belief that the owner or operator may no longer meet the requirements of subsection (1) of this section, require reports of financial condition at any time from the owner or operator in addition to those specified in subsection (3) of this section. If the cabinet [director] finds, on the basis of such reports or other information, that the owner or operator no longer meets the requirements of subsection (1) of this section, the owner or operator shall [must] provide alternate financial assurance as specified in this administrative regulation within thirty (30) days after notification of such a finding.

(8) The cabinet [director] may disallow use of this test on the basis of qualifications in the opinion expressed by the independent certified public accountant in his report on examination of the owner's or operator's financial statements (see subsection (3) of this section). An adverse opinion or a disclaimer of opinion shall [will] be cause for disallowance. The cabinet shall [director will] evaluate other qualifications on an individual basis. The owner or operator shall [must] provide alternate financial assurance as specified in this administrative regulation within thirty (30) days after notification of the disallowance.

(9) During the period of postclosure care, the cabinet [director] may approve a decrease in the current postclosure cost estimate for which this test demonstrates financial assurance if the owner or operator demonstrates to the cabinet [director] that the amount of the cost estimate exceeds the remaining cost of postclosure care.

(10) The owner or operator is no longer required to submit the items specified in subsection (3) of this section when:

(a) An owner or operator substitutes alternate financial assurance as specified in this administrative regulation; or

(b) The cabinet [director] releases the owner or operator from the requirements of this administrative regulation by terminating the financial requirements in accordance with Section 11 of this administrative regulation.

(11) An owner or operator may meet the requirements of this administrative regulation by obtaining a written guarantee, hereafter referred to as "corporate guarantee." The guarantor shall [must] be the direct or higher-tier parent corporation of the owner or operator, a firm whose parent corporation is also the parent corporation of the owner or operator, or a firm with a "substantial business relationship" as defined in Section 1 of 401 KAR 35:080 with the owner or operator. The guarantor shall [must] meet the requirements for owners or operators in subsections (1) to [through] (9) of this section and shall [must] comply with the terms of the corporate guarantee. The corporate guarantee shall [must] be executed on the [a] form incorporated by reference in Section 4 [14] of 401 KAR 34:080. The corporate guarantee shall [provided by the cabinet containing wording identical to the wording specified in 401 KAR 34:165. The corporate guarantee must] accompany the items sent to the cabinet [director] as specified in subsection (3) of this section. One (1) of these items shall be the letter from the guarantor's chief financial officer. If the guarantor's parent corporation is also the parent corporation of the owner or operator, the letter shall describe the value received in consideration of the guarantee. If the guarantor is a firm with a substantial business relationship with the owner or operator, this letter shall describe this substantial business relationship and the value received in consideration of the guarantee. The terms of the corporate guarantee shall [must] provide that:

(a) If the owner or operator fails to perform postclosure care of a facility covered by the corporate guarantee in accordance with the postclosure plan and other interim status requirements whenever required to do so, the guarantor shall [will] do so or establish a trust fund as specified in Section 3 of this administrative regulation in the name of the owner or operator.

(b) The corporate guarantee shall [will] remain in force unless the guarantor sends notice of cancellation by certified mail to the owner or operator and to the cabinet [director]. Cancellation may not occur, however, during the 120 days beginning on the date of receipt of the notice of cancellation by both the owner or operator and the cabinet

[~~director~~], as evidenced by the return receipts.

(c) If the owner or operator fails to provide alternate financial assurance as specified in this administrative regulation and obtain the written approval of such alternate assurance from the cabinet [~~director~~] within ninety (90) days after receipt by both the owner or operator and the cabinet [~~director~~] of a notice of cancellation of the corporate guarantee from the guarantor, the guarantor shall [~~will~~] provide such alternate financial assurance in the name of the owner or operator.

Section 8. Cash Account and Certificates of Deposit. (1) An owner or operator shall [~~must~~] satisfy the requirements of this administrative regulation by submitting to the cabinet [~~director~~] a bond guaranteeing compliance with KRS Chapter 224 and administrative regulations promulgated pursuant thereto. The bond shall [~~is to~~] be supported by a cash account or certificate(s) of deposit. The cash account or the certificate(s) of deposit shall [~~are to~~] be held in escrow pursuant to an escrow agreement. The bank or other financial institution holding the cash account or certificate(s) of deposit in escrow shall [~~must~~] be regulated and examined by a federal or state agency.

(2) The bond shall [~~must~~] be executed on the [a] form incorporated by reference in Section 14 of 401 KAR 34:080. [~~provided by the cabinet which has wording identical to the wording specified in Section 1 of 401 KAR 34:168.~~] The escrow agreement for the cash account or certificate(s) of deposit shall [~~must~~] be executed on the [a] form incorporated by reference in Section 14 of 401 KAR 34:080. [~~provided by the cabinet which has wording identical to the wording specified in Section 2 of 401 KAR 34:168.~~]

(3) The cabinet shall [~~must~~] be the beneficiary of the escrow agreement for the cash account or certificate(s) of deposit. The cabinet shall [~~director must~~] be empowered to draw upon the funds if the owner or operator fails to perform postclosure care in accordance with the postclosure care plan and other permit requirements.

(4) The sum of the cash account or certificate(s) of deposit shall [~~must~~] be in an amount at least equal to the amount of the current postclosure cost estimate, except as provided in Section 9 of this administrative regulation.

(5) After each interest period is completed, whenever the current closure cost estimate changes, the owner or operator shall [~~must~~] compare the new estimate with the trustee's most recent annual valuation of the cash accounts or the certificate(s) of deposit. If the value of the cash accounts or the certificate(s) of deposit is less than the amount of the new estimate, the owner or operator, within sixty (60) days of the change in the cost estimate, shall [~~must~~] either deposit an amount into the cash account or the certificate(s) of deposit so that its value after this deposit at least equals the amount of the current closure cost estimate, or obtain other financial assurance as specified in this section to cover the difference.

(6) If the value of the cash account or the certificate(s) of deposit is greater than the total amount of the current closure cost estimate, the owner or operator may submit a written request to the cabinet [~~director~~] for release of the amount in excess of the current closure cost estimate.

(7) Under the terms of the cash account or certificate(s) of deposit, the bank or financial institution may cancel the cash account or certificate(s) of deposit by sending notice of cancellation by certified mail to the owner or operator and to the cabinet [~~director~~]. Cancellation shall not [~~cannot~~] occur, however, during the 120 days beginning on the date of receipt of the notice of cancellation by both the owner or operator and the cabinet [~~director~~], as evidenced by return receipt.

(8) The owner or operator may terminate the cash account or certificate(s) of deposit if the cabinet [~~director~~] has given prior written consent based on his receipt of evidence of alternate financial assurance as specified in this administrative regulation.

(9) An owner or operator or any other person authorized to conduct postclosure may request reimbursement for postclosure expenditures by submitting itemized bills to the cabinet [~~director~~]. Within sixty (60) days after receiving bills for postclosure activities, the cabinet [~~director~~] may instruct the bank or financial institution to make reimbursements in those amounts as the cabinet [~~director~~] specifies in writing if the cabinet [~~director~~] determines that the postclosure expenditures are in accordance with the postclosure plan or otherwise justified.

Section 9. Use of Multiple Financial Mechanisms. An owner or operator may satisfy the requirements of this administrative regulation by establishing more than one (1) financial mechanism per facility. These mechanisms are limited to trust funds, surety bonds, letters of credit, insurance, cash accounts and certificate(s) of deposit. The mechanisms shall [~~must~~] be as specified in Sections 3, 4, 5, 6, and 8, respectively, of this administrative regulation except that it is the combination of mechanisms rather than the single mechanism which shall [~~must~~] provide financial assurance for an amount at least equal to the current postclosure cost estimate. If an owner or operator uses a trust fund in combination with a surety bond or a letter of credit, he may use the trust fund as the standby trust fund for the other mechanisms. A single standby trust fund may be established for two (2) or more mechanisms. The cabinet [~~director~~] may use any or all of the mechanisms to provide for postclosure care of the facility.

Section 10. Use of a Financial Mechanism for Multiple Facilities. An owner or operator may use a financial assurance mechanism specified in this administrative regulation to meet the requirements of this administrative regulation for more than one (1) facility of which he is the owner or operator provided the facilities are all within the Commonwealth. Evidence of financial assurance submitted to the cabinet shall [~~director must~~] include a list showing for each facility the EPA identification number, name, address, and the amount of funds for postclosure care assured by the mechanism. The amount of funds available through the mechanism shall [~~must~~] be no less than the sum of funds that would be available if a separate mechanism had been established and maintained for each facility. In directing funds available through the mechanism for postclosure care of any of the facilities covered by the mechanism, the cabinet [~~director~~] may direct only the amount of funds designated for that facility, unless the owner or operator agrees to the use of additional funds available under the mechanism.

Section 11. Release of the Owner or Operator from the Requirements of this Administrative Regulation. Within sixty (60) days after approving [~~receiving~~] certifications from the owner or operator and an [~~independent professional~~] engineer [~~registered in the Commonwealth of Kentucky~~] that the postclosure care period has been completed in accordance with the approved postclosure plan, the cabinet shall [~~director will~~] notify the owner or operator in writing that he is no longer required by this administrative regulation to maintain financial assurance for postclosure care of that unit, unless the cabinet [~~director~~] has reason to believe that postclosure care has not been in accordance with the approved postclosure plan. The cabinet shall [~~director will~~] provide the owner or operator a detailed written statement of any such reason to believe that postclosure care has not been in accordance with the approved postclosure plan.

PHILLIP J. SHEPHERD, Secretary
E. DOUGLAS STEPHAN, Commissioner
APPROVED BY AGENCY: December 13, 1993
FILED WITH LRC: December 14, 1993 at 10 a.m.

NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION CABINET
Department for Environmental Protection
Division of Waste Management
(Amended After Hearing)

401 KAR 35:120. Liability requirements (IS).

RELATES TO: KRS 224.10, 224.40, 224.43, 224.46, 224.99
STATUTORY AUTHORITY: KRS 224.46-505, 224.46-520, 224.46-530
NECESSITY AND FUNCTION: To implement provisions of KRS 224.46-505, 224.46-520, and 224.46-530 relative to liability requirements for hazardous waste sites or facilities qualifying for interim status. [~~KRS 224.46-520 requires that persons engaging in the storage, treatment, and disposal of hazardous waste obtain a permit. KRS 224.46-520 requires the cabinet to establish standards for these permits, to require adequate financial responsibility, and to establish minimum standards for closure for all facilities and the postclosure monitoring and maintenance of hazardous waste disposal facilities. This chapter establishes minimum standards for hazardous waste sites or facilities qualifying for interim status. This administrative regulation establishes the liability requirements.~~]

Section 1. Coverage for Sudden Accidental Occurrences. [~~By October 8, 1982,~~] An owner or operator of a hazardous waste treatment, storage, or disposal facility, or a group of such facilities, shall demonstrate financial responsibility for bodily injury and property damage to third parties caused by sudden accidental occurrences arising from operations of the facility or group of facilities. The owner or operator shall have and maintain liability coverage for sudden accidental occurrences in the amount of at least $1,000,000 per occurrence with an annual aggregate of at least $2,000,000, exclusive of legal defense costs. This liability coverage may be demonstrated [~~in one (1) of three (3) ways,~~] as specified in subsections (1) to (6) [~~, (2), and (3)~~] of this section.

(1) An owner or operator may demonstrate the required liability coverage by having liability insurance as specified in this section.

(a) Each insurance policy shall be amended by attachment of the hazardous waste facility liability endorsement or evidenced by a certificate of liability insurance. The liability endorsement shall be executed on the form incorporated by reference in Section 4 [~~14~~] of 401 KAR 34:080. [~~a form provided by the cabinet containing wording identical to the wording specified in 401 KAR 34:172.~~] The certificate of liability insurance shall be on the form incorporated by reference in Section 4 [~~14~~] of 401 KAR 34:080. [~~a form provided by the cabinet containing wording identical to the wording specified in 401 KAR 34:176.~~] The owner or operator shall submit an originally signed duplicate of the endorsement or the certificate of insurance to the cabinet. If requested by the cabinet, the owner or operator shall provide an originally signed duplicate of the insurance policy.

(b) Each primary insurance policy shall be issued by an insurer which, at a minimum, is authorized [~~licensed~~] to transact [~~the business of~~] primary insurance in Kentucky except as KRS 304.11-030 provides otherwise. Each excess insurance policy shall be issued by an insurer which, at a minimum, is licensed to provide insurance as an excess or surplus lines insurer in one (1) state.

(2) An owner or operator may meet the requirements of this administrative regulation by passing a financial test or using the corporate guarantee for liability coverage as specified in Sections 6 and 7 of this administrative regulation.

(3) An owner or operator may meet the requirements of this section by obtaining a letter of credit for liability coverage as specified in Section 8 of this administrative regulation.

(4) An owner or operator may meet the requirements of this section by obtaining a surety bond for liability coverage as specified in Section 9 of this administrative regulation.

(5) An owner or operator may meet the requirements of this section by obtaining a trust fund for liability coverage as specified in Section 10 of this administrative regulation.

(6) An owner or operator may demonstrate the required liability coverage through use of combinations of the financial test, insurance, the corporate guarantee, letter of credit, surety bond, and trust fund, except that the owner or operator may not combine a financial test covering part of the liability coverage requirement with a guarantee unless the financial statement of the owner or operator is not consolidated with the financial statement of the guarantor [~~a combination of the financial test and insurance, or a combination of the corporate guarantee and insurance~~]. The amounts of coverage demonstrated shall total at least the minimum amounts required by this section. If the owner or operator demonstrates the required coverage through the use of a combination of financial assurances under this subsection, the owner or operator shall specify at least one (1) such assurance as "primary" coverage and shall specify other assurance as "excess" coverage.

(7) An owner or operator shall notify the cabinet in writing within thirty (30) days whenever:

(a) A claim for bodily injury or property damages caused by the operation of a hazardous waste treatment, storage, or disposal facility is made against the owner or operator or an instrument providing financial assurance for liability coverage under this section;

(b) The amount of financial assurance for liability coverage under this section provided by a financial instrument authorized by subsections (1) to (6) of this section is reduced; or

(c) A final court order establishing a judgment for bodily injury or property damage caused by a sudden or nonsudden accidental occurrence arising from the operation of a hazardous waste treatment, storage, or disposal facility is issued against the owner or operator or an instrument that is providing financial assurance for liability coverage under subsections (1) to (6) of this section.

Section 2. Coverage for Nonsudden Accidental Occurrences. An owner or operator of a surface impoundment, landfill, facility for land disposal as specified in KRS 224.01-010, or land treatment facility which is used to manage hazardous waste, or a group of such facilities, shall demonstrate financial responsibility for bodily injury and property damage to third parties caused by nonsudden accidental occurrences arising from operations of the facility or group of facilities. The owner or operator shall have and maintain additional liability coverage for nonsudden accidental occurrences in the amount of at least $3,000,000 per occurrence with an annual aggregate of at least $6,000,000, exclusive of legal defense costs. An owner or operator who is required to meet the requirements of this section may combine the required per-occurrence coverage levels for sudden and nonsudden accidental occurrences into a single per-occurrence level, and combine the required annual aggregate coverage levels for sudden and nonsudden accidental occurrences into a single annual aggregate level. Owners or operators who combine coverage levels for sudden and nonsudden accidental occurrences shall maintain liability coverage in the amount of at least $4 million per occurrence and $8 million annual aggregate. This liability coverage may be demonstrated [~~in one (1) of three (3) ways,~~] as specified in subsections (1) to (6) [~~, (2), and (3)~~] of this section:

(1) An owner or operator may demonstrate the required liability coverage by having liability insurance as specified in this section.

(a) Each insurance policy shall be amended by attachment of the hazardous waste facility liability endorsement or evidenced by a certificate of liability insurance. The liability endorsement shall be executed on the form incorporated by reference in Section 4 [~~14~~] of 401 KAR 34:080. [~~on a form provided by the cabinet containing wording identical to the wording specified in 401 KAR 34:172.~~] The certificate of liability insurance shall be executed in accordance with [~~on a form provided by the cabinet containing wording identical to the wording specified in~~] 401 KAR 34:176 on the form incorporated by

reference in Section 4 [13] of 401 KAR 34:080 [34:090]. The owner or operator shall submit an originally signed duplicate of the endorsement or the certificate of insurance to the cabinet. If requested by the cabinet, the owner or operator shall provide an originally signed duplicate of the insurance policy.

(b) Each primary insurance policy shall be issued by an insurer which, at a minimum is authorized [licensed] to transact the business of primary insurance in Kentucky except as KRS 304.11-030 provides otherwise. Each excess insurance policy shall be issued by an insurer which, at a minimum is authorized [licensed] to provide insurance as an excess or surplus lines insurer in one (1) state.

(2) An owner or operator shall notify the cabinet in writing within thirty (30) days whenever:

(a) A claim for bodily injury or property damages caused by the operation of a hazardous waste treatment, storage, or disposal facility is made against the owner or operator or against an instrument providing financial assurance for liability coverage under this section;

(b) The amount of financial assurance for liability coverage under this section, provided by a financial instrument authorized by this subsection, is reduced; or

(c) A final court order establishing a judgment for bodily injury or property damage caused by a sudden or nonsudden accidental occurrence arising from the operation of a hazardous waste treatment, storage, or disposal facility is issued against the owner or operator or against an instrument that is providing financial assurance for liability coverage under subsections (1) to (6) of this section.

(3) An owner or operator may meet the requirements of this administrative regulation by passing a financial test, or using the corporate guarantee for liability coverage as specified in Sections 6 and 7 of this administrative regulation.

(4) An owner or operator may meet the requirements of this section by obtaining a letter of credit for liability coverage as specified in Section 8 of this administrative regulation.

(5) An owner or operator may meet the requirements of this section by obtaining a surety bond for liability coverage as specified in Section 9 of this administrative regulation.

(6) An owner or operator may meet the requirements of this section by obtaining a trust fund for liability coverage as specified in Section 10 of this administrative regulation.

(7) [(3)] An owner or operator may demonstrate the required liability coverage through use of combinations of the financial test, insurance, the corporate guarantee, letter of credit, surety bond, and trust fund, except that the owner or operator may not combine a financial test covering part of the liability coverage requirement with a guarantee unless the financial statement of the owner or operator is not consolidated with the financial statement of the guarantor. [a combination of the financial test and insurance, or a combination of the corporate guarantee and insurance.] The amounts of coverage demonstrated shall total at least the minimum amounts required by this section.

(8) [(4)] The required liability coverage for nonsudden accidental occurrences shall be demonstrated by the dates listed below. The total sales or revenues of the owner or operator in all lines of business, in the fiscal year preceding October 8, 1982, shall determine which of the dates apply. If the owner and operator of a facility are two (2) different parties, or if there is more than one (1) owner or operator, the sales or revenues of the owner or operator with the largest sales or revenues shall determine the date by which the coverage shall be demonstrated. The dates are as follows:

(a) For an owner or operator with sales or revenues totaling $10,000,000 or more, February 24, 1983.

(b) For an owner or operator with sales or revenues greater than $5,000,000 but less than $10,000,000, February 24, 1984.

(c) For all other owners or operators, February 24, 1985.

Section 3. Adjustments by the Cabinet. If the cabinet determines that the levels of financial responsibility required by Sections 1 and 2 of this administrative regulation are not consistent with the degree and duration of risks associated with treatment, storage, or disposal at any facility or group of facilities, the cabinet may increase the level of financial responsibility required under Sections 1 and 2 of this administrative regulation as may be necessary to protect human health and the environment. This adjusted level shall be based on the cabinet's assessment of the degree and duration of risks associated with the ownership or operation of each facility or group of [such] facilities. In addition, if the cabinet determines that there is a significant risk to human health and the environment from nonsudden accidental occurrences resulting from the operations of a facility that is not a surface impoundment, landfill, or land treatment facility, the cabinet may require that the owner or operator of the facility comply with Section 2 of this administrative regulation. An owner or operator shall furnish to the cabinet, within a reasonable time, any information which the cabinet requests to determine whether cause exists for such adjustments of the level or type of coverage. Any adjustment of the level of required coverage for a facility that has a permit shall be treated as a permit modification under Section 2(1)(e) of 401 KAR 38:040 and subject to the procedures of Section 2 of 401 KAR 38:050. Notwithstanding any other provision, the cabinet may hold a public hearing at its discretion or whenever the cabinet finds, on the basis of requests for a public hearing, a significant degree of public interest in a tentative decision to adjust the level or type of required coverage.

Section 4. Request for a Variance. If an owner or operator can demonstrate to the satisfaction of the cabinet that the increased level of financial responsibility required by Section 1 or 2 [3] of this administrative regulation is not consistent with the degree and duration of risks associated with the treatment, storage, or disposal at each facility or group of facilities, the owner or operator may obtain a variance from the cabinet. The request for a variance shall be submitted to the cabinet in writing. The cabinet shall not grant any requests for a variance which seek to decrease the level of financial responsibility below the minimums required by KRS 224.46-520(3)(c). If granted, the variance shall take the form of an adjusted level of required liability coverage, such level to be based on the cabinet's assessment of the degree and duration of risks associated with the ownership or operation of each facility or group of facilities. The cabinet may require an owner or operator who requests a variance to provide such technical and engineering information as is deemed necessary by the cabinet to determine a level of financial responsibility other than that required by Sections 1 and 2 of this administrative regulation. Any request for a variance for a permitted facility shall be treated as a request for a permit modification under Section 2 of 401 KAR 38:040 and subject to the procedures of Section 2 of 401 KAR 38:050. Notwithstanding any other provision, the cabinet may hold a public hearing at its discretion or whenever the cabinet finds, on the basis of requests for a public hearing, a significant degree of public interest in a tentative decision to grant a variance.

Section 5. Period of Coverage. An owner or operator shall continuously provide liability coverage for a facility as required by this administrative regulation until **certification of termination pursuant to the requirements of KRS 224.46-520.** [the cabinet approves the certification from the owner or operator and an engineer that final closure has been completed in accordance with the approved closure plan. The cabinet shall then notify the owner or operator in writing that he is no longer required by this section to maintain liability coverage for that facility, unless the cabinet has reason to believe that closure has not been in accordance with the approved closure plan.] [certification of termination pursuant to the requirements of KRS 224.46-520.]

Section 6. Liability Self-insurance. (1) An owner or operator may satisfy the requirements of this administrative regulation by demon-

strating that he passes a financial test as specified in this section. To pass this test the owner or operator shall demonstrate that the level of self-insurance does not exceed ten (10) percent of equity and shall meet the criteria of either paragraph (a) or (b) of this subsection:

(a) The owner or operator shall have:

1. Net working capital and tangible net worth each at least six (6) times the amount of liability coverage to be demonstrated by this test; and

2. Tangible net worth of at least $10 million; and

3. Assets in the United States amounting to either, at least, ninety (90) percent of his total assets or, at least six (6) times the amount of [~~sum of the appropriate~~] liability coverage to be demonstrated by this test.

(b) The owner or operator shall have:

1. A current rating for his most recent bond issuance of AAA, AA, A, or BBB as issued by Standard and Poor's or Aaa, Aa, A, or Baa as issued by Moody's; and

2. Tangible net worth of at least $10 million; and

3. Tangible net worth at least six (6) times the amount of the liability coverage to be demonstrated by this test; and

4. Assets located in the United States amounting to either, at least, ninety (90) percent of his total assets or, at least, six (6) times the amount of the liability coverage to be demonstrated by this test.

(2) The phrase "amount of liability coverage" as used in subsection (1) of this section refers to the annual aggregate amounts for which coverage is required under Sections 1 and 2 of this administrative regulation.

(3) To demonstrate that he meets this test, the owner or operator shall submit the following three (3) items to the cabinet:

(a) A letter signed by the owner's or operator's chief financial officer and executed on the form incorporated by reference in Section **4** [~~14~~] of 401 KAR 34:080. If an owner or operator is using the financial test to demonstrate both liability coverage and assurance for closure or postclosure care (as specified by Section 8 of 401 KAR 34:090, Section 8 of 401 KAR 34:100, Section 7 of 401 KAR 35:090, and Section 7 of 401 KAR 35:100), he shall submit the letter on the form incorporated by reference in Section **4** [~~14~~] of 401 KAR 34:080, to cover both forms for financial responsibility a separate letter is not required; [~~a form provided by the cabinet which is worded as specified in 401 KAR 34:162;~~]

(b) A copy of the independent certified public accountant's report on examination of the owner's or operator's financial statements for the latest completed fiscal year; and

(c) A special report from the owner's or operator's independent certified public accountant to the owner or operator stating that:

1. He has compared the data which the letter from the chief financial officer specifies as having been derived from the independently audited, year-end financial statements for the latest fiscal year with the amounts in such financial statements; and

2. In connection with that procedure, no matters came to his attention which caused him to believe that the specified data should be adjusted.

(d) The owner or operator may obtain a one (1) time extension of the time allowed for submission of the documents specified in subsection (3) of this section if the fiscal year of the owner or operator ends during the ninety (90) days prior to the effective date of this administrative regulation and if the year-end financial statements for that fiscal year will be audited by an independent certified public accountant. The extension shall end no later than ninety (90) days after the end of the owner's or operator's fiscal year. To obtain the extension, the owner's or operator's chief financial officer is required to send a letter to the cabinet. This letter from the chief financial officer shall:

1. Request the extension;

2. Certify that he has grounds to believe that the owner or operator meets the criteria of the financial test;

3. Specify for each facility to be covered by the test the EPA identification number, name, address, the amount of liability coverage and, when applicable, current closure and postclosure cost estimates to be covered by the test;

4. Specify the date ending the owner's or operator's last complete fiscal year before the effective date of these regulations;

5. Specify the date, no later than ninety (90) days after the end of such fiscal year, when he **will** [~~shall~~] submit the documents specified in subsection (3) of this section; and

6. Certify that the year-end financial statements of the owner or operator for such fiscal year **will** [~~shall~~] be audited by an independent certified public accountant.

(4) An owner or operator of a new facility shall submit the items specified in subsection (3) of this section to the cabinet at least sixty (60) days before the date on which hazardous waste is first received for treatment, storage or disposal.

(5) After the initial submission of items specified in subsection (3) of this section, the owner or operator shall send updated information to the cabinet within ninety (90) days after the close of each succeeding fiscal year. This information shall consist of all three (3) items specified in subsection (3) of this section.

(6) If the owner or operator no longer meets the requirements of subsection (1) of this section, he shall obtain insurance, a letter of credit, a surety bond, a trust fund, or a corporate guarantee for the entire amount of required liability coverage as specified in this administrative regulation. Evidence of insurance shall be submitted to the cabinet within ninety (90) days after the end of the fiscal year for which the year-end financial data show that the owner or operator no longer meets the test requirements.

(7) The cabinet may, based on a reasonable belief that the owner or operator may no longer meet the requirements of subsection (1) of this section, require reports of financial condition at any time from the owner or operator in addition to those specified in subsection (3) of this section. If the cabinet finds, on the basis of such reports or other information, that the owner or operator no longer meets the requirements of subsection (1) of this section, the owner or operator shall provide liability insurance as specified in this administrative regulation within thirty (30) days after notification of such a finding.

(8) The cabinet may disallow use of this test on the basis of qualifications in the opinion expressed by the independent certified public accountant in his report on examination of the owner's or operator's financial statements (see subsection (3)(c) of this section). An adverse opinion or a disclaimer of opinion shall be cause for disallowance. The cabinet shall evaluate other qualifications on an individual basis. The owner or operator shall provide liability insurance for the entire amount of liability coverage as specified in this administrative regulation within thirty (30) days after notification of the disallowance.

Section 7. Corporate Guarantee for Liability Coverage. (1) Subject to subsection (2) of this section, an owner or operator may meet the requirements of this administrative regulation by obtaining a written guarantee, hereinafter referred to as "corporate guarantee." The guarantor shall be the direct or higher-tier parent corporation of the owner or operator a firm whose parent corporation is also the parent corporation of the owner or operator, or a firm with a substantial business relationship with the owner or operator. The guarantee shall meet the requirements for owners or operators in Section 6(1) to (7) [~~through (8)~~] of this administrative regulation. The [~~wording of the~~] corporate guarantee shall be executed on the form incorporated by reference in Section **4** [~~14~~] of 401 KAR 34:080 [~~identical to the wording specified in Section 1(2) of 401 KAR 34:165~~]. A certified copy of the corporate guarantee shall accompany the items sent to the cabinet as specified in Section 6(3) of this administrative regulation. One (1) of these items shall be the letter from the guarantor's chief financial officer. If the guarantor's parent corporation is also the parent corporation of the owner or operator, this letter shall describe the value received in consideration of the guarantee. If the guarantor

is a firm with a substantial business relationship with the owner or operator, this letter shall describe the substantial business relationship and the value received in consideration of the guarantee. The terms of the corporate guarantee shall provide that:

(a) If the owner or operator fails to satisfy a judgment based on a determination of liability for bodily injury or property damage to third parties caused by sudden or nonsudden accidental occurrences (or both as the case may be), arising from the operation of facilities covered by this corporate guarantee, or fails to pay an amount agreed to in settlement of claims arising from or alleged to arise from such injury or damage, the guarantor shall do so up to the limits of coverage.

(b) The corporate guarantee shall remain in force unless the guarantor sends notice of cancellation by certified mail to the owner or operator and to the cabinet. This guarantee may not be terminated unless and until the cabinet approves alternate liability coverage complying with 401 KAR 35:120 or this administrative regulation.

(2)(a) In the case of corporations incorporated in the United States, a corporate guarantee may be used to satisfy the requirements of this administrative regulation only if the Attorney General or insurance commissioner of the state in which the guarantor is incorporated, each state in which a facility covered by the guarantee is located and in the state in which it has its principle place of business, have submitted a written statement to the director that a corporate guarantee executed as described in this administrative regulation and [~~Section 1(2) of 401 KAR 34:165~~] is a legally valid and enforceable obligation in that state and in [~~the Commonwealth of~~] Kentucky.

(b) In the case of corporations incorporated outside of the United States, a corporate guarantee may be used to satisfy the requirements of this section only if the non-U.S. corporation has identified a registered agent for service of process in each state in which a facility covered by the guarantee is located, and in the state in which it has its principle place of business, and the Attorney General or insurance commissioner of each state in which a facility covered by the guarantee is located, and the state in which the guarantor corporation has its principle place of business, and the cabinet's Department of Law or the insurance commissioner of [~~the Commonwealth of~~] Kentucky has [~~have~~] submitted a written statement to the cabinet that a corporate guarantee executed as described in this section and [~~Section 1(2) of 401 KAR 34:165~~] is a legally valid and enforceable obligation in that state and in [~~the Commonwealth of~~] Kentucky.

(c) A corporate guarantee may be used to satisfy the requirements of this administrative regulation only if the assets to be collected are located in the United States. Failure to provide the written statement referenced in paragraphs (a) and (b) of this subsection shall be grounds for denial of the instrument.

Section 8. Letter of Credit for Liability Coverage. (1) An owner or operator may satisfy the requirements of this section by obtaining an irrevocable stand-by letter of credit that conforms to the requirements of this administrative regulation and submitting a copy of the letter of credit to the cabinet.

(2) The financial institution issuing the letter of credit shall be an entity that has the authority to issue letters of credit and whose letter of credit operations are regulated and examined by the federal or state agency.

(3) The letter of credit shall be submitted on the form incorporated by reference in Section 4 [~~14~~] of 401 KAR 34:080.

(4) An owner or operator who uses a letter of credit to satisfy the requirements of this section may also establish a standby trust fund. Under the terms of such a letter of credit, all amounts paid pursuant to a draft by the trustee of the standby trust will be deposited by the issuing institution into the standby trust in accordance with instructions from the trustee. The trustee of the standby trust fund shall be an entity which has the authority to act as a trustee and whose trust operations are regulated and examined by a federal or state agency.

(5) The standby trust shall be on the form incorporated by reference in Section 4 [~~14~~] of 401 KAR 34:080.

Section 9. Surety Bond for Liability Coverage. (1) An owner or operator may satisfy the requirements of this section by obtaining a surety bond that conforms to the requirements of this administrative regulation and submitting a copy of the bond to the cabinet.

(2) The surety company issuing the bond shall be among those listed as acceptable sureties on Federal bonds in the most recent Circular 570 of the U.S. Department of the Treasury.

(3) The letter of credit shall be submitted on the form incorporated by reference in Section 4 [~~14~~] of 401 KAR 34:080.

(4) A surety bond may be used to satisfy the requirements of this section only if the attorney general or insurance commissioners of the state in which the surety is incorporated, and each state in which a facility covered by the surety bond is located have submitted a written statement to the cabinet that a surety bond executed on the form incorporated by reference in Section 4 [~~14~~] of 401 KAR 34:080 is a legally valid and enforceable obligation in that state.

Section 10. Trust Fund for Liability Coverage. (1) An owner or operator may satisfy the requirements of this section by establishing a trust fund that conforms to the requirements of this administrative regulation and submitting an originally signed duplicate of the trust agreement to the cabinet.

(2) The trustee shall be an entity which has the authority to act as a trustee and whose trust operations are regulated and examined by a federal or state agency.

(3) The trust fund or liability coverage shall be funded for the full amount of the liability coverage to be provided by the trust fund before it may relied upon to satisfy the requirements of this section. If at any time after the trust fund is created the amount of funds in the trust fund is reduced below the full amount of the liability coverage to be provided, the owner or operator, by the anniversary date of the establishment of the trust fund, shall either add sufficient funds to the trust fund to cause its value to equal the full amount of liability coverage to be provided, or obtain other financial assurance as specified in this administrative regulation to cover the difference. For purposes of this administrative regulation, "the full amount of the liability coverage to be provided" means the amount of coverage for sudden and nonsudden occurrences required to be provided by the owner or operator by this administrative regulation, less the amount of financial assurance for liability coverage that is being provided by other financial assurance mechanisms being used to demonstrate financial assurance by the owner or operator.

PHILLIP J. SHEPHERD, Secretary
E. DOUGLAS STEPHAN, Commissioner
APPROVED BY AGENCY: December 13, 1993
FILED WITH LRC: December 14, 1993 at 10 a.m.

NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION CABINET
Department for Environmental Protection
Division of Waste Management
(Amended After Hearing)

401 KAR 35:190. Tanks (IS).

RELATES TO: KRS 224.01, 224.10, 224.40, 224.43, 224.46, 224.99

STATUTORY AUTHORITY: KRS 224.10-100, 224.46-520

NECESSITY AND FUNCTION: To implement provisions of KRS 224.46.520 and to establish [~~requires that persons engaging in the storage, treatment, and disposal of hazardous waste obtain a permit. KRS 224.46.520 requires the cabinet to establish standards for these~~

~~permits, to require adequate financial responsibility, and to establish minimum standards for closure for all facilities and the postclosure monitoring and maintenance of hazardous waste disposal facilities. This chapter establishes minimum standards for hazardous waste sites or facilities qualifying for interim status. This administrative regulation establishes~~] minimum standards for tanks qualifying for interim status.

Section 1. Applicability. The regulations of this chapter apply to owners or operators of sites or facilities that use tank systems for storing or treating hazardous waste except as otherwise provided in subsections (1) [~~and~~] (2), and (3) of this section or in Section 1 of 401 KAR 35:010.

(1) Tank systems that are used to store or treat hazardous waste which contain no free liquids and that are situated inside a building with an impermeable floor are exempted from the requirements of Section 4 of this administrative regulation. To demonstrate the absence or presence of free liquids in the stored/treated waste, EPA Method 9095 (paint filter liquids test) as described in "Test Methods for Evaluating Solid Wastes, Physical/Chemical Methods" (EPA Publication No. SW-846) incorporated by reference in subsection (4) [~~(3)~~] of this section, shall be used.

(2) Tank systems, including sumps, as defined in Section 1 of 401 KAR 30:010, that serve as part of a secondary containment system to collect or contain releases of hazardous wastes are exempted from the requirements in Section 4(1) of this administrative regulation.

(3) Tanks, sumps, and other collection devices used in conjunction with drip pads as defined in 401 KAR 30:010 and regulated under 401 KAR 35:285, shall meet the requirements of this administrative regulation.

(4) The paint filter liquids test, Method 9095 in the EPA publication SW-846, is being incorporated into this administrative regulation by reference [~~into this section~~]. The test method became effective in April of 1984 and is available from the National Technical Information Section, 5285 Port Royal Road, Springfield, Virginia 22161, (703) 487-4600. This material is available for [~~public~~] inspection and copying [~~during business hours of 8 a.m. to 4:30 p.m.~~] at the Division of Waste Management, 14 [~~Frankfort Office Park, 18~~] Reilly Road, Frankfort, Kentucky 40601, (502) 564-6716 between 8 a.m. and 4:30 p.m., EST, Monday through Friday.

Section 2. Assessment of Existing Tank System's Integrity. (1) For each existing tank system that does not have secondary containment meeting the requirements of Section 4 of this administrative regulation, the owner or operator shall determine that the tank system is not leaking or is unfit for use. Except as provided in subsection (3) of this section, the owner or operator shall obtain and keep on file at the facility a written assessment reviewed and certified by an [~~independent, qualified, professional~~] engineer [~~registered in the Commonwealth of Kentucky~~], in accordance with Section 7(4) of 401 KAR 38:070, that attests to the tank system's integrity no later than 180 days from the date of promulgation of this administrative regulation.

(2) This assessment shall determine that the tank system is adequately designed and has sufficient structural strength and compatibility with the waste to be stored or treated to ensure that it **will** [~~shall~~] [~~will~~] not collapse, rupture, or fail. At a minimum, this assessment shall [~~must~~] consider the following:

(a) Design standards, if available, according to which the tank and ancillary equipment were constructed;

(b) Hazardous characteristics of the waste that have been or **will** [~~shall~~] be handled;

(c) Existing corrosion protection measures;

(d) Documented age of the tank system, if available (otherwise, an estimate of the age); and

(e) Results of a leak test, internal inspection, or other tank integrity examination such that:

1. For nonenterable underground tanks, this assessment shall consist of a leak test that is capable of taking into account the effects of temperature variations, tank end deflection, vapor pockets, and high water table effects; and

2. For other than nonenterable underground tanks and for ancillary equipment, this assessment shall be either a leak test, or as described above, or an internal inspection and other tank integrity examination certified by an [~~independent, qualified, professional~~] engineer [~~registered in the Commonwealth of Kentucky~~] in accordance with Section 7(4) of 401 KAR 38:070, that addresses cracks, leaks, corrosion, and erosion.

(3) Tank systems that store or treat materials that become hazardous wastes after the effective [~~subsequent to~~] date [~~of promulgation~~] of this administrative regulation shall conduct this assessment within twelve (12) months after the date that the waste becomes a hazardous waste.

(4) If, as a result of the assessment conducted in accordance with subsection (1) of this section, a tank system is found to be leaking or unfit for use, the owner or operator shall comply with the requirements of Section 7 of this administrative regulation.

Section 3. Design and Installation of New Tank Systems or Components. (1) Owners or operators of new tanks systems or components shall ensure that the foundation, structural support, seams, connections, and pressure controls (if applicable) are adequately designed and that the tank system has sufficient structural strength, compatibility with the waste to be stored or treated, and corrosion protection so that it **will** [~~shall~~] not collapse, rupture, or fail. The owner or operator shall obtain a written assessment reviewed and certified by an [~~independent, qualified professional~~] engineer [~~registered in the Commonwealth of Kentucky~~] in accordance with Section 7(4) of 401 KAR 38:070, attesting that the system has sufficient structural integrity and is acceptable for the storing and treating of hazardous waste. This assessment shall include, at a minimum, the following information:

(a) Design standards according to which the tank and the ancillary equipment is or **will** [~~shall~~] be constructed;

(b) Hazardous characteristics of the waste to be handled;

(c) For new tank systems or components in which the external shell of a metal tank or any external metal component of the tank system is or **will** [~~shall~~] be in contact with the soil or with water, a determination by a corrosion expert of:

1. Factors affecting the potential for corrosion, including but not limited to:

a. Soil moisture content;

b. Soil pH;

c. Soil sulfides level;

d. Soil resistivity;

e. Structure to soil potential;

f. Influence of nearby underground metal structures ([~~e.g.,~~] piping);

g. Stray electric current;

h. Existing corrosion-protection measures ([~~e.g.,~~] coating, cathodic protection); and

2. The type and degree of external corrosion protection that are needed to ensure the integrity of the tank system during the use of the tank system or component, consisting of one (1) or more of the following:

a. Corrosion-resistant materials of construction such as special alloys or [~~,~~] fiberglass-reinforced plastic[~~, etc.~~];

b. Corrosion-resistant coating (such as epoxy or [~~,~~] fiberglass[~~, etc.~~]) with cathodic protection (such as [~~e.g.,~~] impressed current or sacrificial anodes); and

c. Electrical isolation devices such as insulating joints and [~~,~~] flanges, etc.

(d) For underground tank system components that are likely to be affected by vehicular traffic, a determination of design or operational

measures that **will** [~~shall~~] [~~will~~] protect the tank system against potential damage; and

(e) Design considerations to ensure that:

1. Tank foundations **will** [~~shall~~] maintain the load of a full tank;

2. Tank systems **will** [~~shall~~] be anchored to prevent flotation or dislodgment where the tank system is placed in a saturated zone, or is located within a seismic fault zone; and

3. Tank systems **will** [~~shall~~] withstand the effects of frost heave.

(2) The owner or operator of a new tank system shall ensure that proper handling procedures are adhered to in order to prevent damage to the system during installation. Prior to covering, enclosing, or placing a new tank system or component in use, an independent, qualified installation inspector or an [~~independent, qualified professional~~] engineer [~~registered in the Commonwealth of Kentucky~~], either of whom is trained and experienced in the proper installation of tank systems, shall inspect the system or component for the presence of any of the following items:

(a) Weld breaks;

(b) Punctures;

(c) Scrapes of protective coatings;

(d) Cracks;

(e) Corrosion; or

(f) Other structural damage or inadequate construction or installation. All discrepancies shall be remedied before the tank system is covered, enclosed, or placed in use.

(3) New tank systems or components and piping that are placed underground and that are backfilled shall be provided with a backfill material that is a noncorrosive, porous, homogeneous substance and that is carefully installed so that the backfill is placed completely around the tank and compacted to ensure that the tank and piping are fully and uniformly supported.

(4) All new tanks and ancillary equipment shall be tested for tightness prior to being covered, enclosed, or placed in use. If a tank system is found not to be tight, all repairs necessary to remedy the leak in the system shall be performed prior to the tank system being covered, enclosed, or placed in use.

(5) Ancillary equipment shall be supported and protected against physical damage and excessive stress due to settlement, vibration, expansion, or contraction.

(6) The owner or operator shall provide the type and degree of corrosion protection necessary, based on the information provided under subsection (1)(c) of this section, to ensure the integrity of the tank system during use of the tank system. The installation of a corrosion protection system that is field fabricated shall be supervised by an independent corrosion expert to ensure proper installation.

(7) The owner or operator shall obtain and keep on file at the facility written statements by those persons required to certify the design of the tank system and supervise the installation of the tank system in accordance with the requirements of subsections (2) to [~~through~~] (6) of this section to attest that the tank system was properly designed and installed and that repairs, pursuant to subsections (2) and (4) of this section were performed. These written statements shall also include the certification statement as required in Section 7(4) of 401 KAR 38:070.

Section 4. Containment and Detection of Releases. (1) In order to prevent the release of hazardous waste or hazardous constituents to the environment, secondary containment that meets the requirements of this section shall be provided (except as provided in subsections (6) and (7) of this section):

(a) For all new tank systems or components, prior to their being put into service;

(b) For all existing tank systems used to store or treat EPA Hazardous Waste Nos. F020, F021, F022, F023, F026, and F027, by January 12, 1991;

(c) For those existing tank systems of known and documentable age, by January 12, 1991 or when the tank systems have reached fifteen (15) years of age, whichever comes later;

(d) For those existing tank systems for which the age cannot be documented within eight (8) years of January 12, 1987, but if the age of the facility is greater than seven (7) years, secondary containment shall be provided by the time the facility reaches fifteen (15) years of age, or within two (2) years of January 12, 1987, whichever comes later; and

(e) For tanks systems that store or treat materials that become hazardous wastes subsequent to the effective date of [~~promulgation of~~] this administrative regulation within the time intervals required in subsections (1)(a) to [~~through~~] (d) of this section, except that the date that a material becomes a hazardous waste shall be used in place of the effective date [~~of promulgation~~] of this administrative regulation.

(2) Secondary containment systems shall be:

(a) Designed, installed, and operated, to prevent any migration of wastes or accumulated liquid out of the system to the soil, groundwater, or surface water at any time during the use of the tank system; and

(b) Capable of detecting and collecting releases and accumulated liquids until the collected material is removed.

(3) To meet the requirements of subsection (2) of this section, secondary containment systems shall be at a minimum:

(a) Constructed of or lined with materials that are compatible with the waste to be placed in the tank system and shall have sufficient strength and thickness to prevent failure due to pressure gradients (including static head and external hydrological forces), physical contact with the waste to which they are exposed climatic conditions, the stress of installation, and the stress of daily operation (including stresses from nearby vehicular traffic);

(b) Placed on a foundation or base capable of providing support to the secondary containment system, resistance to pressure gradients above and below the system, and capable of preventing failure due to settlement, compression, or uplift;

(c) Provided with a leak-detection system that is designed and operated so that it **will** [~~shall~~] detect the failure of either the primary and secondary containment structure or any release of hazardous waste or accumulated liquid in the secondary containment system within twenty-four (24) hours, or at the earliest practicable time if the existing detection technology or sites conditions **will** [~~shall~~] not allow detection of a release within twenty-four (24) hours; and

(d) Sloped or otherwise designed or operated to drain and remove liquids resulting from leaks, spills, or precipitation. Spilled or leaked waste and accumulated precipitation shall be removed from the secondary containment system within twenty-four (24) hours, or in as timely a manner as is possible to prevent harm to human health or the environment, if removal of the released waste or accumulated precipitation cannot be accomplished within twenty-four (24) hours.

(4) Secondary containment for tanks shall include one (1) or more of the following devices:

(a) A liner (external to the tank);

(b) A vault;

(c) A double-walled tank; or

(d) An equivalent device as approved by the cabinet.

(5) In addition to the requirements of subsections (2), (3), and (4) of this section, secondary containment systems shall satisfy the following requirements:

(a) External liner systems shall be:

1. Designed or operated to contain 100 percent of the capacity of the largest tank within its boundary;

2. Designed or operated to prevent run-on or infiltration of precipitation into the secondary containment system unless the collection system has sufficient excess capacity to contain run-on or infiltration. Such additional capacity shall be sufficient to contain precipitation from a twenty-five (25) year, twenty-four (24) hour rainfall event;

3. Free of cracks or gaps; and

4. Designed and installed to completely surround the tank and to

cover all surrounding earth likely to come into contact with the waste if the waste is released from the tank (that is [i.e.,] capable of preventing lateral as well as vertical migration of the wastes).

(b) Vault systems shall be:

1. Designed or operated to contain 100 percent of the capacity of the largest tank within its boundary;

2. Designed or operated to prevent run-on or infiltration of precipitation into the secondary containment system unless the collection system has sufficient excess capacity to contain run-on or infiltration. Such additional capacity shall be sufficient to contain precipitation from a twenty-five (25) year, twenty-four (24) hour rainfall event;

3. Constructed with chemical-resistant water stops in place at all joints (if any);

4. Provided with an impermeable interior coating or lining that is compatible with the stored waste and that **will** [shall] prevent migration of waste into the concrete;

5. Provided with a means to protect against the formation of and ignition of vapors within the vault, if the waste being stored or treated:

a. Meets the definition of ignitable waste under Section 2 of 401 KAR 31:030; or

b. Meets the definition of reactive waste under Section 4 of 401 KAR 31:030 and which may form an ignitable or explosive vapor.

6. Provided with an exterior moisture barrier or be otherwise designed or operated to prevent migration of moisture into the vault if the vault is subject to hydraulic pressure.

(c) Double-walled tanks shall be:

1. Designed as an integral structure (that is [i.e.,] an inner tank within an outer shell) so that any release from the inner tank is contained by the outer shell;

2. Protected, if constructed of metal, from both corrosion of the primary tank interior and of the external surface of the outer shell; and

3. Provided with a built-in continuous leak detection system capable of detecting a release within twenty-four (24) hours or at the earliest practicable time, if the owner or operator can demonstrate to the cabinet, and the cabinet concurs, that the existing leak detection technology or site conditions **will** [shall] not allow detection of a release within twenty-four (24) hours.

(6) Ancillary equipment shall be provided with full secondary containment (for example, [e.g.,] trench, jacketing, double-walled piping) that meets the requirements of subsections (2) and (3) of this section except for:

(a) Aboveground piping (exclusive of flanges, joints, valves, and connections) that is [are] visually inspected for leaks on a daily basis;

(b) Welded flanges, welded joints, and welded connections that are visually inspected for leaks on a daily basis;

(c) Sealless or magnetic coupling pumps and sealless valves, that are visually inspected for leaks on a daily basis; and

(d) Pressurized aboveground piping systems with automatic shutoff devices (for example, [e.g.,] excess flow check valves, flow metering shutdown devices, loss of pressure actuated shutoff devices) that are visually inspected for leaks on a daily basis.

(7) The owner or operator may obtain a variance from the requirements of this section if the cabinet finds, as a result of a demonstration by the owner or operator, either: that alternative design and operating practices, together with location characteristics, **will** [shall] prevent the migration of any hazardous waste or hazardous constituents into the groundwater or surface water at least as effectively as secondary containment during the active life of the tank system; or that in the event of a release that does migrate to groundwater or surface water, no substantial present or potential hazard **will** [shall] be posed to human health or the environment. New underground tank systems may not, per a demonstration in accordance with paragraph (b) of this subsection, be exempted from the secondary containment requirements of this section. Application for a variance as allowed in this subsection does not waive compliance with the requirements of this administrative regulation for new tank systems.

(a) In deciding whether to grant a variance based on a demonstration of equivalent protection of groundwater and surface water, the cabinet shall consider:

1. The nature and quantity of the waste;

2. The proposed alternate design and operation;

3. The hydrogeologic setting of the facility, including the thickness of soils between the tank system and groundwater; and

4. All other factors that would influence the quality and mobility of the hazardous constituents and the potential for them to migrate to groundwater or surface water.

(b) In deciding whether to grant a variance based on a demonstration of no substantial present or potential hazard, the cabinet shall consider:

1. The potential adverse effects on groundwater, surface water, and land quality taking into account:

a. The physical and chemical characteristics of the waste in the tank system, including its potential for migration;

b. The hydrogeological characteristics of the facility and surrounding land;

c. The potential for health risks caused by human exposure to waste constituents;

d. The potential for damage to wildlife, crops, vegetation, and physical structures caused by exposure to waste constituents; and

e. The persistence and permanence of the potential adverse effects;

2. The potential adverse effects of a release on groundwater quality, taking into account:

a. The quantity and quality of groundwater and the direction of groundwater flow;

b. The proximity and withdrawal rates of groundwater in the area;

c. The current and future uses of groundwater in the area; and

d. The existing quality of groundwater, including other sources of contamination and their cumulative impact on the groundwater quality;

3. The potential adverse effects of a release on surface water quality taking into account:

a. The quantity and quality of groundwater and the direction of groundwater flow;

b. The patterns of rainfall in the region;

c. The proximity of the tank system to surface waters;

d. The current and future uses of surface waters in the area and any water quality standards established for those surface waters; and

e. The [This] existing quality of surface water, including other sources of contamination and the cumulative impact on surface water quality; and

4. The potential adverse effects of a release on the land surrounding the tank system, taking into account:

a. The patterns of rainfall in the region; and

b. The current and future uses of the surrounding land.

(c) The owner or operator of a tank system, for which a variance from secondary containment had been granted in accordance with the requirements of paragraph (a) of this subsection, at which a release of hazardous waste has occurred from the primary tank system but has not migrated beyond the zone of engineering control (as established in the variance), shall:

1. Comply with the requirements of Section 7 of this administrative regulation except subsection (4) of that section; and

2. Decontaminate or remove contaminated soil to the extent necessary to:

a. Enable the tank system for which the variance was granted to resume operation with the capability for the detection of and response to releases at least equivalent to the capability it had prior to the release; and

b. Prevent the migration of hazardous waste or hazardous constituents to groundwater or surface water; and

3. If contaminated soil cannot be removed or decontaminated in accordance with subparagraph 2 of this paragraph, comply with the

requirements in Section 8(2) of this administrative regulation.

(d) The owner or operator of a tank system, for which a variance from secondary containment had been granted in accordance with the requirements of paragraph (a) of this subsection, at which a release of hazardous waste has occurred from the primary tank system and has migrated beyond the zone of engineering control (as established in the variance), shall:

1. Comply with the requirements of Sections 7(1), (2), (3), and (4) of this administrative regulation;

2. Prevent the migration of hazardous waste or hazardous constituents to groundwater or surface water, if possible, and decontaminate or remove contaminated soil. If contaminated soil cannot be decontaminated or removed, or if groundwater has been contaminated, the owner or operator shall comply with the requirements of Section 8(2) of this administrative regulation; and

3. If repairing, replacing, or reinstalling the tank system, provide secondary containment in accordance with the requirements of subsections (1) to [~~through~~] (6) of this section or reapply for a variance from secondary containment and meet the requirements for new tank systems in Section 3 of this administrative regulation if the tank system is replaced. The owner or operator shall comply with these requirements even if contaminated soil can be decontaminated or removed and groundwater or surface water has not been contaminated.

(8) The following procedures shall be followed in order to request a variance from secondary containment:

(a) The cabinet shall be notified in writing by the owner or operator that he intends to conduct and submit a demonstration for a variance from a secondary containment as allowed in subsection (7) of this section according to the following schedule:

1. For existing tank systems, at least twenty-four (24) months prior to the date that secondary containment **will** [~~shall~~] be provided in accordance with subsection (1) of this section.

2. For new tank systems, at least thirty (30) days prior to entering into a contract for installation of the tank system.

(b) As part of the notification, the owner or operator shall also submit to the cabinet a description of the steps necessary to conduct the demonstration and a timetable for completing each of the steps. The demonstration shall address each of the factors listed in subsection (7)(a) or (b) of this section.

(c) The demonstration for a variance shall be completed and submitted to the cabinet within 180 days after notifying the cabinet of an intent to conduct the demonstration; and

(d) The cabinet shall inform the public, through a newspaper notice, of the availability of the demonstration for a variance. The notification shall be placed in a daily or weekly major local newspaper of general circulation, and shall provide at least thirty (30) days from the date of the notice for the public to review and comment on the demonstration for a variance. The cabinet also shall hold a public hearing, in response to a request or at his own discretion, whenever such a hearing might clarify one (1) or more issues concerning the demonstration for a variance. Public notice of the hearing shall be given at least thirty (30) days prior to the date of the hearing and may be given the same time as notice of the opportunity for the public to review and comment on the demonstration. These two (2) notices may be combined.

(e) The cabinet shall approve or disapprove the request for a variance within ninety (90) days of receipt of the demonstration from the owner or operator and shall notify in writing the owner or operator and each person who submitted written comments or requested notice of the variance decision. If the demonstration for a variance is incomplete or does not include sufficient information, the ninety (90) day time period shall begin when the cabinet receives a complete demonstration, including all information necessary to make a final determination. If the public comment period in paragraph (d) of this subsection is extended, the ninety (90) day time period shall be similarly extended.

(9) All tank systems, until such time as secondary containment meeting the requirements of this section is provided, shall comply with the following:

(a) For nonenterable underground tanks, a leak test that meets the requirements of Section 2(2)(e) of this administrative regulation shall be conducted at least annually.

(b) For other than nonenterable underground tanks and for all ancillary equipment, an annual leak test, as described in subsection (9)(a) of this section or an internal inspection or other tank integrity examination by an [~~independent, qualified, professional~~] engineer [~~registered in the Commonwealth of Kentucky~~] that addresses cracks, leaks, corrosion and erosion shall be conducted at least annually. The owner or operator shall remove the stored waste from the tank, if necessary, to allow the condition of all internal tank surfaces to be assessed.

(c) The owner or operator shall maintain on file at the facility a record of the results of the assessments conducted in accordance with subsections (1)(a) to [~~through~~] (c) of this section.

(d) If a tank system or component is found to be leaking or unfit for use as a result of the leak test or assessment in subsections (1)(a) to [~~through~~] (c) of this section, the owner or operator shall comply with the requirements of Section 7 of this administrative regulation.

Section 5. General Operating Requirements. (1) Hazardous wastes or treatment reagents shall not be placed in a tank system if they could cause the tank, its ancillary equipment, or the secondary containment system to rupture, leak, corrode or otherwise fail.

(2) The owner or operator shall use appropriate controls and practices to prevent spills and overflows from tank or secondary containment systems. These include at a minimum:

(a) Spill prevention controls (for example, [~~e.g.,~~] check valves or [,] dry discount couplings);

(b) Overfill prevention controls (for example, [~~e.g.,~~] level sensing devices, high level alarms, automatic feed cutoff, or bypass to a standby tank); and

(c) Maintenance of sufficient freeboard in uncovered tanks to prevent overtopping by wave or wind action or by precipitation.

(3) The owner or operator shall comply with the requirements of Section 7 of this administrative regulation if a leak or spill occurs in the tank system.

(4) Tanks holding hazardous waste shall be labeled "hazardous waste" upon the date that hazardous waste is first added to the tank.

Section 6. Inspections. (1) The owner or operator shall inspect, where present, at least once each operating day:

(a) Overfilling and [/] spill control equipment (for example, [~~e.g.,~~] waste-feed cutoff systems, bypass systems, and drainage systems) to ensure that it is in good working order;

(b) The aboveground portions of the tank system, if any, to detect corrosion or releases of waste;

(c) Data gathered from monitoring equipment and leak-detection equipment (for example, [~~e.g.,~~] pressure and temperature gauges, monitoring wells) to ensure that the tank system is being operated according to its design; and

(d) The construction materials and the area immediately surrounding the externally accessible portion of the tank system including the secondary containment structures (such as [~~e.g.,~~] dikes) to detect erosion or signs of releases of hazardous waste (such as [~~e.g.,~~] wet spots or [,] dead vegetation).

(2) The owner or operator shall inspect cathodic protection systems, if present, according to, at a minimum, the following schedule to ensure that they are functioning properly:

(a) The proper operation of the cathodic protection system shall be confirmed within six (6) months after initial installation and annually thereafter; and

(b) All sources of impressed current shall be inspected and

tested, as appropriate, at least bimonthly [~~(i.e., every other month)~~].

(3) The owner or operator shall document in the operating record of the facility an inspection of those items in subsections (1) and (2) of this section.

Section 7. Response to Leaks or Spills and Disposition of Leaking or Unfit-for-use Tank Systems. A tank system or secondary containment system from which there has been a leak or spill, or which is unfit for use, shall be removed from service immediately, and the owner or operator shall satisfy the following requirements:

(1) Cessation of use: prevent flow or addition of wastes. The owner or operator shall immediately stop the flow of hazardous waste into the tank system or secondary containment system and inspect the system to determine the cause of the release.

(2) Removal of waste from tank system or secondary containment system.

(a) If the release was from the tank system, the owner/operator shall, within twenty-four (24) hours after detection of the leak or, if the owner/operator demonstrates that is not possible, at the earliest practicable time remove as much of the waste as is necessary to prevent further release of hazardous waste to the environment and to allow inspection and repair of the tank system to be performed.

(b) If the material released was to a secondary containment system, all released materials shall be removed within twenty- four (24) hours or in as timely a manner as is possible to prevent harm to human health and the environment.

(3) Containment of visible releases to the environment. The owner/operator shall immediately conduct a visual inspection of the release and based upon that inspection:

(a) Prevent further migration of the leak or spill to soils or surface water; and

(b) Remove and properly dispose of any visible contamination of the soil or surface water.

(4) Notifications and reports.

(a) Any release to the environment except as provided in paragraph (b) of this subsection, shall be reported to the cabinet within twenty-four (24) hours of detection. If the release has been reported pursuant to 40 CFR Part 302 that report shall satisfy this requirement.

(b) A leak or spill of hazardous waste is exempted from the requirements of this subsection if it is:

1. Less than or equal to a quantity of one (1) pound; and

2. Immediately contained and cleaned up.

(c) Within thirty (30) days of detection of a release to the environment, a report containing the following information shall be submitted to the cabinet:

1. Likely route of migration of the release;

2. Characteristics of the surrounding soil(soil composition, geology, hydrogeology, climate);

3. Results of any monitoring or sampling conducted in connection with the release (if available). If sampling or monitoring data relating to the release are not available within thirty (30) days, these data shall be submitted to the cabinet as soon as they become available;

4. Proximity to downgradient drinking water, surface water, and population areas; and

5. Description of response actions taken or planned.

(5) Provision of secondary containment, repair or closure.

(a) Unless the owner/operator satisfied the requirements of paragraphs (b) to [~~through~~] (d) of this subsection, the tank system shall be closed in accordance with Section 8 of this administrative regulation.

(b) If the cause of the release was a spill that has not damaged the integrity of the system, the owner/operator may return the system to service as soon as the released waste is removed and repairs, if necessary, are made.

(c) If the cause of the release was a leak from the primary tank system into the secondary containment system, the system shall be repaired prior to returning the tank system to service.

(d) If the source of the release was a leak to the environment from a component of a tank system without secondary containment, the owner/operator shall provide the component of the system from which the leak occurred with secondary containment that satisfies the requirements of Section 4 of this administrative regulation before it can be returned to service, unless the source of the leak is an aboveground portion of a tank system. If the source is an aboveground component that can be inspected visually, the component shall be repaired and may be returned to service without secondary containment as long as the requirements of subsection (6) of this section are satisfied. If a component is replaced to comply with the requirements of this paragraph that component shall satisfy the requirements for new tank systems or components in Sections 3 and 4 of this administrative regulation. Additionally, if a leak has occurred in any portion of a tank system component that is not readily accessible for visual inspection (for example, [~~e.g.,~~] the bottom of an in-ground or on-ground tank), the entire component shall be provided with secondary containment in accordance with Section 4 of this administrative regulation prior to being returned to use.

(6) Certification of major repairs. If the owner/operator has repaired a tank system in accordance with subsection (5) of this section, and the repair has been extensive (for example, [~~e.g.,~~] installation of an internal liner, repair of a ruptured primary containment or secondary containment vessel), the tank system shall not be returned to service unless the owner/operator has obtained a certification by an [~~independent qualified, professional~~] engineer [~~registered in the Commonwealth of Kentucky~~] in accordance with Section 7(4) of 401 KAR 38:070 that the repaired system is capable of handling hazardous wastes without release for the intended life of the system. This certification shall be submitted to the cabinet within seven (7) days after returning the tank system to use.

Section 8. Closure and Postclosure Care. (1) At closure of a tank system, the owner/operator shall remove or decontaminate all waste residues, contaminated containment system components (liners, for example [~~etc.~~]), contaminated soils, and structures and equipment contaminated with waste, and manage them as hazardous waste, unless Section 3(4) of 401 KAR 31:010 applies. The closure plan, closure activities, cost estimates for closure, and financial responsibility for tank systems shall meet all of the requirements specified in 401 KAR 35:070 to [~~through~~] 35:130.

(2) If the owner or operator demonstrates that not all contaminated soil can be practicably removed or decontaminated as required in subsection (1) of this section, then the owner or operator shall close the tank system and perform postclosure care in accordance with the closure and postclosure care requirements that apply to landfills in Section 4 of 401 KAR 35:230. In addition, for the purposes of closure, postclosure, and financial responsibility, such a tank system is then considered to be a landfill, and the owner/operator shall meet all of the requirements for landfills specified in 401 KAR 35:070 to [~~through~~] 35:130.

(3) If an owner or operator has a tank system which does not have secondary containment that meets the requirements in Section 4(2) to [~~through~~] (6) of this administrative regulation and which is not exempt from the secondary containment requirements in accordance with Section 4(7) of this administrative regulation then:

(a) The closure plan for the tank system shall include both a plan for complying with subsection (1) of this section and a contingent plan for complying with subsection (2) of this section.

(b) A contingent postclosure plan for complying with subsection (2) of this section shall be prepared and submitted as part of the permit application.

(c) The cost estimates calculated for closure and postclosure care shall reflect the costs of complying with the contingent closure plan and the contingent postclosure plan, if these costs are greater than the costs of complying with the closure plan prepared for the

expected closure under subsection (1) of this section.

(d) Financial assurance shall be based on the cost estimates in paragraph (c) of this subsection.

(e) For the purposes of the contingent closure and postclosure plans, such a tank system is considered to be a landfill, and the contingent plans shall meet all of the closure, postclosure and financial responsibility requirements for landfills under 401 KAR 35:070 to [~~through~~] 35:130.

(f) For new tank systems that [~~shall~~] close in accordance with subsection (2) of this section, the owner or operator shall demonstrate compliance with 401 KAR 38:500.

Section 9. Special Requirements for Ignitable or Reactive Waste. (1) Ignitable or reactive waste shall not be placed in a tank unless:

(a) The waste is treated, rendered or mixed before or immediately after placement in the tank system so that:

1. The resulting waste, mixture, or dissolved material no longer meets the definition of ignitable or reactive waste under Sections 2 or 4 of 401 KAR 31:030; and

2. Section 8(2) of 401 KAR 35:020 is complied with; or

(b) The waste is stored or treated in such a way that it is protected from any material or conditions that may cause the waste to ignite or react; or

(c) The tank system is used solely for emergencies.

(2) The owner or operator of a facility where ignitable or reactive waste is stored or treated in tanks shall comply with the requirements for the maintenance of protective distances between the waste management area and any public ways, streets, alleys, or an adjoining property line that can be built upon as required in Tables 2-1 to [~~through~~] 2-6 of the National Fire Protection Association's "Flammable and Combustible Liquids Code" (1977 or 1981), incorporated by reference in Section 3 of 401 KAR 30:010.

Section 10. Special Requirements for Incompatible Wastes. (1) Incompatible wastes, or incompatible wastes and materials shall not be placed in the same tank system, unless Section 8(2) of 401 KAR 35:020 is complied with.

(2) Hazardous waste shall not be placed in a tank system that has not been decontaminated and that previously held an incompatible waste or material, unless Section 9(2) of 401 KAR 35:020 is complied with.

Section 11. Waste Analysis and Trial Tests. [~~(1)~~] In addition to performing the waste analysis required by Section 4 of 401 KAR 35:020, the owner/operator shall whenever a tank system is to be used to [~~treat~~] chemically treat or to store a hazardous waste that is substantially different from waste previously treated or stored in that tank system; or [~~treat~~] chemically treat hazardous waste with a substantially different process than any previously used in that tank system:

(1) [~~; (2)~~] Conduct waste analyses and trial treatment or storage tests (for example, [~~e.g.,~~] bench scale or pilot plant scale tests); or

(2) [~~(3)~~] Obtain written, documented information on similar waste under similar operating conditions, to show that the proposed treatment or storage **will** [~~shall~~] meet the requirements of Section 5(1) of this administrative regulation.

PHILLIP J. SHEPHERD, Secretary
E. DOUGLAS STEPHAN, Commissioner
APPROVED BY AGENCY: December 13, 1993
FILED WITH LRC: December 14, 1993 at 10 a.m.

NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION CABINET
Department for Environmental Protection
Division of Waste Management
(Amended After Hearing)

401 KAR 35:200. Surface impoundments (IS).

RELATES TO: KRS 224.10, 224.40, 224.43, 224.46, 224.99
STATUTORY AUTHORITY: KRS 224.10-100, 224.46-520, 224.46-530
NECESSITY AND FUNCTION: To implement provisions of KRS 224.46-520 and 224.46-530 relative to surface impoundments qualifying for interim status. [~~KRS 224.46-520 requires that persons engaging in the storage, treatment, and disposal of hazardous waste obtain a permit. KRS 224.46-520 requires the cabinet to establish standards for these permits, to require adequate financial responsibility, and to establish minimum standards for closure for all facilities and the postclosure monitoring and maintenance of hazardous waste disposal facilities. KRS 224.46-530 requires that corrective action shall be initiated prior to permit issuance, renewal or amendment; groundwater monitoring and corrective action requirements applicable to new surface impoundments are applicable to interim status surface impoundments which continue to receive waste after July 26, 1982; additional requirements necessary to protect public health and the environment may be imposed at existing surface impoundments; and air emissions at surface impoundments may be regulated, monitored or controlled. This chapter establishes minimum standards for hazardous waste sites or facilities qualifying for interim status. This administrative regulation establishes minimum standards for surface impoundments.~~]

Section 1. Applicability. The requirements in this administrative regulation apply to owners and operators of sites or facilities that use surface impoundments to treat, store or dispose of hazardous waste, except as Section 1 of 401 KAR 35:010 provides otherwise.

Section 2. Action Leakage Rate. [~~General Operating Requirements.~~] (1) The owner or operator of surface impoundment units subject to Section 10(1) of this administrative regulation shall submit a proposed action leakage rate to the cabinet when submitting the notice required under Section 10(2) of this administrative regulation. Within sixty (60) days of receipt of the notification, the cabinet shall:

(a) Establish an action leakage rate, either as proposed by the owner or operator or modified using the criteria in this section; or

(b) Extend the review period for up to thirty (30) days. If no action is taken by the cabinet before the original sixty (60) or extended ninety (90) day review periods, the action leakage rate shall be approved as proposed by the owner or operator. However, upon written notice by the cabinet to the owner or operator, the action leakage rate may be modified by the cabinet.

(2) The cabinet shall approve an action leakage rate for surface impoundment units subject to Section 10(1) of this administrative regulation. The action leakage rate is the maximum design flow rate that the leak detection system (LDS) can remove without the fluid head on the bottom liner exceeding one (1) foot. The action leakage rate shall include an adequate safety margin to allow for uncertainties in the design (for example, slope, hydraulic conductivity, thickness of drainage material), construction, operation, and location of the LDS, waste and leachate characteristics, likelihood and amounts of other sources of liquids in the LDS, and proposed response actions (for example, the action leakage rate shall consider decreases in the flow capacity of the system over time resulting from siltation and clogging, rib layover and creep of synthetic components of the system, overburden pressures).

(3) To determine if the action leakage rate has been exceeded, the owner or operator shall convert the weekly or monthly flow rate

from the monitoring data obtained under Section 5(2) of this administrative regulation, to an average daily flow rate (gallons per acre per day) for each sump. Unless the cabinet approves a different calculation, the average daily flow rate for each sump shall be calculated weekly during the active life and closure period, and if the unit closes in accordance with Section 10(1)(b) of this administrative regulation monthly during the postclosure care period when monthly monitoring is required under Section 5(2) of this administrative regulation.

(4) A surface impoundment shall maintain enough freeboard to prevent any overtopping of the dike by overfilling, wave action, or a storm. There shall be at least sixty (60) centimeters (approximately two (2) feet) of freeboard.

Section 3. Response Actions. [~~Containment System.~~] (1) The owner or operator of surface impoundment units subject to Section 10(1) of this administrative regulation shall submit a response action plan to the cabinet when submitting the proposed action leakage rate under Section 2 of this administrative regulation. The response action plan shall set forth the actions to be taken if the action leakage rate has been exceeded. At a minimum, the response action plan shall describe the actions specified in subsection (2) of this section.

(2) If the flow rate into the leak detection system exceeds the action leakage rate for any sump, the owner or operator shall:

(a) Notify the cabinet in writing of the exceedance within seven (7) days of the determination;

(b) Submit a preliminary written assessment to the cabinet within fourteen (14) days of the determination, as to the amount of liquids, likely sources of liquids, possible location, size, and cause of any leaks, and short-term actions taken and planned;

(c) Determine to the extent practicable the location, size, and cause of any leak;

(d) Determine whether waste receipt shall cease or be curtailed, whether any waste shall be removed from the unit for inspection, repairs, or controls, and whether or not the unit shall be closed;

(e) Determine any other short-term and longer-term actions to be taken to mitigate or stop any leaks; and

(f) Within thirty (30) days after the notification that the action leakage rate has been exceeded, submit to the cabinet the results of the analyses specified in subsection (2)(c), (d), and (e) of this section, the results of actions taken, and actions planned. Monthly thereafter, as long as the flow rate in the leak detection system exceeds the action leakage rate, the owner or operator shall submit to the cabinet a report summarizing the results of any remedial actions taken and actions planned.

(3) To make the leak and remediation determinations in subsection (2)(c), (d), and (e) of this section, the owner or operator shall:

(a)1. Assess the source of liquids and amounts of liquids by source;

2. Conduct a fingerprint, hazardous constituent, or other analysis of the liquids in the leak detection system to identify the source of liquids and possible location of any leaks, and the hazard and mobility of the liquid; and

3. Assess the seriousness of any leaks in terms of potential for escaping into the environment; or

(b) Document why such assessments are not needed. [~~All earthen dikes shall have a protective cover, such as grass, shale or rock, to minimize wind and water erosion and to preserve their structural integrity.~~]

Section 4. Waste Analysis and Trial Tests. In addition to the waste analyses required by Section 4 of 401 KAR 35:020, whenever a surface impoundment is to be used to:

(1) Chemically treat a hazardous waste which is substantially different from waste previously treated in that impoundment; or

(2) Chemically treat hazardous waste with a substantially different process than any previously used in that impoundment, the owner or operator shall, before treating the different waste or using the different process:

(a) Conduct waste analyses and trial treatment tests (e.g., bench scale or pilot scale tests); or

(b) Obtain written, documented information on similar treatment of similar waste under similar operating conditions, to show that this treatment **will** [~~shall~~] comply with Section 8(2) of 401 KAR 35:020.

Section 5. Monitoring and Inspections. The owner or operator shall inspect:

(1) The freeboard level at least once each operating day to ensure compliance with Section 2 of this administrative regulation; and

(2)(a) An owner or operator required to have a leak detection system under Section 10(1) of this administrative regulation shall record the amount of liquids removed from each leak detection system sump at least once each week during the active life and closure period.

(b) The amount of liquids removed from each leak detection system sump shall be recorded at least monthly throughout the postclosure period.

(3) The surface impoundment, including dikes and vegetation surrounding the dike, at least once a week to detect any leaks, deterioration or failures in the impoundment.

Section 6. Closure and Postclosure Care. (1) At closure, the owner or operator shall:

(a) Remove or decontaminate all waste residues, contaminated containment system components [~~(liners, etc.),~~] contaminated subsoils, and structures and equipment contaminated with waste and leachate, and manage them as hazardous waste unless Section 3(4) of 401 KAR 31:010 applies; or

(b) Close the impoundment and provide postclosure care for a landfill under 401 KAR 35:070 and Section 4 of 401 KAR 35:230 including the following:

1. Eliminate free liquids by removing liquid wastes or solidifying the remaining wastes and waste residues;

2. Stabilize remaining wastes to a bearing capacity sufficient to support the final cover; and

3. Cover the surface impoundment with a final cover designed and constructed to:

a. Provide long-term minimization of the migration of liquids through the closed impoundment;

b. Function with minimum maintenance;

c. Promote drainage and minimize erosion or abrasion of the cover;

d. Accommodate settling and subsidence so that the cover's integrity is maintained; and

e. Have a permeability less than or equal to the permeability of any bottom liner system or natural subsoils present.

(2) In addition to the requirements of 401 KAR 35:070 and Section 4 of 401 KAR 35:230 during the postclosure care period, the owner or operator of a surface impoundment in which wastes, waste residues, or contaminated materials remain after closure in accordance with the provisions of subsection (1)(b) of this section shall:

(a) Maintain the integrity and effectiveness of the final cover, including making repairs to the cover as necessary to correct the effects of settling, subsidence, erosion, or other events;

(b) Maintain and monitor the leak detection system in accordance with Sections 5(2) and 10(3)(b)4 and (3)(c) of this administrative regulation and comply with all other applicable leak detection system requirements of this chapter.

(c) Maintain and monitor the groundwater monitoring system and comply with all other applicable requirements of 401 KAR 35:060; and

(d) [~~(c)~~] Prevent run-on and run-off from eroding or otherwise damaging the final cover.

Section 7. Special Requirements for Ignitable or Reactive Waste.

Ignitable or reactive waste shall not be placed in a surface impoundment unless the waste and impoundment satisfy all applicable requirements of 401 KAR Chapter 37; and

(1) The waste is treated, rendered or mixed before placement in the impoundment so that: the resulting waste mixture no longer meets the definition of ignitable or reactive waste under Section 2 or 4 of 401 KAR 31:030; or

(2) The surface impoundment is used solely for emergencies.

Section 8. Special Requirements for Incompatible Wastes. Incompatible wastes or incompatible wastes and materials (see 401 KAR 35:330 for examples) shall not be placed in the same surface impoundment.

Section 9. Recordkeeping. The owner or operator shall record the level of liquid in the surface impoundment every day with respect to a fixed reference elevation.

Section 10. Design and Operating Requirements. (1) The owner or operator of each new surface impoundment on which construction commences after January 29, 1992, each lateral expansion of a surface impoundment unit on which construction commences after July 29, 1992, and each replacement of an existing surface impoundment unit that is to commence reuse after July 29, 1992 shall install two (2) or more liners and a leachate collection and removal system above and between such liners, and operate the leachate collection and removal systems, in accordance with Section 10(3) of this administrative regulation (unless exempted under Section 10(4) or (6) of this administrative regulation). "Construction commences" is defined in 401 KAR 30:010 under "existing facility". [~~The owner or operator of a surface impoundment shall install two (2) or more liners and a leachate collection system in accordance with Section 2(3) of 401 KAR 34:200, with respect to each new unit, replacement of an existing unit, or lateral expansion of an existing unit that is within the area identified in the Part A permit application, and with respect to waste received beginning May 8, 1985.~~]

(2) The owner or operator of each unit referred to in subsection (1) of this section shall notify the cabinet at least sixty (60) days prior to receiving waste. The owner or operator of each facility submitting notice shall file a Part B application within six (6) months of the receipt of such notice by the cabinet.

(3) The owner or operator of any replacement surface impoundment unit is exempt from subsection (1) of this section if:

(a) The existing unit was constructed in compliance with design standards of (Section 3004(o)(1)(A)(i) and (o)(5) of RCRA); and

(b) There is no reason to believe that the liner is not functioning as designed. [~~Subsection (1) of this section shall not apply if the owner or operator demonstrates to the cabinet and the cabinet finds for such surface impoundment, that alternative design and operating practices, together with location characteristics, shall prevent the migration of any hazardous constituent into the ground water or surface water at least as effectively as such liners and leachate collection systems.~~]

(4) The double liner requirement set forth in subsection (1) of this section may be waived by the cabinet for any monofill, if:

(a) The monofill contains only hazardous wastes from foundry furnace emission controls or metal casting molding sand, and such wastes are considered hazardous only because they exhibit toxicity characteristics classifying them under EPA hazardous waste numbers D004 through D017 (see Section 5 of 401 KAR 31:030); and

(b) The owner or operator demonstrates that:

1. The monofill:

a. Has at least one (1) liner for which there is no evidence that such liner is leaking. For the purposes of this administrative regulation the term "liner" means a liner designed, constructed, installed, and operated to prevent hazardous waste from passing into the liner at any time during the active life of the facility, or a liner designed, constructed, installed, and operated to prevent hazardous waste from migrating beyond the liner to adjacent subsurface soil, ground water, or surface water at any time during the active life of the facility. In the case of any surface impoundment which has been exempted from the requirements of subsection (1) of this section on the basis of a liner designed, constructed, installed, and operated to prevent hazardous waste from passing beyond the liner, at the closure of such impoundment the owner or operator shall remove or decontaminate all waste residues, all contaminated liner material, and contaminated soil to the extent practicable. If all contaminated soil is not removed or decontaminated, the owner or operator of such impoundment shall comply with appropriate postclosure requirements, including but not limited to ground water monitoring and corrective action;

b. Is located more than one-fourth (1/4) mile from an underground source of drinking water (as that term is defined in 401 KAR 30:010); and

c. Is in compliance with generally applicable ground water monitoring requirements for facilities with permits issued in accordance with 401 KAR Chapter 38; or

2. The monofill is located, designed and operated so as to assure that there shall be no migration of any hazardous constituent into ground water or surface water at any future time.

3. In the case of any unit in which the liner and leachate collection system has been installed pursuant to the requirements of subsection (1) of this section and in good faith for compliance with subsection (1) of this section and with guidance documents governing liners and leachate collection systems under subsection (1) of this section, no liner or leachate collection system which is different from that which was so installed pursuant to subsection (1) of this section shall be required for such unit by the cabinet when issuing the first permit to such facility, except that the cabinet not be precluded from requiring installation of a new liner when the cabinet has reason to believe that any liner installed pursuant to the requirements of subsection (1) of this section is leaking.

(5) A surface impoundment shall maintain enough freeboard to prevent any overtopping of the dike by overfilling, wave action, or a storm. There shall be at least sixty (60) centimeters (approximately two (2) feet) of freeboard.

(6) All earthen dikes shall have a protective cover, such as grass, shale, or rock to minimize wind and water erosion and to preserve their structural integrity.

PHILLIP J. SHEPHERD, Secretary
E. DOUGLAS STEPHAN, Commissioner
APPROVED BY AGENCY: December 13, 1993
FILED WITH LRC: December 14, 1993 at 10 a.m.

NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION CABINET
Department for Environmental Protection
Division of Waste Management
(Amended After Hearing)

401 KAR 35:220. Land treatment (IS).

RELATES TO: KRS 224.10, 224.40, 224.43, 224.46, 224.99
STATUTORY AUTHORITY: KRS 224.10-100, 224.46-520
NECESSITY AND FUNCTION: To implement provisions of KRS 224.46-520 and to establish [~~requires that persons engaging in the storage, treatment and disposal of hazardous waste obtain a permit. KRS 224.46-520 requires the cabinet to establish standards for these permits, to require adequate financial responsibility, and to establish minimum standards for closure for all facilities and the postclosure monitoring and maintenance of hazardous waste disposal facilities. This chapter establishes minimum standards for hazardous waste sites or facilities qualifying for interim status. This regulation establish~~

~~es the~~] minimum standards for land treatment facilities qualifying for interim status.

Section 1. Applicability. The requirements in this administrative regulation apply to owners and operators of hazardous waste land treatment facilities, except as Section 1 of 401 KAR 35:010 provides otherwise.

Section 2. General Operating Requirements. (1) Hazardous waste shall not be placed in or on a land treatment facility unless the waste can be made less hazardous or nonhazardous by degradation, transformation or immobilization processes occurring in or on the soil.

(2) The owner or operator shall design, construct, operate and maintain a run-on control system capable of preventing flow onto the active portions of the facility during peak discharge from at least a twenty-five (25) year storm.

(3) The owner or operator shall design, construct, operate and maintain a run-off management system capable of collecting and controlling a water volume at least equivalent to a twenty-four (24) hour, twenty-five (25) year storm.

(4) Collection and holding facilities ([~~e.g.,~~] tanks or basins for example) associated with run-on and run-off control systems shall be emptied or otherwise managed expeditiously after storms to maintain design capacity of the system.

(5) If the treatment zone contains particulate matter which may be subject to wind dispersal, the owner or operator shall manage the unit to control wind dispersal.

Section 3. Waste Analysis. In addition to the waste analyses required by Section 4 of 401 KAR 35:020, before placing a hazardous waste in or on a land treatment facility, the owner or operator shall:

(1) Determine the concentrations in the waste of any substances which equal or exceed the maximum concentrations contained in Table 1 of 401 KAR 31:030, Section 5(3), that cause a waste to exhibit the toxicity characteristic;

(2) For any waste listed in 401 KAR 31:040, determine the concentrations of any substances which caused the waste to be listed as a hazardous waste; and

(3) If food chain crops are grown, determine the concentrations in the waste of each of the following constituents: arsenic, cadmium, lead, and mercury, unless the owner or operator has written, documented data that show that the constituent is not present.

Section 4. Food Chain Crops. (1) An owner or operator of a hazardous waste land treatment facility on which food chain crops are being grown, or have been grown and shall be grown in the future, shall notify the cabinet within sixty (60) days after January 7, 1981.

(2)(a) Food chain crops shall not be grown on the treated area of a hazardous waste land treatment facility unless the owner or operator can demonstrate, based on field testing, that any arsenic, lead, mercury or other constituents identified under Section 3(2) of this administrative regulation:

1. **Will** [~~Shall~~] not be transferred to the food portion of the crop by plant uptake or direct contact, and **will** [~~shall~~] not otherwise be ingested by food chain animals [~~(e.g., by grazing)~~]; or

2. **Will** [~~Shall~~] not occur in greater concentrations in the crops grown on the land treatment facility than in the same crops grown on untreated soils under similar conditions in the same region.

(b) The information necessary to make the demonstration required by paragraph (a) of this subsection shall be kept at the land treatment facility and shall, at a minimum:

1. Be based on tests for the specific waste and application rates being used at the land treatment facility; and

2. Include descriptions of crop and soil characteristics, sample selection criteria, sample size determination; analytical methods and statistical procedures.

(3) Food chain crops shall not be grown on a land treatment facility receiving waste that contains cadmium unless all requirements of either paragraph (a) of this subsection or all requirements of paragraph (b) of this subsection are met.

(a)1. The pH of the waste and soil mixture is six and five-tenths (6.5) or greater at the time of each waste application, except for waste containing cadmium at concentrations of two (2) mg/kg (dry weight) or less;

2. The annual application of cadmium from waste does not exceed five-tenths (0.5) kilograms per hectare (kg/ha) on land used for production of tobacco, leafy vegetables or root crops grown for human consumption. For other food chain crops, the annual cadmium application rate does not exceed:

Table 1

Time Period	Annual Cd applicable rate (kg/ha)
Present to June 30, 1984	2.0
July 1, 1984-December 31, 1986	1.25
Beginning Jan. 1, 1987	0.5

3. The cumulative application of cadmium from waste does not exceed the levels in either subparagraph 3a of this paragraph or subparagraph 3b of this paragraph.

a. Table 2

Soil Cation Exchange Capacity (meq/100g)	Maximum Cumulative Application (kg/ha) Background Soil pH Less than 6.5	Background Soil pH Greater than 6.5
Less than 5	5	5
5-15	5	10
Greater than 15	5	20

b. For soils with a background pH of less than six and five-tenths (6.5), the cumulative cadmium application rate does not exceed the levels in Table 3 provided that the pH of the waste and soil mixture is adjusted and maintained at six and five-tenths (6.5) or greater whenever food chain crops are grown.

Table 3

Soil Cation Exchange Capacity (meq/100g)	Maximum Cumulative Application (kg/ha)
Less than 5	5
5-15	10
Greater than 15	20

(b)1. The only food chain crop produced is animal feed.

2. The pH of the waste and soil mixture is six and five-tenths (6.5) or greater at the time of waste application or at the time the crop is planted, whichever occurs later, and this pH level is maintained whenever food chain crops are grown;

3. There is a facility operating plan which demonstrates how the animal feed shall be distributed to preclude ingestion by humans. The facility operating plan describes the measures to be taken to safeguard against possible health hazards from cadmium entering the food chain, which may result from alternative land uses.

4. Future property owners are notified by a stipulation in the land

record or property deed which states that the property has received waste at high cadmium application rates and that food chain crops shall not be grown except in compliance with this paragraph.

Section 5. Unsaturated Zone (Zone of Aeration) Monitoring. (1) The owner or operator shall have in writing, and shall implement, an unsaturated zone monitoring plan which is designed to:

(a) Detect the vertical migration of hazardous waste and hazardous waste constituents under the active portion of the land treatment facility; and

(b) Provide information on the background concentrations of the hazardous waste and hazardous waste constituents in similar but untreated soils nearby; this background monitoring shall be conducted before or in conjunction with the monitoring required under paragraph (a) of this subsection.

(2) The unsaturated zone monitoring plan shall include, at a minimum:

(a) Soil monitoring using soil cores; and

(b) Soil-pore water monitoring using devices such as lysimeters.

(3) To comply with subsection (1)(a) of this section, the owner or operator shall demonstrate in his unsaturated zone monitoring plan that:

(a) The depth at which soil and soil-pore water samples are to be taken is below the depth to which the waste is incorporated into the soil;

(b) The number of soil and soil-pore water samples to be taken is based on the variability of:

1. The hazardous waste constituents (as identified in Section 3(1) and (2) of this administrative regulation) in the waste and in the soil; and

2. The soil type; and

(c) The frequency and timing of soil and soil-pore water sampling is based on the frequency, time and rate of waste application, proximity to groundwater and soil permeability.

(4) The owner or operator shall keep at the facility his unsaturated zone monitoring plan, and the rationale used in developing this plan.

(5) The owner or operator shall analyze the soil and soil-pore water samples for the hazardous waste constituents that were found in the waste during the waste analysis under Section 3(1) and (2) of this administrative regulation.

Section 6. Recordkeeping. The owner or operator shall include hazardous waste application dates and rates in the operating record required under Section 4 of 401 KAR 35:050.

Section 7. Closure and Postclosure. (1) In the closure plan under Section 3 of 401 KAR 35:070 and the postclosure plan under Section 9 of 401 KAR 35:070, the owner or operator shall address the following objectives and indicate how they shall be achieved:

(a) Control of the migration of hazardous waste and hazardous waste constituents from the treated area into the groundwater;

(b) Control of the release of contaminated run-off from the land treatment facility into surface water;

(c) Control of the release of airborne particulate contaminants caused by wind erosion; and

(d) Compliance with Section 4 of this administrative regulation concerning the growth of food chain crops.

(2) The owner or operator shall consider at least the following factors in addressing the closure and postclosure care objectives of subsection (1) of this section:

(a) Type and amount of hazardous waste and hazardous waste constituents applied to the land treatment facility;

(b) The mobility and the expected rate of migration of the hazardous waste and hazardous waste constituents;

(c) Site location, topography and surrounding land use with respect to the potential effects of pollutant migration (for example, ~~[e.g.,]~~ proximity to groundwater, surface water and drinking water sources);

(d) Climate, including amount, frequency and pH of precipitation;

(e) Geological and soil profiles and surfaces and subsurface hydrology of the site and soil characteristics including cation exchange capacity, total organic carbon and pH;

(f) Unsaturated zone monitoring information obtained under Section 5 of this administrative regulation; and

(g) Type, concentration and depth of migration of hazardous waste constituents in the soil as compared to their background concentrations.

(3) The owner or operator shall consider at least the following methods in addressing the closure and postclosure care objectives of subsection (1) of this section:

(a) Removal of contaminated soils;

(b) Placement of a final cover considering:

1. Functions of the cover (~~[e.g.,]~~ infiltration control, erosion and run-off control and wind erosion control for example); and

2. Characteristics of the cover including material, final surface contours, thickness, porosity and permeability, slope, length of run of slope and type of vegetation on the cover; and

(c) Monitoring of groundwater.

(4) In addition to the requirements of 401 KAR 35:070, during the closure period the owner or operator of a land treatment facility shall:

(a) Continue unsaturated zone monitoring in a manner and frequency specified in the closure plan;

(b) Maintain the run-on control system required under Section 2(2) of this administrative regulation;

(c) Maintain the run-off management system required under Section 2(3) of this administrative regulation; and

(d) Control wind dispersal of particulate matter which may be subject to wind dispersal.

(5) For the purpose of complying with Section 6 of 401 KAR 35:070, when closure is completed the owner or operator may submit to the cabinet certification both by the owner or operator and by an independent qualified soil scientist, in lieu of an ~~[independent professional]~~ engineer ~~[who is registered in Kentucky]~~, that the facility has been closed in accordance with the specifications in the approved closure plan.

(6) In addition to the requirements of Section 8 of 401 KAR 35:070, during the postclosure care period the owner or operator of a land treatment facility shall:

(a) Continue soil-core monitoring by collecting and analyzing samples in a manner and frequency specified in the postclosure plan;

(b) Restrict access to the land treatment facility as appropriate for its postclosure use;

(c) Assure that growth of food chain crops complies with Section 4 of this administrative regulation; and

(d) Control wind dispersal of hazardous waste.

Section 8. Special Requirements for Ignitable or Reactive Waste. The owner or operator shall not apply ignitable or reactive waste to the treatment zone unless the waste and treatment zone meet all applicable requirements of 401 KAR Chapter 37 and

(1) The waste is immediately incorporated into the soil so that:

(a) The resulting waste, mixture, or dissolution of material no longer meets the definition of ignitable or reactive waste under Sections 2 or 4 of 401 KAR 31:030; and ~~[Ignitable or reactive waste shall not be land treated unless the waste is immediately incorporated into the soil so that:]~~

(b) ~~[(1) The resulting waste, mixture or dissolution of material no longer meets the definition of ignitable or reactive waste under Section 2 or 4 of 401 KAR 31:030; and~~

~~(2)]~~ Section 8(2) of 401 KAR 35:020 is complied with.

(2) The waste is managed in such a way that it is protected from any material or conditions which may cause it to ignite or react.

Section 9. Special Requirements for Incompatible Wastes.

Incompatible wastes, or incompatible wastes and materials (see 401 KAR 35:330 for examples), shall not be placed in the same land treatment area.

PHILLIP J. SHEPHERD, Secretary
E. DOUGLAS STEPHAN, Commissioner
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NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION CABINET
Department for Environmental Protection
Division of Waste Management
(Amended After Hearing)

401 KAR 35:230. Landfill (IS).

RELATES TO: KRS 224.10, 224.40, 224.43, 224.46, 224.99
STATUTORY AUTHORITY: KRS 224.10-100, 224.46-520
NECESSITY AND FUNCTION: To implement provisions of KRS 224.46-520 and to establish [~~requires that persons engaging in the storage, treatment, and disposal of hazardous waste obtain a permit. KRS 224.46-520 requires the cabinet to establish standards for these permits, to require adequate financial responsibility, and to establish minimum standards for closure for all facilities and the postclosure monitoring and maintenance of hazardous waste disposal facilities. This chapter establishes minimum standards for hazardous waste sites or facilities qualifying for interim status. This regulation establishes~~] minimum standards for hazardous waste landfills qualifying for interim status.

Section 1. Applicability. The requirements in this administrative regulation apply to owners and operators of sites or facilities that dispose of hazardous waste in landfills, except as Section 1 of 401 KAR 35:010 provides otherwise. A waste pile used as a disposal facility is a landfill and is governed by this administrative regulation.

Section 2. Action Leakage Rate. (1) The owner or operator of landfill units subject to Section 10(1) of this administrative regulation shall submit a proposed action leakage rate to the cabinet when submitting the notice required under Section 10(2) of this administrative regulation. Within sixty (60) days of receipt of the notification, the cabinet shall:

(a) Establish an action leakage rate, either as proposed by the owner or operator or modified using the criteria in this section; or

(b) Extend the review period for up to thirty (30) days. If no action is taken by the cabinet before the original sixty (60) or extended ninety (90) day review periods, the action leakage rate shall be approved as proposed by the owner or operator.

(2) The cabinet shall approve an action leakage rate for landfills subject to Section 10(1) of this administrative regulation. The action leakage rate is the maximum design flow rate that the leak detection system (LDS) can remove without the fluid head on the bottom liner exceeding one (1) foot. The action leakage rate shall include an adequate safety margin to allow for uncertainties in the design (such as slope, hydraulic conductivity, or thickness of drainage material), construction, operation, and location of the LDS, waste and leachate characteristics, likelihood and amounts of other sources of liquids in the LDS, and proposed response actions. (The action leakage rate must consider decreases in the flow capacity of the system over time resulting from such factors as siltation and clogging, rib layover and creep of synthetic components of the system, or overburden pressures).

(3) To determine if the action leakage rate has been exceeded, the owner or operator shall convert the weekly or monthly flow rate from the monitoring data obtained under Section 12 of this administrative regulation to an average daily flow rate (gallons per acre per day) for each sump. Unless the cabinet approves a different calculation, the average daily flow rate for each sump shall be calculated weekly during the active life and closure period, and monthly during the postclosure care period when monthly monitoring is required under Section 12(2) of this administrative regulation.

(4) [~~(5)~~] As required by Section 4 of 401 KAR 35:020, the waste analysis plan shall [~~must~~] include the analyses needed to comply with Sections 5, 6, and 7 of this administrative regulation. As required by Section 4 of 401 KAR 35:050, the owner or operator shall [~~must~~] place the results of these analyses in the operating record of the facility.

Section 3. Surveying and Recordkeeping. The owner or operator of a landfill shall [~~must~~] maintain the following items in the operating record required in Section 4 of 401 KAR 35:050:

(1) On a map, the exact location and dimensions, including depth of each cell with respect to permanently surveyed benchmarks; and

(2) The contents of each cell and the approximate location of each hazardous waste type within each cell.

Section 4. Closure and Postclosure Care. (1) At final closure of the landfill or upon closure of any cell, the owner or operator shall [~~must~~] cover the landfill or cell with a final cover designed and constructed to:

(a) Provide long-term minimization of migration of liquids through the closed landfill;

(b) Function with minimum maintenance;

(c) Promote drainage and minimize erosion or abrasion of the cover;

(d) Accommodate settling and subsidence so that the cover's integrity is maintained; and

(e) Have a permeability less than or equal to 1×10^{-7} cm/sec.

(2) After final closure, the owner or operator shall comply with all postclosure requirements contained in Sections 8 to 11 of 401 KAR 35:070 including maintenance and monitoring throughout the postclosure care period. The owner or operator shall:

(a) Maintain the integrity and effectiveness of the final cover, including making repairs to the cover as necessary to correct the effects of settling, subsidence, erosion, or other events;

(b) Maintain and monitor the leak detection system in accordance with Sections 2(3)(c)4 and (2)(d) and 13 of 401 KAR 34:230, and comply with all other applicable leak detection system requirements of this chapter.

(c) Maintain and monitor the groundwater monitoring system and comply with all other applicable requirements of 401 KAR 34:060;

(d) Prevent run-on and run-off from eroding or otherwise damaging the final cover; and

(e) Protect and maintain surveyed benchmarks used in complying with Section 3 of this administrative regulation.

[~~(2) In the closure and postclosure plans, the owner or operator must address the following objectives and indicate how they will be achieved:~~

~~(a) Control of pollutant migration from the facility via groundwater, surface water and air;~~

~~(b) Control of surface water infiltration, including prevention of pooling; and~~

~~(c) Prevention of erosion.~~]

(3) The owner or operator shall [~~must~~] consider at least the following factors in addressing the closure and postclosure care objectives of subsection (2) of this section:

(a) Type and amount of hazardous waste and hazardous waste constituents in the landfill;

(b) The mobility and the expected rate of migration of the hazardous waste and hazardous waste constituents;

(c) Site location, topography and surrounding land use, with respect to the potential effects of pollutant migration (for example,

[~~e.g.,~~] proximity to groundwater, surface water, and drinking water sources);

(d) Climate, including amount, frequency and pH of precipitation;

(e) Characteristics of the cover including material, final surface contours, thickness, porosity and permeability, slope, length of run of slope and type of vegetation on the cover; and

(f) Geological and soil profiles, and surface and subsurface hydrology of the site.

(4) After final closure, the owner or operator shall [~~must~~] comply with all postclosure requirements contained in Sections 8 to [~~through~~] 11 of 401 KAR 35:070 including maintenance and monitoring throughout the postclosure care period. The owner or operator shall [~~must~~]:

(a) Maintain the integrity and effectiveness of the final cover, including making repairs to the cover as necessary to correct the effects of settling, subsidence, erosion, or other events;

(b) Maintain and monitor the ground water monitoring system and comply with all other applicable requirements of 401 KAR 35:060;

(c) Prevent run-on and run-off from eroding or otherwise damaging the final cover; and

(d) Protect and maintain surveyed benchmarks used in complying with this section.

(5) In addition to the requirements of Section 8 of 401 KAR 35:070, during the postclosure care period, the owner or operator of a hazardous waste landfill shall [~~must~~]:

(a) Maintain and monitor the gas collection and control system (if there is one present in the landfill) to control the vertical and horizontal escape of gases; and

(b) Restrict access to the landfill as appropriate for its postclosure use.

Section 5. Special Requirements for Ignitable or Reactive Waste. Ignitable or reactive waste shall [~~must~~] not be placed in a landfill unless the waste and [~~is treated, rendered or mixed before placement in a~~] landfill meet all applicable requirements of 401 KAR Chapter 37 and [~~so that~~]:

(1) The resulting waste or mixture no longer meets the definition of ignitable or reactive waste under Section 2 or 3 of 401 KAR 31:030; and

(2) Section 8(2) of 401 KAR 35:020 is complied with.

Section 6. Special Requirements for Incompatible Wastes. Incompatible wastes or incompatible wastes and materials (see 401 KAR 35:330 for examples) shall [~~must~~] not be placed in the same landfill cell.

Section 7. Special Requirements for Liquid, Bulk and Containerized Waste. (1) The placement of bulk or noncontainerized liquid hazardous waste or hazardous waste containing free liquids (whether or not absorbents have been added) in any landfill is prohibited.

(2) To demonstrate the absence or presence of free liquids in either a containerized or bulk waste, the following test shall [~~must~~] be used: Method 9095 (Paint Filter Liquids Test) as described in "Test Methods for Evaluating Solid Wastes, Physical/Chemical Methods," (EPA Publication No. SW-846 which is incorporated by reference in Section 3 of 401 KAR 30:010).

(3) The date for compliance with subsection (1) of this section is November 19, 1981. The date for compliance with subsection (2) of this section is March 22, 1982.

(4) Effective November 8, 1985, the placement of any liquid which is not a hazardous waste in a landfill is prohibited unless the owner or operator of such landfill demonstrates to the cabinet or the cabinet determines that:

(a) The only reasonably available alternative to the placement in such landfill is placement in a landfill or unlined surface impoundment, whether or not permitted or operating under interim status, which contains, or may reasonably be anticipated to contain, hazardous waste;

(b) Placement in such owner's or operator's landfill or surface impoundment will not present a risk of contamination of any underground source of drinking water (as that term is defined in Section 1 of 401 KAR 30:010); and

(c) Placement in such owner's or operator's landfill or unlined surface impoundment is in compliance with the applicable provisions of KRS Chapter 224.

Section 8. Special Requirements for Containers. Unless they are very small, such as an ampule, containers shall [~~must~~] be either:

(1) At least ninety (90) percent full when placed in the landfill; or

(2) Crushed, shredded, or similarly reduced in volume to the maximum practical extent before burial in the landfill.

Section 9. Disposal of Small Containers of Hazardous Waste in Overpacked Drums (Lab Packs). Small containers of hazardous waste in overpacked drums (lab packs) may be placed in a landfill if the following requirements are met:

(1) Hazardous waste shall [~~must~~] be packaged in nonleaking inside containers. The inside containers shall [~~must~~] be of a design and constructed of a material that will not react dangerously with, be decomposed by, or be ignited by the waste held therein. Inside containers shall [~~must~~] be tightly and securely sealed. The inside containers shall [~~must~~] be of the size and type specified in the [~~Department of Transportation (~~]DOT[~~)~~] hazardous materials regulations, [~~(~~]49 CFR Parts 173, 178 and 179[~~)~~], if those regulations specify a particular inside container for the waste.

(2) The inside containers shall [~~must~~] be overpacked in an open head DOT-specification metal shipping container, [~~(~~]49 CFR Parts 178 and 179[~~)~~] of no more than 416-liter (approximately 110 gallon) capacity and surrounded by, at a minimum, a sufficient quantity of absorbent material to completely absorb all of the liquid contents of the inside containers. The metal outer container shall [~~must~~] be full after packing with inside containers and absorbent material.

(3) The absorbent material used shall [~~must~~] not be capable of reacting dangerously with, being decomposed by or being ignited by the contents of the inside containers, in accordance with Section 8(2) of 401 KAR 35:020.

(4) Incompatible wastes, as defined in Section 1 of 401 KAR 30:010, shall [~~must~~] not be placed in the same outside container.

(5) Reactive waste shall [~~must~~] be treated or rendered nonreactive prior to packaging in accordance with subsections (1) to [~~through~~] (4) of this section.

(6) Such disposal shall comply with the requirements of 401 KAR Chapter 37. Persons who incinerate lab packs according to the requirements in Section 4 of 401 KAR 37:040 may use fiber drums in place of metal outer containers. The fiber drums shall meet the DOT specifications in 49 CFR 173.12 and be overpacked according to the requirements in subsection (2) of this section.

Section 10. Design and Operating Requirements. (1) The owner or operator of each new landfill unit on which construction commences after January 29, 1992, each lateral expansion of a landfill unit on which construction commences after July 29, 1992, and each replacement of an existing landfill unit that is to commence reuse after July 29, 1992 shall install two (2) or more liners and a leachate collection and removal system above and between such liners, and operate the leachate collection and removal systems, in accordance with Section 2(4), (5), or (f) of 401 KAR 34:230. "Construction commences" is as defined in 401 KAR 30:010 of this chapter under "existing facility".

(2) [~~(1)~~] The owner or operator of a landfill shall [~~must~~] install two (2) or more liners and leachate collection systems above and between such liners in accordance with Section 2(3) of 401 KAR 34:230 with respect to each new unit, replacement of an existing unit, or lateral expansion of an existing unit that is within the area identified

in the Part A permit application, and with respect to waste received beginning May 8, 1985.

(8) [(2)] The owner or operator of each unit referred to in subsection (1) of this section must notify the cabinet at least sixty (60) days prior to receiving waste. The owner or operator of each facility submitting notice must file a Part B application within six (6) months of the receipt of such notice by the cabinet.

(4) The owner or operator of any replacement landfill unit is exempt from paragraph (a) of this section if:

(a) The existing unit was constructed in compliance with the design standards of Section 3004(o)(1)(A)(i) and (o)(5) of RCRA; and

(b) There is no reason to believe that the liner is not functioning as designed.

(5) [(3)] Subsection (1) of this section **shall [will]** not apply if the owner or operator demonstrates to the cabinet, and the cabinet finds for such landfill, that alternative design and operating practices, together with location characteristics, **will [shall]** [will] prevent the migration of any hazardous constituent into the ground water or surface water at least as effectively as such liners and leachate collection systems.

(6) [(4)] The double liner requirement set forth in subsection (1) of this section may be waived by the cabinet for any monofill, if:

(a) The monofill contains only hazardous wastes from foundry furnace emission controls or metal casting molding sand, and such wastes do not contain constituents which would render the wastes hazardous for reasons other than the [EP] toxicity characteristics in Section 5 of 401 KAR 31:030, and the owner or operator demonstrates that:

1. The monofill:

a. Has at least one (1) liner for which there is no evidence that such liner is leaking;

b. Is located more than one-fourth (1/4) mile from an underground source of drinking water (as that term is defined in 401 KAR 30:010); and

c. Is in compliance with generally applicable ground water monitoring requirements for facilities with permits under 401 KAR Chapter 38; or

2. The owner or operator demonstrates that the monofill is located, designed, and operated so as to assure that there **will [shall]** [will] be no migration of any hazardous constituent into ground water or surface water at any future time.

(7) [(5)] In the case of any unit in which the liner and leachate collection system has been installed pursuant to the requirements of subsection (1) of this section and in good faith compliance with subsection (1) of this section and with guidance documents governing liners and leachate collection systems under subsection (1) of this section, no liner or leachate collection system which is different from that which was so installed pursuant to subsection (1) of this section shall [will] be required for such unit by the cabinet when issuing the first permit to such facility, except that the cabinet shall [will] not be precluded from requiring installation of a new liner if [when] the cabinet has reason to believe that any liner installed pursuant to the requirements of subsection (1) of this section is leaking.

(8) [Section 2. General Operating Requirements. (1)] The owner or operator shall [must] design, construct, operate and maintain a run-on control system capable of preventing flow onto the active portion of the landfill during peak discharge from at least a twenty-five (25) year storm.

(9) [(2)] The owner or operator shall [must] design, construct, operate and maintain a run-off management system to collect and control at least the water volume resulting from a twenty-four (24) hour, twenty-five (25) year storm.

(10) [(3)] Collection and holding facilities (such as [e.g.,] tanks or basins) associated with run-on and run-off control systems shall [must] be emptied or otherwise managed expeditiously after storms to maintain design capacity of the system.

(11) [(4)] The owner or operator of a landfill containing hazardous waste which is subject to dispersal by wind shall [must] cover or otherwise manage the landfill so that wind dispersal of the hazardous waste is controlled.

Section 11. Response Actions. (1) The owner or operator of landfill units subject to Section 10(1) of this administrative regulation shall submit a response action plan to the cabinet when submitting the proposed action leakage rate under Section 2 of this administrative regulation. The response action plan shall set forth the actions to be taken if the action leakage rate has been exceeded. At a minimum, the response action plan shall describe the actions specified in subsection (2) of this section.

(2) If the flow rate into the leak detection system exceeds the action leakage rate for any sump, the owner or operator shall:

(a) Notify the cabinet in writing of the exceedence within seven (7) days of the determination or immediately if required by KRS 224.01-400;

(b) Submit a preliminary written assessment to the cabinet within fourteen (14) days of the determination, as to the amount of liquids, likely sources of liquids, possible location, size, and cause of any leaks, and short-term actions taken and planned;

(c) Determine to the extent practicable the location, size, and cause of any leak;

(d) Determine whether waste receipt shall cease or be curtailed, whether any waste should be removed from the unit for inspection, repairs, or controls, and whether or not the unit shall be closed;

(e) Determine any other short-term and longer-term actions to be taken to mitigate or stop any leaks; and

(f) Within thirty (30) days after the notification that the action leakage rate has been exceeded, submit to the cabinet the results of the analyses specified in paragraphs (c) and (e) of this subsection, the results of actions taken, and actions planned. Monthly thereafter, as long as the flow rate in the leak detection system exceeds the action leakage rate, the owner or operator shall submit to the cabinet a report summarizing the results of any remedial actions taken and actions planned.

(3) To make the leak and remediation determinations in subsections (2)(c), (d), and (e) of this section, the owner or operator shall:

(a)1. Assess the source of liquids and amounts of liquids by source;

2. Conduct a fingerprint, hazardous constituent, or other analyses of the liquids in the leak detection system to identify the source of liquids and possible location of any leaks, and the hazard and mobility of the liquid; and

3. Assess the seriousness of any leaks in terms of potential for escaping into the environment; or

(b) Document why such assessments are not needed.

Section 12. Monitoring and Inspection. (1) An owner or operator required to have a leak detection system under Section 10(1) of this administrative regulation shall record the amount of liquids removed from each leak detection system sump at least once each week during the active life and closure period.

(2) After the final cover is installed, the amount of liquids removed from each leak detection system sump shall be recorded at least monthly. If the liquid level in the sump stays below the pump operating level for two (2) consecutive months, the amount of liquids in the sumps shall be recorded at least quarterly. If the liquid level in the sump stays below the pump operating level for two consecutive quarters, the amount of liquids in the sumps shall be recorded at least semiannually. If at any time during the postclosure care period the pump operating level is exceeded at units on quarterly or semiannual recording schedules, the owner or operator shall return to monthly recording of amounts of liquids removed from each sump until the liquid level again stays below the pump operating level for two consecutive months.

(3) "Pump operating level" is a liquid level proposed by the owner

or operator and approved by the cabinet based on pump activation level, sump dimensions, and level that avoids backup into the drainage layer and minimizes head in the sump. The timing for submission and approval of the proposed "pump operating level" shall be in accordance with Section 2(1) of this administrative regulation.

PHILLIP J. SHEPHERD, Secretary
E. DOUGLAS STEPHAN, Commissioner
APPROVED BY AGENCY: December 13, 1993
FILED WITH LRC: December 14, 1993 at 10 a.m.

NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION CABINET
Department for Environmental Protection
Division of Waste Management
(Amended After Hearing)

401 KAR 35:240. Incinerators (IS).

RELATES TO: KRS 224.10, 224.40, 224.43, 224.46, 224.99
STATUTORY AUTHORITY: KRS 224.10-100, 224.46-520
NECESSITY AND FUNCTION: To implement provisions of KRS 224.46-520 and to establish [~~requires that persons engaging in the storage, treatment, and disposal of hazardous waste obtain a permit. KRS 224.46-520 requires the cabinet to establish standards for these permits, to require adequate financial responsibility, and to establish minimum standards for closure for all facilities and the postclosure monitoring and maintenance of hazardous waste disposal facilities. This chapter establishes minimum standards for hazardous waste sites or facilities qualifying for interim status. This regulation establishes~~] minimum standards for incinerators qualifying for interim status.

Section 1. Applicability. (1) The requirements in this administrative regulation apply to owners and operators of sites or facilities that incinerate hazardous waste, except as Section 1 of 401 KAR 35:010 provides otherwise. [~~The following facility owners or operators are considered to incinerate hazardous waste:~~

~~(a) Owners or operators of hazardous waste incinerators as defined in 401 KAR 30:010; and~~

~~(b) Owners or operators who burn hazardous wastes in boilers or in industrial furnaces in order to destroy them, or who burn hazardous waste in boilers or in industrial furnaces for any recycling purpose and elect to be regulated under this regulation.~~]

(2) Owners and operators of incinerators burning hazardous waste are exempt from all of the requirements of this administrative regulation, except Section 5 of this administrative regulation, provided that the owner or operator has documented, in writing, that the waste shall not reasonably be expected to contain any of the hazardous constituents listed in 401 KAR 31:170, and the documentation is retained at the facility, if the waste to be burned is:

(a) Listed as a hazardous waste in 401 KAR 31:040 solely because it is ignitable (Hazard Code I), corrosive (Hazard Code C), or both; or

(b) Listed as a hazardous waste in 401 KAR 31:040 solely because it is reactive (Hazard Code R) for characteristics other than those listed in Section 4(1)(d) and (e) of 401 KAR 31:030, and **will** [~~shall~~] not be burned when other hazardous wastes are present in the combustion zone; or

(c) A hazardous waste solely because it possesses the characteristic of ignitability, corrosivity, or both, as determined by the tests for characteristics of hazardous wastes under 401 KAR 31:030; or

(d) A hazardous waste solely because it possesses the reactivity characteristics described by Section 4(1)(a), (b), (c), (f), (g), or (h) of 401 KAR 31:030, and **will** [~~shall~~] not be burned when other hazardous wastes are present in the combustion zone.

Section 2. Waste Analysis. In addition to the waste analyses required by Section 4 of 401 KAR 35:020, the owner or operator shall sufficiently analyze any waste which he has not previously burned in his incinerator to enable him to establish steady state (normal) operating conditions (including waste and auxiliary fuel feed and air flow) and to determine the type of pollutants which might be omitted. At a minimum, the analysis shall determine:

(1) Heating value of the waste;

(2) Halogen content and sulfur content in the waste; and

(3) Concentrations in the waste of lead and mercury, unless the owner or operator has written, documented data that show that the element is not present.

Section 3. General Operating Requirements. During start-up and shutdown of an incinerator, the owner or operator shall not feed hazardous waste unless the incinerator is at steady state (normal) conditions of operation, including steady state operating temperature and air flow.

Section 4. Monitoring and Inspections. The owner or operator shall conduct, at a minimum, the following monitoring and inspections when incinerating hazardous waste:

(1) Existing instruments which relate to combustion and emission control shall be monitored at least every fifteen (15) minutes. Appropriate corrections to maintain steady state combustion conditions shall be made immediately either automatically or by the operator. Instruments which relate to combustion and emission control would normally include those measuring waste feed, auxiliary fuel feed, air flow, incinerator temperature, scrubber flow, scrubber pH and relevant level controls.

(2) The complete incinerator and associated equipment (pumps, valves, conveyors, pipes for example [~~, etc.~~]) shall be inspected at least daily for leaks, spills and fugitive emissions, and all emergency shutdown controls and system alarms shall be checked to assure proper operation.

Section 5. Closure. At closure, the owner or operator shall remove all hazardous waste and hazardous waste residues (including but not limited to ash, scrubber waters, and scrubber sludges) from the incinerator.

Section 6. Interim Status Incinerators Burning Particular Hazardous Wastes. (1) Owners or operators of incinerators subject to this administrative regulation may burn EPA Hazardous Wastes Numbers F020, F021, F023, F026, or F027 (chlorinated dioxins, dibenzofurans, and phenols) if they receive a certification from the cabinet that they can meet the performance standards of 401 KAR 34:240 when they burn these wastes.

(2) The following standards and procedures shall be used in determining whether to certify an incinerator:

(a) The owner or operator shall submit an application to the cabinet containing applicable information in 401 KAR 38:190 and Section 3 of 401 KAR 38:060 demonstrating that the incinerator can meet the performance standards in 401 KAR 34:240 when they burn these wastes.

(b) The cabinet shall issue a tentative decision as to whether the incinerator can meet the performance standards in 401 KAR 34:240. Notification of this tentative decision shall be provided by newspaper advertisement and radio broadcast in the jurisdiction where the incinerator is located. The cabinet shall accept comment on the tentative decision for sixty (60) days. The cabinet also may hold a public hearing upon request or at the cabinet's discretion.

(c) After the close of the public comment period, the cabinet shall issue a decision whether or not to certify the incinerator.

PHILLIP J. SHEPHERD, Secretary
E. DOUGLAS STEPHAN, Commissioner

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NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION CABINET
Department for Environmental Protection
Division of Waste Management
(Amended After Hearing)

401 KAR 35:275. Air emission standards for process vents (IS).

RELATES TO: KRS 224.10, 224.40, 224.43, 224.46, 224.99
STATUTORY AUTHORITY: KRS 224.10-100, 224.46-520
NECESSITY AND FUNCTION: To implement provisions of KRS 224.46-520 and to establish standards for air emissions for process vents.

Section 1. Definitions. As used in this administrative regulation, all terms have the meaning given them in KRS Chapter 224 and 401 KAR Chapters 30 to 36.

Section 2. Applicability. (1) This administrative regulation applies to owners and operators of facilities that treat, store, or dispose of hazardous wastes, except as provided in Section 1 of 401 KAR 35:010.

(2) Except for Section 5(4) and (5) of this administrative regulation, this administrative regulation applies to process vents associated with distillation, fractionation, thin-film evaporation, solvent extraction, or air or steam stripping operations that manage hazardous wastes with organic concentrations of at least ten (10) ppmw, if these operations are conducted in:

(a) Units that are subject to the permitting requirements of part 270; or

(b) Hazardous waste recycling units that are located on hazardous waste management facilities otherwise subject to the permitting requirements of 401 KAR Chapter 38.

Section 3. Standards: Process Vents. (1) The owner or operator of a facility with process vents associated with distillation, fractionation, thin-film evaporation, solvent extraction, or air or steam stripping operations managing hazardous wastes with organic concentrations at least ten (10) ppmw shall either:

(a) Reduce total organic emissions from all affected process vents at the facility below one and four-tenths (1.4) kg/h (three (3) lb/h) and two and eight-tenths (2.8) Mg/yr (three and one-tenth (3.1) tons/yr); or

(b) Reduce, by use of a control device, total organic emissions from all affected process vents at the facility by ninety-five (95) weight percent.

(2) If the owner or operator installs a closed-vent system and control device to comply with the provisions of subsection (1) of this section, the closed-vent system and control device shall meet the requirements of Section 4 of this administrative regulation.

(3) Determinations of vent emissions and emission reductions or total organic compound concentrations achieved by add-on control devices may be based on engineering calculations or performance tests. If performance tests are used to determine vent emissions, emission reductions, or total organic compound concentrations achieved by add-on control devices, the performance tests shall conform with the requirements of Section 5(3) of this administrative regulation.

(4) When an owner or operator and the cabinet do not agree on determinations of vent emissions or emission reductions or total organic compound concentrations achieved by add-on control devices based on engineering calculations, the test methods in Section 5(3) of this administrative regulation shall be used to resolve the disagreement.

Section 4. Standards: Closed-vent Systems and Control Devices. (1)(a) Owners or operators of closed-vent systems and control devices used to comply with provisions of this part shall comply with this section.

(b) The owner or operator of an existing facility who cannot install a closed-vent system and control device to comply with this administrative regulation on December 21, 1990 shall prepare an implementation schedule that includes dates by which the closed-vent system and control device **will** **[~~shall~~]** be installed and in operation. The controls shall be installed as soon as possible, but the implementation schedule may allow up to eighteen (18) months after December 21, 1990 for installation and start-up. All units that begin operation after December 21, 1990 shall comply with this administrative regulation immediately (that is, shall have control devices installed and operating on start-up of the affected unit); the two (2) year implementation schedule does not apply to these units.

(2) A control device involving vapor recovery (for example, a condenser or absorber) shall be designed and operated to recover the organic vapors vented to it with an efficiency of ninety-five (95) weight percent or greater unless the total organic emission limits of Section 3(1)(a) of this administrative regulation for all affected process vents can be attained at an efficiency less than ninety-five (95) weight percent.

(3) An enclosed combustion device (for example, a vapor incinerator, boiler, or process heater) shall be designed and operated to reduce the organic emissions vented to it by ninety-five (95) weight percent or greater; to achieve a total organic compound concentration of twenty (20) ppmv, expressed as the sum of the actual compounds, not carbon equivalents, on a dry basis corrected to three (3) percent oxygen; or to provide a minimum residence time of 0.50 seconds at a minimum temperature of 760 °C. If a boiler or process heater is used as the control device, then the vent stream shall be introduced into the flame combustion zone of the boiler or process heater.

(4)(a) A flare shall be designed for and operated with no visible emissions as determined by the methods specified in subsection (5)(a) of this section, except for periods not to exceed a total of five (5) minutes during any two (2) consecutive hours.

(b) A flare shall be operated with a flame present at all times, as determined by the methods specified in subsection (6)(b)3 of this section.

(c) A flare shall be used only if the net heating value of the gas being combusted is eleven and two-tenths (11.2) MJ/scm (300 Btu/scf) or greater, if the flare is steam-assisted or air-assisted; or if the net heating value of the gas being combusted is 7.45 MJ/scm (200 Btu/scf) or greater if the flare is nonassisted. The net heating value of the gas being combusted shall be determined by the methods specified in subsection (5)(b) of this section.

(d)1. A steam-assisted or nonassisted flare shall be designed for and operated with an exit velocity, as determined by the methods specified in subsection (5)(c) of this section, of less than eighteen and three-tenths (18.3) m/s (sixty (60) ft/s), except as provided in subparagraphs 2 and 3 of this paragraph.

2. A steam-assisted or nonassisted flare designed for and operated with an exit velocity, as determined by the methods specified in subsection (5)(c) of this section, equal to or greater than eighteen and three-tenths (18.3) m/s (sixty (60) ft/s) but less than 122 m/s (400 ft/s) is allowed if the net heating value of the gas being combusted is greater than thirty-seven and three-tenths (37.3) MJ/scm (1,000 Btu/scf).

3. A steam-assisted or nonassisted flare designed for and operated with an exit velocity, as determined by the methods specified in subsection (5)(c) of this section, less than the velocity, V_{max}, as determined by the method specified in subsection (5)(d) of this section, and less than 122 m/s (400 ft/s) is allowed.

(e) An air-assisted flare shall be designed and operated with an exit velocity less than the velocity, V_{max}, as determined by the method specified in subsection (5)(e) of this section.

(f) A flare used to comply with this section shall be steam-assisted, air-assisted, or nonassisted.

(5)(a) Reference Method 22 in 40 CFR Part 60 (July 1, 1992) shall be used to determine the compliance of a flare with the visible emission provisions of this administrative regulation. The observation period is two (2) hours and shall be used according to Method 22.

(b) The net heating value of the gas being combusted in a flare shall be calculated using the following equation:

$$H_T = K \left[\sum_{i=1}^{n} C_i H_i\right]$$

where:

1. H_T = Net heating value of the sample, MJ/scm; where the net enthalpy per mole of offgas is based on combustion at twenty-five (25) degrees Centigrade and 760 mm Hg, but the standard temperature for determining the volume corresponding to 1 mol istwenty (20) degrees Centigrade;

2. K = Constant, $1.74X10^{-7}$ (one (1)/ppm) (g mol/scm) (MJ/kcal); where standard temperature for (g mol/scm) is twenty (20) degrees Centigrade;

3. C_i = Concentration of sample component i in ppm on a wet basis, as measured for organics by Reference Method 18 in 40 CFR Part 60 (July 1, 1992) and measured for hydrogen and carbon monoxide by ASTM D 1946-82 (incorporated by reference as specified in Section 3 of 401 KAR 30:010); and

4. H_i = Net heat of combustion of sample component i, kcal/g mol at 25 °C and 760 mm Hg. The heats of combustion may be determined using ASTM D 2382-83 (incorporated by reference as specified in Section 3 of 401 KAR 30:010) if published values are not available or cannot be calculated.

(c) The actual exit velocity of a flare shall be determined by dividing the volumetric flow rate (in units of standard temperature and pressure), as determined by Reference Methods 2, 2A, 2C, or 2D in 40 CFR Part 60 (July 1, 1992) as appropriate, by the unobstructed (free) cross-sectional area of the flare tip.

(d) The maximum allowed velocity in m/s, V_{max}, for a flare complying with subsection (4)(d)3. of this section shall be determined by the following equation:

$$\text{Log}_{10}(V_{max})=(H_T+28.8)/31.7$$

where:

1. H_T=The net heating value as determined in paragraph (e)(2) of this section.

2. 28.8=Constant,

3. 31.7=Constant.

(e) The maximum allowed velocity in m/s, V_{max}, for an air-assisted flare shall be determined by the following equation:

$$V_{max} = 8.706 + 0.7084\ (H_T)$$

where:

1. 8.706 = Constant.

2. 0.7084 = Constant.

3. H_T = The net heating value as determined in paragraph (b) of this subsection.

(6) The owner or operator shall monitor and inspect each control device required to comply with this section to ensure proper operation and maintenance of the control device by implementing the following requirements:

(a) Install, calibrate, maintain, and operate according to the manufacturer's specifications a flow indicator that provides a record of vent stream flow from each affected process vent to the control device at least once every hour. The flow indicator sensor shall be installed in the vent stream at the nearest feasible point to the control device inlet, but before being combined with other vent streams;

(b) Install, calibrate, maintain, and operate according to the manufacturer's specifications a device to continuously monitor control device operation as specified below:

1. For a thermal vapor incinerator, a temperature monitoring device equipped with a continuous recorder. The device shall have an accuracy of plus or minus one (1) percent of the temperature being monitored in degrees Centigrade or plus or minus five-tenths (0.5) degrees Centigrade, whichever is greater. The temperature sensor shall be installed at a location in the combustion chamber downstream of the combustion zone;

2. For a catalytic vapor incinerator, a temperature monitoring device equipped with a continuous recorder. The device shall be capable of monitoring temperature at two (2) locations and have an accuracy of plus or minus one (1) percent of the temperature being monitored in degrees Centigrade or plus or minus five-tenths (0.5) degrees Cengirade, whichever is greater. One (1) temperature sensor shall be installed in the vent stream at the nearest feasible point to the catalyst bed inlet and a second temperature sensor shall be installed in the vent stream at the nearest feasible point to the catalyst bed outlet;

3. For a flare, a heat sensing monitoring device equipped with a continuous recorder that indicates the continuous ignition of the pilot flame;

4. For a boiler or process heater having a design heat input capacity less than forty-four (44) MW, a temperature monitoring device equipped with a continuous recorder. The device shall have an accuracy of plus or minues one (1) percent of the temperature being monitored in degrees Centigrade or plus or minus five-tenths (0.5) degrees Centigrade, whichever is greater. The temperature sensor shall be installed at a location in the furnace downstream of the combustion zone;

5. For a boiler or process heater having a design heat input capacity greater than or equal to forty-four (44) MW, a monitoring device equipped with a continuous recorder to measure a parameter(s) that indicates good combustion operating practices are being used;

6. For a condenser, either:

a. A monitoring device equipped with a continuous recorder to measure the concentration level of the organic compounds in the exhaust vent stream from the condenser; or

b. A temperature monitoring device equipped with a continuous recorder. The device shall be capable of monitoring temperature at two (2) locations and have an accuracy of plus or minus one (1) percent of the temperature being monitored in degrees Centigrade or plus or minus five-tenths (0.5) degrees Centigrade, whichever is greater. One (1) temperature sensor shall be installed at a location in the exhaust vent stream from the condenser, and a second temperature sensor shall be installed at a location in the coolant fluid exiting the condenser;

7. For a carbon adsorption system such as a fixed-bed carbon absorber that regenerates the carbon bed directly in the control device, either:

a. A monitoring device equipped with a continuous recorder to measure the concentration level of the organic compounds in the exhaust vent stream from the carbon bed; or

b. A monitoring device equipped with a continuous recorder to measure a parameter that indicates the carbon bed is regenerated on a regular, predetermined time cycle; and

(c) Inspect the readings from each monitoring device required by paragraphs (a) and (b) of this subsection at least once each operating day to check control device operation and, if necessary, immediately implement the corrective measures necessary to ensure the control device operates in compliance with the requirements of this adminis-

trative regulation.

(7) An owner or operator using a carbon adsorption system, such as a fixed-bed carbon absorber that regenerates the carbon bed directly onsite in the control device, shall replace the existing carbon in the control device with fresh carbon at a regular, predetermined time interval that is no longer than the carbon service life required by Section 6(2)(d)3f of this administrative regulation.

(8) An owner or operator using a carbon adsorption system, such as a carbon canister that does not regenerate the carbon bed directly onsite in the control device, shall replace the existing carbon in the control device with fresh carbon on a regular basis by using one (1) of the following procedures:

(a) Monitor the concentration level of the organic compounds in the exhaust vent stream from the carbon adsorption system on a regular schedule and replace the existing carbon with fresh carbon immediately when carbon breakthrough is indicated. The monitoring frequency shall be daily or at an interval no greater than twenty (20) percent of the time required to consume the total carbon working capacity established as a requirement of Section 6(2)(d)3g of this administrative regulation, whichever is longer; or

(b) Replace the existing carbon with fresh carbon at a regular, predetermined time interval that is less than the design carbon replacement interval required by Section 6(2)(d)3g of this administrative regulation.

(9) An owner or operator of an affected facility seeking to comply with the provisions of this administrative regulation by using a control device other than a thermal vapor incinerator, catalytic vapor incinerator, flare, boiler, process heater, condenser, or carbon adsorption system shall develop documentation including sufficient information to describe the control device operation and identify the process parameter or parameters that indicate proper operation and maintenance of the control device.

(10)(a) Closed-vent systems shall be designed for and operated with no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background and by visual inspections, as determined by the methods specified as Section 5(2) of this administrative regulation.

(b) Closed-vent systems shall be monitored to determine compliance with this section during the initial leak detection monitoring, which shall be conducted by the date that the facility becomes subject to the provisions of this section, annually, and at other times as requested by the cabinet.

(c) Detectable emissions, as indicated by an instrument reading greater than 500 ppm and visual inspections, shall be controlled as soon as practicable, but not later than fifteen (15) calendar days after the emission is detected.

(d) A first attempt at repair shall be made no later than five (5) calendar days after the emission is detected.

(11) Closed-vent systems and control devices used to comply with provisions of this administrative regulation shall be operated at all times when emissions may be vented to them.

Section 5. Test Methods and Procedures. (1) Each owner or operator subject to this administrative regulation shall comply with the test methods and procedures requirements provided in this section.

(2) When a closed-vent system is tested for compliance with no detectable emissions, as required in Section 4(10) of this administrative regulation, the test shall comply with the following requirements:

(a) Monitoring shall comply with Reference Method 21 in 40 CFR Part 60 (July 1, 1992).

(b) The detection instrument shall meet the performance criteria of Reference Method 21.

(c) The instrument shall be calibrated before use on each day of its use by the procedures specified in Reference Method 21.

(d) Calibration gases shall be:

1. Zero air (less than ten (10) ppm of hydrocarbon in air); and

2. A mixture of methane or n-hexane and air at a concentration of approximately, but less than, 10,000 ppm methane or n-hexane.

(e) The background level shall be determined as set forth in Reference Method 21.

(f) The instrument probe shall be traversed around all potential leak interfaces as close to the interface as possible as described in Reference Method 21.

(g) The arithmetic difference between the maximum concentration indicated by the instrument and the background level is compared with 500 ppm for determining compliance.

(3) Performance tests to determine compliance with Section 3(1) of this administrative regulation and with the total organic compound concentration limit of Section 4(3) shall comply with the following:

(a) Performance tests to determine total organic compound concentrations and mass flow rates entering and exiting control devices shall be conducted and data reduced in accordance with the following reference methods and calculation procedures:

1. Method 2 in 40 CFR Part 60 (July 1, 1992) for velocity and volumetric flow rate.

2. Method 18 in 40 CFR Part 60 (July 1, 1992) for organic content.

3. Each performance test shall consist of three (3) separate runs; each run conducted for at least one (1) hour under the conditions that exist when the hazardous waste management unit is operating at the highest load or capacity level reasonably expected to occur. For the purpose of determining total organic compound concentrations and mass flow rates, the average of results of all runs shall apply. The average shall be computed on a time-weighted basis.

4. Total organic mass flow rates shall be determined by the following equation:

$$E_h = Q_{sd} \left[\sum_{i=1}^{n} C_i MW_i\right] [0.0416] [10^{-6}]$$

where:

a. E_h = Total organic mass flow rate, kg/h;

b. Q_{sd} = Volumetric flow rate of gases entering or exiting control device, as determined by Method 2, dscm/h;

c. n = Number of organic compounds in the vent gas;

d. C_i = Organic concentration in ppm, dry basis, of compound i in the vent gas, as determined by Method 18;

e. MW_i = Molecular weight of organic compound i in the vent gas, kg/kg-mol;

f. 0.0416 = Conversion factor for molar volume, kg-mol/m^3 (@ 293 K and 760 mm Hg); and

g. 10^{-6} = Conversion from ppm, ppm^{-1}.

5. The annual total organic emission rate shall be determined by the following equation:

$E_A=(E_h)$ (H)

where:

a. E_A=Total organic mass emission rate, kg/y; and

b. E_h=Total organic mass flow rate for the process vent, kg/h; and

c. H=Total annual hours of operations for the affected unit, h.

6. Total organic emissions from all affected process vents at the facility shall be determined by summing the hourly total organic mass emission rates (E_h, as determined in paragraph (a)4 of this subsection) and by summing the annual total organic mass emission rates (E_A, as determined in paragraph (a)5 of this subsection) for all affected process vents at the facility.

(b) The owner or operator shall record such process information as may be necessary to determine the conditions of the performance tests. Operations during periods of start-up, shutdown, and malfunction shall not constitute representative conditions for the purpose of a performance test.

(c) The owner or operator of an affected facility shall provide, or cause to be provided, performance testing facilities as follows:

1. Sampling ports adequate for the test methods specified in of

this section; and

2. Safe sampling platform(s); and

3. Safe access to sampling platform(s); and

4. Utilities for sampling and testing equipment.

(d) For the purpose of making compliance determinations, the time-weighted average of the results of the three (3) runs shall apply. In the event that a sample is accidentally lost or conditions occur in which one (1) of the three (3) runs **will** [~~shall~~] be discontinued because of forced shutdown, failure of an irreplaceable portion of the sample train, extreme meteorological conditions, or other circumstances beyond the owner or operator's control, compliance may, upon the cabinet's approval, be determined using the average of the results of the two (2) other runs.

(4) To show that a process vent associated with a hazardous waste distillation, fractionation, thin-film evaporation, solvent extraction, or air or steam stripping operation is not subject to the requirements of this administrative regulation, the owner or operator shall make an initial determination that the time-weighted, annual average total organic concentration of the waste managed by the waste management unit is less than ten (10) ppmw using one (1) of the following two (2) methods:

(a) Direct measurement of the organic concentration of the waste using the following procedures:

1. The owner or operator shall take a minimum of four (4) grab samples of waste for each waste stream managed in the affected unit under process conditions expected to cause the maximum waste organic concentration.

2. For waste generated onsite, the grab samples shall be collected at a point before the waste is exposed to the atmosphere such as in an enclosed pipe or other closed system that is used to transfer the waste after generation to the first affected distillation fractionation, thin-film evaporation, solvent extraction, or air or steam stripping operation. For waste generated off-site, the grab samples shall be collected at the inlet to the first waste management unit that receives the waste provided the waste has been transferred to the facility in a closed system such as a tank truck and the waste is not diluted or mixed with other waste.

3. Each sample shall be analyzed and the total organic concentration of the sample shall be computed using Method 9060 or 8240 of SW-846 (incorporated by reference under in Section 3 of 401 KAR 30:010).

4. The arithmetic mean of the results of the analyses of the four (4) samples shall apply for each waste stream managed in the unit in determining the time-weighted, annual average total organic concentration of the waste. The time-weighted average is to be calculated using the annual quantity of each waste stream processed and the mean organic concentration of each waste stream managed in the unit; or

(b) Using knowledge of the waste to determine that its total organic concentration is less than ten (10) ppmw. Documentation of the waste determination shall be required. Examples of documentation that may be used to support a determination under this provision include production process information documenting that no organic compounds are used, information that the waste is generated by a process that is identical to a process at the same or another facility that has previously been demonstrated by direct measurement to generate a waste stream having a total organic content less than ten (10) ppmw, or prior specification analysis results on the same waste stream where it can also be documented that no process changes have occurred since that analysis that could affect the waste total organic concentration.

(5) The determination that distillation, fractionation, thin-film evaporation, solvent extraction, or air or steam stripping operations manage hazardous wastes with time-weighted annual average total organic concentrations less than ten (10) ppmw shall be made as follows:

(a) By December 21, 1990 or by the date when the waste is first managed in a waste management unit, whichever is later; and

(b) For continuously generated waste, annually; and

(c) Whenever there is a change in the waste being managed or a change in the process that generates or treats the waste.

(6) When an owner or operator and the cabinet do not agree on whether a distillation, fractionation, thin-film evaporation, solvent extraction, or air or steam stripping operation manages a hazardous waste with organic concentrations of at least ten (10) ppmw based on knowledge of the waste, the procedures in Method 8240 may be used to resolve the dispute.

Section 6. Recordkeeping Requirements. (1)(a) Each owner or operator subject to this administrative regulation shall comply with the recordkeeping requirements of this section.

(b) An owner or operator of more than one (1) hazardous waste management unit subject to the provisions of this administrative regulation may comply with the recordkeeping requirements for these hazardous waste management units in one (1) recordkeeping system if the system identifies each record by each hazardous waste management unit.

(2) Owners and operators shall record the following information in the facility operating record:

(a) For facilities that comply with the provisions of Section 4(1)(b) of this administrative regulation, an implementation schedule that includes dates by which the closed-vent system and control device **will** [~~shall~~] be installed and in operation. The schedule shall also include a rationale of why the installation cannot be completed at an earlier date. The implementation schedule shall be in the facility operating record by December 21, 1990; and

(b) Up-to-date documentation of compliance with the process vent standards in Section 3 of this administrative regulation, including:

1. Information and data identifying all affected process vents, annual throughput, and operating hours of each affected unit; estimated emission rates for each affected vent and for the overall facility (that is, the total emissions for all affected vents at the facility); and the approximate location within the facility of each affected unit (for example, by identifying the hazardous waste management units on a facility plot plan); and

2. Information and data supporting determinations of vent emissions and emission reductions achieved by add-on control devices based on engineering calculations or source tests. For the purpose of determining compliance, determinations of vent emissions and emission reductions shall be made using operating parameter values (for example, temperatures, flow rates or vent stream organic compounds and concentrations) that represent the conditions that result in maximum organic emissions, such as when the waste management unit is operating at the highest load or capacity level reasonably expected to occur. If the owner or operator takes any action (for example, managing a waste of different composition or increasing operating hours of affected waste management units) that would result in an increase in total organic emissions from affected process vents at the facility, then a new determination shall be required; and

(c) Where an owner or operator chooses to use test data to determine the organic removal efficiency or total organic compound concentration achieved by the control device, a performance test plan. The test plan shall include:

1. A description of how it is determined that the planned test is going to be conducted when the hazardous waste management unit is operating at the highest load or capacity level reasonably expected to occur. This shall include the estimated or design flow rate and organic content of each vent stream and define the acceptable operating ranges of key process and control device parameters during the test program.

2. A detailed engineering description of the closed-vent system and control device including:

a. Manufacturer's name and model number of control device; b.

Type of control device

c. Dimensions of the control device;

d. Capacity; and

e. Construction materials.

3. A detailed description of sampling and monitoring procedures, including sampling and monitoring locations in the system, the equipment to be used, sampling and monitoring frequency, and planned analytical procedures for sample analysis.

(d) Documentation of compliance with Section 4 of this administrative regulation shall include the following information:

1. A list of all information references and sources used in preparing the documentation.

2. Records, including the dates, of each compliance test required by Section 4(10) of this administrative regulation.

3. If engineering calculations are used, a design analysis, specifications, drawings, schematics, and piping and instrumentation diagrams based on the appropriate sections of "APTI Course 415: Control of Gaseous Emissions" (incorporated by reference in Section 3 of 401 KAR 30:010) or other engineering texts acceptable to the cabinet that present basic control device design information. Documentation provided by the control device manufacturer or vendor that describes the control device design in accordance with clauses a to g of this subparagraph may be used to comply with this requirement. The design analysis shall address the vent stream characteristics and control device operation parameters as specified below.

a. For a thermal vapor incinerator, the design analysis shall consider the vent stream composition, constituent concentrations, and flow rate. The design analysis shall also establish the design minimum and average temperature in the combustion zone and the combustion zone residence time.

b. For a catalytic vapor incinerator, the design analysis shall consider the vent stream composition, constituent concentrations, and flow rate. The design analysis shall also establish the design minimum and average temperatures across the catalyst bed inlet and outlet.

c. For a boiler or process heater, the design analysis shall consider the vent stream composition, constituent concentrations, and flow rate. The design analysis shall also establish the design minimum and average flame zone temperatures, combustion zone residence time, and description of method and location where the vent stream is introduced into the combustion zone.

d. For a flare, the design analysis shall consider the vent stream composition, constituent concentrations, and flow rate. The design analysis shall also consider the requirements specified in Section 4(4) of this administrative regulation.

e. For a condenser, the design analysis shall consider the vent stream composition, constituent concentrations, flow rate, relative humidity, and temperature. The design analysis shall also establish the design outlet organic compound concentration level, design average temperature of the condenser exhaust vent stream, and design average temperatures of the coolant fluid at the condenser inlet and outlet.

f. For a carbon adsorption system such as a fixed-bed absorber that regenerates the carbon bed directly onsite in the control device, the design analysis shall consider the vent stream composition, constituent concentrations, flow rate, relative humidity, and temperature. The design analysis shall also establish the design exhaust vent stream organic compound concentration level, number and capacity of carbon beds, type and working capacity of activated carbon used for carbon beds, design total steam flow over the period of each complete carbon bed regeneration cycle, duration of the carbon bed steaming and cooling and drying cycles, design carbon bed temperature after regeneration, design carbon bed regeneration time, and design service life of carbon.

g. For a carbon adsorption system such as a carbon canister that does not regenerate the carbon bed directly onsite in the control device, the design analysis shall consider the vent stream composition, constituent concentrations, flow rate, relative humidity, and temperature. The design analysis shall also establish the design outlet organic concentration level, capacity of carbon bed, type and working capacity of activated carbon used for carbon bed, and design carbon replacement interval based on the total carbon working capacity of the control device and source operating schedule.

4. A statement signed and dated by the owner or operator certifying that the operating parameters used in the design analysis reasonably represent the conditions that exist when the hazardous waste management unit is or would be operating at the highest load or capacity level reasonably expected to occur.

5. A statement signed and dated by the owner or operator certifying that the control device is designed to operate at an efficiency of ninety-five (95) percent or greater unless the total organic concentration limit of Section 3(1) of this administrative regulation is achieved at an efficiency less than ninety-five (95) weight percent or the total organic emission limits of Section 3(1) of this administrative regulation for affected process vents at the facility can be attained by a control device involving vapor recovery at an efficiency less than ninety-five (95) weight percent. A statement provided by the control device manufacturer or vendor certifying that the control equipment meets the design specifications may be used to comply with this requirement.

6. If performance tests are used to demonstrate compliance, all test results.

(3) Design documentation and monitoring, operating, and inspection information for each closed-vent system and control device required to comply with the provisions of this administrative regulation shall be recorded and kept up-to-date in the facility operating record. The information shall include:

(a) Description and date of each modification that is made to the closed-vent system or control device design.

(b) Identification of operating parameter, description of monitoring device, and diagram of monitoring sensor location or locations used to comply with Section 4(6)(a) and (b) of this administrative regulation.

(c) Monitoring, operating, and inspection information required by Section 4(6) to (10) of this administrative regulation.

(d) Date, time, and duration of each period that occurs while the control device is operating when any monitored parameter exceeds the value established in the control device design analysis as specified below:

1. For a thermal vapor incinerator designed to operate with a minimum residence time of 0.50 seconds at a minimum temperature of 760 degrees Centigrade, period when the combustion temperature is below 760 degrees Centigrade;

2. For a thermal vapor incinerator designed to operate with an organic emission reduction efficiency of ninety-five (95) percent or greater, period when the combustion zone temperature is more than twenty-eight (28) degrees Centigrade below the design average combustion zone temperature established as a requirement of subsection (2)(d)3a of this section;

3. For a catalytic vapor incinerator, period when:

a. Temperature of the vent stream at the catalyst bed inlet is more thantwenty-eight (28) degrees Centigrade below the average temperature of the inlet vent stream established as a requirement of subsection (2)(d)3b of this section; or

b. Temperature difference across the catalyst bed is less than eighty (80) percent of the design average temperature difference established as a requirement of subsection (2)(d)3b of this section;

4. For a boiler or process heater, period when:

a. Flame zone temperature is more than twenty-eight (28) degrees Centigrade below the design average flame zone temperature established as a requirement of subsection (2)(d)3c of this section; or

b. Position changes where the vent stream is introduced to the combustion zone from the location established as a requirement of

subsection (2)(d)3c of this section;

5. For a flare, period when the pilot flame is not ignited;

6. For a condenser that complies with Section 4(6)(b)6a of this administrative regulation, period when the organic compound concentration level or readings of organic compounds in the exhaust vent stream from the condenser are more than twenty (20) percent greater than the design outlet organic compound concentration level established as a requirement of subsection (2)(d)3e of this section;

7. For a condenser that complies with Section 4(6)(b)6b of this administrative regulation, period when:

a. Temperature of the exhaust vent stream from the condenser is more than six (6) degrees Centigrade above the design average exhaust vent stream temperature established as a requirement of subsection (2)(d)3e of this section; or

b. Temperature of the coolant fluid exiting the condenser is more than six (6) degrees Centigrade above the design average coolant fluid temperature at the condenser outlet established as a requirement of subsection (2)(d)3e of this section;

8. For a carbon adsorption system such as a fixed-bed carbon absorber that regenerates the carbon bed directly onsite in the control device and complies with Section 4(6)(b)7a of this administrative regulation, period when the organic compound concentration level or readings of organic compounds in the exhaust vent stream from the carbon bed are more than twenty (20) percent greater than the design exhaust vent stream organic compound concentration level established as a requirement of subsection (2)(d)3f of this section;

9. For a carbon adsorption system such as a fixed-bed carbon absorber that regenerates the carbon bed directly onsite in the control device and complies with Section 4(6)(b)7b period when the vent stream continues to flow through the control device beyond the predetermined carbon bed regeneration time established as a requirement of subsection (2)(d)3f of this section.

(e) Explanation for each period recorded under paragraph (d) of this subsection of the cause for control device operating parameter exceeding the design value and the measures implemented to correct the control device operation.

(f) For carbon adsorption systems operated subject to Section 4(7) or (8)(b) of this administrative regulation, date when existing carbon in the control device is replaced with fresh carbon.

(g) For carbon adsorption systems operated subject to Section 4(8)(a) of this administrative regulation, a log that records:

1. Date and time when control device is monitored for carbon breakthrough and the monitoring device reading; and

2. Date when existing carbon in the control device is replaced with fresh carbon.

(h) Date of each control device start-up and shutdown.

(4) Records of the monitoring, operating, and inspection information required by subsections (3)(c) to (h) of this section need be kept only three (3) years.

(5) For a control device other than a thermal vapor incinerator, catalytic vapor incinerator, flare, boiler, process heater, condenser, or carbon adsorption system, monitoring and inspection information indicating proper operation and maintenance of the control device shall be recorded in the facility operating record.

(6) Up-to-date information and data used to determine whether or not a process vent is subject to Section 3 of this administrative regulation including supporting documentation as required by Section 5(4)(b) of this administrative regulation when application of the knowledge of the nature of the hazardous waste stream or the process by which it was produced is used, shall be recorded in a log that is kept in the facility operating record.

PHILLIP J. SHEPHERD, Secretary
E. DOUGLAS STEPHAN, Commissioner
APPROVED BY AGENCY: December 13, 1993
FILED WITH LRC: December 14, 1993 at 10 a.m.

NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION CABINET
Department for Environmental Protection
Division of Waste Management
(Amended After Hearing)

401 KAR 35:285. Drip pads (IS).

RELATES TO: KRS 224.10, 224.40, 224.46, 224.99
STATUTORY AUTHORITY: KRS 224.10-100, 224.46-520
NECESSITY AND FUNCTION: To implement provisions of KRS 224.46-520 and to establish minimum standards for drip pads qualifying for interim status.

Section 1. Applicability. (1) The requirements of this administrative regulation apply to owners and operators of facilities that use new or existing drip pads to convey treated wood drippage, precipitation, or surface water run-off to an associated collection system. Existing drip pads are those constructed before the effective date of this administrative regulation, and those for which the owner or operator has a design and has entered into binding financial or other agreements for construction prior to the effective date of this administrative regulation. All other drip pads are new drip pads. The requirement at Section 4(2)(c) of this administrative regulation to install a leak collection system applies only to those drip pads that are constructed after the effective date of this administrative regulation, except for those constructed after the effective date of this administrative regulation for which the owner or operator has a design and has entered into binding financial or other agreements for construction prior to the effective date of this administrative regulation.

(2) The owner or operator of any drip pad that is inside or under a structure that provides protection from precipitation so that neither run-off nor run-on is generated is not subject to Section 4(5) or (6) of this administrative regulation, as appropriate.

(3) This administrative regulation is not applicable to the management of infrequent and incidental drippage in storage yards provided that:

(a) The owner or operator maintains and complies with a written contingency plan that describes how the owner or operator will respond immediately to the discharge of infrequent and incidental drippage; and

(b) At a minimum, the contingency plan shall describe how the facility will do the following:

1. Clean up the drippage; and
2. Document the cleanup of the drippage; and
3. Retain documents regarding cleanup for three (3) years; and
4. Manage the contaminated media in a manner consistent with KRS Chapter 224 and 401 KAR Chapters 30 to 49.

Section 2. Assessment of Existing Drip Pad Integrity. (1) For each existing drip pad as defined in Section 1 of this administrative regulation, the owner or operator shall evaluate the drip pad and determine that it meets all of the requirements of this administrative regulation, except the requirements for liners and leak detection systems of Section 4(2) of this administrative regulation. The owner or operator shall obtain and keep on file at the facility a written assessment of the drip pad, reviewed and certified by an engineer, that attests to the results of the evaluation. This assessment shall be obtained no later than December 21, 1992 for F032 wastes, and no later than the effective date of this administrative regulation for F034 and F035 wastes. The assessment shall be reviewed, updated and recertified annually until all upgrades, repairs, or modifications necessary to achieve compliance with all of the standards of Section 4 of this administrative regulation are complete. The evaluation shall document the extent to which the drip pad meets each of the design and operating standards of Section 4 of this administrative regulation, except the standards for liners and leak detection systems, specified

in Section 4(2) of this administrative regulation.

(2) The owner or operator shall develop a written plan for upgrading, repairing, and modifying the drip pad to meet the requirements of Section 4(2) of this administrative regulation and submit the plan to the cabinet no later than two (2) years before the date that all repairs, upgrades, and modifications will be complete. This written plan shall describe all changes to be made to the drip pad in sufficient detail to document compliance with all the requirements of Section 4 of this administrative regulation. The plan shall be reviewed and certified by an engineer.

(3) Upon completion of all repairs and modifications, the owner or operator shall submit to the cabinet the as-built drawings for the drip pad together with a certification by an engineer attesting that the drip pad conforms to the drawings.

(4) If the drip pad is found to be leaking or unfit for use, the owner or operator shall comply with the provisions of Section 4(13) of this administrative regulation or close the drip pad in accordance with Section 6 of this administrative regulation.

Section 3. Design and Installation of New Drip Pads. Owners and operators of new drip pads shall ensure that the pads are designed, installed, and operated in accordance with one (1) of the following:

(1) All of the applicable requirements of Sections 4 (except Section 4(1)(d)), 5, and 6 of this administrative regulation; or

(2) All of the applicable requirements of Sections 4 (except Section 4(2)), 5, and 6 of this administrative regulation.

Section 4. Design and Operating Requirements. (1) Drip pads shall:

(a) Be constructed of nonearthen materials, excluding wood and nonstructurally supported asphalt;

(b) Be sloped to free-drain treated wood drippage, rain and other waters, or solutions of drippage and water or other wastes to the associated collection system;

(c) Have a curb or berm around the perimeter; and

(d) Be impermeable (for example, concrete pads shall be sealed, coated, or covered with an impermeable material) so that the entire surface where drippage occurs or may run across is capable of containing such drippage and mixtures of drippage and precipitation, materials, or other wastes while being routed to an associated collection system.

1. Have a hydraulic conductivity of less than or equal to $1x10^{-7}$ centimeters per second. Existing concrete drip pads shall be sealed, coated, or covered with a surface material with a hydraulic conductivity of less than or equal to $1x10^{-7}$ centimeters per second so that the entire surface where drippage occurs or may run across is capable of containing such drippage and mixtures of drippage and precipitation, materials, or other wastes while being routed to an associated collection system. This surface material shall be maintained free of cracks and gaps that could adversely affect its hydraulic conductivity, and the material shall be chemically compatible with the preservatives that contact the drip pad. The requirements of this subparagraph apply only to existing drip pads and those drip pads for which the owner or operator elects to comply with Section 3(1) instead of 3(2) of this administrative regulation.

2. The owner or operator shall obtain and keep on file at the facility a written assessment of the drip pad, reviewed and certified by an engineer, that attests to the results of the evaluation. The evaluation shall be reviewed, updated, and recertified annually. The evaluation shall document the extent to which the drip pad meets the design and operating standards of this section, except for subsection (b) of this section.

(e) Be of sufficient structural strength and thickness to prevent failure due to physical contact, climatic conditions, the stress of installation, and the stress of daily operations (for example, variable and moving loads such as vehicle traffic and movement of wood). (The cabinet will generally consider applicable standards established by professional organizations generally recognized by industry such as the American Concrete Institute (ACI) and the American Society of Testing Materials (ASTM) in judging the structural integrity requirement of this paragraph.)

(2) If an owner or operator elects to comply with Section 3(1) instead of Section 3(2) of this administrative regulation, the drip pad shall have:

(a) A synthetic liner installed below the drip pad that is designed, constructed, and installed to prevent leakage from the drip pad into the adjacent subsurface soil or groundwater or surface water at any time during the active life (including the closure period) of the drip pad. The liner shall be constructed of materials that **will** ~~[shall]~~ prevent waste from being absorbed into the liner and prevent releases into the adjacent subsurface soil or ground water or surface water during the active life of the facility. The liner shall be:

1. Constructed of materials that have appropriate chemical properties and sufficient strength and thickness to prevent failure due to pressure gradients (including static head and external hydrogeologic forces), physical contact with the waste or drip pad leakage to which they are exposed, climatic conditions, the stress of installation, and the stress of daily operation (including stresses from vehicular traffic on the drip pad);

2. Placed upon a foundation or base capable of providing support to the liner and resistance to pressure gradients above and below the liner to prevent failure of the liner due to settlement, compression or uplift; and

3. Installed to cover all surrounding earth that could come in contact with the waste or leakage.

(b) A leakage detection system immediately above the liner that is designed, constructed, maintained and operated to detect leakage from the drip pad. The leakage detection system shall be:

1. Constructed of materials that are:

a. Chemically resistant to the waste managed in the drip pad and the leakage that might be generated.

b. Of sufficient strength and thickness to prevent collapse under the pressures exerted by overlaying materials and by any equipment used at the drip pad.

2. Designed and operated to function without clogging through the scheduled closure of the drip pad; and

3. Designed so that it **will** ~~[shall]~~ detect the failure of the drip pad or the presence of a release of hazardous waste or accumulated liquid at the earliest practicable time.

(c) A leakage collection system immediately above the liner that is designed, constructed, maintained, and operated to collect leakage from the drip pad such that it can be removed from below the drip pad. The date, time, and quantity of any leakage collected in this system and removed shall be documented in the operating log.

(3) Drip pads shall be maintained so that they remain free of cracks, gaps, corrosion, or other deterioration that could cause hazardous waste to be released from the drip pad. (Refer to subsection (13) of this section for remedial action required if deterioration or leakage is detected.)

(4) The drip pad and associated collection system shall be designed and operated to convey, drain, and collect liquid resulting from drippage or precipitation in order to prevent run-off.

(5) Unless protected by a structure, as described in Section 1(2) of this administrative regulation, the owner or operator shall design, construct, operate and maintain a run-on control system capable of preventing flow onto the drip pad during peak discharge from at least a twenty-four (24) hour, twenty-five (25) year storm unless the system has sufficient excess capacity to contain any run-on that might enter the system, or the drip pad is protected by a structure or cover, as described in Section 1(2) of this administrative regulation.

(6) Unless protected by a structure or cover, as described in Section 1(2) of this administrative regulation, the owner or operator shall design, construct, operate, and maintain a runoff management system to collect and control at least the water volume resulting from

a twenty-four (24) hour, twenty-five (25) year storm.

(7) The drip pad shall be evaluated to determine that it meets the requirements of subsections (1) to (6) of this section and the owner or operator shall obtain a statement from an engineer certifying that the drip pad design meets the requirements of this section.

(8) Drippage and accumulated precipitation shall be removed from the associated collection system as necessary to prevent overflow onto the drip pad.

(9)(a) The drip pad surface shall be cleaned thoroughly in a manner and frequency such that accumulated residues of hazardous waste or other materials are removed, with residues being properly managed as hazardous waste, so as to allow weekly inspections of the entire drip pad surface without interference or hindrance from accumulated residues of hazardous waste or other materials on the drip pad.

(b) The owner or operator shall document the date and time of each cleaning and the cleaning procedure used in the facility's operating log.

(10) Drip pads shall be operated and maintained in a manner to minimize tracking of hazardous waste or hazardous waste constituents off the drip pad as a result of activities by personnel or equipment.

(11) After being removed from the treatment vessel, treated wood from pressure and nonpressure processes shall be held on the drip pad until drippage has ceased. The owner or operator shall maintain records sufficient to document that all treated wood is held on the pad following treatment in accordance with this requirement.

(12) Collection and holding units associated with run-on and runoff control systems shall be emptied or otherwise managed as soon as possible after storms to maintain design capacity of the system.

(13) Throughout the active life of the drip pad, if the owner or operator detects a condition that may have caused or has caused a release of hazardous waste, the condition shall be repaired within a reasonably prompt period of time following discovery, in accordance with the following procedures:

(a) Upon detection of a condition that may have caused or has caused a release of hazardous waste (upon detection of leakage by the leak detection system), the owner or operator shall:

1. Enter a record of the discovery in the facility operating log;

2. Immediately remove the portion of the drip pad affected by the condition from service;

3. Determine what steps must be taken to repair the drip pad, remove any leakage from below the drip pad, and establish a schedule for accomplishing the cleanup and repairs; and

4. Within twenty-four (24) hours after discovery of the condition (or immediately if required by KRS 224.01-400), notify the cabinet of the condition and, within ten (10) working days, provide a written notice to the cabinet with a description of the steps that will be taken to repair the drip pad, and clean up any leakage, and the schedule for accomplishing this work.

(b) The cabinet shall review the information submitted, make a determination regarding whether the pad shall be removed from service completely or partially until repairs and cleanup are complete, and notify the owner or operator of the determination and the underlying rationale in writing.

(c) Upon completing all repairs and cleanup, the owner or operator shall notify the cabinet in writing and provide a certification, signed by an engineer, that the repairs and cleanup have been completed according to the written plan submitted in accordance with paragraph (a)4 of this subsection.

(d) The owner or operator shall comply with all applicable requirements of KRS 224.01-400. However, compliance with KRS 224.01-400 shall not exempt the owner or operator from compliance with this administrative regulation.

(14) The owner or operator shall maintain, as part of the facility operating log, documentation of past operating and waste handling practices. This shall include identification of preservative formulations used in the past, a description of drippage management practices, and a description of treated wood storage and handling practices.

Section 5. Inspections. (1) During construction or installation, liners and cover systems (for example, membranes, sheets, or coatings) shall be inspected for uniformity, damage, and imperfections (for example, holes, cracks, thin spots, or foreign materials). Immediately after construction or installation, liners shall be inspected and certified as meeting the requirements of Section 4 of this administrative regulation by an engineer. The certification shall be maintained at the facility as part of the facility operating record. After installation, liners and covers shall be inspected to ensure tight seams and joints and the absence of tears, punctures, or blisters.

(2) While a drip pad is in operation, it shall be inspected weekly and after storms to detect evidence of the following:

(a) Deterioration, malfunctions or improper operation of run-on and run-off control systems; or

(b) The presence of leakage in and proper functioning of leakage detection system; or

(c) Deterioration or cracking of the drip pad surface.

Section 6. Closure. (1) At closure, the owner or operator shall remove or decontaminate all waste residues, contaminated containment system components (for example, pad and liners), contaminated subsoils, and structures and equipment contaminated with waste and leakage, and manage them as hazardous waste.

(2) If, after removing or decontaminating all residues and making all reasonable efforts to effect removal or decontamination of contaminated components, subsoils, structures, and equipment as required in subsection (1) of this section, the owner or operator finds that not all contaminated subsoils can be practically removed or decontaminated, he shall close the facility and perform postclosure care in accordance with closure and postclosure care requirements that apply to landfills (Section 4 of 401 KAR 35:230). For permitted units, the requirement to have a permit continues throughout the postclosure period.

(3)(a) The owner or operator of an existing drip pad, as defined in Section 1 of this administrative regulation, that does not comply with the liner requirements of Section 4(2)(a) shall:

1. Include in the closure plan for the drip pad under Section 3 of 401 KAR 35:080 both a plan for complying with subsection (1) of this section and a contingent plan for complying with subsection (2) of this section in case not all contaminated subsoils can be practicably removed at closure; and

2. Prepare a contingent postclosure plan under Section 9 of 401 KAR 35:070 for complying with subsection (2) of this section in case not all contaminated subsoils can be practicably removed at closure.

(b) The cost estimates calculated under Section 3 of 401 KAR 35:070 and Section 1 of 401 KAR 35:100 for closure and postclosure care of a drip pad subject to this subsection shall include the cost of complying with the contingent closure plan and the contingent postclosure plan, but are not required to include the cost of expected closure under subsection (1) of this section.

PHILLIP J. SHEPHERD, Secretary
E. DOUGLAS STEPHAN, Commissioner
APPROVED BY AGENCY: December 13, 1993
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NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION CABINET
Department for Environmental Protection
Division of Waste Management
(Amended After Hearing)

401 KAR 36:050. Used oil burned for energy recovery.

RELATES TO: KRS 224.10, 224.40, 224.43, 224.46, 224.99
STATUTORY AUTHORITY: KRS 224.10-100, 224.46-520, 224.46-530
NECESSITY AND FUNCTION: To implement provisions of KRS 224.46-520 and 224.46-530 and to establish [~~requires that persons engaging in recycling of hazardous waste obtain a permit. KRS 224.46-520 requires the cabinet to establish standards for these permits, to require adequate financial responsibility, and to establish minimum standards for closure for all hazardous waste recycling facilities. This chapter establishes minimum standards for hazardous waste recycling facilities. This regulation establishes~~] minimum standards for used oil burned for energy recovery.

Section 1. Applicability of Standards for Used Oil Burned for Energy Recovery. (1) The requirements in [~~Sections 1 through 5 of~~] this administrative regulation apply to used oil that is burned for energy recovery in any boiler or industrial furnace that is not regulated under 401 KAR 34:240 or 401 KAR 35:240, except as provided by subsections (3) and (5) of this section. Such used oil is termed "used oil fuel." Used oil fuel includes any fuel produced from used oil by processing, blending, or other treatment.

(2) "Used oil" means any oil that has been refined from crude oil, used, and as a result of such use, is contaminated by physical or chemical impurities.

(3) Except as provided by subsection (4) of this section, used oil that is mixed with hazardous waste and burned for energy recovery is subject to administrative regulation as hazardous waste fuel under [~~Sections 1 through 6 of~~] 401 KAR 36:020 [~~040~~]. Used oil containing more than 1000 ppm of total halogens is presumed to be a hazardous waste because it has been mixed with halogenated hazardous waste listed in 401 KAR 31:040. Persons may rebut this presumption by demonstrating that the used oil does not contain hazardous waste (for example, by showing that the used oil does not contain significant concentrations of halogenated hazardous constituents listed in 401 KAR 31:170).

(4) Used oil burned for energy recovery is subject to regulation under [~~Sections 1 through 5 of~~] this administrative regulation rather than as hazardous waste fuel under [~~Sections 1 through 6 of~~] 401 KAR 36:020 [~~040~~] if it is a hazardous waste solely because it:

(a) Exhibits a characteristic of hazardous waste identified in 401 KAR 31:030, provided that it is not mixed with a hazardous waste; or

(b) Contains hazardous waste generated only by a person subject to the special requirements for limited quantity generators under Section 5 of 401 KAR 31:010.

(5) Except as provided by subsection (3) of this section, used oil burned for energy recovery, and any fuel produced from used oil by processing, blending, or other treatment, is subject to regulation under [~~Sections 1 through 5 of~~] this administrative regulation unless it is shown not to exceed any of the allowable levels of the constituents and properties in the specification shown in Table 1. Used oil fuel that meets the specification is subject only to the analysis and recordkeeping requirements under Section 4(2)(a) and (f). Used oil fuel that exceeds any specification level is termed "off-specification used oil fuel."

Table 1
USED OIL EXCEEDING ANY SPECIFICATION LEVEL IS SUBJECT TO [~~SECTIONS 1 THROUGH 5 OF~~] THIS ADMINISTRATIVE REGULATION WHEN BURNED FOR ENERGY RECOVERY[a]

Constituent/property	Allowable level
Arsenic	5 ppm maximum
Cadmium	2 ppm maximum
Chromium	10 ppm maximum
Lead	100 ppm maximum
Flash point	100°F minimum
Total halogens	4000 ppm maximum[b]

[a]The specification does not apply to used oil fuel mixed with a hazardous waste other than limited quantity generator hazardous waste.

[b]Used oil containing more than 1,000 ppm total halogens is presumed to be a hazardous waste under the rebuttable presumption provided under subsection (3) of this section. Such used oil is subject to Sections 1 to [~~through~~] 6 of 401 KAR 36:040 rather than [~~Sections 1 through 5 of~~] this administrative regulation when burned for energy recovery unless the presumption of mixing can be successfully rebutted.

Section 2. Prohibitions for Used Oil Burned for Energy Recovery. (1) A person may market off-specification used oil for energy recovery only:

(a) To burners or other marketers who have notified the cabinet of their used oil management activities stating the location and general description of such activities, and who have an EPA identification number; and

(b) To burners who burn the used oil in an industrial furnace or boiler identified in subsection (2) of this section.

(2) Off-specification used oil may be burned for energy recovery in only the following devices:

(a) Industrial furnaces identified in 401 KAR 30:010;

(b) Boilers, as defined in 401 KAR 30:010, that are identified as follows:

1. Industrial boilers located on the site of a facility engaged in a manufacturing process where substances are transformed into new products, including the component parts of products, by mechanical or chemical processes;

2. Utility boilers used to produce electric power, steam, or heated or cooled air or other gases or fluids for sale; or

3. Used oil-fired space heaters provided that:

a. The heater burns only used oil that the owner or operator generates or used oil received from do-it-yourself oil changers who generated used oil as household waste;

b. The heater is designed to have a maximum capacity of not more than 0.5 million Btu per hour; and

c. The combustion gases from the heater are vented to the ambient air.

Section 3. Standards Applicable to Generators of Used Oil Burned for Energy Recovery. (1) Except as provided in subsections (2) and (3) of this section, generators of used oil are not subject to [~~Sections 1 through 5 of~~] this administrative regulation.

(2) Generators who market used oil directly to a burner are subject to Section 4 of this administrative regulation; and

(3) Generators who burn used oil are subject to Section 5 of this administrative regulation.

Section 4. Standards Applicable to Marketers of Used Oil Burned for Energy Recovery. (1) Persons who market used oil fuel are termed "marketers". Except as provided below, marketers include

generators who market used oil fuel directly to a burner, persons who receive used oil from generators and produce, process, or blend used oil fuel from these used oils (including persons sending blended or processed used oil to brokers or other intermediaries), and persons who distribute but do not process or blend used oil fuel. However, the following persons are not marketers subject to [~~Sections 1 through 5 of~~] this administrative regulation:

(a) Used oil generators, and collectors who transport used oil received only from generators, unless the generator or collector markets the used oil directly to a person who burns it for energy recovery. However, persons who burn some used oil fuel for purposes of processing or other treatment to produce used oil fuel for marketing are considered to be burning incidentally to processing. Thus, generators and collectors who market to such incidental burners are not marketers subject to [~~Sections 1 through 5 of~~] this administrative regulation;

(b) Persons who market only used oil fuel that meets the specifications under Section 1(5) of this administrative regulation and who are not the first person to claim the oil meets the specification ([~~i.e.,~~] marketers who do not receive used oil from generators or initial transporters and marketers who neither receive nor market off-specification used oil fuel for example).

(2) Marketers are subject to the following requirements:

(a) Analysis of used oil fuel. Used oil fuel is subject to [~~regulation under Sections 1 through 5 of~~] this administrative regulation unless the marketer obtains analyses or other information documenting that the used oil fuel meets the specifications provided under Section 1(5) of this administrative regulation.

(b) Prohibitions. The prohibitions under Section 2(1) of this administrative regulation shall apply.

(c) Notification. Notification to the cabinet stating the location and general description of used oil management activities is required. Even if a marketer has previously notified the cabinet of his hazardous waste management activities in accordance with Section 2 of 401 KAR 34:020 and obtained an [~~U.S.~~] EPA identification number, he shall [~~must~~] renotify to identify his used oil management activities.

(d) Invoice system. When a marketer initiates a shipment of off-specification used oil, he shall [~~must~~] prepare and send the receiving facility an invoice containing the following information:

1. An invoice number;

2. His own EPA identification number and the EPA identification number of the receiving facility;

3. The names and addresses of the shipping and receiving facilities;

4. The quantity of off-specification used oil to be delivered;

5. The date(s) of shipment or delivery; and

6. The following statement: "This used oil is subject to EPA regulation under 40 CFR Part 266 or Kentucky administrative regulation under 401 KAR Chapter 36."

(e) Required notices.

1. Before a marketer initiates the first shipment of off-specification used oil to a burner or other marketer, he shall [~~must~~] obtain a one (1) time written and signed notice from the burner or marketer certifying that:

a. The burner or marketer has notified EPA stating the location and general description of his used oil management activities; and

b. If the recipient is a burner, the burner **will** [~~shall~~] [~~will~~] burn the off-specification used oil only in an industrial furnace or boiler identified in Section 2(2) of this administrative regulation; and

2. Before a marketer accepts the first shipment of off-specification used oil from another marketer subject to the requirements of this section, he shall [~~must~~] provide the marketer with a one (1) time written and signed notice certifying that he has notified EPA of his used oil management activities; and

(f) Recordkeeping.

1. Used oil fuel that meets the specification. A marketer who first claims under paragraph (a) of this subsection that used oil fuel meets the specification shall [~~must~~] keep copies of analysis (or other information used to make the determination) of used oil for three (3) years. Such marketers shall [~~must~~] also record in an operating log and keep for three (3) years the following information on each shipment of used oil fuel that meets the specification. Such used oil fuel is not subject to further regulation, unless it is subsequently mixed with hazardous waste or unless it is mixed with used oil so that it no longer meets the specification.

a. The name and address of the facility receiving the shipment;

b. The quantity of used oil fuel delivered;

c. The date of shipment or delivery; and

d. A cross-reference to the record of used oil analysis (or other information used to make the determination that the oil meets the specification) required under this subparagraph.

2. Off-specification used oil fuel. A marketer who receives or initiates an invoice under the requirements of this section shall [~~must~~] keep a copy of each invoice for three (3) years from the date the invoice is received or prepared. In addition, a marketer shall [~~must~~] keep a copy of each certification notice that he receives or sends for three (3) years from the date he last engages in an off-specification used oil fuel marketing transaction with the person who sends or receives the certification notice.

Section 5. Standards Applicable to Burners of Used Oil Burned for Energy Recovery. Owners and operators of facilities that burn used oil fuel are "burners" and are subject to the following requirements:

(1) Prohibitions. The prohibitions under Section 2(2) of this administrative regulation shall apply.

(2) Notification. Burners of off-specification used oil fuel, and burners of used oil fuel who are the first to claim that the oil meets the specification provided under Section 1(5) of this administrative regulation, except burners who burn specification oil that they generate, shall [~~must~~] notify the cabinet stating the location and general description of used oil management activities. Burners of used oil fuel that meets the specification who receive such oil from a marketer that previously notified the cabinet are not required to notify. Owners and operators of used oil-fired space heaters that burn used oil fuel under the provisions of Section 2(2)(b) of this administrative regulation are exempt from this notification requirement. Even if a burner has previously notified the cabinet of his hazardous waste management activities in accordance with Section 2 of 401 KAR 34:020 and obtained an EPA identification number, he shall [~~must~~] renotify to identify his used oil management activities.

(3) Required notices. Before a burner accepts the first shipment of off-specification used oil fuel from a marketer, he shall [~~must~~] provide the marketer a one (1) time written and signed notice certifying that:

(a) He has notified the cabinet stating the location and general description of his used oil management activities; and

(b) He **will** [~~shall~~] [~~will~~] burn the used oil only in an industrial furnace or boiler identified in Section 2(2) of this administrative regulation.

(4) Used oil fuel analysis.

(a) Used oil fuel burned by the generator is subject to regulation under Sections 1 to [~~through~~] 5 of this administrative regulation unless the burner obtains analysis (or other information) documenting that the used oil meets the specifications provided under Section 1(5) of this administrative regulation.

(b) Burners who treat off-specification used oil fuel by processing, blending, or other treatment to meet the specification provided under Section 1(5) of this administrative regulation shall [~~must~~] obtain analyses (or other information) documenting that the used oil meets the specifications.

(5) Recordkeeping. A burner who receives an invoice under the requirements of this section shall [~~must~~] keep a copy of each invoice for three (3) years from the date the invoice is received. Burners shall

[~~must~~] also keep for three (3) years copies of analyses of used oil fuel as may be required by subsection (4) of this section. In addition, he shall [~~must~~] keep a copy of each certification notice that he sends to a marketer for three (3) years from the date he last receives off-specification used oil from that marketer

PHILLIP J. SHEPHERD, Secretary
E. DOUGLAS STEPHAN, Commissioner
APPROVED BY AGENCY: December 13, 1993
FILED WITH LRC: December 14, 1993 at 10 a.m.

NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION CABINET
Department for Environmental Protection
Division of Waste Management
(Amended After Hearing)

401 KAR 37:010. General provisions for land disposal restrictions.

RELATES TO: KRS 224.01, 224.10, 224.40, 224.43, 224.46, 224.70, 224.99, 40 CFR 268.1 to [~~through~~] 268.8, 40 CFR 268.10 to [~~through~~] 268.12

STATUTORY AUTHORITY: KRS 224.10-100, 224.46-505, 224.46-520[~~, 40 CFR 268.1 through 268.8, 40 CFR 268.10 through 268.12~~]

NECESSITY AND FUNCTION: To implement provisions of KRS 224.46-505, 224.46-520, relative to land disposal restrictions. [~~KRS 224.46-520 enables the cabinet to prohibit the land disposal of any hazardous wastes. KRS 224.46-520 requires that the cabinet allow land disposal of hazardous waste when the disposal methods have been determined by the cabinet to be protective of human health and the environment for as long as the waste remains hazardous. 401 KAR Chapter 37 establishes land disposal restrictions and treatment standards for hazardous wastes. This regulation establishes waste specific prohibitions on land disposal.~~] Applicability dates set forth in this administrative regulation are consistent with those adopted by USEPA. This administrative regulation reflects those federal dates to assure consistency with the federal program. Enforcement of applicable provisions preceding the effective date of this administrative regulation was the responsibility of USEPA. The cabinet assumed enforcement responsibility from USEPA upon the effective date of this administrative regulation.

Section 1. Definitions Applicable to 401 KAR Chapter 37. (1) When used in 401 KAR Chapter 37 the following terms have the meanings given below:

(a) "Halogenated organic compounds" or "HOCs" means those compounds having a carbon-halogen bond which are listed under 401 KAR 37:110.

(b) "Hazardous constituent or constituents" means those constituents listed in 401 KAR 31:170.

(c) "Land disposal", as set forth in KRS 224.01-010, means placement in or on the land and includes, but is not limited, placement in a landfill, surface impoundment, waste pile, injection well, land treatment facility, salt dome formation, salt bed formation, underground mine or cave, or placement in a concrete vault or bunker intended for disposal purposes.

(d) "Nonwastewaters" are wastes that do not meet the criteria for wastewaters in paragraph (f) of this section.

(e) "Polychlorinated biphenyls" or "PCB" are halogenated organic compounds defined in accordance with 40 CFR 761.2 as of July 1989.

(f) "Wastewaters" are wastes that contain less than one (1) percent by weight total organic carbon (TOC) and less than one (1) percent by weight total suspended solids (TSS), with the following exceptions:

1. F001, F002, F003, F004, F005, wastewaters are solvent-water mixtures that contain less than one (1) percent by weight TOC or less than one (1) percent by weight total F001, F002, F003, F004, F005 solvent constituents listed in Section 2 of 401 KAR 37:040 in Table CCWE.

2. K011, K013, K014 wastewaters contain less than five (5) percent by weight TOC and less than one (1) percent by weight TSS, as generated.

3. K103 and K104 wastewaters contain less than four (4) percent by weight TOC and less than one (1) percent by weight TSS.

(g) "Inorganic solid debris" means nonfriable inorganic solids contaminated with D004-D011 hazardous wastes that are incapable of passing through a nine and five-tenths (9.5) mm standard sieve; and that require cutting, or crushing and grinding in mechanical sizing equipment prior to stabilization; and, are limited to the following inorganic or metal materials:

1. Metal slags (either dross or scoria);
2. Glassified slag;
3. Glass;
4. Concrete (excluding cementitious or pozzolanic stabilized hazardous wastes);
5. Masonry and refractory bricks;
6. Metal cans, containers, drums, or tanks;
7. Metal nuts, bolts, pipes, pumps, valves, appliances, or industrial equipment;
8. Scrap metal as defined in Section 1(3)(f) of 401 KAR 31:010.

(2) All other terms have the meanings given under Section 1 of 401 KAR 30:010, Section 2 and 3 of 401 KAR 31:010 or Section 2 of 401 KAR 38:010.

Section 2. Purpose, Scope and Applicability. (1) This chapter identifies hazardous wastes that are restricted from land disposal and defines those limited circumstances under which an otherwise prohibited waste may continue to be land disposed.

(2) Except as specifically provided otherwise in 401 KAR Chapter 31 or 37, the requirements of 401 KAR Chapter 37 apply to persons who generate or transport hazardous waste and owners and operators of hazardous waste treatment, storage, and disposal facilities.

(3) Prohibited wastes may continue to be land disposed as follows:

(a) Where persons have been granted an extension to the effective date of a prohibition under 401 KAR 37:030 or pursuant to Section 5 of this administrative regulation, with respect to those wastes covered by the extension;

(b) Where persons have been granted an exemption from a prohibition pursuant to a petition under Section 6 of this administrative regulation, with respect to those wastes and units covered by the petition;

(c) Wastes that are hazardous only because they exhibit a hazardous characteristic, and which are otherwise prohibited from land disposal under this chapter, are not prohibited from land disposal if the wastes:

1. Are disposed into a nonhazardous or hazardous injection well as defined in 40 CFR 144.6(a); and

2. Do not exhibit any prohibited characteristic or hazardous waste at the point of injection.

[~~(c) Where the waste is generated by limited quantity generators as defined in Section 5 of 401 KAR 31:010; or~~

~~(d) Where a farmer is disposing of waste pesticides in accordance with 401 KAR 32:050, Section 10;~~

~~(e) Prior to May 8, 1990, a landfill or surface impoundment unit where all applicable persons are in compliance with the requirements of Section 8 of this regulation, with respect to wastes that are not subject to the treatment standards set forth in 401 KAR 37:040 and not subject to the prohibitions in 401 KAR 37:030, Section 4, or KRS~~

~~224.46-520.~~]

(4) The requirements of this chapter shall not affect the availability of a waiver under Section 121(d)(4) of [~~the Comprehensive Environmental Response, Compensation, and Liability Act of 1980~~ (]CERCLA[)].

(5) The following hazardous wastes are not subject to any provision of 401 KAR Chapter 37:

(a) Waste generated by small quantity generator of less than 100 kilograms of nonacute hazardous waste or less than one (1) kilogram of acute hazardous waste per month as specified in Section 5 of 401 KAR 31:010.

(b) Waste pesticides that a farmer disposes of pursuant to Section 10 of 401 KAR 32:050;

(c) Wastes identified or listed as hazardous after November 8, 1984 for which EPA has not promulgated land disposal prohibitions or treatment standards.

Section 3. Dilution Prohibited as a Substitute for Treatment. (1) Except as provided in subsection (2) of this section, no generator, transporter, handler, or owner or operator of a treatment, storage, or disposal facility shall in any way dilute a restricted waste or the residual from treatment of a restricted waste as a substitute for adequate treatment to achieve compliance with 401 KAR 37:040, to circumvent the effective date of a prohibition in 401 KAR 37:030, to otherwise avoid a prohibition in 401 KAR 37:030, or to circumvent a land disposal prohibition imposed by RCRA Section 3004.

(2) Dilution of wastes that are hazardous only because they exhibit a characteristic in a treatment system which treats wastes subsequently discharged to a water of the United States pursuant to a permit issued under Section 402 of the CWA or which treats wastes for purposes of pretreatment requirements under Section 307 of the CWA is not impermissible dilution for purposes of this section unless a method has been specified as the treatment standard in Section 4 of 401 KAR 37:040, or unless the waste is a D003 reactive cyanide wastewater or nonwastewater. [~~No generator, transporter, handler, or owner or operator of a treatment, storage, or disposal facility shall in any way dilute a restricted waste or the residual from treatment of a restricted waste as a substitute for adequate treatment to achieve compliance with 401 KAR 37:040 to circumvent the effective date of a prohibition in 401 KAR 37:030, to otherwise avoid a prohibition in 401 KAR 37:030, or to circumvent a land disposal prohibition imposed by KRS 224.46-520.~~]

Section 4. Treatment Surface Impoundment Exemption. (1) Wastes which are otherwise prohibited from land disposal under 401 KAR Chapter 37 may be treated in a surface impoundment or series of impoundments provided that:

(a) Treatment of such wastes occurs in the impoundments;

(b) The following conditions are met:

1. Sampling and testing. For wastes with treatment standards in 401 KAR 37:040 or prohibition levels in 401 KAR 37:030 or KRS 224.46-520, the residues from treatment are analyzed, as specified in Section 7 of this administrative regulation or Section 4 of 401 KAR 37:030[~~, Section 4~~], to determine if they meet the applicable treatment standards or where no treatment standards have been established for the waste, the applicable prohibition levels. The sampling method specified in the waste analysis plan under Section 4 of 401 KAR 34:020[~~, Section 4,~~] or Section 4 of 401 KAR 35:020[~~, Section 4,~~] shall be designed so that representative samples of the sludge and the supernatant are tested separately rather than mixed to form homogeneous samples.

2. Removal. The following treatment residues (including any liquid waste) shall be removed at least annually: residues which do not meet the treatment standards of 401 KAR 37:040; residues which do not meet the prohibition levels established under 401 KAR 37:030 or imposed by statute (where no treatment standards have been established); residues which are from the treatment of wastes prohibited from land disposal under 401 KAR 37:030 (where no treatment standards have been established and no prohibition levels apply); or residues from managing listed wastes which are not delisted under Section 2 of 401 KAR 31:050[~~, Section 2~~]. However, residues which are the subject of a valid certification under Section 8 of this administrative regulation made no later than a year after placement of the wastes in an impoundment are not required to be removed annually. If the volume of liquid flowing through the impoundment or series of impoundments annually is greater than the volume of the impoundment or impoundments, this flow-through constitutes removal of the supernatant for the purpose of this requirement.

3. Subsequent management. Treatment residues shall [~~may~~] not be placed in any other surface impoundment for subsequent management unless the residues are the subject of a valid certification under Section 8 of this administrative regulation which allows disposal in surface impoundments meeting the requirements of Section 8(1) of this administrative regulation.

4. Recordkeeping. The procedures and schedule for the sampling of impoundment contents, the analysis of test data, and the annual removal of residues which do not meet the treatment standards, or prohibition levels (where no treatment standards have been established), or which are from the treatment of wastes prohibited from land disposal under 401 KAR 37:030 (where no treatment standards have been established and no prohibition levels apply), shall be specified in the facility's waste analysis plan as required under 401 KAR 34:020, Section 4, or 401 KAR 35:020, Section 4.

(c) The impoundment meets the design requirements of Section 2(3) of 401 KAR 34:200 or Section 10(1) of 401 KAR 35:200, regardless that the unit may not be new, expanded, or a replacement, and it is [~~be~~] in compliance with applicable groundwater monitoring requirements of 401 KAR 34:060 or 401 KAR Chapter 35 unless:

1. It is exempted pursuant to Section 2(4) or (5) of 401 KAR 34:200, or to Section 10(3) or (4) of 401 KAR 35:200; or

2. Upon application by the owner or operator, the cabinet after notice and an opportunity to comment has granted a waiver of the requirements on the basis that the surface impoundment:

a. Has at least one (1) liner, and [~~for which~~] there is no evidence that such liner is leaking;

b. Is located more than one-quarter (1/4) mile from an underground source of drinking water; and

c. Is in compliance with generally applicable groundwater monitoring requirements for facilities with permits; or

3. Upon application by the owner or operator, the cabinet, after notice and an opportunity to comment, has granted a modification to the requirements on the basis of a demonstration that the surface impoundment is located, designed, and operated so as to assure that there **will** [~~shall~~] be no migration of any hazardous constituent into groundwater or surface water at any future time.

(d) The owner or operator submits to the cabinet a written certification that the requirements of paragraph (c) of this subsection have been met and submits a copy of the waste analysis plan required under paragraph (b) of this subsection. The following certification is required:

I certify under penalty of law that the requirements of Section 4(1)(c) of 401 KAR 37:010 have been met for all surface impoundments being used to treat restricted wastes. I believe that the submitted information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

(2) Evaporation of hazardous constituents as the principal means of treatment is not considered to be treatment for purposes of an exemption under this section.

Section 5. Procedures for Case-by-case Extensions to an Effective Date. (1) Any person who generates, treats, stores, or disposes of a hazardous waste may submit an application to the

cabinet for an extension to the effective date of any applicable restriction established under 401 KAR 37:030. The applicant shall demonstrate the following:

(a) He has made a good-faith effort to locate and contract with treatment, recovery, or disposal facilities nationwide to manage his waste in accordance with the effective date of the applicable restriction established under 401 KAR 37:030;

(b) He has entered into a binding contractual commitment to construct or otherwise provide alternative treatment, recovery ([~~e.g.,~~] recycling for example), or disposal capacity that meets the treatment standards specified in 401 KAR 37:040 or, where treatment standards have not been specified, such treatment, recovery, or disposal capacity is protective of human health and the environment;

(c) Due to circumstances beyond the applicant's control, such alternative capacity cannot reasonably be made available by the applicable effective date. This demonstration may include a showing that the technical and practical difficulties associated with providing the alternative capacity **will** [~~shall~~] result in the capacity not being available by the applicable effective date;

(d) The capacity being constructed or otherwise provided by the applicant **will** [~~shall~~] be sufficient to manage the entire quantity of waste that is the subject of the application;

(e) He provides a detailed schedule for obtaining required operating and construction permits or an outline of how and when alternative capacity **will** [~~shall~~] be available;

(f) He has arranged for adequate capacity to manage his waste during an extension and has documented in the application the location of all sites at which the waste will [~~shall~~] be managed; and

(g) Any waste managed in a surface impoundment or landfill during the extension period **will** [~~shall~~] meet the requirements of subsection (8)(b) of this section.

(2) An authorized representative signing an application described under subsection (1) of this section shall make the following certification:

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

(3) After receiving an application for an extension, the cabinet may request any additional information which it deems necessary to evaluate the application.

(4) An extension shall apply only to the waste generated at the individual facility covered by the application and shall not apply to restricted waste from any other facility.

(5) On the basis of the information referred to in subsection (1) of this section, after notice and opportunity for comment, and after consultation with appropriate state agencies in all affected states, the cabinet may grant an extension of up to one (1) year from the effective date. The cabinet may renew this extension for up to one (1) additional year upon the request of the applicant if the demonstration required in subsection (1) of this section can still be made. In no event shall an extension continue beyond twenty-four (24) months from the applicable effective date specified in 401 KAR 37:030. The length of any extension authorized shall be determined by the cabinet based on the time required to construct or obtain the type of capacity needed by the applicant as described in the completion schedule discussed in subsection (1)(e) of this section. The cabinet shall give public notice of the intent to approve or deny a petition and provide an opportunity for public comment. The final decision on a petition shall be published in the Kentucky Administrative Register.

(6) Any person granted an extension under this section shall immediately notify the cabinet as soon as he has knowledge of any change in the conditions certified to in the application.

(7) Any person granted an extension under this section shall submit written progress reports at intervals designated by the cabinet. Such reports shall describe the overall progress made toward constructing or otherwise providing alternative treatment, recovery or disposal capacity; shall identify any event which may cause or has caused a delay in the development of the capacity; and shall summarize the steps taken to mitigate the delay. The cabinet may revoke the extension at any time if the applicant does not demonstrate a good-faith effort to meet the schedule for completion, if the cabinet denies or revokes any required permit, if conditions certified in the application change, or for any violation of this chapter.

(8) Whenever the cabinet establishes an extension to an effective date under this section, during the period for which such extension is in effect:

(a) The storage restrictions under Section 2(1) of 401 KAR 37:050 do not apply; and

(b) The hazardous waste may be disposed of in a landfill or surface impoundment unit only if the unit is in compliance with the following requirements:

1. The landfill, if in interim status, is in compliance with the requirements of 401 KAR 35:060 and Section 10(1), (3) and (4) of 401 KAR 35:230;

2. The landfill, if permitted, is in compliance with the requirements of 401 KAR 34:060 and Section 10(3), (4), and (5) of 401 KAR 34:230;

3. The surface impoundment, if in interim status, is in compliance with the requirements of 401 KAR 35:060 and Section 10(1), (3) and (4) of 401 KAR 35:200 [~~and KRS 224.46-520~~]; or

4. The surface impoundment, if permitted, is in compliance with the requirements of 401 KAR 34:060 and Section 10(3), (4), and (5) of 401 KAR 34:200; or

5. The landfill, if disposing of containerized liquid hazardous wastes containing PCB's at concentrations greater than or equal to fifty (50) ppm but less than 500 ppm, is also in compliance with 40 CFR 761.75 and 401 KAR Chapters 34 and 35.

(9) Pending a decision on the application the applicant is required to comply with all restrictions on land disposal under 401 KAR Chapter 37 once the effective date for the waste has been reached.

[~~(10) Any decisions of the cabinet relating to an application for an extension to the effective date of any applicable restriction established under 401 KAR 37:030 shall not supersede the authority of the Environmental Protection Agency under 40 CFR 268.5 (1989).~~]

Section 6. Petitions to Allow Land Disposal of a Waste Prohibited Under 401 KAR 37:030. (1) Any person seeking an exemption from a prohibition under 401 KAR 37:030 for the disposal of a restricted hazardous waste in a particular unit or units shall submit a petition to the cabinet demonstrating, to a reasonable degree of certainty, that there **will** [~~shall~~] be no migration of hazardous constituents from the disposal unit or injection zone for as long as the wastes remain hazardous. The demonstration shall include the following components:

(a) An identification of the specific waste and the specific unit for which the demonstration **will** [~~shall~~] be made;

(b) A waste analysis to describe fully the chemical and physical characteristics of the subject waste;

(c) A comprehensive characterization of the disposal unit site including an analysis of background air, soil, and water quality;

(d) A monitoring plan that detects migration at the earliest practicable time; and

(e) Sufficient information to assure the cabinet that the owner or operator of a land disposal unit receiving restricted waste **will** [~~shall~~] comply with other applicable federal, state, and local laws.

(2) The demonstration referred to in subsection (1) of this section shall meet the following criteria:

(a) All waste and environmental sampling, test, and analysis data shall be accurate and reproducible to the extent that state-of-the-art techniques allow;

(b) All sampling, testing, and estimation techniques for chemical and physical properties of the waste and all environmental parameters shall have been approved by the cabinet;

(c) Simulation models shall be calibrated for the specific waste and site conditions, and verified for accuracy by comparison with actual measurements;

(d) A quality assurance and quality control plan that addresses all aspects of the demonstration shall be approved by the cabinet; and

(e) An analysis shall be performed to identify and quantify any aspects of the demonstration that contribute significantly to uncertainty. This analysis shall include an evaluation of the consequences of predictable future events, including, but not limited to, earthquakes, floods, severe storm events, droughts, or other natural phenomena.

(3) Each petition referred to in subsection (1) of this section shall include the following:

(a) A monitoring plan that describes the monitoring program installed at or around the unit to verify continued compliance with the conditions of the variance. This monitoring plan shall provide information on the monitoring of the unit or the environment around the unit. The following specific information shall be included in the plan:

1. The media monitored in the case where monitoring of the environment around the unit is required;

2. The type of monitoring conducted at the unit, in the cases where monitoring of the unit is required;

3. The location of the monitoring stations;

4. The monitoring interval (frequency of monitoring at each station);

5. The specific hazardous constituents to be monitored;

6. The implementation schedule for the monitoring program;

7. The equipment used at the monitoring stations;

8. The sampling and analytical techniques employed; and

9. The data recording and reporting procedures.

(b) Where applicable, the monitoring program described in paragraph (a) of this subsection shall be in place for a period of time specified by the cabinet, as part of the approval of the petition, prior to receipt of prohibited waste at the unit.

(c) The monitoring data collected according to the monitoring plan specified under paragraph (a) of this subsection shall be sent to the cabinet according to a format and schedule specified and approved in the monitoring plan.

(d) A copy of the monitoring data collected under the monitoring plan specified under paragraph (a) of this subsection shall be kept on site at the facility in the operating record.

(e) The monitoring program specified under paragraph (a) of this subsection shall meet the following criteria:

1. All sampling, testing, and analytical data shall be approved by the cabinet and shall provide data that is accurate and reproducible.

2. All estimation and monitoring techniques shall be approved by the cabinet.

3. A quality assurance and quality control plan addressing all aspects of the monitoring program shall be provided to and approved by the cabinet.

(4) Each petition shall be submitted to the cabinet.

(5) After a petition has been approved, the owner or operator shall report any changes in conditions at the unit or the environment around the unit that significantly depart from the conditions described in the variance and affect the potential for migration of hazardous constituents from the units as follows:

(a) If the owner or operator plans to make changes to the unit design, construction, or operation, the change shall be proposed, in writing, and the owner or operator shall submit a demonstration to the cabinet at least thirty (30) days prior to making the change. The cabinet shall determine whether the proposed change invalidates the terms of the petition and shall determine the appropriate response. Any change shall be approved by the cabinet prior to being made.

(b) If the owner or operator discovers that a condition at the site which was modeled or predicted in the petition does not occur as predicted, this change shall be reported, in writing, to the cabinet within ten (10) days of discovering the change. The cabinet shall determine whether the reported change from the terms of the petition requires further action, which may include termination of waste acceptance and revocation of the petition, petition modifications, or other responses.

(6) If the owner or operator determines that there is migration of hazardous constituents from the unit, the owner or operator shall:

(a) Immediately suspend receipt of restricted waste at the unit;

(b) Notify the cabinet, in writing, within ten (10) days of the determination that the release has occurred; and

(c) Following receipt of the notification the cabinet shall determine, within sixty (60) days of receiving notification, whether the owner or operator can continue to receive prohibited waste in the unit and whether the variance is to be revoked. The cabinet shall also determine whether further examination of any migration is warranted under applicable provisions of 401 KAR Chapters 34 and 35.

(7) Each petition shall include the following statement signed by the petitioner or an authorized representative:

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this petition and all attached documents, and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the submitted information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

(8) After receiving a petition, the cabinet may request any additional information that reasonably may be required to evaluate the demonstration.

(9) If approved, the petition shall apply to land disposal of the specific restricted waste at the individual disposal unit described in the demonstration and shall not apply to any other restricted waste at that disposal unit, or to that specific restricted waste at any other disposal unit.

(10) The cabinet shall give public notice in the Kentucky Administrative Register of the intent to approve or deny a petition and provide an opportunity for public comment. The final decision on a petition shall be published in the Kentucky Administrative Register.

(11) The term of a petition granted under this section shall be no longer than the term of the hazardous waste site or facility permit if the disposal unit is operating under a hazardous waste site or facility permit, or up to a maximum of ten (10) years from the date of approval provided under subsection (7) of this section if the unit is operating under interim status. In either case, the term of the granted petition shall expire upon the termination or denial of a hazardous waste site or facility permit, or upon the termination of interim status or when the volume limit of waste to be land disposed during the term of petition is reached.

(12) Prior to the cabinet's decision, the applicant is required to comply with all restrictions on land disposal under 401 KAR Chapter 37 once the effective date for the waste has been reached.

(13) The petition granted by the cabinet does not relieve the petitioner of his responsibilities in the management of hazardous waste under the hazardous waste management administrative regulations.

(14) Liquid hazardous wastes containing polychlorinated biphenyls at concentrations greater than or equal to 500 ppm are not eligible for an exemption under this section.

~~[(15) Any decisions of the cabinet relating to petitions to seek an exemption from a prohibition under 401 KAR 37:030 for the disposal of a restricted hazardous waste in a particular unit shall not supersede the authority of the Environmental Protection Agency under 40 CFR 268.6 (1989).]~~

Section 7. Waste Analysis. (1) Except as specified in Section 3 of 401 KAR 37:030[~~, Section 4,~~] or Section 5 of 401 KAR 37:040[~~,~~

~~Section 6~~], the generator shall test his waste or an extract developed using the test method described in 401 KAR 37:100, or use knowledge of the waste to determine if the waste is restricted from land disposal under 401 KAR Chapter 37 except as specified in Section 3 of 401 KAR 37:030, if a generator's waste exhibits one (1) or more of the characteristics set out in **401 KAR 31:030** [~~40 CFR Part 261, Subpart C~~], the generator must test an extract using the test method described in **Section 10(2)(f) of this administrative regulation** [~~Appendix IX of this chapter~~], or use knowledge of the waste, to determine if the waste is restricted from land disposal under this chapter.

(a) If a generator determines that he is managing a restricted waste under 401 KAR Chapter 37 and the waste does not meet the applicable treatment standards set forth in 401 KAR 37:040 or exceeds the applicable prohibition levels set forth in Section 3 of 401 KAR 37:030[~~, Section 4~~] or KRS 224.46-520, with each shipment of waste the generator shall notify the treatment or storage facility in writing of the appropriate treatment standards set forth in 401 KAR 37:040 and any applicable prohibition levels set forth in Section 3 of 401 KAR 37:030[~~, Section 4~~] or KRS 224.46-520. The notice shall include the following information:

1. EPA hazardous waste number;

2. The corresponding treatment standards for wastes F001-F005, F039, and wastes prohibited pursuant to Section 3 of 401 KAR 37:030 or Section 3004(d) of RCRA. Treatment standards for all other restricted wastes shall either be included, or be referenced by including on the notification the applicable wastewater, as defined in Section 2(6) of this administrative regulation or nonwastewater, as defined in Section 2(4) of this administrative regulation, category, the applicable subdivisions made within a waste code based on waste-specific criteria (such as D003 reactive cyanides), and the applicable treatment standards of this chapter. Where the applicable treatment standards are expressed as specified technologies in Section 3 of 401 KAR 37:040, the applicable five (5) letter treatment code found in Table 1 of Section 3 of 401 KAR 37:040 also shall be listed on the notification;

[~~2. The corresponding treatment standards and all applicable prohibitions set forth in 401 KAR 37:030, Section 4, or KRS 224.46-520;~~]

3. The manifest number associated with the shipment of waste; and

4. Waste analysis data, where available.

(b) If a generator determines that he is managing a restricted waste under 401 KAR Chapter 37, and determines that the waste can be land disposed without further treatment, with each shipment of waste he shall submit, to the treatment, storage, or land disposal facility, a notice and a certification stating that the waste meets applicable treatment standards set forth in 401 KAR 37:040 and the applicable prohibition levels set forth in Section 3 of 401 KAR 37:030[~~, Section 4,~~] or KRS 224.46-520.

1. The notice shall include the following information:

a. EPA hazardous waste number;

b. The corresponding treatment standards for wastes F001-F005, F039, and wastes prohibited pursuant to Section 3 of 401 KAR 37:030 or Section 3004(d) of RCRA. Treatment standards for all other restricted wastes shall either be included, or be referenced by including on the notification the applicable wastewater (as defined in Section 2(6) of this administrative regulation) or nonwastewater (as defined in Section 2(4) of this administrative regulation) category, the applicable subdivisions made within a waste code based on waste-specific criteria (such as D003 reactive cyanides), and the administrative regulation or administrative regulations in which the applicable treatment standard appear. Where the applicable treatment standards are expressed as specified technologies in Section 3 of 401 KAR 37:040, the applicable five (5) letter treatment code found in Table 1 of Section 3 of 401 KAR 37:040 also shall be listed on the notification;

[~~b. The corresponding treatment standard and all applicable prohibition levels set forth in 401 KAR 37:030, Section 4, or KRS 224.46-520;~~]

c. The manifest number associated with the shipment of waste; and

d. Waste analysis data, where available.

2. The certification shall be signed by an authorized representative and shall state the following:

I certify under penalty of law that I have personally examined and am familiar with the waste through analysis and testing or through knowledge of the waste to support this certification that the waste complies with treatment standards specified in 401 KAR 37:040 and all applicable prohibitions set forth in 401 KAR 37:030, Section 4, or KRS 224.46-520. I believe that the information I submitted is true, accurate, and complete. I am aware that there are significant penalties for submitting a false certification, including the possibility of a fine and imprisonment.

(c) If a generator's waste is subject to an exemption from a prohibition on the type of land disposal method utilized for the waste (such as, but not limited to, a case-by-case extension under Section 5 of this administrative regulation, an exemption under Section 6 of this administrative regulation, or nationwide capacity variance under 401 KAR 37:030), with each shipment of waste he shall submit a notice to the facility receiving his waste stating that the waste is not prohibited from land disposal. The notice shall include the following information:

[~~(c) If a generator's waste is subject to a case-by-case extension under Section 5 of this regulation, an exemption under Section 6 of this regulation, or a nationwide variance under 401 KAR 37:030, he shall with each shipment of waste submit a notice to the facility receiving his waste, stating that the waste is not prohibited from land disposal. The notice shall include the following information:~~]

1. EPA hazardous waste number;

2. The corresponding treatment standards for wastes F001-F005, F039, and wastes prohibited pursuant to Section 3 of 401 KAR 37:030 or Section 3004(d) of RCRA. Treatment standards for all other restricted wastes shall either be included, or be referenced by including on the notification the applicable wastewater (as defined in Section 3(6) of this administrative regulation) or nonwastewater (as defined in Section 2(4) of this administrative regulation) category, the applicable subdivisions made within a waste code based on waste-specific criteria (such as D003 reactive cyanides), and the applicable treatment standards of this chapter. Where the applicable treatment standards are expressed as specified technologies in Section 3 of 401 KAR 37:040, the applicable five (5) letter treatment code found in Table 1 of Section 3 of 401 KAR 37:040 also shall be listed on the notification;

[~~2. The corresponding treatment standards and all applicable prohibitions set forth in 401 KAR 37:040, Section 4, or KRS 224.46-520;~~]

3. The manifest number associated with the shipment of waste;

4. Waste analysis data, where available; and

5. The date the waste is subject to the prohibitions.

(d) If a generator is managing a prohibited waste in tanks or containers regulated under Section 5 of 401 KAR 32:030, and is treating such waste in the tanks or containers to meet applicable treatment standards under 401 KAR 37:040, the generator shall develop and follow a written waste analysis plan that describes the procedures the generator shall carry out to comply with the treatment standards. The plan shall be kept on site in the generator's records, and the following requirements shall be met:

1. The waste analysis plan shall be based on a detailed chemical and physical analysis of a representative sample of the prohibited waste(s) being treated, and contain all information necessary to treat the waste(s) in accordance with the requirements of this part, including the selected testing frequency.

2. The plan shall be filed with the cabinet to implement 401 KAR

Chapter 37 requirements a minimum of thirty (30) days prior to the treatment activity, with delivery verified.

3. Wastes shipped off site pursuant to this paragraph shall comply with the notification requirements of paragraph (b) of this subsection.

~~[(d) If a generator determines that he is managing a waste that is subject to the prohibitions under 401 KAR 37:030, Section 5(6), and is not subject to the prohibitions set forth in 401 KAR 37:030, Section 4, the generator shall with each shipment of waste notify the treatment, storage, or disposal facility, in writing, of any applicable prohibitions set forth in 401 KAR 37:030, Section 5(6). The notice shall include the following information:~~

~~1. EPA Hazardous Waste Number;~~

~~2. The applicable prohibitions set forth in 401 KAR 37:030, Section 5(6);~~

~~3. The manifest number associated with the shipment of waste; and~~

~~4. Waste analysis data, where available.]~~

(e) If the generator determines whether the waste is restricted based solely on his knowledge of the waste, all supporting data used to make this determination shall be retained on-site in the generator's files. If a generator determines whether the waste is restricted based on testing this waste or an extract developed using the test method described in Section 1 of 401 KAR 37:100[~~, Section 1,~~] all waste analysis data shall be retained on site in the generator's files.

(f) If a generator determines that he is managing a restricted waste that is excluded from the definition of hazardous or solid waste or exempt from 401 KAR 37:030, under Sections 2 to 6 of 401 KAR 31:010 subsequent to the point of generation, he shall place a one (1) time notice stating such generation, subsequent exclusion from the definition of hazardous or solid waste or exemption from 401 KAR 37:030, and the disposition of the waste, in the facility's file.

(g) [~~(f)~~] Generators shall retain on site a copy of all notices, certifications, demonstrations, waste analysis data, and other documentation produced pursuant to this section for at least five (5) years from the date that the waste that is the subject of the documentation was last sent to on-site or off-site treatment, storage, or disposal. The five (5) year record retention period is automatically extended during the course of any unresolved enforcement action regarding the regulated activity or as requested by the cabinet. The requirements of this paragraph apply to solid wastes even when the hazardous characteristic is removed prior to disposal, or when the waste is excluded from the definition of hazardous or solid waste under Sections 2 to 6 of 401 KAR 31:010, or exempted from 401 KAR 37:030, subsequent to the point of generation.

(h) If a generator is managing a lab pack that contains wastes identified in Section 10(2)(a) of this administrative regulation, and wishes to use the alternative treatment standard under Section 4 of 401 KAR 37:010, with each shipment of waste the generator shall submit a notice to the treatment facility in accordance with paragraph (a) of this subsection. The generator shall also comply with the requirements in paragraphs (e) and (f) of this subsection, and shall submit the following certification, which shall be signed by an authorized representative:

I certify under penalty of law that I personally have examined and am familiar with the waste and that the lab pack contains only the wastes specified in Section 10(2)(a) of 401 KAR 37:010 or solid wastes not subject to administrative regulation under 401 KAR Chapter 31. I am aware that there are significant penalties for submitting a false certification, including the possibility of fine or imprisonment.

(i) If a generator is managing a lab pack that contains organic wastes specified in Section 10(2)(b) of this administrative regulation and wishes to use the alternate treatment standards under Section 3 of 401 KAR 37:040, with each shipment of waste the generator shall submit a notice to the treatment facility in accordance with paragraph (a) of this subsection. The generator also shall comply with the requirements in paragraphs (e) and (f) of this subsection, and shall submit the following certification which shall be signed by an authorized representative:

I certify under penalty of law that I personally have examined and am familiar with the waste through analysis and testing or through knowledge of the waste and that the lab pack contains only organic waste specified in Section 10(2)(b) of this administrative regulation or solid wastes not subject to regulation under 401 KAR Chapter 31. I am aware that there are significant penalties for submitting a false certification, including the possibility of fine or imprisonment.

(j) Small quantity generators with tolling agreements pursuant to Section 1(5) of 401 KAR 32:020 shall comply with the applicable notification and certification requirements of this subsection for the initial shipment of the waste subject to the agreement. Such generators shall retain on site a copy of the notification and certification, together with the tolling agreement, for at least three (3) years after termination or expiration of the agreement. The three (3) year record retention period is automatically extended during the course of any unresolved enforcement action regarding the regulated activity or as requested by the cabinet.

(2) Treatment facilities shall test their wastes according to the frequency specified in their waste analysis plans as required by Section 4 of 401 KAR 30:020[~~, Section 4,~~] or Section 4 of 401 KAR 35:020[~~, Section 4~~]. The testing shall be performed as provided in paragraphs (a), (b), and (c) of this subsection.

(a) For wastes with treatment standards expressed as concentrations in the waste extract (Section 3 of 401 KAR 37:040), the owner or operator of the treatment facility shall test the treatment residues or an extract of such residues developed using the test method described in 401 KAR 37:100 to assure that the treatment residues or extract meet the applicable treatment standards.

(b) For wastes prohibited under Section 3 of 401 KAR 37:030[~~, Section 4,~~] or KRS 224.46-520 which are not subject to any treatment standards under 401 KAR 37:040, the owner or operator of the treatment facility shall test the treatment residues according to the generator testing requirements specified in Section 3 of 401 KAR 37:030[~~, Section 4,~~] to assure that the treatment residues comply with the applicable prohibitions.

(c) For wastes with treatment standards expressed as concentrations in the waste (Section 5 of 401 KAR 37:040[~~, Section 6~~]) the owner or operator of the treatment facility shall test the treatment residues (not an extract of the residues) to assure that the treatment residues meet the applicable treatment standards.

(d) A notice shall be sent with each waste shipment to the land disposal facility which includes the following information:

1. EPA hazardous waste number;

2. The corresponding treatment standards for wastes F001 to F005, F039, and all applicable prohibitions set forth in Section 3 of 401 KAR 37:030[~~, Section 4,~~] or KRS 224.46-520. Treatment standards for all other restricted wastes shall either be included, or referenced by including on the notification the applicable wastewater (as defined in Section 1(6) of this administrative regulation) or nonwastewater (as defined in Section 1(4) of this administrative regulation) category, the applicable subdivisions made within a waste code based on waste-specific criteria (such as D003 reactive cyanides), and the applicable treatment standards of this chapter. Where the applicable treatment standards are expressed as specified technologies in Section 3 of 401 KAR 37:040, the applicable five (5) letter treatment code found in Table 1 of Section 3 of 401 KAR 37:040 also shall be included on the notification;

3. The manifest number associated with the shipment of waste; and

4. Waste analysis data, where available.

(e) The treatment facility shall submit a certification with each shipment of waste or treatment residue of a restricted waste to the land disposal facility stating that the waste or treatment residue has been treated in compliance with the applicable performance standards specified in 401 KAR 37:040 and applicable prohibitions set forth in

Section 3 of 401 KAR 37:030[~~, Section 4,~~] or KRS 224.46-520.

1. For wastes with treatment standards expressed as concentrations in the waste extract or in the waste (Section 2 [~~3~~] of 401 KAR 37:040), or for wastes prohibited under Section 3 of 401 KAR 37:030[~~, Section 4,~~] or KRS 224.46-520 which are not subject to any treatment standards under 401 KAR 37:040, the certification shall be signed by an authorized representative and shall state the following:

I certify under penalty of law that I have personally examined and am familiar with the treatment technology and operation of the treatment process used to support this certification and that, based on my inquiry of those individuals immediately responsible for obtaining this information, I believe that the treatment process has been operated and maintained properly so as to comply with the performance levels specified in 401 KAR 37:040 and all applicable prohibitions set forth in 401 KAR 37:030, Section 3 [4], and KRS 224.46-520 without dilution of the prohibited waste. I am aware that there are significant penalties for submitting a false certification, including the possibility of fine and imprisonment.

2. For wastes with treatment standards expressed as technologies (Section 3 [4] of 401 KAR 37:040), the certification shall be signed by an authorized representative and shall state the following:

I certify under penalty of law that the waste has been treated in accordance with the requirements of Section 3 [4] of 401 KAR 37:040. I am aware that there are significant penalties for submitting a false certification, including the possibility of fine and imprisonment.

3. For wastes with treatment standards expressed as concentrations in the waste pursuant to Section 5 of 401 KAR 37:040, if compliance with the treatment standards in this administrative regulation is based in part or whole on the analytical detection limit alternative specified in Section 5(3) of 401 KAR 37:040, the certification also shall state the following:

I certify under penalty of law that I have personally examined and am familiar with the treatment technology and operation of the treatment process used to support this certification and that, based on my inquiry of those individuals immediately responsible for obtaining this information, I believe that the nonwastewater organic constituents have been treated by incineration in units operated in accordance with 401 KAR 34:240 or 401 KAR 35:240, or by combustion in fuel substitution units operating in accordance with applicable technical requirements, and I have been unable to detect the nonwastewater organic constituents despite having used best good faith efforts to analyze for such constituents. I am aware that there are significant penalties for submitting a false certification, including the possibility of fine and imprisonment.

(f) If the waste or treatment residue **will** [~~shall~~] be further managed at a different treatment or storage facility, the treatment, storage, or disposal facility sending the waste or treatment residue off site shall comply with the notice and certification requirements applicable to generators under this section.

[~~(g) For wastes that are subject to the prohibitions under 401 KAR 37:030, Section 5(6), and are not subject to the prohibitions set forth in 401 KAR 37:040, Section 4, with each shipment of the waste the owner or operator shall notify any subsequent treatment, storage, or disposal facility, in writing, of any applicable prohibitions set forth in 401 KAR 37:030, Section 5(6). The notice shall include the following information:~~

~~1. EPA hazardous waste number;~~

~~2. The applicable prohibitions set forth in 401 KAR 37:030, Section 5(6);~~

~~3. The manifest number associated with the shipment of waste; and~~

~~4. Waste analysis data, where available.~~]

(g) [~~(h)~~] Where the wastes are recyclable materials used in a manner constituting disposal subject to the provisions of Section 1 of 401 KAR 36:030 regarding treatment standards and prohibition levels, [~~Section 1,~~] the owner or operator of a treatment facility (the recycler) is not required to notify the receiving facility, pursuant to paragraph (d) of this section. With each shipment of the wastes, the owner or operator of the recycling facility shall submit a certification described in paragraph (e) of this section, and a notice which includes the information listed in paragraph (d) of this section (except the manifest number) to the cabinet. The recycling facility also shall keep records of the name and location of each entity receiving the hazardous waste-derived product.

(3) Except where the owner or operator is disposing of any waste that is a recyclable material used in a manner constituting disposal pursuant to 401 KAR 36:030, the owner or operator of any land disposal facility disposing of any waste subject to restrictions under 401 KAR Chapter 37 shall:

(a) Have copies of the notice and certifications specified in subsection (1) or (2) of this section, and the certification specified in Section 8 of 401 KAR 37:010[~~, Section 8,~~] if applicable.

(b) Test the waste, or an extract of the waste or treatment residue developed using the test method described in Section 1 of 401 KAR 37:100[~~, Section 1,~~] or using any methods required by generators under Section 3 of 401 KAR 37:030[~~, Section 4~~], to assure that the wastes or treatment residues are in compliance with the applicable treatment standards set forth in Section 3 of 401 KAR 38:040 and all applicable prohibitions set forth in Section 3 of 401 KAR 37:030[~~, Section 4,~~] or in KRS 224.46-520. The testing shall be performed according to the frequency specified in the facility's waste analysis plan as required by Section 4 of 401 KAR 34:020[~~, Section 4,~~] or Section 4 of 401 KAR 37:020[~~, Section 4~~].

[~~(c) Where the owner or operator is disposing of any waste that is subject to the prohibitions under 401 KAR 37:030, Section 5(6), but not subject to the prohibitions set forth in 401 KAR 37:040, Section 4, he shall ensure that the waste is the subject of a certification according to the requirements of Section 8 of this regulation prior to disposal in a landfill or surface impoundment unit, and that the disposal is in accordance with the requirements of Section 5(8)(b) of this regulation. The same requirement applies to any waste that is subject to the prohibitions under 401 KAR 37:030, Section 5(6), and also is subject to the statutory prohibitions in KRS 224.46-520 or the codified prohibitions in 401 KAR 37:040, Section 4.~~]

Section 8. Landfill and Surface Impoundment Disposal Restrictions. (1) Prior to May 8, 1990, wastes which are otherwise prohibited from land disposal under Section 5(6) of 401 KAR 37:030[~~, Section 5(6)~~] may be disposed in a landfill or surface impoundment which is in compliance with the requirements of Section 5(8)(b) of this administrative regulation provided that the requirements of this section are met. As of May 8, 1990, this subsection, including paragraph (a), is no longer in effect.

(a) Prior to the disposal, the generator has made a good faith effort to locate and contract with treatment and recovery facilities practically available which provide the greatest environmental benefit.

[~~(b) The generator submits to the cabinet a demonstration and certification that the requirements of paragraph (a) of this subsection have been met. The demonstration shall include a list of facilities and facility officials contacted, addresses, telephone numbers, and contact dates.~~]

(b) [~~1.~~] If a generator determines that there is no practically available treatment for his waste, he shall fulfill the following requirements [~~indicate so in his demonstration, and provide a written discussion of why he was not able to obtain treatment or recovery for that waste. The generator shall also provide the following certification~~]:

1. Prior to the initial shipment of waste, the generator shall submit a demonstration to the cabinet that includes: a list of facilities and facility officials contacted, addresses, telephone numbers, and contact dates, as well as written discussion of why he was not able to obtain treatment or recovery for that waste. The generator shall also provide to the cabinet the following certification:

I certify under penalty of law that the requirements of Section 8(1)(a) of 401 KAR 37:010 have been met and that disposal in a

landfill or surface impoundment is the only practical alternative to treatment currently available. I believe that the information submitted is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

The generator does not need to wait for the cabinet's approval of the demonstration or certification before shipment of the waste. However, if the cabinet invalidates the demonstration or certification for the reasons outlined in Section 8(2)(b) of this administrative regulation the generator shall immediately cease further shipments of the waste, and immediately inform all facilities that received the waste of such invalidation, and keep records of such communication on-site in his files.

2. With the initial shipment of waste, the generator shall submit a copy of the demonstration and the certification discussed above in subparagraph 1 of this paragraph to the receiving facility. With each subsequent waste shipment, only the certification is required to be submitted provided that the conditions being certified remain unchanged. Such a generator shall retain on site a copy of the demonstration (if applicable) and certification required for each waste shipment for at least five years from the date that the waste that is subject of such documentation was last sent to on-site or off-site disposal. The five (5) year record retention requirement is automatically extended during the course of any unresolved enforcement action regarding the regulated activity or as requested by the cabinet.

(c) If a generator determines that there are practically available treatments for his waste, he shall contract to use the practically available technology that yields the greatest environmental benefit. He shall also fulfill the following specific requirements:

1. The generator shall submit to the cabinet, prior to the initial shipment of waste, a demonstration that includes: a list of facilities and facility officials contacted, addresses, telephone numbers, and contact dates, as well as a written discussion explaining why the treatment or recovery technology chosen provides the greatest environmental benefit. The generator shall also provide to the cabinet the following certification:

I certify under penalty of law that the requirements of Section 8(1)(a) of 401 KAR 37:010 have been met and that I have contracted to treat my waste (or otherwise provide treatment) by the practically available technology which yields the greatest environmental benefit, as indicated in my demonstration. I believe that the information submitted is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

The generator does not need to wait for cabinet approval of the demonstration or certification before shipment of the waste.

2. With the initial shipment of waste, the generator shall submit to the receiving facility a copy of the demonstration and the certification discussed above in subparagraph 1 of this paragraph. With each subsequent waste shipment, only the certification is required to be submitted provided that the conditions being certified remain unchanged. Such a generator shall retain on site a copy of the demonstration (if applicable) and certification required for each waste shipment for at least five (5) years from the date that the waste that is the subject of such documentation was last sent to on-site or off-site disposal. The five (5) year record retention requirement is automatically extended during the course of any unresolved enforcement action regarding the regulated activity or as requested by the cabinet.

~~[I certify under penalty of law that the requirements of 401 KAR 37:010, Section 8(1)(a), have been met and that disposal in a landfill or surface impoundment is the only practical alternative to treatment currently available. I believe that the information submitted is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.~~

~~2. If a generator determines that there are practically available treatments for his waste, he shall contract to use the practically available technology that yields the greatest environmental benefit, as indicated in his demonstration. He shall provide the following certification:~~

~~I certify under penalty of law that the requirements of 401 KAR 37:010, Section 8(1)(a), have been met and that I have contracted to treat my waste (or shall otherwise provide treatment) by the practically available technology which yields the greatest environmental benefit, as indicated in my demonstration. I believe that the information submitted is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.~~

~~(c) Where the generator has determined that there is no practically available treatment for his waste prior to disposal, with the initial shipment of waste, the generator shall submit a copy of the demonstration and the certification required in paragraph (b)1 of this subsection to the receiving facility. With each subsequent waste shipment, only the certification is required to be submitted provided that the conditions being certified remain unchanged. The generator shall retain on site a copy of the demonstration (if applicable) and certification required for each waste shipment for at least five (5) years from the date that the waste that is subject to the documentation was last sent to on site or off site disposal. The five (5) year record retention requirement is automatically extended during the course of any unresolved enforcement action regarding the regulated activity or as requested by the cabinet.]~~

(d) Where the generator has determined that there is practically available treatment for his waste prior to disposal, with the initial shipment of waste, the generator shall submit a copy of the demonstration and certification required in paragraph (b)2 of this section to the receiving facility. With each subsequent waste shipment, only the certification is required to be submitted provided that the conditions being certified remain unchanged. The generator shall retain on site a copy of the demonstration (if applicable) and certification required for each waste shipment for at least five (5) years from the date that the waste that is the subject of the documentation was last sent to on-site or off-site disposal. The five (5) year record retention requirement is automatically extended during the course of any unresolved enforcement action regarding the regulated activity or as requested by the cabinet.

(2) After receiving the demonstration and certification, the cabinet may request any additional information deemed necessary to evaluate the certification, and submit a new demonstration and certification as provided in this section to the receiving facility.

(a) A generator who has submitted a certification under this section shall immediately notify the cabinet when he has knowledge of any change in the conditions which formed the basis of his certification.

(b) If, after review of the certification, the cabinet determines that practically available treatment exists where the generator has certified otherwise, or that there exists some other method of practically available treatment yielding greater environmental benefit than that which the generator has certified, the cabinet may invalidate the certification.

(c) If the cabinet invalidates a certification, the generator shall immediately cease further shipments of the waste, and inform all facilities that received the waste of the invalidation and keep records of the communication on site in his files.

(3) A treatment, recovery, or storage facility receiving wastes subject to a valid certification shall keep copies of the generator's demonstration (if applicable) and certification in his operating record.

(a) The owner or operator of a treatment or recovery facility shall certify that he has treated the waste in accordance with the generator's demonstration. The following certification is required:

I certify under penalty of law that I have personally examined and am familiar with the treatment technology and operation of the treatment process used to support this certification and that, based on

my inquiry of those individuals immediately responsible for obtaining this information, I believe that the treatment process has been operated and maintained properly so as to comply with the treatment as specified in the generator's demonstration. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

(b) The owner or operator of a treatment, recovery, or storage facility shall, for each initial shipment of waste, send a copy of the generator's demonstration (if applicable) and certification under subsection (1)(b)1 or (c)1 of this section and certification under paragraph [~~(3)~~](a) of this subsection (if applicable) to the facility receiving the waste or treatment residues. With each subsequent waste shipment, only the certification shall be required to be submitted provided that the conditions being certified remain unchanged.

(4) The owner or operator of a disposal facility shall ensure that those wastes prohibited under Section 4(6) of 401 KAR 37:030[~~, Section 5(6),~~] are subject to a certification according to the requirements of this section prior to disposal in a landfill or surface impoundment, and that the units receiving the wastes **will** [~~shall~~] meet the minimum technological requirements of Section 5(8)(b) of this administrative regulation.

(5) Once the certification is received by the cabinet, and provided that the wastes have been treated by the treatment (if any), determined by the generator to yield the greatest environmental benefit practically available, the wastes or treatment residuals may be disposed in a landfill or surface impoundment unit meeting the requirements of Section 5(8)(b) of this administrative regulation, unless otherwise prohibited by the cabinet.

Section 9. Special Rules Regarding Wastes that Exhibit a Characteristic. (1) The initial generator of a solid waste shall determine each EPA hazardous waste number (waste code) applicable to the waste in order to determine the applicable treatment standards under 401 KAR 37:040. For purposes of this chapter, the waste shall carry the waste code for any applicable listing under 401 KAR 31:040. In addition, the waste shall carry one (1) or more of the waste codes under 401 KAR 31:030, where the waste exhibits a characteristic, except in the case when the treatment standard for the waste code listed in 401 KAR 31:040 operates in lieu of the standard for the waste code under 401 KAR 31:010 as specified in subsection (2) of this section.

(2) Where a prohibited waste is both listed under 401 KAR 31:040 and exhibits a characteristic under 401 KAR 31:010, the treatment standard for the waste code listed in 401 KAR 31:040 shall operate in lieu of the standard for the waste code under 401 KAR 31:010, provided that the treatment standard for the listed waste includes a treatment standard for the constituent that causes the waste to exhibit the characteristic. Otherwise the waste shall meet the treatment standards for all applicable listed and characteristic waste codes.

(3) In addition to any applicable standards determined from the initial point of generation, no prohibited waste which exhibits a characteristic under 401 KAR 31:010 may be land disposed unless the waste complies with the treatment standards under 401 KAR 37:040.

(4) Wastes that exhibit a characteristic are also subject to Section 7 requirements of this administrative regulation, except that once the waste is no longer hazardous, for each shipment of such wastes to a 401 KAR 37:040 facility the initial generator or the treatment facility need not send a notification to such facility in accordance with Section 7 of this administrative regulation. In such circumstances, a notification and certification shall be sent to the cabinet to implement the requirements of this chapter.

(a) The notification shall include the following information:

1. The name and address of the 401 KAR 37:040 facility receiving the waste shipment;

2. A description of the waste as initially generated, including the applicable EPA hazardous waste number(s), the applicable wastewater (as defined in Section 2(6) of this administrative regulation) or nonwastewater (as defined in Section 2(4) of this administrative regulation) category, and the subdivisions made within a waste code based on waste-specific criteria (such as D003 reactive cyanides).

3. The treatment standards applicable to the waste at the initial point of generation.

(b) The certification shall be signed by an authorized representative and shall state the language found in Section 7(2)(e)1 of this administrative regulation.

Section 10. [~~9.~~] Identification of Wastes to be Evaluated by EPA. (1) 40 CFR 268.10 to [~~through~~] 268.12 (1991), which identify wastes that are to be evaluated to determine land disposal prohibitions and treatment standards and are [~~hereby~~] incorporated into this administrative regulation by reference.

(2) The following appendices to 40 CFR Part 268 (July 1, 1992) are incorporated into this administrative regulation by reference:

(a) Appendix IV;
(b) Appendix V;
(c) Appendix VI;
(d) Appendix VII;
(e) Appendix VIII; and
(f) Appendix IX.

(3) [~~(2)~~] The appendices specified [~~federal regulations incorporated by reference~~] in subsections (1) and (2) of this section are available from [~~for copying and inspection at~~] the Division of Waste Management, 14 Reilly Road, Frankfort, Kentucky 40601, (502) 564-6716 between [~~. The business hours of the division are from~~] 8 a.m. and [~~to~~] 4:30 p.m., local time, Monday through Friday.

PHILLIP J. SHEPHERD, Secretary
E. DOUGLAS STEPHAN, Commissioner
APPROVED BY AGENCY: December 13, 1993
FILED WITH LRC: December 14, 1993 at 10 a.m.

NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION CABINET
Department for Environmental Protection
Division of Waste Management
(Amended After Hearing)

401 KAR 38:020. Interim status provisions.

RELATES TO: KRS 224.01, 224.10, 224.40, 224.43, 224.46, 224.99

STATUTORY AUTHORITY: KRS 224.10-100, 224.46-520

NECESSITY AND FUNCTION: To implement provisions of KRS 224.46-520 and to establish [~~KRS 224.40-305 and 224.46-520 require any person who treats, stores, recycles or disposes of hazardous waste to first obtain a hazardous waste site or facility permit from the cabinet. This chapter establishes the permitting process for hazardous waste sites or facilities. This regulation establishes~~] permitting standards for interim status facilities.

Section 1. Qualifying for Interim Status. (1) Any person who owns or operates an "existing hazardous waste management facility" or a hazardous waste site or facility in existence on the effective date of statutory or regulatory amendments under [~~the Resource Conservation and Recovery Act (~~]RCRA[)] that render the facility subject to the requirements to have a RCRA permit shall have interim status and shall be treated as having been issued a permit to the extent he [~~or she~~] has:

(a) Complied with the requirements of KRS 224.46-520 pertaining to notification of an existing hazardous waste activity; and

(b) Complied with the requirements of 401 KAR 38:070 governing submission of Part A applications.

(2) When the cabinet determines on examination or reexamination of a Part A application (or its equivalent, Registration of Intent to Apply for a Permit) that it fails to meet the standards of these administrative regulations, it may notify the owner or operator that the application is deficient and that the owner or operator is therefore not entitled to interim status. The owner or operator shall then be subject to enforcement procedures for operating without a permit.

(3) Subsection (1) of this section shall not apply to any facility which has been previously denied a permit or if authority to operate the facility under 401 KAR Chapters 30 to [~~through~~] 39 and KRS Chapter 224 has been previously terminated.

Section 2. Operation During Interim Status. (1) During the interim status period the facility, except as provided in Section 3 of this [~~the~~] administrative regulation, shall not:

(a) Treat, store or dispose of hazardous waste not specified in Part A of the permit application (or its equivalent, Registration of Intent to Apply for a Permit);

(b) Employ processes not specified in Part A of the permit application (or its equivalent, Registration of Intent to Apply for a Permit); or

(c) Exceed the design capacities specified in Part A of the permit application (or its equivalent, Registration of Intent to Apply for a Permit).

(2) During interim status, owners or operators shall comply with the interim status standards in 401 KAR Chapter 35.

Section 3. Changes During Interim Status. (1) Except as provided in subsection (2) of this section, the owner or operator of an interim status facility may make the following changes at the facility:

(a) Treatment, storage, or disposal of new hazardous wastes not previously identified in Part A of the permit application (and, in the case of newly listed or identified wastes, addition of the units being used to treat, store, or dispose of the hazardous wastes on the effective date of the listing or identification) if the owner or operator submits a revised Part A permit application prior to the treatment, storage, or disposal;

(b) Increases in the design capacity of processes used at the facility if the owner or operator submits a revised Part A permit application prior to a change (along with a justification explaining the need for the change) and the cabinet approves the changes because:

1. There is a lack of available treatment, storage, or disposal capacity at other hazardous waste management facilities; or

2. The change is necessary to comply with a federal, state, or local requirement.

(c) Changes in the processes for the treatment, storage, or disposal of hazardous waste or addition of processes if the owner or operator submits a revised Part A permit application prior to such change (along with a justification explaining the need for the change) and the cabinet approves the change because:

1. The change is necessary to prevent a threat to human health and the environment because of an emergency situation; or

2. The change is necessary to comply with a federal, state, or local requirement.

(d) Changes in the ownership or operational control of a facility if the new owner or operator submits a revised Part A permit application no later than ninety (90) days prior to the scheduled change. When a transfer of operational control of a facility occurs, the old owner or operator shall comply with the requirements of 401 KAR 35:080 to [~~through~~] 35:130 [~~(Financial Requirements)~~] until the new owner or operator has demonstrated to the cabinet that he is complying with the requirements of that chapter. The new owner or operator shall demonstrate compliance with 401 KAR 35:080 to [~~through~~] 35:130 requirements within six (6) months of the date of the change in ownership or operational control of the facility. Upon demonstration to the cabinet by the new owner or operator of compliance with 401 KAR 35:080 to [~~through~~] 35:130, the cabinet shall notify the old owner or operator in writing that he no longer needs to comply with 401 KAR 35:080 through 35:130 as of the date of demonstration. All other interim status duties are transferred effective immediately upon the date of the change in ownership or operational control of the facility.

(e) Changes made in accordance with an interim status corrective action order issued by EPA under section 3008(h) of RCRA or other federal authority, by the cabinet, or by a court in a judicial action brought by EPA or by the cabinet. Changes under this subsection are limited to the treatment, storage, or disposal of solid waste from releases that originate within the boundary of the facility.

(f) Addition of newly regulated units for the treatment, storage, or disposal of hazardous waste if the owner or operator submits a revised Part A permit application on or before the date on which the unit becomes subject to the **new** [~~newly~~] requirements.

(2) Except as specifically allowed under this subsection, changes listed under subsection (1) of this section may not be made if they amount to reconstruction of the hazardous waste management facility. Reconstruction occurs when the capital investment in the changes to the facility exceeds fifty (50) percent of the capital cost of a comparable entirely new hazardous waste management facility. If all other requirements are met, the following changes may be made even if they amount to a reconstruction:

(a) Changes made solely for the purposes of complying with the requirements of Section 4 of 401 KAR 35:190[~~, Section 4,~~] for tanks and ancillary equipment.

(b) If necessary to comply with federal, state, or local requirements, changes to an existing unit, changes solely involving tanks or containers, or addition of the replacement [~~of~~] surface impoundments that satisfy the standards of Section 3004(o) of RCRA.

(c) Changes that are necessary to allow owners or operators to continue handling newly listed or identified hazardous wastes that have been treated, stored, or disposed of at the facility prior to the effective date of this [~~the~~] administrative regulation establishing the new listing or identification.

(d) Changes during closure of a facility or of a unit within a facility made in accordance with an approved closure plan.

(e) Changes necessary to comply with an interim status corrective action order issued by EPA under section 3008(h) of RCRA or other federal authority, by the cabinet, or by a court in a judicial proceeding brought by EPA or the cabinet, provided that the changes are limited to the treatment, storage, or disposal of solid waste from releases that originate within the boundary of the facility.

(f) Changes to treat or store, in tanks or containers, hazardous wastes subject to land disposal restrictions imposed by 401 KAR Chapter 37 or KRS Chapter 224, provided that the changes are made solely for the purpose of complying with 401 KAR Chapter 37 or KRS Chapter 224.

(g) Addition of newly regulated units under subsection (1)(f) of this section.

Section 4. Termination of Interim Status. Interim status terminates when:

(1) Final administrative disposition of a permit application is made; or

(2) Interim status is terminated as provided in Section 4 of 401 KAR 38:040.

(3) For owners or operators of each land disposal facility which has been granted interim status prior to November 8, 1984, on November 8, 1985, unless:

(a) The owner or operator submits a Part B application for a permit for the facility prior to that date; and

(b) The owner or operator certifies that the facility is in compliance with all applicable ground water monitoring and financial responsibility requirements.

(4) For owners or operators of each land disposal facility which is in existence on November 8, 1984 or the date applicable amend-

ments are made to 401 KAR Chapters 30 to [through] 39 which render the facility subject to the requirements in 401 KAR Chapters 30 to [through] 39 and which is granted interim status, twelve (12) months after the date on which the facility first becomes subject to the permit requirement unless the owner or operator of the facility:

(a) Submits a Part B application for a permit for the facility before the date twelve (12) months after the date on which the facility first becomes subject to the permit requirements; and

(b) Certifies that the facility is in compliance with all applicable ground water monitoring and financial responsibility requirements.

(5) For owners or operators of any land disposal unit that is granted authority to operate under Section 3(1)(a), (b), and (c) of this administrative regulation, on the date twelve (12) months after the effective date of the requirement, unless the owner or operator certifies that the unit is in compliance with all applicable groundwater monitoring and financial responsibility requirements.

(6) For owners or operators of each incinerator facility which has achieved interim status prior to [on] November 8, 1989, interim status terminates on November 8, 1989, unless the owner or operator of the facility submits a Part B application for a permit for an incinerator facility by November 8, 1986.

(7) For owners or operators of any facility (other than a land disposal or an incinerator facility) which has achieved interim status prior to [on] November 8, 1984 [1992], interim status terminates on November 8, 1992, unless the owner or operator of the facility submits a Part B application for a permit for the facility by November 8, 1988.

Section 5. Deadlines for Submission of Part B of the Application. All hazardous waste sites or facilities which have submitted Part A of the application or its equivalent shall be required to submit Part B of the application within six (6) months of the cabinet's decision to require the submittal, according to Section 2(4) of 401 KAR 38:070. The cabinet may base its decision to require Part B of the application upon receiving Phase II or final authorization from the [US] EPA. However, in accordance with KRS 224.46-520(1), the cabinet may require submission of Part B of the application at any time.

PHILLIP J. SHEPHERD, Secretary
E. DOUGLAS STEPHAN, Commissioner
APPROVED BY AGENCY: December 13, 1993
FILED WITH LRC: December 14, 1993 at 10 a.m.

NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION CABINET
Department for Environmental Protection
Division of Waste Management
(Amended After Hearing)

401 KAR 38:040. Changes to permits; expiration of permits.

RELATES TO: KRS 224.01, 224.10, 224.40, 224.43, 224.46, 224.99[, 40 CFR 270.42]

STATUTORY AUTHORITY: KRS 224.10-100, 224.46-520, 224.46-530[, 40 CFR 270.42]

NECESSITY AND FUNCTION: To implement provisions of KRS 224.46-520 and 224.46-530 relative to changes and expiration of hazardous waste permits. [KRS 224.40-305 and 224.46-520 require any person who treats, stores, recycles or disposes of hazardous waste to first obtain a hazardous waste site or facility permit from the cabinet. This chapter establishes the permitting process for hazardous waste sites or facilities. An overview of the permit program is found in the Necessity and Function of 401 KAR 38:010. This regulation establishes permitting standards on duration, termination, renewal and deadlines.]

Section 1. Transfer of Permits. (1) A permit may be transferred by the permittee to a new owner or operator only if the permit has been modified or revoked and reissued (under subsection (2) of this section or Section 2(2)(b) of this administrative regulation) [or a minor modification made (under Section 3(4) of this regulation)] to identify the new permittee and incorporate such other requirements as may be necessary under KRS Chapter 224 and the waste management administrative regulations.

(2) Changes in ownership or operational control of a facility may be made as a major modification with prior written approval of the cabinet in accordance with Section 2 of this administrative regulation. The new owner or operator shall submit a revised permit application no later than ninety (90) days prior to the scheduled change. Among other demonstrations, this application shall comply with KRS 224.40-330. A written agreement containing a specific date for transfer of permit responsibility between the current and new permittees shall also be submitted to the cabinet. When a transfer of ownership or operational control occurs, the old owner or operator shall comply with the requirements of 401 KAR Chapter 34 until the cabinet approves transfer to the new owner or operator. The new owner or operator shall demonstrate compliance with Section 2 of this administrative regulation and 401 KAR Chapter 34 within six (6) months of the date of the change of ownership or operational control of the facility. Upon demonstration to the cabinet by the new owner or operator of compliance with 401 KAR Chapter 34, the cabinet shall notify the old owner or operator that he no longer needs to comply with 401 KAR Chapter 34 as of the date of demonstration.

Section 2. Major Modification or Revocation and Reissuance of Permits. When the cabinet receives any information (for example, if the cabinet inspects the facility, receives information submitted by the permittee as required in the permit under Section 1 of 401 KAR 38:030, receives a request for modification or revocation and reissuance under Section 2 of 401 KAR 38:050, or conducts a review of permit file), the cabinet may determine whether [or not] one (1) or more of the causes listed in subsections (1) and (2) of this section for modification or revocation and reissuance or both exist. If cause exists, the cabinet may modify or revoke and reissue the permit accordingly, subject to the limitations of subsection (3) of this section and may request an updated application if necessary. When a permit is modified, only the conditions subject to modification are reopened. If a permit is revoked and reissued, the entire permit is reopened and subject to revision and the permit is reissued for a new term (see Section 2(4) of 401 KAR 38:050). If cause does not exist under this section or Section 3 of this administrative regulation, the cabinet shall not modify or revoke and reissue the permit. If a permit modification satisfies the criteria in Section 3 of this administrative regulation for "minor modifications," the permit may be modified without a draft permit or public review. Otherwise, a draft permit shall [must] be prepared and other procedures in 401 KAR 38:050 and, if applicable, 401 KAR 38:500 followed.

(1) Causes for modification. Paragraphs (a) to [through] (d) of this subsection are causes for modification but not revocation and reissuance of permits. Paragraphs (a) to [through] (d) of this subsection may be causes for revocation and reissuance as well as modification, when the permittee requests or agrees.

(a) Alterations. There are material and substantial alterations or additions to the permitted hazardous waste site or facility or activity which occurred after permit issuance which justify the application of permit conditions that are different or absent in the existing permit.

(b) Information. The cabinet has received new information. Permits may be modified during their terms for this cause only if the information was not available at the time of permit issuance (other than revised administrative regulations, guidance, or test methods) and would have justified the application of different permit conditions at the time of issuance.

(c) New statutory requirements or administrative regulations. The

standards or administrative regulations on which the permit was based have been changed by statute, through promulgation of new or amended standards or administrative regulations, or by judicial decision after the permit was issued. Except as provided in paragraph (e) of this subsection, permits may be modified during their terms for this cause as follows:

1. The cabinet may modify the permit when the standards or administrative regulations on which the permit was based have been changed by statute or amended standards or administrative regulations.

2. Permittee may request modification when:

a. The permit condition to be modified was based on a promulgated [an effective hazardous waste management] administrative regulation in 401 KAR Chapters 30 to 38; and

b. The cabinet has revised, withdrawn, or modified that portion of the administrative regulation on which the permit condition was based; or

c. A permittee requests modification in accordance with Section 2 of 401 KAR 38:050 within ninety (90) days after notice of the action on which the request is based.

3. For judicial decisions, a court of competent jurisdiction has remanded and stayed cabinet promulgated administrative regulations, if the remand and stay concern that portion of the administrative regulations on which the permit condition was based or if a request is filed by the permittee in accordance with Section 2 of 401 KAR 38:050 within ninety (90) days of judicial remand.

(d) Compliance schedules. The cabinet determines good cause exists for modification of a compliance schedule, such as an act of God, strike, flood, materials shortage, or other events over which the permittee has little or no control and for which there is no reasonably available remedy (see also Section 3 of this administrative regulation on minor modifications).

(e) The cabinet may modify a permit:

1. When modification of a closure plan is required under Section 3(2) or 4(2) of 401 KAR 34:070[, Section 3(2) or 4(2)].

2. When the cabinet receives notification of expected closure under Section 4 of 401 KAR 34:070[, Section 4,] and finds that any of the following previously granted permit conditions are no longer warranted:

a. Extension of the ninety (90) or 180 day periods under Section 4 of 401 KAR 34:070[, Section 4];

b. Modification of an extended postclosure care period under Section 7 of 401 KAR 34:070[, Section 7];

c. Continuation of security requirements under Section 7(2) of 401 KAR 34:070[, Section 7(2)]; or

d. Permission to disturb the integrity of the containment system under Section 7(3) of 401 KAR 34:070[, Section 7(3)].

3. When the permittee has filed a request under Section 4 of 401 KAR 34:120[, Section 4] for a variance to the level of financial responsibility or when the cabinet demonstrates under Section 5 of 401 KAR 34:120[, Section 5] that an upward adjustment of the level of financial responsibility is required.

4. When the corrective action program specified in the permit under Section 11 of 401 KAR 34:060 has not brought the regulated unit into compliance with the groundwater protection standard within a reasonable period of time.

5. To include a detection monitoring program meeting the requirements of Section 9 of 401 KAR 34:060, when the owner or operator has been conducting a compliance monitoring program under Section 10 of 401 KAR 34:060 or a corrective action program under Section 11 of 401 KAR 34:060 and the compliance period ends before the end of the postclosure care period for the unit.

6. When a permit requires a compliance monitoring program under Section 10 of 401 KAR 34:060, but monitoring data collected prior to permit issuance indicate that the facility is exceeding the groundwater protection standard.

7. To include the conditions applicable to units at a facility that were not previously included in the site or facility's permit.

8. When a land treatment unit is not achieving complete treatment of hazardous constituents under its current permit conditions.

9. To include conditions applicable in new or amended standards or administrative regulations.

10. When modification is necessary to protect the public health or the environment.

11. To include conditions applicable as the result of a hearing or enforcement action as specified in 401 KAR Chapter 40.

(f) Not withstanding any other provision in this section, when a permit for a land disposal facility is reviewed by the cabinet under Section 5(4) of this administrative regulation, the cabinet shall modify the permit as necessary to assure that the facility continues to comply with the currently applicable requirements in 401 KAR Chapters 30 to [through] 39.

(2) Causes for modification or revocation and reissuance. The following are causes to modify or, alternatively, revoke and reissue a permit:

(a) Cause exists for termination under Section 4 of this administrative regulation and the cabinet determines that modification or revocation and reissuance is appropriate.

(b) The cabinet has received notification (as required in the permit in Section 1(12)(c) of 401 KAR 38:030) of a proposed transfer of the permit.

(c) Cause exists for termination under Section 2(1)(e) and (f) of this administrative regulation, and the cabinet determines that modification or revocation and reissuance is appropriate.

(3) Facility siting. Suitability of the facility location will not be considered at the time of permit modification or revocation and reissuance unless new information or standards indicate that a threat to human health or the environment exists which was unknown at the time of permit issuance.

(4) Major modifications that include changes in ownership and operational control of a facility may be made if the new owner or operator submits a revised permit application no later than ninety (90) days prior to the scheduled change. A change in ownership or operational control includes a transfer of twenty-five (25) or more percent interest in the corporation, joint venture, partnership, proprietorship, or entity designated to own or operate the hazardous waste site or facility. When a transfer of ownership or operational control of a site or facility occurs, the old owner or operator shall comply with the requirements of 401 KAR 34:080 to [through] 401 KAR 34:176 (financial requirements), until the new owner or operator has demonstrated to the cabinet that he is complying with the requirements in 401 KAR 34:080 to [through] 401 KAR 34:176. The new owner or operator shall demonstrate compliance with the requirements in 401 KAR 34:080 to [through] 401 KAR 34:176 within six (6) months of the date of the change in the ownership or operational control of the site or facility. Upon demonstration to the cabinet by the new owner or operator of compliance with the requirements in 401 KAR 34:080 to [through] 401 KAR 37:176, the cabinet shall notify the old owner or operator in writing that he no longer needs to comply with the requirements in 401 KAR 34:080 to [through] 401 KAR 34:176 as of the date of demonstration. Past performance as specified in Section 2(20) of 401 KAR 38:090[, Section 2(20)] shall be considered. The provisions set forth in Section 3 of this administrative regulation as amended on March 10, 1988, shall apply to requests for modification received by the cabinet prior to November 14, 1990, and including all additional information and documentation submitted subsequent to November 14, 1990, as requested by the cabinet.

Section 3. Minor Modifications of Permits. Upon consent of the permittee, the cabinet may modify a permit to make the corrections or allowances for changes in the permitted activity listed in this section, without following the procedures of 401 KAR 38:050. Any permit modification not processed as a minor modification under this section shall be made for cause and with a 401 KAR 38:050 draft

permit, public notice as required in Section 2 of this administrative regulation and, if applicable, compliance with 401 KAR 38:500 shall be demonstrated.

(1) The permittee shall put into effect minor modifications listed in subsection (3) of this section under the following conditions:

(a) The permittee shall inform the cabinet concerning the modification by certified mail or other means that establish proof of delivery within seven (7) calendar days after the change is put into effect. This notice shall [~~must~~] specify the changes being made to permit conditions or supporting documents referenced by the permit, and shall [~~must~~] explain why they are necessary. Along with the notice, the permittee shall [~~must~~] provide a completed notification of minor modifications to hazardous waste permits not requiring prior approval of the cabinet, as incorporated by reference in subsection (2) of this section. The permittee shall [~~should~~] also provide the applicable information from Parts A and B of the Kentucky Hazardous Waste Permit Application as it relates to the specific type of facility.

(b) The permittee shall send a notice of the modification to all persons on the facility mailing list and the appropriate units of local government. This notification shall be made within ninety (90) calendar days after the cabinet approves the request.

(c) Any person may request that the cabinet review, and the cabinet may, for cause, reject[~~,~~] any minor modification. The cabinet shall inform the permittee by certified mail that a minor modification has been rejected, explaining the reasons for the rejection. If a minor modification has been rejected, the permittee shall comply with the original permit conditions.

(d) Minor modifications listed in subsection (3) of this section requiring "Prior Approval" shall be made only with the prior written approval of the cabinet.

(e) For a minor modification, the permittee may elect to follow the procedures for major modifications instead of the minor modifications procedures. The permittee shall inform the cabinet of this decision in the notice required in Section 2 of this administrative regulation.

(2) Form DEP 7092 entitled "Notification of Minor Modifications to Hazardous Waste Permits Not Requiring Prior Approval of the Cabinet" is hereby incorporated by reference. This application is available at the Division of Waste Management, 14 Reilly Road, Frankfort, Kentucky 40601, (502) 564-6716, between [~~. The business hours of the division are from~~] 8 a.m. and [~~to~~] 4:30 p.m., eastern time, Monday through Friday, except on state holidays.

(3) The following shall be used to determine whether prior approval is required for a minor modification:

[~~APPENDIX I TO 40 CFR 270.42~~]
CLASSIFICATION OF PERMIT MODIFICATION (1 OF 6)

TYPE OF MINOR MODIFICATION	PRIOR APPROVAL	NOTIFICATION
(a) General Permit Provisions:		
1. Administrative and informative changes.		X
2. Correction of typographical errors.		X
3. Equipment replacement or upgrading with functionally equivalent components (e.g. pipes, valves, pumps, conveyors, controls).		X
4. Changes to provide for more frequent monitoring, reporting, sampling, or maintenance activities by the permittee.		X
5. Changes in interim compliance dates.	X	
(b) General Facility Standards:		
1. Changes to waste sampling or analysis methods to conform with agency guidelines or administrative regulations.		X
2. Changes associated with F039 (multisource leachate) sampling or analysis methods.		X
3. Changes to analytical quality assurance or the quality control plan to conform with agency administrative regulations.		X
4. [~~3.~~] Changes in the training plan, except to decrease the amount of training or type of training.		X
5. [~~4.~~] Changes in names, address or phone number of coordinators or other persons or agencies identified in the contingency plan.		X
6. Changes that the COA officer certifies in the operating record will [~~shall~~] provide equivalent or better certainty that the unit components meet the design standards.	[~~X~~]	X
7. Other COA changes.	X	[~~X~~]
(c) Groundwater Protection:		
1. Replacement of an existing well that has been damaged or rendered inoperable, without change to location, design, or depth of the well.		X
2. Changes in groundwater sampling or analysis procedures or monitoring schedule.		X
3. Changes in statistical procedure for determining whether a statistically significant change in groundwater quality between upgradient and downgradient wells has occurred.		X
(d) Closure:		
1. Changes to the closure plan in estimate of maximum extent of operations or maximum inventory of waste on-site at any time during the active life of the facility.		X
2. Changes in the closure schedule for any unit, changes in the final closure schedule for the facility, or extension of the closure period.		X
3. Changes in the expected year of final closure, where other permit conditions are not changed.		X
4. Changes in procedures for decontamination of facility equipment or structures.		X
5. Changes in approved closure plan resulting from unexpected events occuring during partial or final closure, unless otherwise specified in this section.		X
6. Extension of the closure period to allow a landfill, surface impoundment or land treat-		X

	ment unit to receive non-hazardous wastes after final receipt of hazardous wastes under Section 4(4) and (5) of 401 KAR 34:070.			
(e)	Postclosure:			
1.	Changes in name, address, or phone number of contact in post-closure plan.	X		
2.	Changes to the expected year of final closure, where other permit conditions are not changed.	X		
(f)	Containers:			
1.	Addition of a roof to a container unit without alteration of the containment system.		X	
(g)	Tanks:			
1.	Addition of a new tank that will operate for up to ninety (90) days using any of the following physical or chemical treatment technologies: neutralization, dewaterizing, phase separation, or component separation.	X		
2.	Replacement of a tank with a tank that meets the same design standards and has a capacity within +/- ten (10) percent of the replaced tank provided:	X		
a.	The capacity difference is no more than 1500 gallons.			
b.	The facility's permitted tank capacity is not increased.			
c.	The replacement tank meets the same conditions in the permit.			
(h)	Surface Impoundments:			
1.	Modifications of unconstructed units to comply with 401 KAR 34:200.	X		
2.	Changes in response action plan.	X		
a.	Increase in action leakage rate.	X		
b.	Changes in specific response reducing its frequency or effectiveness.	X		
c.	Other changes.	X		
3.	Other changes.	X		
(i)	[~~(h)~~] Enclosed Waste Piles:			
1.	Replacement of a waste pile unit with another waste pile unit of the same design and capacity and meeting all waste pile conditions in the permit.	X		
(j)	Landfills and Unenclosed Waste Piles:			
1.	Modifications of unconstructed units to comply with 401 KAR 34:210.	X		
2.	Changes in response action plan.	X		
a.	Increase in action leakage rate.	X		
b.	Change in a specific response reducing its frequency or effectiveness.	X		
c.	Other changes in response action plan.	X		
3.	Other changes.	X		
(k)	[~~(i)~~] Land Treatment:			
1.	Modification of a land treatment unit management practice to decrease rate of waste application.			X
2.	Changes in any condition specified in the permit for a land treatment unit to reflect results of the land treatment demonstration, provided performance standards are met.	X		
3.	Changes to allow a second land treatment demonstration to be conducted when the results of the first demonstration conducted have not shown the conditions under which the wastes can be treated completely, provided the conditions for the second demonstration are substantially the same as the conditions for the first demonstration. In addition, the land treatment waste application rate cannot exceed previously established waste application rates.	X		
(l)	[~~(j)~~] Incinerators - Shakedown and Trial Burn:			
1.	Authorization of up to an additional 720 hours of waste incineration during the shakedown period for determining operational readiness after construction.	X		
2.	Minor changes in the operating requirements set in the permit for conducting a trial burn.	X		
3.	Minor changes in the ranges of the operating requirements set in the permit to reflect the results of the trial burn.	X		

Section 4. Termination of Permits. (1) The cabinet may terminate a permit during its term or deny a permit renewal application for the following causes:

(a) Noncompliance by the permittee with any condition of the permit;

(b) The permittee's failure in the application or during the permit issuance process to disclose fully all relevant facts, or the permittee's misrepresentation of any relevant facts at any time;

(c) A determination that the permitted activity endangers human health or the environment and can only be regulated to acceptable levels by permit modification or termination; or

(d) A violation of any requirement of KRS Chapter 224 or the respective administrative regulations promulgated pursuant thereto (including 401 KAR 40:040).

(2) The cabinet shall follow the applicable procedures in this administrative regulation and in 401 KAR 38:050 and 401 KAR Chapter 40 in terminating any permit under this section.

Section 5. Duration of Permit. (1) Term of permit. Hazardous waste site or facility permits shall be effective for a fixed term not to exceed ten (10) years. (See also Section 5 of 401 KAR 38:060[~~, Interim permits for UIC wells~~].)

(2) Modification of term of permit. Except as provided in Section 6 of this administrative regulation, the term of a permit shall not be extended by modification beyond the maximum duration specified in

subsection (1) of this section.

(3) Reduced term of permit. The cabinet may issue any permit for a duration that is less than the full allowable term under subsection (1) of this section.

(4) Each permit for a land disposal facility shall be reviewed by the cabinet five (5) years after the date of permit issuance or reissuance and shall be modified as necessary, as provided in Section 2 of this administrative regulation.

(5) A permit for the nerve agents specified in KRS 224.50-130 shall be reviewed by the cabinet five (5) years after the date of permit issuance or reissuance and shall be modified as necessary, as provided in Section 2 of this administrative regulation.

Section 6. Continuation of Expiring Permits. (1) The conditions of an expired permit continue in force until the effective date of a new permit if:

(a) The permittee has submitted a timely application under 401 KAR 38:090 and 401 KAR 38:100 and the applicable requirements in 401 KAR 38:150 to [~~through~~] 401 KAR 38:210 and which is a complete (under Section 1(3) of 401 KAR 38:070) application for a new permit, paid the appropriate fees due (under 401 KAR Chapter 39); and

(b) The cabinet, through no fault of the permittee, does not issue a new permit with an effective date on or before the expiration date of the previous permit (for example, when issuance is impracticable due to time or resources constraints).

(2) Effect. Permits continued under this section remain fully effective and enforceable.

(3) Enforcement. When the permittee is not in compliance with the conditions of the expiring or expired permit, the cabinet may choose to do any or all of the following:

(a) Initiate enforcement action based upon th permit which has been continued;

(b) Issue a notice of intent to deny the new permit under Section 3 of 401 KAR 38:050. If the permit is denied, the owner or operator would then be required to cease the activities authorized by the continued permit or be subject to enforcement action for operating without a permit;

(c) Issue a new permit under 401 KAR 38:050 with appropriate conditions; or

(d) Take other actions authorized by 401 KAR Chapters 30 to [~~through~~] 40.

(4) State continuation. As provided in 40 CFR 270.51(d), an EPA issued permit shall not continue in force beyond its expiration date under federal law if at that time the cabinet is the RCRA permitting authority.

PHILLIP J. SHEPHERD, Secretary
E. DOUGLAS STEPHAN, Commissioner
APPROVED BY AGENCY: December 13, 1993
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NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION CABINET
Department for Environmental Protection
Division of Waste Management
(Amended After Hearing)

401 KAR 38:050. Public information procedures.

RELATES TO: KRS 224.01, 224.10, 224.40, 224.43, 224.46, 224.99

STATUTORY AUTHORITY: KRS 224.40-305, 224.46-520

NECESSITY AND FUNCTION: KRS 224.40-305 and 224.46-520 require any person who treats, stores, recycles or disposes of hazardous waste to first obtain a hazardous waste site or facility permit from the cabinet. This chapter establishes the permitting process for hazardous waste sites or facilities and [~~. This regulation~~] establishes standards on public information procedures and confidentiality.

Section 1. Application for a Permit. (1)(a) Any person who requires a hazardous waste site or facility permit under KRS Chapter 224 shall complete, sign, and submit to the cabinet an application for each permit required under Section 1 of 401 KAR 38:010. Applications are not required for hazardous waste site or facility permits by rule (Section 1 of 401 KAR 38:060) or underground injections authorized by rule. However, for all facilities, including underground injection wells, which meet the definition of a disposal facility (see 401 KAR 30:010), compliance with the requirements of 401 KAR 38:500 (Provisions for approval by the local government or the Kentucky Regional Integrated Treatment and Disposal Facility Siting Board), if applicable, shall be demonstrated to the cabinet prior to construction or operation under a permit by rule.

(b) The cabinet shall not begin the processing of a permit until the applicant has fully complied with the application requirements for that permit (see Sections 1 through 6 of 401 KAR 38:070, 401 KAR 38:080 and the applicable requirements in 401 KAR 38:150 through 38:210). Applications shall be processed in accordance with 401 KAR **38:010** [~~38:025~~].

(c) Permit applications shall comply with the signature and certification requirements of Section 7 of 401 KAR 38:070.

(2) Upon completing the review, the cabinet shall notify the applicant in writing whether the application is complete or incomplete. If the application is incomplete, the cabinet shall list the information necessary to make the application complete. When the application is for an existing hazardous waste site or facility, the cabinet shall specify in the notice of deficiency a date for submitting the necessary information. The cabinet may notify the applicant that the application is complete upon receiving this information. Any application, complete or incomplete, may be denied based on the considerations set forth in KRS 224.46-520.

(3) If an applicant fails or refuses to correct deficiencies in the application or if the applicant fails or refuses to submit additional information, the permit may be denied and appropriate enforcement actions may be taken under the applicable statutory provision.

(4) If the cabinet decides that a site visit is necessary for any reason in conjunction with the processing of an application, a representative of the cabinet shall notify the applicant and a date shall be scheduled.

(5) The effective date of an application is the date on which the cabinet notifies the applicant that the application is complete as provided in subsection (2) of this section.

(6) For each application, the cabinet shall, no later than the effective date of the application, prepare and mail to the applicant a project decision schedule. The schedule shall specify target dates by which the cabinet intends to:

(a) Prepare a draft permit;

(b) Give public notice;

(c) Complete the public comment period, including any public hearing; and

(d) Issue a final permit.

Section 2. Modification, Revocation and Reissuance, or Termination of Permits. (1) A permit for a hazardous waste site or facility may be modified, revoked and reissued, or terminated either at the request of any interested person (including the permittee) or upon the cabinet's initiative. However, a permit may only be modified, revoked and reissued; or terminated for the reasons specified in Sections 2 and 4 of 401 KAR 38:040 and following the procedures of 401 KAR Chapter 40. All requests shall be in writing and shall contain facts or reasons supporting the request.

(2) If the cabinet decides the request is not justified, the cabinet shall send the requester a brief written response giving a reason for

the decision. Denials of requests for modification, revocation and reissuance, or termination are not subject to public notice, comment, or hearings.

(3)(a) If the cabinet tentatively decides to modify or revoke and reissue a permit under Section 2 of 401 KAR 38:040, the cabinet shall prepare a draft permit under Section 3 of this administrative regulation incorporating the proposed changes. The cabinet may request additional information and, in the case of a modified permit, may require the submission of an updated permit application. In the case of revoked and reissued permits, the cabinet shall require the submission of a new application.

(b) In a permit modification under this section, only those conditions to be modified shall be reopened when a new draft permit is prepared. All other aspects of the existing permit shall remain in effect for the duration of the unmodified permit. When a permit is revoked and reissued under this section, the entire permit is reopened just as if the permit had expired and was being reissued. During any revocation and reissuance proceeding the permittee shall comply with all conditions of the existing permit until a new final permit is reissued.

(c) "Minor modifications" as defined in Section 3 of 401 KAR 38:040 are not subject to the requirements of this section.

(4) If the cabinet tentatively decides to terminate a permit under Section 4 of 401 KAR 38:040, it shall issue a notice of intent to terminate. A notice of intent to terminate is a type of draft permit which follows the same procedures as any draft permit prepared under Section 3 of this administrative regulation.

(5) All draft permits (including notices of intent to terminate) prepared under Sections 3 through 5 of this administrative regulation shall be based on the administrative record as defined in Section 6 of this administrative regulation.

Section 3. Draft Permits. (1) Once an application is complete, the cabinet shall tentatively decide whether to prepare a draft permit or to deny the application. In making this determination the cabinet shall consider the requirements specified in the waste management administrative regulations and in KRS 224.46-520.

(2) If the cabinet tentatively decides to deny the permit application, it shall issue a notice of intent to deny. A notice of intent to deny the permit application is a type of draft permit which follows the same procedures as any draft permit prepared under this subsection (see subsection (4)). If the cabinet's final decision is that the tentative decision to deny the permit application was incorrect, the cabinet shall withdraw the notice of intent to deny and proceed to prepare a draft permit under subsection (3) of this section.

(3) If the cabinet decides to prepare a draft permit, the draft permit shall contain the following information:

(a) All conditions under Sections 1 and 3 of 401 KAR 38:030;

(b) All compliance schedules under Section 4 of 401 KAR 38:030;

(c) All monitoring requirements under Section 2 of 401 KAR 38:030; and

(d) Standards for treatment, storage or disposal, and other permit conditions under Section 1 of 401 KAR 38:030.

(4) All draft permits prepared by the cabinet under this section shall be accompanied by a statement of basis (see Section 4 of this administrative regulation) or fact sheet (see Section 5 of this administrative regulation) and shall be based on the administrative record (see Section 6 of this administrative regulation) and publicly noticed (see Section 7 of this administrative regulation), and shall be made available for public comment (see Section 8 of this administrative regulation). The cabinet shall give notice of the opportunity for a public hearing as required by KRS 224.40-310 (see Section 9 of this administrative regulation), issue a final decision and respond to comments (see Section 11 of this administrative regulation). An appeal may be taken under KRS 224.10-420. [~~Draft permits shall be accompanied by a fact sheet if required under Section 5 of this regulation.~~]

Section 4. Statement of Basis. The cabinet shall prepare a statement of basis for every draft permit for which a fact sheet under Section 5 of this administrative regulation is not prepared. The statement of basis shall briefly describe the derivation of the conditions of the draft permit and the reasons for them or, in the case of notices of intent to deny or terminate, reasons supporting the tentative decision. The statement of basis shall be sent to the applicant and, on request, to any other person.

Section 5. Fact Sheet. (1) A fact sheet shall be prepared for every draft permit for a hazardous waste site or facility which includes an incinerator, a surface impoundment, disposal facility ([~~i.e.,~~] landfill, land treatment facility, injection well, for example [~~etc.~~]), or a research, development, and demonstration facility, and for every draft permit which the cabinet finds is the subject of widespread public interest or raises major issues. The fact sheet shall briefly set forth the principal facts and the significant factual, legal, methodological and policy questions considered in preparing the draft permit. The cabinet shall send this fact sheet to the applicant and, on request, to any other person.

(2) The fact sheet shall include, when applicable:

(a) A brief description of the type of facility or activity which is the subject of the draft permit;

(b) The type and quantity of wastes, fluids, or pollutants which are proposed to be or are being treated, stored, disposed of, injected, emitted, or discharged;

(c) A brief summary of the basis for the draft permit conditions including references to applicable statutory or regulatory provisions and appropriate supporting references to the administrative record required by Section 6 of this administrative regulation;

(d) Reasons why any requested variances or alternatives to required standards do or do not appear justified;

(e) A description of the procedures for reaching a final decision on the draft permit including:

1. The beginning and ending dates of the comment period under Section 7 of this administrative regulation and the address where comments shall be received;

2. Procedures for requesting a hearing and the nature of that hearing; and

3. Any other procedures by which the public may participate in the final decision.

(f) Name and telephone number of a person to contact for additional information.

Section 6. Administrative Record for Draft Permits. (1) The provisions of a draft permit prepared by the cabinet under Section 3 of this administrative regulation shall be based on the administrative record defined in this section.

(2) For preparing a draft permit under Section 3 of this administrative regulation, the record shall consist of:

(a) The application, if required, and any supporting data furnished by the applicant;

(b) The draft permit or notice of intent to deny the application or to terminate the permit;

(c) The statement of basis (see Section 4 of this administrative regulation) or fact sheet (see Section 5 of this administrative regulation);

(d) All documents cited in the statement of basis or the fact sheet; and

(e) Other documents contained in the supporting file for the draft permit.

(3) Material readily available at the cabinet's office or published material that is generally available, and that is included in the administrative record under this subsection and subsection (2) of this section, need not be physically included with the rest of the record as long as it is specifically referred to in the statement of basis or the fact sheet.

(4) This section applies to all draft permits when public notice was given after the effective date of these administrative regulations.

Section 7. Public Notice of Permit Application and Public Comment Period. (1) Scope.

(a) The cabinet shall give public notice under KRS 224.40-310(4) and (5) that the following actions have occurred:

1. A permit application has been tentatively denied under Section 3(2) of this administrative regulation;

2. A draft permit has been prepared under Section 3(3) of this administrative regulation;

3. A hearing has been scheduled under Section 9 of this administrative regulation; and

4. An appeal has been granted under 401 KAR 40:030.

(b) No public notice is required when a request for permit modification, revocation and reissuance, or termination is denied under Section 2(2) of this administrative regulation. Written notice of that denial shall be given to the requester and to the permittee.

(c) Public notices may describe more than one (1) permit or permit action.

(2) Timing.

(a) Public notice of the preparation of a draft permit (including a notice of intent to deny a permit application) required under subsection (1) of this section shall allow at least forty-five (45) days for public comment.

(b) Public notice of a public hearing shall be given at least thirty (30) days before the hearing. (Public notice of the hearing may be given at the same time as public notice of the draft permit and the two (2) notices may be combined.)

(3) Methods. Public notice of activities described in subsection (1)(a) of this section shall be given by the following methods:

(a) By mailing a copy of a notice to the following persons (any person otherwise entitled to receive notice under this subparagraph may waive his or her rights to receive notice for any classes and categories of permits):

1. The applicant;

2. Any other agency which the cabinet knows has issued or is required to issue an environmental permit for the same facility or activity (including United States Environmental Protection Agency);

3. Federal and state agencies with jurisdiction over fish, shellfish, and wildlife resources and over coastal zone management plans, the Advisory Council on Historic Preservation, State Historic Preservation Officers, and other appropriate government authorities, including any other affected states;

4. Persons on a mailing list developed by:

a. Including those who request in writing to be on the list;

b. Soliciting persons for "area lists" from participants in past permit proceedings in that area; and

c. Notifying the public of the opportunity to be put on the mailing list through periodic publication in the public press and in such publications as regional and state funded newsletters, environmental bulletins, or state law journals. (The cabinet may update the mailing list from time to time by requesting written indication of continued interest from those listed. The cabinet may delete from the list the name of any person who fails to respond to such a request.)

5. To any unit of local government having jurisdiction over the area where the facility is proposed to be located; and

6. To each state agency having any authority under state law with respect to the construction or operation of such facility.

(b) Publication of a notice in a daily or weekly major local newspaper of general circulation as required by KRS 224.40-310(2), (4), and (5) and broadcast over any commercial radio stations which have general coverage in the locality where the proposed site is located.

(c) Any other method reasonably calculated to give actual notice of the action in question to the persons potentially affected by it, including press releases or any other forum or medium to elicit public participation.

(4) Contents.

(a) All public notices. All public notices issued under this chapter shall contain the following minimum information:

1. Name and address of the office processing the permit action for which notice is being given;

2. Name and address of the permittee or permit applicant and, if different, of the facility or activity regulated by the permit;

3. A brief description of the business conducted at the facility or activity described in the permit application;

4. Name, address and telephone number of a person from whom interested persons may obtain further information, including copies of the draft permit, statement of basis or fact sheet, and the application;

5. A brief description of the comment procedures required by Sections 8 and 9 of this administrative regulation and the time and place of any hearing that **will** ~~[shall]~~ be held, including a statement of procedures to request a hearing (unless a hearing has already been scheduled) and other procedures by which the public may participate in the final permit decision;

6. The location of the administrative record required by Section 6 of this administrative regulation, the times at which the record **will** ~~[shall]~~ be open for public inspection, and a statement that all data submitted by the applicant is available as part of the administrative record;

7. The statement contained in KRS 224.40-310(5)(e); and

8. Any additional information considered necessary or proper.

(b) Public notices for hearings. In addition to the general public notice described in subsection (4)(a) of this section, the public notice of a hearing under Section 9 of this administrative regulation shall contain the following information:

1. Reference to the date of previous public notices relating to the permit;

2. Date, time, and place of the hearing; and

3. A brief description of the nature and purpose of the hearing, including the applicable rules and procedures.

(5) In addition to the general public notice described in subsection (4)(a) of this section, all persons identified in subsection (3)(a) of this section shall be mailed a copy of the fact sheet or statement of basis, the permit application (if any) and the draft permit (if any). The cabinet shall charge for duplication cost and postage.

Section 8. Public Comments and Requests for Public Hearings. During the public comment period provided under Section 7 of this administrative regulation, any interested person may submit written comments on the draft permit and may request a public hearing if no hearing has already been scheduled. A request for a public hearing shall be in writing and shall state the nature of the issues proposed to be raised in the hearing. All comments shall be considered in making the final decision and shall be answered as provided in Section 11 of this administrative regulation.

Section 9. Public Hearings. (1)(a) The cabinet shall hold a public hearing on the basis of requests, when a significant degree of public interest in a draft permit(s) is found.

(b) The cabinet at its discretion may also hold a public hearing whenever, for instance, such a hearing might clarify one (1) or more issues involved in the permit decision.

(c) 1. The cabinet shall hold a public hearing whenever written notice of opposition to a draft permit and a request for a hearing within forty-five (45) days of public notice under Section 7(2)(a) of this administrative regulation is received.

2. Whenever possible the cabinet shall schedule a hearing under this section at a location convenient to the population center nearest to the proposed facility provided the hearing location is in the same county as required by KRS 224.40-310.

(d) Public notice of the hearing shall be given as specified in Section 7 of this administrative regulation.

(2) Whenever a public hearing **is** [~~shall be~~] held, the cabinet shall designate a presiding officer for the hearing who shall be responsible for its scheduling and orderly conduct.

(3) Any person may submit oral or written statements and data concerning the draft permit. Reasonable limits may be set upon the time allowed for oral statements, and the submission of statements in writing may be required. The public comment period under Section 7 of this administrative regulation shall automatically be extended to the close of any public hearing under this administrative regulation. The hearing officer may also extend the comment period by so stating at the hearing.

(4) A tape recording or written transcript of the hearing shall be made available to any person upon payment of the actual cost of reproducing the original.

Section 10. Reopening of the Public Comment Period. (1) If any data, information or arguments submitted during the public comment period (including information or arguments that any condition of the draft permit or permit denial is inappropriate) appear to raise substantial new questions concerning a permit, the cabinet may take one (1) or more of the following actions:

(a) Prepare a new draft permit, appropriately modified, under Section 3 of this administrative regulation;

(b) Prepare a revised statement of basis under Section 4 of this administrative regulation and reopen the comment period under this section; or

(c) Reopen or extend the comment period under Section 7 of this administrative regulation to give interested persons an opportunity to comment on the information or arguments submitted.

(2) Comments filed during the reopened comment period shall be limited to the substantial new questions that caused its reopening. The public notice under Section 7 of this administrative regulation shall define the scope of the reopening.

(3) The cabinet may also, in the circumstances described above, elect to hold further proceedings. This decision may be combined with any of the actions enumerated in subsection (1) of this section.

(4) Public notice of any of the above actions shall be issued under Section 7 of this administrative regulation.

Section 11. Response to Comments. (1) At the time that any final permit decision is issued, the cabinet shall issue a response to comments when a final permit is issued. This response shall:

(a) Specify which provisions, if any, of the draft permit have been changed in the final permit decision, and the reasons for the change; and

(b) Briefly describe and respond to all significant comments on the draft permit raised during the public comment period, or during any hearing.

(2) For cabinet issued permits, any documents cited in the response to comments shall be included in the administrative record for the final permit decision. If new points are raised or new material supplied during the public comment period, the cabinet may document its response to those matters by adding new materials to the administrative record.

(3) The response to comments shall be available to the public.

(4) In the case of a hazardous waste disposal site or facility, no permit shall be approved or issued by the cabinet prior to the approvals specified in KRS 224.40-310(5) and (6). 401 KAR 38:500 details the procedures that the applicant shall use in obtaining local government approval for incinerators or land disposal facilities or for a regional integrated waste treatment and disposal demonstration facility, the approval of the Kentucky Regional Integrated Waste Treatment and Disposal Facility Siting Board.

Section 12. Issuance and Effective Date of Permit. (1) After the close of the public comment period under Section 7 of this administrative regulation on a draft permit, the cabinet shall issue a final permit decision (or a decision to deny a permit for the active life of a RCRA hazardous waste management facility or unit under Section 11 of 401 KAR 38:070). For the purposes of this section, a final permit decision means a final decision to issue, deny, modify, revoke and reissue, or terminate a permit.

(2) A final permit decision shall become effective on the date issued by the cabinet.

Section 13. Past Performance Considered in Review Past performance of the owner or operator shall be considered in the review and in the determination of any requirement for specialized conditions.

PHILLIP J. SHEPHERD, Secretary
E. DOUGLAS STEPHAN, Commissioner
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NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION CABINET
Department for Environmental Protection
Division of Waste Management
(Amended After Hearing)

401 KAR 38:060. Special types of permits.

RELATES TO: KRS 224.01, 224.10, 224.40, 224.43, 224.46, 224.99

STATUTORY AUTHORITY: KRS 224.10-100, 224.46-520

NECESSITY AND FUNCTION: To implement provisions of KRS 224.40-305 and 224.46-520 and to establish [~~require any person who treats, stores, recycles or disposes of hazardous waste to first obtain a hazardous waste site or facility permit from the cabinet. This chapter establishes the permitting process for hazardous waste sites or facilities. An overview of the permit program is found in the Necessity and Function of 401 KAR 38:010. This regulation establishes~~] standards for special types of permits.

Section 1. Permit by Rule. Notwithstanding any other provision of this chapter the following shall be deemed to have a permit by rule if the conditions listed are met:

(1) Ocean disposal barges or vessels. The owner or operator of a barge or other vessel which accepts hazardous waste for ocean disposal, if the owner or operator:

(a) Has a permit for ocean disposal issued by the [~~U.S.~~] EPA;

(b) Complies with the conditions of that permit; and

(c) Complies with the following hazardous waste administrative regulations:

1. Section 2 of 401 KAR 34:020, Identification Number;
2. Section 2 of 401 KAR 34:050, Use of Manifest System;
3. Section 3 of 401 KAR 34:050, Manifest Discrepancies;
4. Section 4(1) and (2)(a) of 401 KAR 34:050, Operating Record;
5. Section 6(1) and (2)(a) of 401 KAR 34:050, Annual Report; and
6. Section 7 of 401 KAR 34:050, Unmanifested Waste Report.

(2) Injection wells. The owner or operator of an injection well disposing of hazardous waste, if the owner or operator:

(a) Has a permit for underground injection issued by the U.S. EPA under 40 CFR Part 144 or 145;

(b) Complies with the conditions of that permit and the requirements of 40 CFR 144.14 (wells managing hazardous waste);

(c) For UIC permits issued after November 8, 1984:

1. Complies with Section 12 of 401 KAR 34:060; and

2. Where the UIC well is the only unit at a facility which requires a hazardous waste site or facility permit, complies with Section 3 of 401 KAR 38:100.

(d) Complies with the requirements of 401 KAR 38:500, if

applicable.

(3) Publicly owned treatment works (POTW). The owner or operator of a POTW which accepts hazardous waste for treatment, if the owner
or operator:

(a) Has an NPDES permit or a KPDES permit issued under the authorized program;

(b) Complies with the conditions of that permit; and

(c) Complies with the following administrative regulations.

1. Section 2 of 401 KAR 34:020, Identification Number;

2. Section 2 of 401 KAR 34:050, Use of Manifest System;

3. Section 3 of 401 KAR 34:050, Manifest Discrepancies;

4. Section 4(1) and (2)(a) of 401 KAR 34:050, Operating Record;

5. Section 6 of 401 KAR 34:050, Annual Report;

6. Section 7 of 401 KAR 34:050, Unmanifested Waste Report; and

7. For NPDES or KPDES permits issued after November 8, 1984, Section 12 of 401 KAR 34:060, Corrective action.

(d) If the waste meets all federal, state, and local pretreatment requirements which would be applicable to the waste if it were being discharged into the POTW through a sewer, pipe, or similar conveyance.

(4) Elementary neutralization units. The owner or operator of an elementary neutralization unit which accepts hazardous waste for treatment, if the owner or operator complies with the national pretreatment standards (see Section 9 of 401 KAR 5:055).

(5) Wastewater treatment units. The owner or operator of a wastewater treatment unit which accepts hazardous waste for treatment, if the owner or operator:

(a) Has a NPDES permit or a KPDES permit; and

(b) Complies with the conditions of the permit.

Section 2. Emergency Permits. (1) Notwithstanding any other provision of this chapter, in the event the cabinet finds an imminent and substantial endangerment to human health or the environment, the cabinet may issue an emergency permit to allow temporary treatment, storage, or disposal of hazardous waste for a nonpermitted facility, thus, granting the nonpermitted facility an effective temporary hazardous waste site or facility permit. An emergency permit shall be granted when the cabinet has issued an emergency order to discontinue, abate or alleviate pursuant to KRS 224.10-410, if applicable. However, an emergency permit may be issued whenever an imminent and substantial endangerment to human health and the environment exists, but the circumstances of the situation render an order for discontinuance, abatement or alleviation inappropriate.

(2) This emergency permit:

(a) May be oral or written. If oral, it shall be followed in five (5) days by a written emergency permit.

(b) Shall not exceed ninety (90) days in duration.

(c) Shall clearly specify the hazardous wastes to be received, and the manner and location of their treatment, storage, or disposal.

(d) May be terminated by the cabinet at any time without process if the cabinet determines that termination is appropriate to protect human health and the environment.

(e) Shall be accompanied by a public notice published under Section 7(2) of 401 KAR 38:050 including:

1. Name and address of the office granting the emergency authorization;

2. Name and location of the permitted hazardous waste site or facility;

3. A brief description of the wastes involved;

4. A brief description of the action authorized and reasons for authorizing it; and

5. Duration of the emergency permit.

(f) Shall incorporate to the extent possible and not inconsistent with the emergency situation, all applicable requirements of this chapter, and 401 KAR Chapter 34 and 401 KAR 30:030.

(g) Shall specify that all remaining hazardous waste and residues are removed at the end of the term of the emergency permit to a properly permitted hazardous waste site or facility in order to be exempted from the financial requirements of Section 1 of 401 KAR 34:080.

(h) Shall specify that failure to comply with the conditions of the emergency permit **will** ~~[shall]~~ cause the cabinet to sue for the recovery of the cost of proper closure (see Section 2 of 401 KAR 34:070 for closure performance standards and KRS Chapter 224 for the appropriate fines and penalties).

Section 3. Hazardous Waste Incinerator Permits. (1) For the purposes of determining operational readiness following completion of physical construction, the cabinet shall establish permit conditions, including but not limited to allowable waste feeds and operating conditions, in the permit to a new hazardous waste incinerator. These permit conditions shall be effective for the minimum time required to bring the incinerator to a point of operational readiness sufficient to conduct a trial burn, not to exceed 720 hours operating time for treatment of hazardous waste. The cabinet may extend the duration of this operational period once, for up to 720 additional hours, at the request of the applicant when good cause is shown. The permit may be modified to reflect the extension according to Section 3 of 401 KAR 38:040 (minor modifications of permits).

(a) Applicants shall submit a statement, with Part B of the permit application, which suggests the conditions necessary to operate in compliance with the performance standards of Section 4 of 401 KAR 34:240 during this period. This statement should include, at a minimum, restrictions on waste constituents, waste feed rates and the operating parameters identified in Section 6 of 401 KAR 34:240.

(b) The cabinet shall review this statement and any other relevant information submitted with Part B of the permit application and specify requirements for this period sufficient to meet the performance standards of Section 4 of 401 KAR 34:240 based on engineering judgment.

(2) For the purposes of determining feasibility of compliance with the performance standards of Section 4 of 401 KAR 34:240 and of determining adequate operating conditions under Section 6 of 401 KAR 34:240, the cabinet shall establish conditions in the permit to a new hazardous waste incinerator to be effective during the trial burn.

(a) Applicants shall propose a trial burn plan, prepared in accordance with paragraph (b) of this subsection, with Part B of the permit application.

(b) The trial burn plan shall include the following information:

1. An analysis of each waste or mixture of wastes to be burned which includes:

a. Heat value of the waste in the form and composition in which it **will** ~~[shall]~~ be burned.

b. Viscosity (if applicable) or description of physical form of the waste.

c. An identification of any hazardous organic constituents listed in 401 KAR 31:170, which are present in waste to be burned, except that the applicant need not analyze for constituents listed in 401 KAR 31:170, which would reasonably not be expected to be found in the waste. The constituents excluded from analysis shall be identified and the basis for their exclusion stated. The waste analysis shall rely on analytical techniques specified in "Test Methods for the Evaluation of Solid Waste, Physical/Chemical Methods" ~~[(incorporated by reference in Section 3 of 401 KAR 30:010]~~, or other equivalent analytical techniques.

d. An approximate quantification of the hazardous constituents identified in the waste, within the precision produced by the analytical methods specified in the "Test Methods for the Evaluation of Solid Waste, Physical/Chemical Methods" ~~[(incorporated by reference in Section 3 of 401 KAR 30:010)]~~, or other equivalent analytical methods.

2. A detailed engineering description of the incinerator for which

the trial burn permit is sought including:

a. Manufacturer's name and model number of incinerator (if available);

b. Type of incinerator;

c. Linear dimensions of the incinerator unit including the cross sectional area of the combustion chamber;

d. Description of the auxiliary fuel system (type/feed);

e. Capacity of prime mover;

f. Description of automatic waste feed cutoff system(s);

g. Stack gas monitoring and pollution control equipment;

h. Nozzle and burner design;

i. Construction materials; and

j. Location and description of temperature, pressure, and flow indicating and control devices.

3. A detailed description of sampling and monitoring procedures, including sampling and monitoring locations in the system, the equipment to be used, sampling and monitoring frequency, and planned analytical procedures for sample analysis.

4. A detailed test schedule for each waste for which the trial burn is planned including date(s), duration, quantity of waste to be burned, and other factors relevant to the cabinet's decision under paragraph (e) of this subsection.

5. A detailed test protocol, including, for each waste identified, the ranges of temperature, waste feed rate, combustion gas velocity, use of auxiliary fuel, and any other relevant parameters that **will** [~~shall~~] be varied to affect the destruction and removal efficiency of the incinerator.

6. A description of, and planned operating conditions for, any emission control equipment which **will** [~~shall~~] be used.

7. Procedures for rapidly stopping waste feed, shutting down the incinerator, and controlling emissions in the event of an equipment malfunction.

8. Such other information as the cabinet reasonably finds necessary to determine whether to approve the trial burn plan in light of the purposes of this subsection and the criteria in paragraph (e) of this subsection.

(c) The cabinet, in reviewing the trial burn plan, shall evaluate the sufficiency of the information provided and may require the applicant to supplement this information, if necessary, to achieve the purposes of this subsection.

(d) Based on the waste analysis data in the trial burn plan, the cabinet shall specify as trial Principal Organic Hazardous Constituents (trial POHC's), those constituents for which destruction and removal efficiencies shall be calculated during the trial burn. These trial POHC's shall be specified by the cabinet based on the estimate of the difficulty of incineration of the constituents identified in the waste analysis, the concentration or mass in the waste feed, and, for wastes listed in 401 KAR 31:040, the hazardous waste constituent or constituents identified in 401 KAR 31:160 as the basis for listing.

(e) The cabinet shall approve a trial burn plan if it finds that:

1. The trial burn is likely to determine whether the incinerator performance standards required by Section 4 of 401 KAR 34:240 can be met;

2. The trial burn itself shall not present an imminent hazard to human health or the environment;

3. The trial burn shall help the cabinet to determine operating requirements to be specified under Section 6 of 401 KAR 34:240; and

4. The information sought in paragraph (e)1 and 2 of this subsection cannot reasonably be developed through other means.

(f) During each approved trial burn (or as soon after the burn as is practicable), the applicant shall make the following determinations:

1. A quantitative analysis of the trial POHC's in the waste feed to the incinerator;

2. A quantitative analysis of the exhaust gas to determine the concentration and mass emissions of the trial POHC's, oxygen (O_2), and hydrogen chloride (HCl);

3. A quantitative analysis of the scrubber water (if any), ash residues, and other residues, for the purpose of estimating the fate of the trial POHC's;

4. A computation of destruction and removal efficiency (DRE), in accordance with the DRE formula specified in Section 4(1) of 401 KAR 34:240;

5. If the HCl emission rate exceeds one and eight tenths (1.8) kilograms of HCl per hour (four (4) pounds per hour), a computation of HCl removal efficiency in accordance with Section 4(2) of 401 KAR 34:240;

6. A computation of particulate emissions, in accordance with Section 4(3) of 401 KAR 34:240,

7. An identification of sources of fugitive emissions and their means of control;

8. A measurement of average, maximum, and minimum temperatures, and combustion gas velocity;

9. A continuous measurement of carbon monoxide (CO) in the exhaust gas; and

10. Such other information as the cabinet may specify as necessary to ensure that the trial burn **will** [~~shall~~] determine compliance with the performance standard in Section 4 of 401 KAR 34:240 and to establish the operating conditions required in Section 6 of 401 KAR 34:240 to meet that performance standard.

(g) The applicant shall submit to the cabinet a certification that the trial burn has been carried out in accordance with the approved trial burn plan, and shall submit the results of all the determinations required in paragraph (f) of this subsection. This submission shall be made within ninety (90) days of the completion of the trial burn, or later if approved by the cabinet.

(h) All data collected during any trial burn shall be submitted to the cabinet following the completion of the trial burn. The results of the trial burn shall be included with Part B of the permit application as specified in Sections 9 and 10 of 401 KAR 38:070 and this administrative regulation, if a permit application is submitted.

(i) All submissions required by this subsection shall be certified on behalf of the applicant by the signature of a person authorized to sign a permit application or a report under Section 7 of 401 KAR 38:070.

(j) Based on the results of the trial burn, the cabinet shall set the operating requirements in the final permit according to Section 6 of 401 KAR 34:240. The permit modification shall proceed as a minor modification according to Section 3 of 401 KAR 38:040.

(3) For the purposes of allowing operation of a new hazardous waste incinerator following completion of the trial burn and prior to final modification of the permit conditions to reflect the trial burn results, the cabinet may establish permit conditions, including but not limited to allowable waste feeds and operating conditions, sufficient to meet the requirements of Section 6 of 401 KAR 34:240, in the permit to a new hazardous waste incinerator. These permit conditions shall be effective for the minimum time required to complete sample analysis, data computation and submission of the trial burn results by the applicant, and modification of the facility permit by the cabinet.

(a) Applicants shall submit a statement, with Part B of the permit application, which identifies the conditions necessary to operate in compliance with the performance standards of Section 4 of 401 KAR 34:240, during this period. This statement should include, at a minimum, restrictions on waste constituents, waste feed rates and the operating parameters identified in Section 6 of 401 KAR 34:240.

(b) The cabinet shall review this statement and any other relevant information submitted with Part B of the permit application and specify those requirements for this period most likely to meet the performance standards of Section 4 of 401 KAR 34:240, based on engineering judgment.

(4) For the purposes of determining feasibility of compliance with the performance standards of Section 4 of 401 KAR 34:240 and of determining adequate operating conditions under Section 6 of 401 KAR 34:240, the applicant for a permit for an existing hazardous waste incinerator shall prepare and submit a trial burn plan and

perform a trial burn in accordance with 401 KAR 38:190, Section 2, and subsections (2)(b) to [~~through~~] (i) of this section or, instead, submit other information as specified in Section 2(3) of 401 KAR 38:190. Applicants submitting information under Section 2(1) of 401 KAR 38:190 are exempt from compliance with Sections 4 and 6 of 401 KAR 34:240 and, therefore, are exempt from the requirement to conduct a trial burn. Applicants who submit trial burn plans and receive approval before submission of a permit application shall complete the trial burn and submit the results, specified in subsection (2)(f) of this administrative regulation, with Part B of the permit application. If completion of this process conflicts with the date set for the submission of the Part B application, the applicant shall contact the cabinet to establish a later date for submission of the Part B application or the trial burn results. Trial burn results shall be submitted prior to issuance of the permit. When the applicant submits a trial burn plan with Part B of the permit application, the cabinet shall specify a time period prior to permit issuance in which the trial burn shall be conducted and the results submitted.

(5) In accordance with Section 3 [~~4~~] of 401 KAR 34:080, prior to issuance of a trial burn permit, the applicant shall establish financial assurance sixty (60) days before the date on which hazardous waste is first received for treatment or storage. The amount of financial assurance established for closure shall be in accordance with the closure plan prepared pursuant to 401 KAR 34:070 and 34:240.

Section 4. Permits for Land Treatment Demonstrations Using Field Tests or Laboratory Analyses. (1) For the purpose of allowing an owner or operator to meet the treatment demonstration requirements of Section 3 of 401 KAR 34:220, the cabinet may issue a treatment demonstration permit. The permit shall contain only those requirements necessary to meet the standards in Section 3(3) of 401 KAR 34:220. The permit may be issued either as a treatment or disposal permit covering only the field test or laboratory analyses, or as a two (2) phase facility permit covering the field tests, or laboratory analyses, and design, construction, operation and maintenance of the land treatment unit.

(a) The cabinet may issue a two (2) phase facility permit if it is found that, based on information submitted in Part B of the application, substantial, although incomplete or inconclusive, information already exists upon which to base the issuance of a facility permit.

(b) If the cabinet finds that not enough information exists upon which it can establish permit conditions to attempt to provide for compliance with all of the requirements of 401 KAR 34:220, the cabinet shall issue a treatment demonstration permit covering only the field test or laboratory analyses.

(2) If the cabinet finds that a phased permit may be issued, it shall establish, as requirements in the first phase of the facility permit, conditions for conducting the field test or laboratory analyses. These permit conditions shall include design and operating parameters (including the duration of the tests or analyses and, in the case of field tests, the horizontal and vertical dimensions of the treatment zone), monitoring procedures, postdemonstration cleanup activities, and any other conditions which the cabinet finds may be necessary under Section 3(3) of 401 KAR 34:220. The cabinet shall include conditions in the second phase of the facility permit to attempt to meet all of 401 KAR 34:220 requirements pertaining to unit design, construction, operation, and maintenance. The cabinet shall establish these conditions in the second phase of the permit based upon the substantial but incomplete or inconclusive information contained in the Part B application.

(a) The first phase of the permit shall be effective as specified by the cabinet in the permit.

(b) The second phase of the permit shall be effective as provided in subsection (4) of this section.

(3) When the owner or operator who has been issued a two (2) phase permit has completed the treatment demonstration, he shall submit to the cabinet a certification, signed by a person authorized to sign a permit application or report under Section 7 of 401 KAR 38:070, that the field tests or laboratory analyses have been carried out in accordance with the conditions specified in the first phase of the permit for conducting such tests or analyses. The owner or operator shall also submit all data collected during the field tests or laboratory analyses within ninety (90) days of completion of those tests or analyses unless the cabinet approves a later date.

(4) If the cabinet determines that the results of the field tests or laboratory analyses meet the requirements of Section 3 of 401 KAR 34:220, it shall modify the second phase of the permit to incorporate any requirements necessary for operation of the facility in compliance with 401 KAR 34:220, based upon the results of the field tests or laboratory analyses.

(a) This permit modification may proceed as a minor modification under Section 3 of 401 KAR 38:040, provided any such change is minor, or otherwise shall proceed as a modification under Section 2(1)(b) of 401 KAR 38:040.

(b) If no modifications of the second phase of the permit are necessary, or if only minor modifications are necessary and have been made, the cabinet shall give notice of the final decision to the permit applicant and to each person who submitted written comments on the phased permit or who requested notice of final decision on the second phase of the permit. The second phase of the permit then shall become effective as specified by the cabinet in Section 12 of 401 KAR 38:050.

(c) If modifications under Section 2(1)(b) of 401 KAR 38:040 are necessary, the second phase of the permit shall become effective only after those modifications have been made.

(5) No permits shall be issued under this section unless the owner or operator has established adequate financial responsibility as specified in 401 KAR 34:080 to [~~through~~] 34:176.

Section 5. Interim Permits for UIC Wells. The cabinet may issue a permit under this section to any Class I UIC well (defined in 40 CFR 144.7) injecting hazardous wastes within the state, if no UIC program has been approved by the [~~U.S.~~] EPA for Kentucky. Any such permit shall apply and insure compliance with all applicable requirements of 401 KAR Chapter 34 and 401 KAR 38:500 and shall be for a term not to exceed two (2) years. No such permit shall be issued after approval or promulgation of a UIC program in Kentucky. Any permit under this section shall contain a condition providing that it shall terminate upon final action by the cabinet under a UIC program to issue or deny a UIC permit for the facility.

Section 6. Research, Development, and Demonstration Permits. (1) The cabinet may issue a research, development, and demonstration permit for any hazardous waste treatment facility which proposes to utilize an innovative and experimental hazardous waste treatment technology or process for which permit standards for such experimental activity have not been promulgated under 401 KAR Chapters 34 or 36. Any such permit shall include such terms and conditions as **will** [~~shall~~] assure protection of human health and the environment. Such permits:

(a) Shall provide for the construction of such facilities as necessary, and for operation of the facility for not longer than one (1) year unless renewed as provided in subsection (4) of this section; and

(b) Shall provide for the receipt and treatment by the facility of only those types and quantities of hazardous waste which the cabinet deems necessary for purposes of determining the efficacy and performance capabilities of the technology or process and the effects of such technology or process on human health and the environment; and

(c) Shall include such requirements as the cabinet deems necessary to protect human health and the environment (including, but not limited to, requirements regarding monitoring, operation, financial responsibility, closure, and remedial action), and such requirements as the cabinet deems necessary regarding testing and

providing of information to the cabinet with respect to the operation of the facility.

(2) For the purpose of expediting review and issuance of permits under this section, the cabinet may, consistent with the protection of human health and the environment, modify or waive permit application and permit issuance requirements in 401 KAR Chapter 38 except that there may be no modification or waiver of provisions in KRS Chapter 224 regarding financial responsibility (including insurance) or of procedures regarding public participation.

(3) The cabinet may order an immediate termination of all operations at the facility at any time it is determined that termination is necessary to protect human health and the environment.

(4) Any permit issued under this section may be renewed not more than three (3) times. Each such renewal shall be for a period of not more than one (1) year.

Section 7. Permits for Boilers and Industrial Furnaces Burning Hazardous Waste. (1) General. Owners and operators of new boilers and industrial furnaces (those not operating under the interim status standards of Section 4 of 401 KAR 36:020) are subject to subsections (2) to (6) of this section. Boilers and industrial furnaces operating under the interim status standards of Section 4 of 401 KAR 36:020 are subject to subsection (7) of this section.

(2) Permit operating periods for new boilers and industrial furnaces. A permit for a new boiler or industrial furnace shall specify appropriate conditions for the following operating periods:

(a) Pretrial burn period. For the period beginning with initial introduction of hazardous waste and ending with initiation of the trial burn, and only for the minimum time required to bring the boiler or industrial furnace to a point of operational readiness to conduct a trial burn, not to exceed 720 hours operating time when burning hazardous waste, the cabinet shall establish in the pretrial burn period of the permit conditions, including but not limited to, allowable hazardous waste feed rates and operating conditions. The cabinet may extend the duration of this operational period once, for up to 720 additional hours, at the request of the applicant when good cause is shown. The permit may be modified to reflect the extension according to Section 3 of 401 KAR 38:040.

1. Applicants shall submit a statement, with part B of the permit application, that suggests the conditions necessary to operate in compliance with the standards of Sections 5 to 8 of 401 KAR 36:020 during this period. This statement should include, at a minimum, restrictions on the applicable operating requirements identified in Section 3(5) of 401 KAR 36:020.

2. The cabinet shall review this statement and any other relevant information submitted with part B of the permit application and specify requirements for this period sufficient to meet the performance standards of Sections 5 to 8 of 401 KAR 36:020 based on his engineering judgment.

(b) Trial burn period. For the duration of the trial burn, the cabinet shall establish conditions in the permit for the purposes of determining feasibility of compliance with the performance standards of Sections 5 to 8 of 401 KAR 36:020 and determining adequate operating conditions under Section 3(5) of 401 KAR 36:020. Applicants shall propose a trial burn plan, prepared under subsection (3) of this section, to be submitted with part B of the permit application.

(c) Posttrial burn period.

1. For the period immediately following completion of the trial burn, and only for the minimum period sufficient to allow sample analysis, data computation, and submission of the trial burn results by the applicant, and review of the trial burn results and modification of the facility permit by the cabinet to reflect the trial burn results, the cabinet shall establish the operating requirements most likely to ensure compliance with the performance standards of Sections 5 to 8 of 401 KAR 36:020 based on his engineering judgment.

2. Applicants shall submit a statement, with part B of the application, that identifies the conditions necessary to operate during this period in compliance with the performance standards of Sections 5 to 8 of 401 KAR 36:020. This statement shall include, at a minimum, restrictions on the operating requirements provided by Section 3(5) of 401 KAR 36:020.

3. The cabinet shall review this statement and any other relevant information submitted with part B of the permit application and specify requirements for this period sufficient to meet the performance standards of Sections 5 to 8 of 401 KAR 36:020 based on his engineering judgment.

(d) Final permit period. For the final period of operation, the cabinet shall develop operating requirements in conformance with Section 3(5) of 401 KAR 36:020 that reflect conditions in the trial burn plan and are likely to ensure compliance with the performance standards of Sections 5 to 8 of 401 KAR 36:020. Based on the trial burn results, the cabinet shall make any necessary modifications to the operating requirements to ensure compliance with the performance standards. The permit modification shall proceed according to Section 3 of 401 KAR 38:040.

(3) Requirements for trial burn plans. The trial burn plan shall include the following information. The cabinet, in reviewing the trial burn plan, shall evaluate the sufficiency of the information provided and may require the applicant to supplement this information, if necessary, to achieve the purposes of this subsection:

(a) An analysis of each feed stream, including hazardous waste, other fuels, and industrial furnace feedstocks, as fired, that includes:

1. Heating value, levels of antimony, arsenic, barium, beryllium, cadmium, chromium, lead, mercury, silver, thallium, total chlorine/chloride, and ash;

2. Viscosity or description of the physical form of the feed stream;

(b) An analysis of each hazardous waste, as fired, including:

1. An identification of any hazardous organic constituents listed in 401 KAR 31:170, that are present in the feed stream, except that the applicant need not analyze for constituents listed in 401 KAR 31:170, that would reasonably not be expected to be found in the hazardous waste. The constituents excluded from analysis shall be identified and the basis for this exclusion explained. The analysis shall be conducted in accordance with analytical techniques specified in test methods for evaluating solid waste, physical/chemical methods, or their equivalent.

2. An approximate quantification of the hazardous constituents identified in the hazardous waste, within the precision produced by the analytical methods specified in test methods for evaluating solid waste, physical/chemical methods, or other equivalent.

3. A description of blending procedures, if applicable, prior to firing the hazardous waste, including a detailed analysis of the hazardous waste prior to blending, an analysis of the material with which the hazardous waste is blended, and blending ratios.

(c) A detailed engineering description of the boiler or industrial furnace, including:

1. Manufacturer's name and model number of the boiler or industrial furnace;

2. Type of boiler or industrial furnace;

3. Maximum design capacity in appropriate units;

4. Description of the feed system for the hazardous waste, and, as appropriate, other fuels and industrial furnace feedstocks;

5. Capacity of hazardous waste feed system;

6. Description of automatic hazardous waste feed cutoff system(s);

7. Description of any pollution control system; and

8. Description of stack gas monitoring and any pollution control monitoring systems.

(d) A detailed description of sampling and monitoring procedures including sampling and monitoring locations in the system, the equipment to be used, sampling and monitoring frequency, and planned analytical procedures for sample analysis.

(e) A detailed test schedule for each hazardous waste for which the trial burn is planned, including date(s), duration, quantity of

hazardous waste to be burned, and other factors relevant to the cabinet's decision under subsection (2)(b) of this section.

(f) A detailed test protocol, including, for each hazardous waste identified, the ranges of hazardous waste feed rate, and, as appropriate, the feed rates of other fuels and industrial furnace feedstocks, and any other relevant parameters that may affect the ability of the boiler or industrial furnace to meet the performance standards in Sections 5 to 8 of 401 KAR 36:020.

(g) A description of, and planned operating conditions for, any emission control equipment that will be used.

(h) Procedures for rapidly stopping the hazardous waste feed and controlling emissions in the event of an equipment malfunction.

(i) Such other information as the cabinet reasonably finds necessary to determine whether to approve the trial burn plan in light of the purposes of this subparagraph and the criteria in subsection (2)(b) of this section.

(4) Trial burn procedures.

(a) A trial burn shall be conducted to demonstrate conformance with the standards of Sections 5 to 8 of 401 KAR 36:020 under an approved trial burn plan.

(b) The cabinet shall approve a trial burn plan if it finds that:

1. The trial burn is likely to determine whether the boiler or industrial furnace can meet the performance standards of Sections 5 to 8 of 401 KAR 36:020;

2. The trial burn itself will not present an imminent hazard to human health and the environment;

3. The trial burn will help the cabinet to determine operating requirements to be specified under Section 3(5) of 401 KAR 36:020; and

4. The information sought in the trial burn cannot reasonably be developed through other means.

(c) The applicant shall submit to the cabinet a certification that the trial burn has been carried out in accordance with the approved trial burn plan, and shall submit the results of all the determinations required in subsection (3) of this section. This submission shall be made within ninety (90) days of completion of the trial burn, or later if approved by the cabinet.

(d) All data collected during any trial burn shall be submitted to the cabinet following completion of the trial burn.

(e) All submissions required by this subsection shall be certified on behalf of the applicant by the signature of a person authorized to sign a permit application or a report under Section 7 of 401 KAR 38:070.

(5) Special procedures for destruction and removal efficiency (DRE) trial burns. When a destruction and removal efficiency (DRE) trial burn is required under Section 5(1) of 401 KAR 36:020, the cabinet shall specify (based on the hazardous waste analysis data and other information in the trial burn plan) as trial principal organic hazardous constituents (POHCs) those compounds for which destruction and removal efficiencies shall be calculated during the trial burn. These trial POHCs shall be specified by the cabinet based on information including its estimate of the difficulty of destroying the constituents identified in the hazardous waste analysis, their concentrations or mass in the hazardous waste feed, and, for hazardous waste containing or derived from wastes listed in 401 KAR 31:040, the hazardous waste organic constituent(s) identified in 401 KAR 31:160 as the basis for listing.

(6) Determinations based on trial burn. During each approved trial burn (or as soon after the burn as is practicable), the applicant shall make the following determinations:

(a) A quantitative analysis of the levels of antimony, arsenic, barium, beryllium, cadmium, chromium, lead, mercury, thallium, silver, and chlorine/chloride, in the feed streams (hazardous waste, other fuels, and industrial furnace feedstocks);

(b) When a DRE trial burn is required under Section 5(1) of 401 KAR 36:020:

1. A quantitative analysis of the trial POHCs in the hazardous waste feed;

2. A quantitative analysis of the stack gas for the concentration and mass emissions of the trial POHCs; and

3. A computation of destruction and removal efficiency (DRE), in accordance with the DRE formula specified in Section 5(1) of 401 KAR 36:020.

(c) When a trial burn for chlorinated dioxins and furans is required under Section 5(5) of 401 KAR 36:020, a quantitative analysis of the stack gas for the concentration and mass emission rate of the 2,3,7,8-chlorinated tetra-octa congeners of chlorinated dibenzo-p-dioxins and furans, and a computation showing conformance with the emission standard.

(d) When a trial burn for particulate matter, metals, or HCl/Cl_2 is required under Sections 6, 7(3) or (4), 8(2)(b) or (3) of 401 KAR 36:020, a quantitative analysis of the stack gas for the concentrations and mass emissions of particulate matter, metals, or hydrogen chloride (HCl) and chlorine (Cl_2), and computations showing conformance with the applicable emission performance standards;

(e) When a trial burn for DRE, metals, or HCl/Cl_2 is required under Sections 5(1), 7(3) or (4), or 8(2)(b) or (3) of 401 KAR 36:020, a quantitative analysis of the scrubber water (if any), ash residues, other residues, and products for the purpose of estimating the fate of the trial POHCs, metals, and chlorine/chloride;

(f) An identification of sources of fugitive emissions and their means of control;

(g) A continuous measurement of carbon monoxide (CO), oxygen, and where required, hydrocarbons (HC), in the stack gas; and

(h) Such other information as the cabinet may specify as necessary to ensure that the trial burn will determine compliance with the performance standards in Sections 5 to 8 of 401 KAR 36:020 and to establish the operating conditions required by Section 3(5) of 401 KAR 36:020 as necessary to meet those performance standards.

(7) Interim status boilers and industrial furnaces. For the purpose of determining feasibility of compliance with the performance standards of Sections 5 to 8 of 401 KAR 36:020 and of determining adequate operating conditions under Section 4 of 36:020, applicants owning or operating existing boilers or industrial furnaces operated under the interim status standards of Section 4 of 401 KAR 36:020 shall either prepare and submit a trial burn plan and perform a trial burn in accordance with the requirements of this section or submit other information as specified in Section 1(f) of 401 KAR 38:260. Applicants who submit a trial burn plan and receive approval before submission of the part B permit application shall complete the trial burn and submit the results specified in subsection (6) of this section with the part B permit application. If completion of this process conflicts with the date set for submission of the part B application, the applicant shall contact the cabinet to establish a later date for submission of the part B application or the trial burn results. If the applicant submits a trial burn plan with part B of the permit application, the trial burn shall be conducted and the results submitted within a time period prior to permit issuance to be specified by the cabinet.

PHILLIP J. SHEPHERD, Secretary
E. DOUGLAS STEPHAN, Commissioner
APPROVED BY AGENCY: December 13, 1993
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NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION CABINET
Department for Environmental Protection
Division of Waste Management
(Amended After Hearing)

401 KAR 38:090. General contents of Part B application.

RELATES TO: KRS 224.10, 224.40, 224.46, 224.99
STATUTORY AUTHORITY: KRS 10-100, 224.46-520, 224.46-530
NECESSITY AND FUNCTION: To implement provisions of KRS 224.46-520 and 224.46-530, and to establish [~~KRS 224.40-305 and 224.46-520 require any person who treats, stores, recycles or disposes of hazardous waste to first obtain a hazardous waste site or facility permit from the cabinet. This chapter establishes the permitting process for hazardous waste sites or facilities. An overview of the permit program is found in the Necessity and Function of 401 KAR 38:010. This regulation establishes~~] the general contents of the Part B application.

Section 1. Contents of Part B Application. Part B of the permit application consists of the general information requirements of this administrative regulation and the specific informational requirements in 401 KAR 38:100 to [~~through~~] 38:210 applicable to the facility. The Part B information requirements presented in this administrative regulation and 401 KAR 38:100 to [~~through~~] 401 KAR 38:210 reflect the information requirements necessary for the cabinet to determine compliance with 401 KAR Chapter 34 standards. If owners and operators of hazardous waste sites or facilities can demonstrate that the information prescribed in Part B cannot be provided to the extent required, the cabinet may make allowance for submission of such information on a case-by-case basis. Information required in Part B shall be submitted to the cabinet and signed in accordance with requirements in Section 7 of 401 KAR 38:070. Certain technical data, such as design drawings and specifications, and engineering studies shall be certified by an [~~professional~~] engineer [~~registered in Kentucky~~].

Section 2. General Information Requirements. The following information is required for all hazardous waste sites or facilities, except as Section 1 of 401 KAR 34:010 provides otherwise:

(1) A general description of the facility.

(2) Chemical and physical analyses of the hazardous wastes to be handled at the facility. At a minimum, these analyses shall contain all the information which must be known to treat, store, or dispose of the wastes properly in accordance with 401 KAR Chapter 34.

(3) A copy of the waste analysis plan required by Section 4(2) of 401 KAR 34:020 and, if applicable, Section 4(3) of 401 KAR 34:020.

(4) A description of the security procedures and equipment required by Section 5 of 401 KAR 34:020, or a justification demonstrating the reasons for requesting a variance of this requirement.

(5) A copy of the general inspection schedule required by Section 6(2) of 401 KAR 34:020. Include, where applicable, as part of the inspection schedule, specific requirements in Section 5 of 401 KAR 34:180, Sections 4(9) and 6 of 401 KAR 34:190[~~, Section 6 of 401 KAR 34:190~~], Section 4 of 401 KAR 34:200, Section 5 of 401 KAR 34:210, Section 4 of 401 KAR 34:220, Section 4 of 401 KAR 34:230, [~~and~~] Section 3 of 401 KAR 34:250, Section 4 of 401 KAR 34:275, and Sections 3, 4, and 9 of 401 KAR 34:280.

(6) A justification of any request for a variance of the preparedness and prevention requirements of 401 KAR 34:030.

(7) A copy of the contingency plan required by 401 KAR 34:030; include, where applicable, as part of the contingency plan, specific requirements in 401 KAR 34:190, 34:200 and 34:210.

(8) A description of procedures, structures, or equipment used at the facility to:

(a) Prevent hazards in unloading operations (for example, ramps, special fork lifts);

(b) Prevent run-off from hazardous waste handling areas to other areas of the facility or environment, or to prevent flooding (for example, berms, dikes, trenches);

(c) Prevent contamination of water supplies;

(d) Mitigate effects of equipment failure and power outages; [~~and~~]

(e) Prevent undue exposure of personnel to hazardous waste (for example, protective clothing); and

(f) Prevent releases to atmosphere.

(9) A description of precautions to prevent accidental ignition or reaction of ignitable, reactive or incompatible wastes as required to demonstrate compliance with Section 8 of 401 KAR 34:020 including documentation demonstrating compliance with Section 8(3) of 401 KAR 34:020.

(10) Traffic pattern, estimated volume (number, types of vehicles) and control (for example, show turns across traffic lanes, and stacking lanes, if appropriate; describe access road surfacing and load bearing capacity; show traffic control signals).

(11) Facility location information:

(a) In order to determine the applicability of the seismic standard, Section 9(1) of 401 KAR 34:020, the owner or operator of a new facility shall identify the political jurisdiction ([~~e.g.,~~] county, township, or election district) in which the facility is proposed to be located.

(b) If the facility is proposed to be located in an area listed in 401 KAR 34:340 the owner or operator shall demonstrate compliance with the seismic standard. This demonstration may be made using either published geologic data or data obtained from field investigations carried out by the applicant. The information provided shall be of such quality to be acceptable to geologists experienced in identifying and evaluation seismic activity. The information submitted shall show that either:

1. No faults which have had displacement in Holocene time are present, or no lineations which suggest the presence of a fault (which have had displacement in Holocene time) within 3,000 feet of a facility are present, based on data from:

a. Published geologic studies;

b. Aerial reconnaissance of the area within a five (5) mile radius from the facility;

c. An analysis of aerial photographs covering a 3,000 foot radius of the facility; and

d. If needed to clarify the above data, a reconnaissance based on walking portions of the area within 3,000 feet of the facility; or

2. If faults (to include lineations) which have had displacement in Holocene time are present within 3,000 feet of a facility, no faults pass within 200 feet of the portions of the facility where treatment, storage, or disposal of hazardous waste **will** [~~shall~~] be conducted, based on data from a comprehensive geologic analysis of the site. Unless a site analysis is otherwise conclusive concerning the absence of faults within 200 feet of such portions of the facility, data shall be obtained from a subsurface exploration (trenching) of the area within a distance no less than 200 feet from portions of the facility where treatment, storage or disposal of hazardous waste **will** [~~shall~~] be conducted. Such trenching shall be performed in a direction that is perpendicular to known faults (which have had displacement in Holocene time) passing within 3,000 feet of the portions of the facility where treatment, storage, or disposal of hazardous waste shall be conducted. Such investigation shall document with supporting maps and other analyses the location of any faults found.

(c) Owners and operators of all facilities shall provide an identification of whether the facility is located within a 100-year flood plain, floodway or seasonal high water tables in accordance with Section 9(2) of 401 KAR 34:020. This identification shall indicate the source of data for such determination and include a copy of the relevant Federal Insurance Administration (FIA) flood map, if used, or the calculations and maps used where a FIA map is not available. Information shall also be provided identifying the 100-year flood level and any other special flooding factors ([~~e.g.~~] wave action for example)

which will [~~shall~~] be considered in designing, constructing, operating, or maintaining the facility to withstand washout from a 100-year flood. Note: Where maps for the National Flood Insurance Program produced by the Federal Insurance Administration (FIA) of the Federal Emergency Management Agency are available, they shall normally be determinative of whether a facility is located within or outside of the 100-year flood plain. However, where the FIA map excludes an area (usually areas of the flood plain less than 200 feet in width), these areas shall be considered and a determination made as to whether they are in the 100-year flood plain. Where FIA maps are not available for a proposed facility location, the owner or operator shall use equivalent mapping techniques to determine whether the facility is within the 100-year flood plain, and if so located, what the 100-year flood elevation would be.

(d) Owners and operators of facilities located in the 100-year flood plain shall provide the following information:

1. Engineering analysis to indicate the various hydrodynamic and hydrostatic forces expected to result at the site as a consequence of a 100-year flood;

2. Structural or other engineering studies showing the design of operational units (for example, [~~e.g.,~~] tanks, incinerators) and flood prevention devices (for example, [~~e.g.,~~] floodwalls, dikes) at the facility and how these will [~~shall~~] prevent washout and inundation of the waste;

3. If applicable, and in lieu of subparagraphs 1 and 2 of this paragraph a detailed description of procedures to be followed to remove hazardous waste to safety before the facility is flooded, including:

a. Timing of such movement relative to flood levels, including estimated time to move the waste, to show that such movement can be completed before floodwaters reach the facility;

b. A description of the location(s) to which the waste will [~~shall~~] be moved and demonstration that those facilities will [~~shall~~] be eligible to receive hazardous waste in accordance with the administrative regulations under 401 KAR Chapters 34 to [~~through~~] 38;

c. The planned procedures, equipment, and personnel to be used and the means to ensure that such resources will [~~shall~~] be available in time for use; and

d. The potential for accidental discharges of the waste during movement.

(e) Existing facilities NOT in compliance with Section 9(2) of 401 KAR 34:020 shall provide a plan showing how the facility will [~~shall~~] be brought into compliance and a schedule for compliance.

(12) An outline of both the introductory and continuing training programs by owners or operators to prepare persons to operate or maintain the hazardous waste site or facility in a safe manner as required to demonstrate compliance with Section 7 of 401 KAR 34:020. A brief description of how training will [~~shall~~] be designed to meet actual job tasks in accordance with requirements in Section 7(1)(c) of 401 KAR 34:020.

(13) A copy of the closure plan and, where applicable, the postclosure plan required by Sections 3 and 9 of 401 KAR 34:070, and Section 8 of 401 KAR 34:190. Include, where applicable, as part of the plans, specific requirements in Section 9 of 401 KAR 34:180, Section 8 of 401 KAR 34:190, Section 6 of 401 KAR 34:200, Section 8 of 401 KAR 34:210, Section 8 of 401 KAR 34:220, Section 6 of 401 KAR 34:230, Section 8 of 401 KAR 34:240 and Sections 2 and 4 of 401 KAR 34:250.

(14) For hazardous waste disposal units that have been closed, documentation that notices required under Section 10 of 401 KAR 34:070 have been filed.

(15) The most recent closure cost estimate for the facility prepared in accordance with Section 1 of 401 KAR 34:090 and a copy of the documentation required to demonstrate financial assurance under Sections 2 to [~~through~~] 12 of 401 KAR 34:090. For a new facility, a copy of the required documentation may be submitted sixty (60) days prior to the initial receipt of hazardous wastes, if that is later than the submission of the Part B.

(16) Where applicable, the most recent postclosure cost estimate for the facility prepared in accordance with Section 1 of 401 KAR 34:100 plus a copy of the documentation required to demonstrate financial assurance under Sections 2 to [~~through~~] 12 of 401 KAR 34:100. For a new facility, a copy of the required documentation may be submitted sixty (60) days prior to the initial receipt of hazardous wastes, if that is later than the submission of the Part B.

(17) Where applicable, a copy of the insurance policy or other documentation which comprises compliance with the requirements of 401 KAR 34:120. For a new facility, documentation showing the amount of insurance meeting the specification of Section 1 of 401 KAR 34:120 and if applicable, Section 2 of 401 KAR 34:120 that the owner or operator plans to have in effect before initial receipt of hazardous waste for the treatment, storage, or disposal. A request for a variance in the amount of required coverage, for a new or existing facility, may be submitted as specified in 401 KAR 34:120.

(18) A topographic map showing a distance of 1000 feet around the facility at a scale of 2.5 centimeters (approximately one (1) inch) equal to not more than 61.0 meters (approximately 200 feet). Contours shall be shown on the map. The contour interval shall be sufficient to clearly show the pattern of surface water flow in the vicinity of and from each operational unit of the facility. For example, contours with an interval of 1.5 meters (approximately five (5) feet), if relief is greater than 6.1 meters (approximately twenty (20) feet), or an interval of 0.6 meters (approximately two (2) feet), if relief is less than 6.1 meters (approximately twenty (20) feet). Owners and operators of hazardous waste sites or facilities located in mountainous areas shall use larger contour intervals to adequately show topographic profiles of facilities. The map shall clearly show the following:

(a) Map scale and date;

(b) 100 year flood plain area and, if applicable, floodway and areas of seasonal high water table;

(c) Surface waters including intermittent streams;

(d) Surrounding land uses (residential, commercial, agricultural, recreational);

(e) A wind rose (that is, [~~i.e.,~~] prevailing wind-spread and direction);

(f) Orientation of the map (north arrow);

(g) Legal boundaries of the hazardous waste site or facility;

(h) Access control (fences, gates);

(i) Injection and withdrawal wells both on-site and off-site;

(j) Buildings; treatment, storage, or disposal operations; or other structures (recreation areas, run-off control systems, groundwater monitoring systems, access and internal roads, storm, sanitary, and process sewerage systems, loading and unloading areas, and fire control facilities for example [~~, etc.~~]);

(k) Barriers for drainage or flood control; and

(l) Location of operational units within the hazardous waste site or facility where hazardous waste is (or will [~~shall~~] be) treated, stored, or disposed (including equipment cleanup areas).

(19) In addition to information required by the cabinet pursuant to this section, all applicants for construction permits shall submit to the cabinet a plan in accordance with KRS 224.46-520(1). The plan shall address each of the following issues specifically, shall document the applicant's decisions with respect to the proposal, shall make reasonable justification for actions taken and demonstrate that the proposed facility can be integrated into the surroundings in an environmentally compatible manner, including but not limited to insuring that hydrologic, seismologic, geologic and soil considerations have been adequately addressed in the application and operational plan. The plan shall include:

(a) An evaluation of alternatives including other site locations and treatment, storage and disposal approaches (see KRS 224.46-520(1)(a));

(b) An evaluation of the public health, safety and environmental

aspects on the affected community (see KRS 224.46-520(1)(b));

(c) An evaluation of the social and economic impacts of the proposal on the affected community (see KRS 224.46-520(1)(b));

(d) An evaluation of mitigation procedures to alleviate problems identified in paragraphs (a), (b), and (c) of this subsection (see KRS 224.46-520(1)(d)); and

(e) An evaluation of the relationship of the proposal to local planning and existing development (see KRS 224.46-520(1)(e)).

(f) In the case of hazardous waste landfills or other sites or facilities for the land disposal of hazardous waste the provisions of paragraphs (c) and (e) of this subsection shall be determined by the local unit of government pursuant to KRS 224.40-310(5); in the case of a regional integrated waste treatment and disposal demonstration facility the provisions of paragraphs (c) and (e) of this subsection shall be determined by the siting board established pursuant to KRS 224.46-820.

(20) A showing of the past compliance record for both the applicant and any other individual or entity designated to own or operate the hazardous waste site or facility (as required by KRS 224.46-520(1) as follows:

(a) Organizational structure:

1. If the applicant is a proprietorship, a detailed listing of:

a. The proprietors and their respective interests, whether ownership or otherwise.

b. Any partnership (general or limited), joint venture, or corporation in which the applicant holds as much as or more than a twenty-five (25) percent interest (whether ownership or otherwise).

2. If the applicant is a partnership, either general or limited, a detailed listing of:

a. Each of the partners and their respective interests, whether ownership or otherwise.

b. Any corporation, joint venture, partnership (general or limited), or proprietorship in which any of the constituent partners of the applicant holds as much as or more than twenty-five (25) percent interest (whether ownership or otherwise);

c. Any corporation, joint venture, proprietorship, or partnership (general or limited) which holds as much as or more than a twenty-five (25) percent interest (whether ownership or otherwise) in any of the nonindividual constituent partners comprising the applicant.

3. If the applicant is a corporation, a detailed listing of:

a. The officers, directors, and major stockholders;

b. Any corporation of which the applicant is either a subsidiary or which holds as much as or more than a twenty-five (25) percent interest (either in stock or assets) in the applicant;

c. Any corporations which are either subsidiaries of the applicant or in which the applicant holds as much as or more than a twenty-five (25) percent interest (either in stock or assets);

d. Any proprietorship, partnership (general or limited), or joint venture in which the applicant holds as much as or more than a twenty-five (25) percent interest, whether ownership or otherwise.

4. If the applicant is a joint venture, a detailed listing of:

a. All other joint venturers, and the respective interests (whether ownership or otherwise) of each;

b. Any proprietorship, partnership (general or limited), joint venture or corporation in which the applicant holds as much as or more than a twenty-five (25) percent interest (whether ownership or otherwise).

(b) For the purposes of paragraph (c) of this subsection, the listing of violations of laws, rules or administrative regulations shall include the following areas:

1. Solid or hazardous waste management;

2. Air pollution;

3. Water;

4. OSHA with respect to hazardous materials or hazardous substances; and

5. Transportation with respect to hazardous materials or hazardous substances.

(c) For each and every individual or other entity listed in paragraph (a) of this subsection, a detailed listing of all violations of federal or state laws, rules or administrative regulations concerning the areas listed in paragraph (b) of this subsection (whether either judicial or administrative proceedings are pending or completed) that have resulted or could result in either criminal convictions or civil or administrative fines as much as or more than $1,000.

(d) For each and every individual or other entity listed in paragraph (a) of this subsection, a current financial statement prepared by a certified public accountant.

(e) Hazardous waste sites or facilities which have been regulated under interim status shall be exempt from the requirements of this subsection unless the cabinet specifies otherwise in writing.

(21) An evaluation of subsurface geologic formations and surface topography for solution or karst features. The owner or operator shall demonstrate compliance with either paragraph (a) or (b) of this subsection.

(a) If the owner or operator demonstrates to the satisfaction of the cabinet that the facility is not underlain by soluble limestone, he is exempt from all of the requirements of this subsection.

(b) If the owner or operator does not make the demonstration of paragraph (a) of this subsection, the owner or operator shall satisfy the requirements in paragraph (c)1 or (c)2 of this subsection. In addition, the owner or operator shall demonstrate that:

1. The facility has been designed to withstand any gradual or sudden land subsidence which is characteristic of areas underlain by soluble limestone; and

2. No contamination into or through any fractures, channels or solution features shall occur.

(c) Except as provided in paragraph (a) of this subsection, the owner or operator shall comply with either subparagraph 1 or 2 of this paragraph.

1. The owner or operator shall:

a. Establish the presence and extent of all fractures, channels and solution features in the bedrock beneath the facility and describe how such features **will** [~~shall~~] be sealed, filled, isolated or otherwise neutralized to prevent subsidence; and

b. Describe how such solution features **will** [~~shall~~] be monitored to demonstrate compliance with the criteria of paragraph (b)1 and 2 of this subsection; or

2. The owner or operator shall design, operate and maintain a double-liner system which shall be installed beneath the facility and which includes a leak detection system that meets the criteria of paragraph (b)1 and 2 of this subsection. The design of the double-lined facility shall meet all the specifications of Section 3 of 401 KAR 34:200 (surface impoundments), Section 3 of 401 KAR 34:210 (waste piles) and Section 3 of 401 KAR 34:230 (landfills), as applicable.

(22) The actual test data showing that the liner is or will be compatible with the waste, if applicable.

(23) For land disposal facilities, if a case-by-case extension has been approved under Section 5 of 401 KAR 37:010 or a petition has been approved under Section 6 of 401 KAR 37:010, a copy of the notice of approval for the extension or petition is required.

(24) The documentation on waste minimization required by Section 1(12)(h)4 of 401 KAR 38:030[~~, Section 1(12)(h)4~~].

(25) Applicants may be required to submit such information as may be necessary to enable the cabinet to carry out its duties under state laws as required in this chapter.

PHILLIP J. SHEPHERD, Secretary
E. DOUGLAS STEPHAN, Commissioner
APPROVED BY AGENCY: December 13, 1993
FILED WITH LRC: December 14, 1993 at 10 a.m.

NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION CABINET
Department for Environmental Protection
Division of Waste Management
(Amended After Hearing)

401 KAR 38:170. Specific Part B requirements for surface impoundments.

RELATES TO: KRS 224.10, 224.40, 224.46, 224.99
STATUTORY AUTHORITY: KRS 224.10-100, 224.46-520
NECESSITY AND FUNCTION: To implement provisions of KRS 224.46-520 and to establish [~~KRS 224.40-305 and 224.46-250 require any person who treats, stores, recycles, or disposes of hazardous waste to first obtain a hazardous waste site or facility permit from the cabinet. This chapter establishes the permitting process for hazardous waste sites or facilities. An overview of the permit program is found in the Necessity and Function of 401 KAR 38:010. This regulation establishes~~] specific Part B requirements for facilities that treat, store or dispose of hazardous waste in surface impoundments.

Section 1. Applicability. The requirements in this administrative regulation apply to all owners and operators of hazardous waste sites or facilities that treat, store or dispose or will treat, store or dispose of hazardous waste in surface impoundments.

Section 2. Additional Part B Requirements for Surface Impoundments. In addition to the information required by 401 KAR 38:080, 401 KAR 38:090, and 401 KAR 38:100, owners and operators of facilities that store, treat, or dispose or will store, treat, or dispose of hazardous waste in surface impoundments, except as otherwise provided in Section 1 of 401 KAR 34:010 and Section 1 of 401 KAR 34:200, must provide the following additional information:

(1) A list of the hazardous wastes placed or to be placed in each surface impoundment;

(2) Detailed plans and an engineering report describing how the surface impoundment is [~~or will be~~] designed and is or **will** [~~shall~~] be [~~,~~] constructed, operated, and maintained to meet the requirements[~~,~~] of Section 10 of 401 KAR 3:020 and Sections 2, 3, and 10 of 401 KAR 34:200, addressing the following items: [~~. This submission must address the following items as specified in Section 2 of 401 KAR 34:200:~~]

(a) The liner system (except for an existing portion of a surface impoundment). If an exemption from the requirement for a liner is sought as provided by Section 2(2) of 401 KAR 34:200, submit detailed plans and engineering and hydrogeologic reports as appropriate, describing alternate design and operating practices that will, in conjunction with location aspects, prevent the migration of any hazardous constituents into the groundwater or surface water at any future time;

(b) **The double liner and leak (leachate) detection, collection, and removal system, if the surface impoundment is required to meet the requirements of Section 2(3) of 401 KAR 34:200. If an exemption from the requirements for double liners and a leak detection, collection, and removal system or alternative design is sought as provided by Section 2(4), (5), or (6) of 401 KAR 34:200, submit appropriate information;** [~~Detailed plans and an engineering report describing how the surface impoundment is or will be designed, constructed, operated and maintained to meet the requirements of Section 2 of 401 KAR 34:200. This submission shall address the following items as specified in Section 2 of 401 KAR 34:200:~~]

(c) **If the leak detection system is located in a saturated zone, submit detailed plans and an engineering report explaining the leak detection system design and operation, and the location of the saturated zone in relation to the leak detection system;** [~~A description of how each surface impoundment, including the liner and cover systems and appurtenances for control of overtopping, will be inspected in order to meet the requirements of Section 4(1) and (2) of 401 KAR 34:200. This information shall be included in the inspection plan submitted under Section 2(5) of 401 KAR 38:090;~~]

(d) **The construction quality assurance (CQA) plan, if required under Section 10 of 401 KAR 34:020;** [~~A certification by an engineer which attests to the structural integrity of each dike, as required under Section 4(3) of 401 KAR 34:200. For new units, the owner or operator shall submit a statement by an engineer that he will provide such a certification upon completion of construction in accordance with the plans and specifications;~~]

(e) **Proposed action leakage rate, with rationale, if required under Section 3 of 401 KAR 34:200, and response action plan, if required under Section 10 of 401 KAR 34:200;** [~~A description of the procedure to be used for removing a surface impoundment from service, as required under Section 5(2) and (3) of 401 KAR 34:200. This information shall be included in the contingency plan submitted under Section 2(7) of 401 KAR 38:090;~~]

(f) [~~(b)~~] Prevention of overtopping, including flow measuring devices; and

(g) [~~(c)~~] Structural integrity of dikes;

(3) A description of how each surface impoundment, including the double liner system, leak detection system, [~~liner and~~] cover system, and appurtenances for control of overtopping, including flow measuring devices, will be inspected in order to meet the requirements of Section 5(1) and (2) of 401 KAR 34:200. This information shall [~~should~~] be included in the inspection plan submitted under Section 2(5) of 401 KAR 38:090;

(4) A certification by an [~~qualified~~] engineer [~~registered in the state of Kentucky~~] which attests to the structural integrity of each dike, as required under Section 4(3) of 34:200. For new units, the owner or operator shall [~~must~~] submit a statement by an [~~qualified~~] engineer [~~registered in the state of Kentucky~~] that he will provide such a certification upon completion of construction in accordance with the plans and specifications;

(5) A description of the procedures to be used for removing a surface impoundment from service, as required under Section 5(2) and (3) of 401 KAR 34:200. This information shall [~~should~~] be included in the contingency plan submitted under Section 2(7) of 401 KAR 38:090;

(6) A description of how hazardous waste residues and contaminated materials will be removed from the unit at closure, as required under Section 6(1)(a) of 401 KAR 34:200. For any wastes not to be removed from the unit upon closure, the owner or operator shall [~~must~~] submit detailed plans and an engineering report describing how Section 6(1)(b) and (2) of 401 KAR 34:200 and 38:500 will be complied with. This information shall [~~should~~] be included in the closure plan and, where applicable, the postclosure plan submitted under Section 2(13) of 401 KAR 38:190;

(7) If ignitable or reactive wastes are to be placed in a surface impoundment, an explanation of how Section 7 of 401 KAR 34:200 will be complied with;

(8) Incompatible wastes, or incompatible wastes and materials shall not be placed in a surface impoundment in accordance with Section 8 of 401 KAR 34.200.

(9) A waste management plan for EPA hazardous waste numbers F020, F021, F022, F023, F026, and F027 (chlorinated dioxins, dibenzofurans and phenols) describing how the surface impoundment is or will be designed, constructed, operated, and maintained to meet the requirements of Section 9 of 401 KAR 34:200[~~, Section 9~~]. This submission shall [~~must~~] address the following items as specified in Section 9 of 401 KAR 34:200[~~, Section 9~~]:

(a) The volume, physical, and chemical characteristics of the wastes, including their potential to migrate through soil or to volatilize or escape into the atmosphere;

(b) The attenuative properties of underlying and surrounding soils or other materials;

(c) The mobilizing properties of other materials codisposed with these wastes; and

(d) The effectiveness of additional treatment, design, or monitoring techniques.

PHILLIP J. SHEPHERD, Secretary
E. DOUGLAS STEPHAN, Commissioner
APPROVED BY AGENCY: December 13, 1993
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NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION CABINET
Department for Environmental Protection
Division of Waste Management
(Amended After Hearing)

401 KAR 38:180. Specific Part B requirements for waste piles.

RELATES TO: KRS 224.10, 224.40, 224.46, 224.99
STATUTORY AUTHORITY: KRS 224.10-100, 224.46-520
NECESSITY AND FUNCTION: To implement provisions of KRS [~~224.40-305 and~~] 224.46-520 and to establish [~~require any person who treats, stores, recycles, or disposes of hazardous waste to first obtain a hazardous waste site or facility permit from the cabinet. This chapter establishes the permitting process for hazardous waste sites or facilities. An overview of the permit program is found in the Necessity and Function of 401 KAR 38:010. This regulation establishes~~] specific Part B requirements for facilities that store or treat hazardous waste in waste piles.

Section 1. Applicability. The requirements in this administrative regulation apply to all owners and operators of hazardous waste sites or facilities that treat or store or will treat or store hazardous waste in waste piles.

Section 2. Additional Part B Requirements for Waste Piles. In addition to the information required by 401 KAR 38:080, 401 KAR 38:090, and 401 KAR 38:100, owners and operators of facilities that store or treat or will store or treat hazardous waste in waste piles, except as otherwise provided in Section 1 of 401 KAR 34:010 and Section 1 of 401 KAR 34:210, shall [~~must~~] provide the following additional information:

(1) A list of the hazardous wastes placed or to be placed in each waste pile;

(2) If an exemption is sought to Section 2 of 401 KAR 34:210 and 401 KAR 34:060 as provided by Section 1(3) of 401 KAR 34:210, an explanation of how the standards of Section 1(3) of 401 KAR 34:210 **will** [~~shall~~] [~~will~~] be complied with or detailed plans and an engineering report describing how the requirements of 401 KAR 34:060, Section 1(2)(b) **will** [~~shall~~] [~~will~~] be met;

(3) Detailed plans and an engineering report describing how the waste pile is [~~or will be~~] designed and is or **will** [~~shall~~] be [~~,~~] constructed, operated, and maintained to meet the requirements of Section 10 of 401 KAR 34:020 and Sections 2 to 4 of 401 KAR 34:210, addressing the following items: [~~. This submission must address the following items as specified in Section 2 of 401 KAR 34:210.~~]

(a)1. The liner system (except for an existing portion of a waste pile) if the waste pile **will** [~~shall~~] meet the requirements of Section 2(1) of 401 KAR 34:210. If an exemption from the requirement for a liner is sought, as provided by Section 2 [~~3~~](2) of 401 KAR 34:210, the owner or operator shall [~~must~~] submit detailed plans and engineering and hydrogeologic reports, as applicable, describing alternate design and operating practices that will, in conjunction with location aspects, prevent the migration of any hazardous constituents into the groundwater or surface water at any future time;

2. The double liner and leak (leachate) detection, collection, and removal system, if the waste pile is required to meet the requirements of Section 2 of 401 KAR 34:210 of this chapter. If an exemption from the requirements for double liners and a leak detection, collection, and removal system or alternative design is sought as provided by Section 2 of 401 KAR 34:210 of this chapter, submit the appropriate information;

3. If the leak detection system is located in a standard zone, submit detailed plans and an engineering report explaining the leak detection system design and operation, and the location of the saturated zone in relation to the leak detection system;

4. The construction quality assurance (CQA) plan if required under 401 KAR 34:020;

5. Proposed action leakage rate, with rationale, if required under 401 KAR 34:210, and response action plan, if required under 401 KAR 34:210;

(b) Control of run-on;

(c) Control of run-off;

(d) Management of collection and holding units associated with run-on and run-off control systems; and

(e) Control of wind dispersal of particulate matter, where applicable;

(4) A description of how each waste pile, including the liner and appurtenances for control of run-on, and run-off, **will** [~~shall~~] [~~will~~] be inspected in order to meet the requirements of Section 5(1) to (3) [~~and (2)~~] of 401 KAR 34:210. This information shall [~~should~~] be included in the inspection plan submitted under Section 2(5) of 401 KAR 38:090;

(5) If treatment is carried out on or in the pile, details of the process and equipment used, and the nature and quality of the residuals;

(6) If ignitable or reactive wastes are to be placed in a waste pile, an explanation of how requirements of Section 6 of 401 KAR 34:210 **will** [~~shall~~] [~~will~~] be complied with;

(7) Incompatible wastes, or incompatible wastes and materials shall not be placed in a waste pile in accordance with Section 7 of 401 KAR 34.210;

(8) A description of how hazardous waste residues and contaminated materials **will** [~~shall~~] [~~will~~] be removed from the waste pile at closure, as required under Section 8(1) of 401 KAR 34:210. For any waste not to be removed from the waste pile upon closure, the owner or operator shall [~~must~~] submit detailed plans and an engineering report describing how Section 6(1) and (2) of 401 KAR 34:230 and 38:500 **will** [~~shall~~] [~~will~~] be complied with. This information shall [~~should~~] be included in the closure plan and, where applicable, the postclosure plan submitted under Section 2(13) of 401 KAR 38:090; and

(9) A waste management plan for EPA hazardous waste numbers F020, F021, F022, F023, F026, and F027 (chlorinated dioxins, dibenzofurans and phenols) describing how a waste pile that is not enclosed (as defined in 401 KAR 34:210, Section 1(3)) is or **will** [~~shall~~] [~~will~~] be designed, constructed, operated, and maintained to meet the requirements of Section 9 of 401 KAR 34:210[~~, Section 9~~]. This submission shall [~~must~~] address the following items as specified in Section 9 of 401 KAR 34:210[~~, Section 9~~]:

(a) The volume, physical, and chemical characteristics of the wastes to be disposed in the waste pile, including their potential to migrate through soil or to volatilize or escape into the atmosphere;

(b) The attenuative properties of underlying and surrounding soils or other materials;

(c) The mobilizing properties of other materials codisposed with these wastes; and

(d) The effectiveness of additional treatment, design, or monitoring techniques.

PHILLIP J. SHEPHERD, Secretary
E. DOUGLAS STEPHAN, Commissioner
APPROVED BY AGENCY: December 13, 1993

FILED WITH LRC: December 14, 1993 at 10 a.m.

NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION CABINET
Department for Environmental Protection
Division of Waste Management
(Amended After Hearing)

401 KAR 38:210. Specific Part B requirements for landfills.

RELATES TO: KRS 224.10, 224.40, 224.46, 224.99
STATUTORY AUTHORITY: KRS 224.10-100, 224.46-520
NECESSITY AND FUNCTION: To implement provisions of KRS 224.46-520 and to establish [~~KRS 224.40-305 and 224.46-520 require any person who treats, stores, recycles, or disposes of hazardous waste to first obtain a hazardous waste site or facility permit from the cabinet. This chapter establishes the permitting process for hazardous waste sites or facilities. An overview of the permit program is found in the Necessity and Function of 401 KAR 38:010. This regulation establishes~~] specific Part B requirements for landfills.

Section 1. Applicability. The requirements in this administrative regulation apply to all owners and operators of hazardous waste management sites or facilities that dispose [~~or will dispose~~] of hazardous waste in landfills.

Section 2. Additional Part B Requirements for Landfills. In addition to the information required by 401 KAR 38:080, 401 KAR 38:090 and 401 KAR 38:100, owners and operators of facilities that dispose or **will** [~~shall~~] [~~will~~] dispose of hazardous waste in landfills, except as otherwise provided in Section 1 of 401 KAR 34:010 and Section 1 of 401 KAR 34:230, shall [~~must~~] provide the following additional information:

(1) A list of hazardous wastes placed or to be placed in each landfill or landfill cell;

(2) Detailed plans and an engineering report describing how the landfill is [~~or will be~~] designed and is or **will** [~~shall~~] be [,] constructed, operated, and maintained to comply with the requirements of Section 10 of 401 KAR 34:020 and Sections 2 to 4 of 401 KAR 34:230, addressing the following items as specified in 401 KAR 34:230: [~~. This submission must address the following items as specified in Section 2 of 401 KAR 34:230:~~]

(a)1. The liner system and leachate collection and removal system (except for an existing portion of a landfill). If an exemption from the requirements for a liner and a leachate collection and removal system is sought as provided by Section 2(2) of 401 KAR 34:230, submit detailed plans and engineering and hydrogeologic reports, as appropriate, describing alternate design and operating practices that **will** [~~shall~~] [~~will~~], in conjunction with location aspects, prevent the migration of any hazardous constituent into the groundwater or surface water at any future time;

2. The double liner and leak (leachate) detection, collection, and removal system, if the landfill is required to comply with Section 2 of 401 KAR 34:230. If an exemption from the requirements for double liners and a leak detection, collection, and removal system or alternative design is sought as provided by Section 3 of 401 KAR 34:230, submit appropriate information;

3. If the leak detection system is located in a saturated zone, submit detailed plans and an engineering report explaining the leak detection system design and operation, and the location of the saturated zone in relation to the leak detection system;

4. The construction quality assurance (CQA) plan if required under 401 KAR 34:020;

5. Proposed action leakage rate, with rationale, if required under 401 KAR 34:230, and response action plan, if required under 401 KAR 34:230;

(b) Control of run-on;

(c) Control of run-off;

(d) Management of collection and holding facilities associated with run-on and run-off control systems; and

(e) Control of wind dispersal of particulate matter, where applicable.

(3) If an exemption from 401 KAR 34:060 is sought, as provided by Section 3(1) of 401 KAR 34:230, the owner or operator shall [~~must~~] submit detailed plans and an engineering report explaining the location of the saturated zone in relation to the landfill, the design of a double-liner system that incorporates a leak detection system between the liners, and a leachate collection and removal system above the liners;

(4) A description of how each landfill, including the liner and cover systems, **will** [~~shall~~] [~~will~~] be inspected in order to meet the requirements of Section 4(1) to (3) [~~and (2)~~] of 401 KAR 34:230. This information shall [~~should~~] be included in the inspection plan submitted under Section 2(5) of 401 KAR 38:090;

(5) Detailed plans and an engineering report describing the final cover which **will** [~~shall~~] [~~will~~] be applied to each landfill or landfill cell at closure in accordance with Section 6(1) of 401 KAR 34:230, and a description of how each landfill **will** [~~shall~~] [~~will~~] be maintained and monitored after closure in accordance with Section 6(2) of 401 KAR 34:230. This information shall [~~should~~] be included in the closure and postclosure plans submitted under Section 2(13) of 401 KAR 38:090;

(6) If ignitable or reactive wastes will be landfilled, an explanation of how the requirements of Section 7 of 401 KAR 34:230 **will** [~~shall~~] [~~will~~] be complied with;

(7) Incompatible wastes, or incompatible wastes and materials shall not be landfilled in accordance with Section 8 of 401 KAR 34:230;

(8) If bulk or noncontainerized liquid waste or waste containing free liquids is to be landfilled, an explanation of how the requirements of Section 9 of 401 KAR 34:230 and KRS 224.46-520(2) **will** [~~shall~~] [~~will~~] be complied with;

(9) If containers of hazardous waste are to be landfilled, an explanation of how the requirements of Sections 10 and 11 of 401 KAR 34:230, as applicable, **will** [~~shall~~] [~~will~~] be complied with; and

(10) A waste management plan for EPA hazardous waste numbers F020, F021, F022, F023, F026, and F027 (chlorinated dioxins, dibenzofurans and phenols) describing how a landfill is or **will** [~~shall~~] [~~will~~] be designed, constructed, operated, and maintained to meet the requirements of Section 12 of 401 KAR 34:230 and KRS 224.46-520(2). This submission shall [~~must~~] address the following items as specified in Section 12 of 401 KAR 34:230 and KRS 224.46-520(2):

(a) The volume, physical, and chemical characteristics of the wastes, including their potential to migrate through soil or to volatilize or escape into the atmosphere;

(b) The attenuative properties of underlying and surrounding soils or other materials;

(c) The mobilizing properties of other materials codisposed with these wastes; and

(d) The effectiveness of additional treatment, design, or monitoring techniques.

PHILLIP J. SHEPHERD, Secretary
E. DOUGLAS STEPHAN, Commissioner
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NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION CABINET
Department for Environmental Protection
Division of Waste Management
(Amended After Hearing)

401 KAR 38:260. Specific Part B information requirements for boilers and industrial furnaces burning hazardous waste.

RELATES TO: KRS 224.10, 224.40, 224.46, 224.99
STATUTORY AUTHORITY: KRS 224.10-100, 224.46-520
NECESSITY AND FUNCTION: To implement provisions of KRS 224.46-520 and to establish specific Part B requirements for boilers and industrial furnaces burning hazardous waste.

Section 1. Specific Part B Information Requirements for Boilers and Industrial Furnaces Burning Hazardous Waste. (1) Trial burns.

(a) General. Except as provided below, owners and operators that are subject to the standards to control organic emissions provided by Section 5 of 401 KAR 36:020, standards to control particulate matter provided by Section 6 of 401 KAR 36:020, standards to control metals emissions provided by Section 7 of 401 KAR 36:020, or standards to control hydrogen chloride or chlorine gas emissions provided by Section 8 of 401 KAR 36:020 shall conduct a trial burn to demonstrate conformance with those standards and shall submit a trial burn plan or the results of a trial burn, including all required determinations, in accordance with Section 7 of 401 KAR 38:060.

1. A trial burn to demonstrate conformance with a particular emission standard may be waived under provisions of Sections 5 to 8 of 401 KAR 36:020 and paragraphs (b) to (e) of this subsection; and

2. The owner or operator may submit data in lieu of a trial burn, as prescribed in paragraph (f) of this subsection.

(b) Waiver of trial burn for destruction and removal efficiency (DRE).

1. Boilers operated under special operating requirements. When seeking to be permitted under Sections 5(1)(d) and 11 of 401 KAR 36:020 that automatically waive the DRE trial burn, the owner or operator of a boiler shall submit documentation that the boiler operates under the special operating requirements provided by Section 11 of 401 KAR 36:020.

2. Boilers and industrial furnaces burning low risk waste. When seeking to be permitted under the provisions for low risk waste provided by Sections 5(1)(e) and 10 of 401 KAR 36:020 that waive the DRE trial burn, the owner or operator shall submit:

a. Documentation that the device is operated in conformance with the requirements of Section 10(1)(a) of 401 KAR 36:020.

b. Results of analyses of each waste to be burned, documenting the concentrations of nonmetal compounds listed in 401 KAR 31:170, except for those constituents that would reasonably not be expected to be in the waste. The constituents excluded from analysis shall be identified and the basis for their exclusion explained. The analysis shall rely on analytical techniques specified in test methods for evaluating solid waste, physical and chemical methods incorporated by reference in Section 3 of 401 KAR 30:010.

c. Documentation of hazardous waste firing rates and calculations of reasonable, worst-case emission rates of each constituent identified in clause b of this subparagraph using procedures provided by Section 10(1)(b)2 of 401 KAR 36:020.

d. Results of emissions dispersion modeling for emissions identified in clause c of this subparagraph using modeling procedures prescribed by Section 7(8) of 401 KAR 36:020. The cabinet shall review the emission modeling conducted by the applicant to determine conformance with these procedures. The cabinet shall either approve the modeling or determine that alternate or supplementary modeling is appropriate.

e. Documentation that the maximum annual average ground level concentration of each constituent identified in clause b of this subparagraph quantified in conformance with clause d of this subparagraph does not exceed the allowable ambient level established in Sections 4 or 5 of 401 KAR 36:025. The acceptable ambient concentration for emitted constituents for which a specific reference air concentration has not been established in Section 4 of 401 KAR 36:025 or risk-specific dose has not been established in Section 5 of 401 KAR 36:025 is one-tenth (0.1) micrograms per cubic meter as noted in the footnote to Section 4 of 401 KAR 36:025.

(c) Waiver of trial burn for metals. When seeking to be permitted under the Tier I (or adjusted Tier I) metals feed rate screening limits provided by Section 7(2) and (5) of 401 KAR 36:020 that control metals emissions without requiring a trial burn, the owner or operator shall submit:

1. Documentation of the feed rate of hazardous waste, other fuels, and industrial furnace feed stocks;

2. Documentation of the concentration of each metal controlled by Section 7(2) or (5) of 401 KAR 36:020 in the hazardous waste, other fuels, and industrial furnace feedstocks, and calculations of the total feed rate of each metal;

3. Documentation of how the applicant **will** **[~~shall~~]** ensure that the Tier I feed rate screening limits provided by Section 7(2) or (5) of 401 KAR 36:020 **will** **[~~shall~~]** not be exceeded during the averaging period provided by that subsection;

4. Documentation to support the determination of the terrain-adjusted effective stack height, good engineering practice stack height, terrain type, and land use as provided by Section 7(2)(c) to (e) of 401 KAR 36:020;

5. Documentation of compliance with the provisions of Section 7(2)(f) of 401 KAR 36:020, if applicable, for facilities with multiple stacks;

6. Documentation that the facility does not fail the criteria provided by Section 7(2)(g) of 401 KAR 36:020 for eligibility to comply with the screening limits; and

7. Proposed sampling and metals analysis plan for the hazardous waste, other fuels, and industrial furnace feed stocks.

(d) Waiver of trial burn for particulate matter. When seeking to be permitted under the low risk waste provisions of Section 10(2) of 401 KAR 36:020 which waives the particulate standard (and trial burn to demonstrate conformance with the particulate standard), applicants shall submit documentation supporting conformance with paragraphs (b)2 and (c) of this subsection.

(e) Waiver of trial burn for HCl and Cl_2. When seeking to be permitted under the Tier I (or adjusted Tier I) feed rate screening limits for total chloride and chlorine provided by Section 8(2)(a) and (5) of 401 KAR 36:020 that control emissions of hydrogen chloride (HCl) and chlorine gas (Cl_2) without requiring a trial burn, the owner or operator shall submit:

1. Documentation of the feed rate of hazardous waste, other fuels, and industrial furnace feed stocks;

2. Documentation of the levels of total chloride and chlorine in the hazardous waste, other fuels, and industrial furnace feedstocks, and calculations of the total feed rate of total chloride and chlorine;

3. Documentation of how the applicant **shall** **[~~shall~~]** ensure that the Tier I (or adjusted Tier I) feed rate screening limits provided by Section 8(2)(a) or (5) of 401 KAR 36:020 **will** **[~~shall~~]** not be exceeded during the averaging period provided by that subsection;

4. Documentation to support the determination of the terrain-adjusted effective stack height, good engineering practice stack height, terrain type, and land use as provided by Section 8(2)(c) of 401 KAR 36:020;

5. Documentation of compliance with the provisions of Section 8(2)(d) of 401 KAR 36:020, if applicable, for facilities with multiple stacks;

6. Documentation that the facility does not fail the criteria provided by Section 8(2)(c) of 401 KAR 36:020 for eligibility to comply with the screening limits; and

7. Proposed sampling and analysis plan for total chloride and chlorine for the hazardous waste, other fuels, and industrial furnace feedstocks.

(f) Data in lieu of trial burn. The owner or operator may seek an exemption from the trial burn requirements to demonstrate conformance with Sections 5 to 8 of 401 KAR 36:020 and Section 7 of 401 KAR 38:060 by providing the information required by Section 7 of 401 KAR 36:020 from previous compliance testing of the device in conformance with Section 4 of 401 KAR 36:020, or from compliance testing or trial or operational burns of similar boilers or industrial furnaces burning similar hazardous wastes under similar conditions. If data from a similar device is used to support a trial burn waiver, the design and operating information required by Section 7 of 401 KAR 38:060 shall be provided for both the similar device and the device to which the data is to be applied, and a comparison of the design and operating information shall be provided. The cabinet shall approve a permit application without a trial burn if he finds that the hazardous wastes are sufficiently similar, the devices are sufficiently similar, the operating conditions are sufficiently similar, and the data from other compliance tests, trial burns, or operational burns are adequate to specify (under Section 3 of 401 KAR 36:020) operating conditions that **will** ~~[shall]~~ ensure conformance with Section 3(3) of 401 KAR 36:020. In addition, the following information shall be submitted:

1. For a waiver from any trial burn:

a. A description and analysis of the hazardous waste to be burned compared with the hazardous waste for which data from compliance testing, or operational or trial burns are provided to support the contention that a trial burn is not needed;

b. The design and operating conditions of the boiler or industrial furnace to be used, compared with that for which comparative burn data are available; and

c. Such supplemental information as the cabinet finds necessary to achieve the purposes of this subsection.

2. For a waiver of the DRE trial burn, the basis for selection of POHCs used in the other trial or operational burns which demonstrate compliance with the DRE performance standard in Section 5(1) of 401 KAR 36:020. This analysis shall specify the constituents in 401 KAR 31:170, that the applicant has identified in the hazardous waste for which a permit is sought, and any differences from the POHCs in the hazardous waste for which burn data are provided.

(2) Alternative HC limit for industrial furnaces with organic matter in raw materials. Owners and operators of industrial furnaces requesting an alternative HC limit under Section 5(6) of 401 KAR 36:020 shall submit the following information at a minimum:

(a) Documentation that the furnace is designed and operated to minimize HC emissions from fuels and raw materials;

(b) Documentation of the proposed baseline flue gas HC (and CO) concentration, including data on HC (and CO) levels during tests when the facility produced normal products under normal operating conditions from normal raw materials while burning normal fuels and when not burning hazardous waste;

(c) Test burn protocol to confirm the baseline HC (and CO) level including information on the type and flow rate of all feedstreams, point of introduction of all feedstreams, total organic carbon content (or other appropriate measure of organic content) of all nonfuel feedstreams, and operating conditions that affect combustion of fuel(s) and destruction of hydrocarbon emissions from nonfuel sources;

(d) Trial burn plan to:

1. Demonstrate that flue gas HC (and CO) concentrations when burning hazardous waste do not exceed the baseline HC (and CO) level; and

(2) Identify the types and concentrations of organic compounds listed in 401 KAR 31:170, that are emitted when burning hazardous waste in conformance with procedures prescribed by the cabinet;

(e) Implementation plan to monitor over time changes in the operation of the facility that could reduce the baseline HC level and procedures to periodically confirm the baseline HC level; and

(f) Such other information as the cabinet finds necessary to achieve the purposes of this subsection.

(3) Alternative metals implementation approach. When seeking to be permitted under an alternative metals implementation approach under Section 7(b) of 401 KAR 36:020, the owner or operator shall submit documentation specifying how the approach ensures compliance with the metals emissions standards of Section 7(3) or (4) of 401 KAR 36:020 and how the approach can be effectively implemented and monitored. Further, the owner or operator shall provide such other information that the cabinet finds necessary to achieve the purposes of this subsection.

(4) Automatic waste feed cutoff system. Owners and operators shall submit information describing the automatic waste feed cutoff system, including any pre-alarm systems that may be used.

(5) Direct transfer. Owners and operators that use direct transfer operations to feed hazardous waste from transport vehicles (containers, as defined in Section 12 of 401 KAR 36:020) directly to the boiler or industrial furnace shall submit information supporting conformance with the standards for direct transfer provided by Section 12 of 401 KAR 36:020.

(6) Residues. Owners and operators that claim that their residues are excluded from administrative regulation under the provisions of Section 13 of 401 KAR 36:020 shall submit information adequate to demonstrate conformance with those provisions.

PHILLIP J. SHEPHERD, Secretary
E. DOUGLAS STEPHAN, Commissioner
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NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION CABINET
Department for Environmental Protection
Division of Waste Management
(Amended After Hearing)

401 KAR 38:270. Specific Part B information requirements for drip pads.

RELATES TO: KRS 224.10, 224.40, 224.46, 224.99
STATUTORY AUTHORITY: KRS 224.10-100, 224.46-520
NECESSITY AND FUNCTION: To implement provisions of KRS 224.46-520 and to establish specific Part B information requirements for drip pads.

Section 1. Special Part B Information Requirements for Drip Pads. Except as otherwise provided by 401 KAR 34:100, owners and operators of hazardous waste treatment, storage, or disposal facilities that collect, store, or treat hazardous waste on drip pads shall provide the following additional information:

(1) A list of hazardous wastes placed or to be placed on each drip pad.

(2) If an exemption is sought to 401 KAR 34:060, as provided by Section 1 of 401 KAR 34:060, detailed plans and an engineering report describing how the requirements of Section 1(2)(b) of 401 KAR 34:060 **will** ~~[shall]~~ be met.

(3) Detailed plans and an engineering report describing how the drip pad **will** ~~[shall]~~ be designed, constructed, operated and maintained to meet the requirements of Section 4 of 401 KAR 34:285, including the as-built drawings and specifications. This submission shall address the following items as specified in Section 5 of 401 KAR 34:285:

(a) The design characteristics of the drip pad.

(b) The liner system.

(c) The leakage detection system, including the leak detection

system and how it is designed to detect the failure of the drip pad or the presence of any releases of hazardous waste or accumulated liquid at the earliest practicable time.

(d) Practices designed to maintain drip pads.

(e) The associated collection system.

(f) Control of run-on to the drip pad.

(g) Control of run-off from the drip pad.

(h) The interval at which drippage and other materials **will** ~~[shall]~~ be removed from the associated collection system and a statement demonstrating that the interval **will** ~~[shall]~~ be sufficient to prevent overflow onto the drip pad.

(i) Procedures for cleaning the drip pad at least once every seven (7) days to ensure the removal of any accumulated residues of waste or other materials, including but not limited to rinsing, washing with detergents or other appropriate solvents, or steam cleaning and provisions for documenting the date, time, and cleaning procedure used each time the pad is cleaned.

(j) Operating practices and procedures that **will** ~~[shall]~~ be followed to ensure that tracking of hazardous waste or waste constituents off the drip pad due to activities by personnel or equipment is minimized.

(k) Procedures for ensuring that, after removal from the treatment vessel, treated wood from pressure and nonpressure processes is held on the drip pad until drippage has ceased, including recordkeeping practices.

(l) Provisions for ensuring that collection and holding units associated with the run-on and run-off control systems are emptied or otherwise managed as soon as possible after storms to maintain design capacity of the system.

(m) If treatment is carried out on the drip pad, details of the process equipment used, and the nature and quality of the residuals.

(n) A description of how each drip pad, including appurtenances for control of run-on and run-off, **will** ~~[shall]~~ be inspected in order to meet the requirements of Section 4 of 401 KAR 34:285. This information shall be included in the inspection plan submitted under Section 2(5) of 401 KAR 38:090.

(o) A certification signed by an engineer, stating that the drip pad design meets the requirements of Section 4(1) to (6) of 401 KAR 34:285.

(p) A description of how hazardous waste residues and contaminated materials **will** ~~[shall]~~ be removed from the drip pad at closure, as required under Section 6(1) of 401 KAR 34:285. For any waste not to be removed from the drip pad upon closure, the owner or operator shall submit detailed plans and an engineering report describing how Section 6(1) and (2) of 401 KAR 34:230 **will** ~~[shall]~~ be complied with. This information shall be included in the closure plan and, where applicable, the postclosure plan submitted under Section 2(13) of 401 KAR 38:090.

PHILLIP J. SHEPHERD, Secretary
E. DOUGLAS STEPHAN, Commissioner
APPROVED BY AGENCY: December 13, 1993
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TRANSPORTATION CABINET
Kentucky Bicycle and Bikeways Commission
(Amended After Hearing)

601 KAR 14:020. Bicycle safety standards.

RELATES TO: KRS Chapter 189
STATUTORY AUTHORITY: KRS 174.125, 189.287
NECESSITY AND FUNCTION: KRS Chapter 189 sets forth many bicycle safety standards that can be overridden by administrative regulations promulgated by the Transportation Cabinet. The Bicycle and Bikeways Commission authorized by KRS 174.125 has suggested that with the ever-growing use of bicycles in Kentucky additional or different standards are necessary for the safety of the traveling public. This administrative regulation sets forth the required bicycle safety standards.

Section 1. Front Lights. A bicycle operated on a highway during the hours or atmospheric conditions described in KRS 189.030(1) shall be equipped with one (1) front light which clearly reveals substantial objects at least fifty (50) feet ahead and which is visible for 500 feet.

Section 2. Rear Lights or Reflectors. A bicycle, when operated on a highway or highway shoulder, shall display on either the bicycle or the bicyclist so that it is visible from the rear of the bicycle:

(1) One (1) red reflector or red light visible for at least 100 feet; and

(2) During the hours or atmospheric conditions described in KRS 189.030(1), one (1) red light or flashing red light visible for at least 500 feet.

Section 3. Horn or Bell. (1) A bicycle may be equipped with a bell, horn or other device capable of making an abrupt sound.

(2) Every person operating a bicycle shall shout or sound the bell, horn or sound device whenever necessary as a warning of the approach of the bicycle to pedestrians or other bicycles, but shall not sound the horn or sound device unnecessarily.

(3) A bicycle shall not be equipped with a siren or whistle.

Section 4. Brakes. A bicycle shall not be operated on a highway or highway shoulder without brakes adequate to control the movement of and to stop the bicycle.

Section 5. Seat. A bicyclist, when operating on a highway or highway shoulder, shall ride on or astride a permanently attached bicycle seat.

Section 6. Passengers. A bicycle, when being operated on a highway or highway shoulder, shall not carry more than the number of persons for which the bicycle was designed or is safely equipped.

Section 7. Packages. A bicyclist, when operating on a highway or highway shoulder, shall not carry a package, bundle, or article that prevents the operator from keeping at least one (1) hand on the handle bars.

Section 8. Prohibition Against Attaching to Vehicles. A bicyclist, when operating on a highway or highway shoulder, shall not attach either the bicycle or himself to any other vehicle.

Section 9. Operation of Bicycles. A bicycle shall be operated in the same manner as a motor vehicle except the following traffic conditions shall apply:

(1) A bicycle may be operated on the shoulder of a highway;

(2) If a highway lane is marked for the exclusive use of bicycles, the operator of a bicycle shall use the lane whenever feasible;

(3) ~~[The operator of a bicycle which has wheels with a diameter of more than fourteen (14) inches shall not operate the bicycle upon or along a sidewalk except in crossing the sidewalk to or from abutting property; and~~

~~(4)~~] Not more than two (2) bicycles shall be operated abreast in a single highway lane.

KEITH LOGSDON, Chairman
NORRIS BECKLEY, Commissioner
DON C. KELLY, P.E., Secretary
APPROVED BY AGENCY: December 6, 1993

FILED WITH LRC: December 8, 1993 at 11 a.m.

CABINET FOR HUMAN RESOURCES
Department for Medicaid Services
(Amended After Hearing)

907 KAR 1:580. Additional classes of health care services and providers defined.

RELATES TO: KRS 205.520
STATUTORY AUTHORITY: KRS **142.217,** 194.050, 205.520**[**~~; 42 CFR 433.56, HB 1 of the Second Extraordinary Session of 1993 General Assembly~~**]**
NECESSITY AND FUNCTION: The Cabinet for Human Resources has responsibility to administer the Medicaid Program. KRS 205.520 empowers the cabinet, by administrative regulation, to comply with any requirement that may be imposed or opportunity presented by federal law for the provision of medical assistance to Kentucky's indigent citizenry. This administrative regulation sets forth provisions relating to additional classes of items or services.

Section 1. Additional Classes of Health Care Services and Providers. The additional classes of health care services and providers described in federal regulations at 42 CFR 433.56, except chiropractic services, **psychological services, therapist services, and nursing services** shall be added to the list of items or services subject to the tax imposed under **KRS 142.201 et seq.** **[**~~Section 3 of House Bill 1, Second Extraordinary Session of the 1993 General Assembly (referred to herein as HB 1).~~**]**

Section 2. Description of Additional Classes of Health Care Services and Providers. **[**~~(1)~~**]** The additional classes of health care services and providers shall be **the following** **[**~~those~~**]** services and providers added to the listing in 42 CFR 433.56 after passage of **KRS 142.217** **[**~~HB 1~~**]**, as described in 42 CFR 433.56.
[~~(2) The additional classes include the following:~~**]**
(1) **[**~~(a)~~**]** Ambulatory surgical center services;
(2) **[**~~(b)~~**]** Dental services;
(3) **[**~~(c)~~**]** Podiatric services;
(4) **[**~~(d)~~**]** Optometric/optician services;
[~~(e) Psychological services;~~
~~(f) Therapist services;~~
~~(g) Nursing services;~~**]**
(5) **[**~~(h)~~**]** Laboratory and x-ray services; and
(6) **[**~~(i)~~**]** Emergency ambulance services.

Section 3. Exclusions from Classes of Health Care Services and Providers. The classes of health care services and providers do not include items or services furnished by federal and other public employees in the state. For example, the class of dental services does not include services of dentists employed by local public health departments or the United States Public Health Service, or dentists employed by state agencies, such as the Department for Health Services and Department for Medicaid Services.

HAROLD R. BLOM, Commissioner
FONTAINE BANKS, JR., Secretary
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