Public Hearings Scheduled

NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION CABINET

A public hearing has been scheduled on August 2, 1983, at 10 a.m. in the Auditorium of the State Office Building, Frankfort, Kentucky, on the following regulations:

401 KAR Chapters 30 through 47 printed in this register.

A public hearing has been scheduled on August 2, 1983, at 7 p.m. at the Harley Hotel, 2143 North Broadway, Lexington, Kentucky; and on August 4, 1983, at 7 p.m. at the Executive Inn, Ohio Room, East Annex, Owensboro, Kentucky on the following regulations:

401 KAR 5:110. Disposal of produced water from oil and gas facilities. [10 Ky.R. 184]
401 KAR 5:120. Fees for permits to control water pollution from oil and gas facilities. [10 Ky.R. 185]

Emergency Regulations Now In Effect

(NOTE: Emergency regulations expire upon being repealed or replaced.)

JOHN Y. BROWN, JR. GOVERNOR
Executive Order 83-519
June 3, 1983

EMERGENCY REGULATION
Cabinet for Human Resources
Department for Health Services

WHEREAS, the Commonwealth of Kentucky through the Cabinet for Human Resources administers in Kentucky the Women and Infant Children Supplemental Food Program as authorized under 42 USC Section 1786; and

WHEREAS, the Food and Nutrition Service within the U.S. Department of Agriculture has issued revised federal regulations governing the operation of the program which strengthen the ability of participating states to take action to correct fraud and program abuse committed by contracting vendors; and

WHEREAS, the Secretary for Human Resources has promulgated regulations setting forth the sanctions to be applied, and procedures for appeal by aggrieved vendors; and

WHEREAS, the Secretary has determined in writing that an emergency exists with respect to said regulation and that, therefore, said regulation should, pursuant to the provisions of KRS 13.088(1), become effective immediately upon filing with the Legislative Research Commission:

NOW, THEREFORE, I, John Y. Brown, Jr., Governor of the Commonwealth of Kentucky, by virtue of the authority vested in me under KRS 13.088(1), do hereby acknowledge the finding of an emergency by the Secretary of the Cabinet for Human Resources with respect to the filing of said regulation pertaining to sanctions for vendor fraud and abuse of the Women and Infant Children Program in Kentucky, and direct that said regulation shall become effective upon being filed with the Legislative Research Commission, in accordance with the provisions of Chapter 13 of the Kentucky Revised Statutes.

JOHN Y. BROWN, JR., Governor
FRANCES JONES MILLS, Secretary of State

CABINET FOR HUMAN RESOURCES
Department for Health Services

902 KAR 4:040E. Special Supplemental Food Program for Women, Infants and Children (WIC).

RELATES TO: KRS 194.050
PURSUANT TO: KRS 13.082, 194.050, 42 USC 1786
EFFECTIVE: June 7, 1983
NECESSITY AND FUNCTION: Through operation of 42 USC §1786 and 7 CFR 246.10, the state is required to impose sanctions upon vendors participating in the Special Supplemental Food Program for Women, Infants and Children (WIC) when it is determined that a violation of program requirements has occurred. The purpose of this regulation is to set forth the violations for which sanctions are to be imposed, the applicable sanctions, and the appeal rights assured an affected vendor.

Section 1. Definitions. (1) "Cabinet" means Cabinet for Human Resources.

(2) "Secretary" means Secretary for Human Resources.

(3) "State agency" means the Cabinet for Human Resources or its designated representative.

(4) "Vendor" means a vendor of food items who, by contract, participates in the Special Supplemental Food Program for Women, Infants and Children (WIC).

(5) "WIC program" means the Special Supplemental Food Program for Women, Infants and Children (WIC) administered pursuant to 42 USC §1786.

Section 2. For the following acts or circumstances committed by the vendor, his employe or agent, the cabinet shall impose the following sanctions:

	Period of Disqualification		
	1st offense	2nd offense	3rd offense
Types of Abuse			
1. Providing cash/credit for WIC checks (trafficking)	1 year	2 years	3 years

2. Selling nonfood items for WIC checks	6 months	1 year	18 months
3. Selling related but unauthorized foods	Written Warning	3 months	6 months
4. Charging more than the current retail market price for WIC food items	6 months	1 year	18 months
5. Charging for food not received by the WIC participant	1 year	2 years	3 years
6. Charging for food not authorized on the WIC check	6 months	1 year	18 months
7. Redeeming WIC checks outside valid period	Written Warning	3 months	6 months
8. Not recording actual purchase price on WIC checks at time of purchase	Written Warning	3 months	6 months
9. Giving due bills, IOU's or rainchecks	Written Warning	3 months	6 months
10. Suspension from Food Stamp Program	Equivalent to food stamp disqualification period (does not have to run concurrently)		
11. Nonpayment of a claim made by state agency	3 months	6 months	1 year
12. Discrimination (separate WIC lines, denying trading stamps, other customer courtesies)	Written Warning	3 months	6 months
13. Failure to allow monitoring and inspection of store premises, records and procedures or access to WIC checks	Written Warning	3 months	6 months
14. Failure to return WIC vendor authorization stamp upon request	Add 3 months to previously established disqualification period or monetary penalty in the amount of unauthorized funds received or both		
15. Requiring cash purchase to redeem WIC checks	Written Warning	3 months	6 months

Sanctions imposed may, in the discretion of the cabinet, run concurrently or consecutively. Notice of sanction to be imposed by the cabinet and the date upon which such sanction is to commence may be hand-delivered to the vendor or mailed certified mail return receipt requested to the vendor's last known address.

Section 3. (1) Any vendor aggrieved by a decision of the cabinet to impose a sanction authorized by this regulation may file a written request for a hearing with the cabinet no later than twenty (20) days after receipt of notice. Upon receipt of a request for a hearing, the secretary shall appoint one (1) or more impartial hearing officer(s) to conduct the hearing. Within five (5) days of a request for a hearing, the cabinet shall advise the subject vendor of the date, time and place of the scheduled hearing and of the opportunity to review the records of the cabinet prior to the date of the hearing.

(2) On the date of the hearing the subject vendor shall have:

(a) An opportunity to present its case against the imposition of any sanction;

(b) The opportunity to be represented by counsel, if desired; and

(c) The opportunity to confront and to cross-examine witnesses.

(3) The hearing officer(s) shall decide upon the validity of the violation and sanction imposed based upon the record of the hearing and the relevant statutory and regulatory provisions governing the WIC program. The decision shall be in writing and shall be the final decision of the cabinet. It need not contain formal findings of fact and conclusions of law.

(4) A decision shall be reached and written notification of the decision forwarded to the vendor no later than sixty (60) days from the date of receipt of the written request for hearing. Any vendor aggrieved shall have the right to appeal such decision to the circuit court of the county wherein the vendor has his principal place of business.

DAVID T. ALLEN, Commissioner
ADOPTED: May 31, 1983
APPROVED: BUDDY H. ADAMS, Secretary
RECEIVED BY LRC: June 7, 1983 at 9:45 a.m.

JOHN Y. BROWN, JR. GOVERNOR
Executive Order 83-498
May 25, 1983

EMERGENCY REGULATION
Cabinet for Human Resources
Department for Social Insurance

WHEREAS, the Secretary of the Cabinet for Human Resources is responsible, under the provisions of KRS 194.050 for establishing, by regulation, the policies of the Cabinet with regard to funds made available under Public Law 98-8 for the provision of emergency food and shelter; and

WHEREAS, the Secretary has promulgated a regulation on the Emergency Food and Shelter Program; and

WHEREAS, the United States Congress has expressed its intent in Public Law 98-8 that such regulatory programs should be implemented as expeditiously as possible in order to provide emergency food and shelter to persons in need of such aid; and

WHEREAS, the Secretary has determined in writing that an emergency exists with respect to said regulation and that, therefore, said regulation should, pursuant to the provision of KRS 13.088(1), become effective immediately upon filing with the Legislative Research Commission:

NOW, THEREFORE, I, John Y. Brown, Jr., Governor of the Commonwealth of Kentucky, by virtue of the authority vested in me by KRS 13.088(1), do hereby acknowledge the finding of an emergency by the Secretary of the Cabinet for Human Resources with respect to the filing of said regulation on the Emergency Food and Shelter

Program, and hereby direct that said regulation shall become effective upon being filed with the Legislative Research Commission, as provided in Chapter 13 of the Kentucky Revised Statutes.

JOHN Y. BROWN, JR., Governor
FRANCES JONES MILLS, Secretary of State

CABINET FOR HUMAN RESOURCES
Department for Social Insurance

904 KAR 2:125E. Emergency food and shelter program.

RELATES TO: KRS 194.050
PURSUANT TO: KRS 13.082, 194.050
EFFECTIVE: May 31, 1983
NECESSITY AND FUNCTION: The Cabinet for Human Resources has responsibility to administer the funds made available to the state pursuant to Public Law 98-8 (Emergency Expenditures to Meet National Needs Act of 1983). This regulation specifies the manner in which the cabinet shall distribute funds provided for emergency food and shelter programs in areas in the state that are suffering from high unemployment, labor surplus, or from poverty.

Section 1. Fiscal Agent. The Cabinet for Human Resources will appoint, through contract, a fiscal agent(s) with responsibility to handle the program funds, keep program records, arrange for a program audit, and enter into contracts with local non-profit agencies. This fiscal agent(s) shall be bound by the terms and provisions of the contract and of this regulation. The fiscal agent(s) shall be required to use a contract prototype provided by the cabinet in entering into agreements with local agencies, and local agencies shall be responsible for complying with the terms and conditions therein in the actual expending of funds for emergency food and shelter.

Section 2. Availability of Funds to Subcontractors. An advisory board appointed by the Secretary, Cabinet for Human Resources, shall recommend local non-profit or volunteer agencies for funds, and the amount of their respective grants. The Commissioner, Department for Social Insurance, shall be chairman of the advisory board, and shall be responsible for final selection of local agencies and funding amounts. The commissioner shall provide, in writing, authorization to the fiscal agent(s) for the disbursement of program funds from the fiscal agent to participating agencies.

Section 3. Disbursement and Accountability of Fiscal Agent for Funds. The fiscal agent(s) shall disburse available funds and provide the cabinet with reports of expenditures in accordance with the terms of the contract.

Section 4. Auditing. The fiscal agent(s) shall arrange for and provide to the cabinet an audit of expenditures not later than forty-five (45) days after all program funds are expended as provided for in the contract.

Section 5. Recordkeeping and Access. The fiscal agent(s) shall maintain and retain records of all disbursements, authorizations of disbursements and support documents for a period of three (3) years except as otherwise provided for in the contract. The Director of the Federal Emergency Management Agency, the United States Comptroller General, and the Secretary of the Cabinet for Human Resources, or their authorized representatives, shall have access to any pertinent books, documents, papers, and records of the fiscal agent(s) to make audits, examinations, etc., as deemed necessary.

Section 6. Implementation. The program shall begin on June 1, 1983, and funds must be expended or obligated by September 30, 1983.

JOHN CUBINE, Commissioner
ADOPTED: May 11, 1983
APPROVED: BUDDY H. ADAMS, Secretary
RECEIVED BY LRC: May 31, 1983 at 3:30 p.m.

Amended Regulations Now In Effect

FINANCE AND ADMINISTRATION CABINET
State Investment Commission
As Amended

200 KAR 14:010. General rules.

RELATES TO: KRS Chapter 42
PURSUANT TO: KRS 13.082, 42.525
EFFECTIVE: June 1, 1983
NECESSITY AND FUNCTION: KRS 42.525 provides that the State Investment Commission shall prescribe rules for the operation of the state's investment program. This regulation establishes the general rules which apply to the investment of state funds.

Section 1. Definitions. For purposes of this regulation:
(1) "Commission" means the State Investment Commission; and
(2) "Office" means the Office for Investment and Debt Management.

Section 2. General. The purpose of this regulation is to provide standard rules that will govern the Commonwealth's investment and cash management programs.

Section 3. Goals of Investments. (1) The primary goal of all investments of the Commonwealth is to maximize the yield received.
(2) (a) The limiting factors to the primary goal of maximizing yield are liquidity and security.
(b) The office is charged with the duty of determining the Commonwealth's liquidity needs pursuant to KRS 42.410. In light of this responsibility, the office shall not execute nor allow the execution of any investment that will negatively impact the short or long-term cash needs of the Commonwealth.
(c) The commission shall not allow the investment of state funds in any institution or instrument which it deems unsafe and a threat to the security of those funds.

Section 4. Monies to be Invested. The commission shall

invest all state funds as defined in KRS 446.010*(31) which are excess, surplus, or otherwise available for investment for periods of time for one (1) day or more.*

Section 5. Minimum Interest Rates. *(1) The amount of funds per investment instrument will be determined periodically by the commission at its regular public meetings. Criteria to determine such amounts are:*

(a) Liquidity needs of the various state agencies for which funds are budgeted; and

(b) Rates available per instrument, and safety of principal and interest.

(2) Investment instruments will be qualified as available for use by being:

(a) Specified as such in statute; and

(b) Further qualified by the commission guidelines, hereby incorporated by reference (available from the Office for Investment and Debt Management, Room 201, Capitol Annex, Frankfort, Kentucky).

(3) The commission shall not allow the investment of state funds in any institution or instrument for a term of one (1) year or less at a yield less than the yield available on Treasury Bills of similar maturity. For funds to be invested for more than one (1) year, the commission shall not allow investment in any institution or instrument at a yield less than the yield available on Treasury Notes of similar maturity.

Section 6. Acceptable Maturity of Investments. The limits on the maturity of investments made by the commission shall first be KRS *42.500* [Chapter 42] *which is no greater than five (5) years for U.S. government or government agency obligations. Certificates of deposit will be limited to a one (1) year maturity maximum* and second, the liquidity needs of the state as determined by the office.

Section 7. In-State and Out-of-State Deposits. All funds eligible for investment in certificates of deposit as determined by the commission shall first be offered to financial institutions chartered in Kentucky or by the United States that have their main office located in Kentucky. The rate at which these funds will be offered shall be set by the commission as set out in KRS Chapter 42. Should Kentucky financial institutions eligible for these funds refuse any part of the funds offered, the commission may offer the funds to any commercial bank chartered in the United States, approved by the State Investment Commission. Any out-of-state investments shall be subject to the same collateralization requirements as in-state investments.

Section 8. Distribution of Funds Among Types of Institutions. *Distribution of funds among types of institutions will be determined from time to time by the commission at its regular public meetings. The criteria for that distribution will be:*

(1) The institution is permitted by statute to qualify as a depository;

(2) Rates available;

(3) Sufficiency of collateral; and

(4) Determination as to whether institutions are meeting the economic development needs of the community. [The commission shall allocate funds eligible for investments in certificates of deposit among eligible types of financial intermediaries at its open meetings. The allocation by type may be changed from time to time as market conditions change.]

[Section 9. Deviation from Rules. In special cases for good cause shown upon application to and approval by, the commission may permit deviation from these rules.]

ROBERT L. WARREN, Secretary
ADOPTED: December 17, 1982
RECEIVED BY LRC: December 21, 1982 at 3 p.m.

FINANCE AND ADMINISTRATION CABINET
Kentucky Board of Pharmacy
As Amended

201 KAR 2:170. Computerized recordkeeping.

RELATES TO: KRS Chapters 217, 315
PURSUANT TO: KRS 13.082, 217.215(2), 315.191(1), (5)
EFFECTIVE: June 1, 1983
NECESSITY AND FUNCTION: KRS 217.215(2) provides for the board to establish regulations relating to the storage and retrieval of prescription records, including computerized recordkeeping. This regulation will assure uniform compliance for those desiring to use computerized recordkeeping.

Section 1. An automated data processing system may be used for the storage and retrieval of prescription information subject to the following conditions:

(1) Written notification is provided to the Kentucky Board of Pharmacy that an automated data processing system is being utilized to maintain prescription records. Written notification must also be provided to the board that use of an automated data processing system is being discontinued.

(2) All information pertinent to a prescription shall be entered into the system, including, but not limited to, each of the following:

(a) The prescription number;

(b) The patient's name and address;

(c) The prescriber's name and address;

(d) The prescriber's Federal Drug Enforcement Administration number, if appropriate;

(e) Refill authorization;

(f) Any prescriber's instructions or patient's preference permitted by law or regulation;

(g) The name, strength, dosage form, and quantity of the drug dispensed originally and upon each refill;

(h) The date of dispensing of the prescription and the identifying designation of the dispensing pharmacist for the original filling and each refill. [; and]

[(i) The date and identifying designation of the dispensing pharmacist for the original (re)filling and each refill.]

(3) The entries shall be made into the system at the time the prescription is first filled and at the time of each refill, except that the format of the record may be organized so that the information already entered may appear for the prescription or refill without re-entering such information. The dispensing pharmacist is responsible for the completeness and accuracy of the entries. The original prescription order and a record of each refill shall be preserved by the pharmacy for a period of five (5) years and shall be subject to inspection by authorized agents. No original prescription order shall be obstructed in any manner.

(4) The required information shall be entered into the system for all prescriptions filled at the pharmacy.

(5) The system shall provide, within the pharmacy, retrieval of all required original and refill prescription in-

formation by display screen or hard-copy printout.

(6) The system shall provide adequate safeguards against improper manipulation or alteration of the records.

(7) The system shall have the capability of producing a hard-copy printout of all original and refilled prescription data as required in Section *1* [2] of this regulation. A hard-copy printout of the required data shall be made available to an authorized agent within forty-eight (48) hours of the receipt of a written request.

(8) The system shall provide a hard-copy printout *or log book* of each day's prescription data. That printout *or log book* shall be verified, dated, and signed by the pharmacist(s) who filled such prescription orders. This document shall be maintained for a period of five (5) years. Permission to maintain an alternative system to produce this record may be granted by the board.

(9) An auxiliary recordkeeping system shall be established for the documentation of refills if the automated data processing system is inoperative for any reason. The auxiliary system shall insure that all refills are authorized by the original prescription order and that the maximum number of refills is not exceeded. If the automated data processing system is restored to operation, the information regarding prescriptions filled and refilled during the inoperative period shall be entered into the automated data processing system within seventy-two (72) hours.

(10) Controlled substance data contained on a hard-copy printout must be separated, asterisked, or in some other manner visually identifiable apart from other items appearing on the printout.

(11) The pharmacist is responsible to assure continuity in the maintenance of records throughout any transition in record systems utilized.

Section 2. A computer malfunction or data processing services provider's negligence is not defense against charges of improper recordkeeping.

Section 3. This regulation is not applicable to the recordkeeping for drugs prescribed for and administered to patients confined as an inpatient in an acute care facility.

Section 4. Violation of any provision of this regulation constitutes unethical or unprofessional conduct in accordance with KRS 315.121.

JOHN H. VOIGE, Executive Director
ADOPTED: March 16, 1983
RECEIVED BY LRC: March 31, 1983 at 2:30 p.m.

FINANCE AND ADMINISTRATION CABINET
Kentucky Board of Pharmacy
As Amended

201 KAR 2:175. Emergency/72 hour prescription refills.

RELATES TO: KRS Chapters 217, 315
PURSUANT TO: KRS 13.082, 217.215(3), 315.191
EFFECTIVE: June 1, 1983
NECESSITY AND FUNCTION: This regulation sets out the conditions whereby a prescription may be refilled in an emergency situation and the prescriber is unavailable.

Section 1. In the event a pharmacist receives a request for a prescription refill with no refill authorized and the pharmacist is unable to readily obtain refill authorization from the prescriber, the pharmacist may dispense a one (1) time emergency refill of up to a seventy-two (72) hour supply of the medication providing that:

(1) The prescription refill is not for a controlled substance;

(2) The medication is essential to the maintenance of life or to the continuation of therapy in chronic conditions;

(3) In the pharmacist's professional judgment, the interruption of therapy might reasonably produce undesirable health consequences and/or may be detrimental to the patient's welfare and *cause* physical or mental discomfort;

(4) The pharmacist notes on the prescription *record* the date, the quantity dispensed, and his name or initials; and

(5) In all situations an emergency refill must be followed by authorization from the prescriber for continued therapy.

Section 2. Violation of any provision of this regulation constitutes unethical or unprofessional conduct in accordance with KRS 315.121.

JOHN H. VOIGE, Executive Director
ADOPTED: March 16, 1983
RECEIVED BY LRC: March 31, 1983 at 2:30 p.m.

FINANCE AND ADMINISTRATION CABINET
Kentucky State Board of Medical Licensure
As Amended

201 KAR 9:020. Licensing qualifications; approved schools.

RELATES TO: KRS 311.530 to 311.620, 311.990
PURSUANT TO: KRS 13.082
EFFECTIVE: June 1, 1983
NECESSITY AND FUNCTION: KRS 311.565 empowers the State Board of Medical Licensure to exercise all the administrative functions of the state in the prevention of empiricism and in the regulation of the practice of medicine and osteopathy and authorizes the board to establish requirements and standards relating thereto. The purpose of this regulation is to assure uniformity of requirements to all applicants for regular licenses to practice medicine or osteopathy in Kentucky.

Section 1. Qualifications for Regular Medical and Osteopathic Licenses. No person shall be entitled to a regular license unless he meets all requirements specified in KRS 311.570(1) and has successfully passed a written examination prescribed by the board; provided, however, that regular licenses may be issued by [reciprocity for] endorsement as otherwise provided by regulation of the board without written examination. Provided, further, that graduates of medical schools situated outside the United States or Canada shall have successfully completed at least one (1) year of internship or postgraduate training in a hospital or institution located in the United States or Canada and approved by the board. *The one (1) year of internship or postgraduate training must be in a program consisting, at a minimum, of clinical experience in the areas of internal medicine, family practice, obstetrics/gynecology and emergency medicine or in a similar program approved by the board. Provided, however, that the board may exempt an applicant that has completed a program of postgraduate training outside the*

United States or Canada which is at least equivalent to that required by this regulation. In addition, all foreign medical graduates *must be fully certified by the Educational Commission for Foreign Medical Graduates (ECFMG) or by a recognized medical or osteopathic specialty board* [whose native language is not English shall have successfully passed a written examination to the satisfaction of the board].

Section 2. Medical and Osteopathic Schools in the United States and Canada Approved by the Board. (1) All medical schools, colleges [,] and universities located in the United States approved by the *Liaison Committee on Medical Education (LCME)* [Council on Medical Education of the American Medical Association] are approved by the board [,] in connection with the issuance of regular licenses to practice medicine in Kentucky.

(2) All medical schools, colleges [,] and universities located in Canada and approved by the Canadian Medical Association are approved by the board [,] in connection with the issuance of regular licenses to practice medicine in Kentucky.

(3) All osteopathic schools and colleges located in the United States and approved by the American Osteopathic Association are approved by the board in connection with the issuance of osteopathic licenses in Kentucky.

Section 3. Medical Schools Outside the United States or Canada. Unless otherwise provided by regulation, all graduates of medical or osteopathic schools located outside the United States shall be eligible for licensure only upon a finding of the board that the medical or osteopathic school which they attended possesses standards and educational requirements at least equal to the minimum required for approval of medical and osteopathic schools located within the United States by their respective accrediting bodies. The board shall maintain a list of medical and osteopathic schools located outside the United States which the board has found to meet this criteria. In the event an applicant's school does not appear on this list, the applicant or his agent shall be given the opportunity to document to the board's satisfaction that his school meets the criteria set forth.

Section *4.* [3.] Medical and Osteopathic Programs Approved for Internship and Postgraduate Training. (1) All internship and postgraduate programs in hospitals and institutions located in the United States approved by the *Accreditation Council for Graduate Medical Education (ACGME)* [Council on Medical Education of the American Medical Association] are approved by the board in connection with the issuance of a regular license to practice medicine in Kentucky.

(2) All internships and postgraduate programs in hospitals and institutions located in Canada and approved by the Canadian Medical Association or the Royal College of Physicians and Surgeons of Canada are approved by the board in connection with the issuance of a regular license to practice medicine in Kentucky.

(3) All internships and postgraduate programs in hospitals and institutions located in the United States and Canada and approved by the American Osteopathic Association are hereby approved by the board in connection with the issuance of a license to practice osteopathy in Kentucky.

(4) The equivalency of all other programs in hospitals and institutions may be considered for approval by the board in connection with the issuance of a regular license on an individual basis.

(5) Nothing in this section shall be construed to limit the requirements for licensure established for graduates of medical schools situated outside the United States or Canada established in Section 1 of this regulation.

Section *5.* [4.] Personal Interview. If the board so directs, an applicant shall personally appear before the secretary or assistant secretary of the board, or some person designated by the secretary or assistant secretary, for a personal interview to establish his identity and qualifications.

Section *6.* [5.] Endorsement. "Endorsement" means a written and signed certification by the duly authorized officer or representative of the official statutory medical or osteopathic examining board of some other state of the United States, or by the National Board of Medical Examiners, or by the National Board of Examiners for Osteopathic Physicians and Surgeons, or any approved successors thereof, *or by any analogous provincial examining board or national organization located in Canada,* that a certain person is a licentiate, in good standing, *of* [or] said board, and that the person was required to and did, as a condition precedent to such licensure, satisfactorily pass a comprehensive written examination conducted by said board. Endorsement may be accepted by the board in lieu of further written examination in Kentucky [without regard to the existence or non-existence of a reciprocal agreement], but shall not be in lieu of standards and qualifications prescribed by KRS 311.570(1) and the regulations of the board. The secretary or assistant secretary of the board shall prepare, or cause to be prepared, all forms desirable and appropriate for licensure by endorsement, including applications, questionnaires, certificates, and licenses. The secretary or assistant secretary is authorized to require the submission of photographs, fingerprints, personal history data, and grades of his licensure examining board in connection therewith.

C. WILLIAM SCHMIDT, Assistant Secretary
ADOPTED: March 24, 1983
RECEIVED BY LRC: April 14, 1983 at 4 p.m.

NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION CABINET
Department for Environmental Protection
Division of Water
As Amended

401 KAR 5:050. Definitions and general provisions; KPDES permitting program.

RELATES TO: KRS Chapter 224
PURSUANT TO: KRS 13.082, 224.005, *224.020,* 224.033(19), (21), (22), (23), 224.034, 224.060
EFFECTIVE: June 1, 1983
NECESSITY AND FUNCTION: KRS Chapter 224 authorizes the Natural Resources and Environmental Protection Cabinet to issue, continue in effect, revoke, modify, suspend or deny under such conditions as the cabinet may prescribe, permits to discharge into the waters of the Commonwealth. KRS 224.034 empowers the cabinet to issue federal permits pursuant to 33 U.S.C. 1342(b) of the Federal Water Pollution Control Act (33 U.S.C. Section 1251 et seq.). Permits issued pursuant to KRS *224.034* [224.004] shall be referred to as KPDES permits. This

regulation defines essential terms used in connection with the following KPDES regulations: 401 KAR 5:050; 401 KAR 5:055; 401 KAR 5:060; 401 KAR 5:065; 401 KAR 5:070; 401 KAR 5:075; 401 KAR 5:080; and 401 KAR 5:085.

Section 1. Definitions. Whenever used in the KPDES regulations, unless a different meaning clearly appears from the context or unless a different meaning is stated in a definition applicable to only a portion of these regulations, the following terms have the meaning as set forth herein. Terms not further defined in this section have the meaning given by KRS 224.005 and regulations promulgated pursuant thereto.

(1) "Administrator" means the Administrator of the United States Environmental Protection Agency, or an authorized representative.

(2) "Applicable standards and limitations" means all standards and limitations to which a discharge or a related activity is subject under KRS Chapter 224, and regulations promulgated pursuant thereto, including but not limited to effluent limitations, water quality standards, standards of performance, and toxic effluent standards.

(3) "Application" means the forms approved by the cabinet, which are equivalent to the EPA standard NPDES forms for applying for a KPDES permit, including any additions, revisions or modifications to the forms.

(4) "Average monthly discharge limitation" means the highest allowable average of daily discharges over a calendar month, calculated as the sum of all daily discharges measured during a calendar month divided by the number of daily discharges measured during that month.

(5) "Average weekly discharge limitation" means the highest allowable average of daily discharges over a calendar week, calculated as the sum of all daily discharges measured during a calendar week divided by the number of daily discharges measured during that week.

(6) "Best management practices (BMPs)" means schedules of activities, prohibitions of practices, maintenance procedures, and other management practices to prevent or reduce the pollution of waters of the Commonwealth. BMPs also includes treatment requirements, operating procedures, practices to control plant site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage.

(7) "Continuous discharge" means a discharge which occurs without interruption throughout the operating hours of the facility, except for infrequent shutdowns for maintenance, process changes, or other similar activities.

(8) "CWA" means the Clean Water Act as subsequently amended (33 U.S.C. 1251 et seq.), otherwise known as the Federal Water Pollution Control Act.

(9) "Daily discharge" means the discharge of a pollutant measured during a calendar day or any twenty-four (24) hour period that reasonably represents the calendar day for purposes of sampling. For pollutants with limitations expressed in units of mass, the daily discharge is calculated as the total mass of the pollutant discharged over the day. For pollutants with limitations expressed in other units of measurement, the daily discharge is calculated as the average measurement of the pollutant over the day.

(10) "Date of program approval" means the effective date of the administrator's approval of Kentucky's KPDES regulatory program under Section 402 of CWA.

(11) "Direct discharge" means the discharge of a pollutant *into waters of the Commonwealth when such discharge is not included under the definition of "indirect discharger."*

(12) "Director" means the secretary of the cabinet, or an authorized representative. For purposes of permit issuance decisions, the director is the director of the Division of Water, in the Department for Environmental Protection.

(13) "Discharge" or "discharge of a pollutant" means any addition of any pollutant or combination of pollutants to waters of the Commonwealth from any point source. This defintion includes, but is not limited to, additions of pollutants into waters of the Commonwealth from surface runoff which is collected or channelled by man; discharges through pipes, sewers or other conveyances whether publicly or privately owned which do not lead to a treatment works; and discharges through pipes, sewers, or other conveyances leading into privately owned treatment works.

(14) "Discharge monitoring report (DMR)" means the cabinet's form including any subsequent additions, revisions, or modifications, for the reporting of self-monitoring results by permittees.

(15) "Draft permit" means a document prepared under 401 KAR *5:075* [5:065], Section 3, indicating the director's preliminary decision to issue or deny, modify, revoke and reissue, terminate, or reissue a permit. A notice of intent to terminate a permit, and a notice of intent to deny a permit, as provided in 401 KAR *5:075* [5:065], Section 2, are types of draft permits. A denial of a request for modification, revocation and reissuance, or termination, as provided in 401 KAR *5:075* [5:065], Section 2, is not a draft permit. A proposed permit is not a draft permit.

(16) "Effluent limitation" means any restriction imposed by the director on quantities, discharge rates, and concentrations of pollutants which are discharged from point sources into waters of the Commonwealth.

(17) "Effluent limitations guidelines" means a regulation published by the administrator under Section 304(b) of CWA (33 U.S.C. Section 1314(b)) to adopt or revise effluent limitations.

(18) "Environmental Protection Agency (EPA)" means the United States Environmental Protection Agency.

(19) "Facility or activity" means any KPDES point source, or any other facility or activity, including land or appurtenances thereto, that is subject to regulation under the KPDES program.

(20) "General permit" means any KPDES permit authorizing a category of discharges under KRS Chapter 224 within a geographical area, issued under 401 KAR 5:055.

(21) "Hazardous substance" means any substance designated under 40 CFR Part 116.

(22) "Indirect discharger" means a nondomestic discharger introducing pollutants to a publicly owned treatment works.

(23) "Kentucky Pollutant Discharge Elimination System (KPDES)" means the Kentucky program for issuing, modifying, revoking and reissuing, terminating, monitoring and enforcing permits, and imposing and enforcing pretreatment requirements. The KPDES regulations are: 401 KAR 5:050, 401 KAR 5:055, 401 KAR 5:060, 401 KAR 5:065, 401 KAR 5:070, 401 KAR 5:075, 401 KAR 5:080 and 401 KAR 5:085.

(24) "Interstate agency" means an agency of which Kentucky and one (1) or more states is a member established by or under an agreement or compact, or any other agency, of which Kentucky and one (1) or more other states are members, having substantial powers or duties pertaining to the control of pollution as determined and approved by the secretary or administrator under the CWA or KRS Chapter 224.

(25) "Major facility" means any KPDES facility or activity classified as such by the director in cooperation with the regional adminstrator; *designation as a "major industry," as set forth in 401 KAR 5:085, Section 2, does not indicate automatic classification as a major facility.*

(26) "Maximum daily discharge limitation" means the highest allowable daily discharge.

(27) "Municipality" means a city, district, or other public body created by or under the Kentucky Revised Statutes and having jurisdiction over disposal of sewage, industrial wastes, or other wastes, or a designated and approved management agency under Section 208 of CWA (33 U.S.C. 1258).

(28) "National Pollutant Discharge Elimination System (NPDES)" means the national program for issuing, modifying, revoking and reissuing, terminating, monitoring and enforcing permits, and imposing and enforcing pretreatment requirements.

(29) "New discharger" means any building, structure, facility or installation:

(a) 1. From which there is or may be a new or additional discharge of pollutants at a site at which on October 18, 1972 it had never discharged pollutants; and

2. Which has never received a finally effective NPDES or KPDES permit for discharges at that site; and

3. Which is not a new source.

(b) This definition includes an indirect discharger which commences discharging into waters of the Commonwealth. It also includes any existing mobile point source that begins discharging at a location for which it does not have an existing permit.

(30) "New source" means any building, structure, facility, or installation from which there is or may be a *direct or indirect* discharge of pollutants, the construction of which commenced:

(a) After promulgation of EPA's standards of performance *or pretreatment standards* which are applicable to such source; or

(b) After proposal of EPA's standards of performance *or pretreatment standards* which are applicable to such source, but only if the federal standards are promulgated within 120 days of their proposal.

(31) "Owner or operator" means the owner or operator of any facility or activity subject to regulation under the KPDES program.

(32) "Permit" means an authorization, license, or equivalent control document issued by the cabinet *or U.S. EPA* to implement the requirements of the KPDES *or NPDES* regulations. Permit does not include any permit which has not yet been the subject of final agency action, such as a draft permit or a proposed permit.

(33) "Person" means an individual, association, partnership, corporation, municipality, state or federal agency, or an agent or employee thereof.

(34) "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.

(35) "Pollutant" means as defined in KRS 224.005(28) *including filter backwash, munitions and cellar dirt,* except:

(a) Radioactive materials which are regulated under the Atomic Energy Act of 1954, as amended (42 U.S.C. 2011 et seq.);

(b) Sewage from vessels; or

(c) Water, gas, or other material which is injected into a well to facilitate production of oil or gas, or water derived in association with oil and gas production and disposed of in a well, if the well used either to facilitate production or for disposal purposes is approved by *the state or federal agency administering the Underground Injection Control program pursuant to the Safe Drinking Water Act (42 U.S.C. 300f et seq.) or by the cabinet pursuant to 401 KAR Chapter 5 and* the appropriate [state] agency and if the state agency determines that the injection or disposal will not violate any applicable law or regulation.

(36) "Primary industry category" means any industry category listed in Section 10 of 401 KAR 5:060.

(37) "Privately owned treatment works" means any device or system which is used to treat wastes from any facility whose operator is not the operator of the treatment works and which is not a POTW.

(38) "Process wastewater" means any water which, during manufacturing or processing, comes into direct contact with or results from the production or use of any raw material, intermediate product, finished product, byproduct, or waste product.

(39) "Proposed permit" means a KPDES permit prepared after the close of the public comment period and, when applicable, any public hearing and administrative appeals, which is sent to EPA for review before final issuance by the cabinet. A proposed permit is not a draft permit.

(40) "Publicly owned treatment works (POTW)" means any device or system used in the treatment, including recycling and reclamation, of municipal sewage or industrial wastes of a liquid nature which is owned by the Commonwealth or a municipality. This definition includes sewers, pipes, or other conveyances only if they convey wastewater to a POTW providing treatment. *For purposes of pretreatment in 401 KAR 5:055, Section 9, POTW includes a municipality having jurisdiction over the indirect discharges to and discharges from the treatment works.*

(41) "Recommencing discharger" means a source which recommences discharge after terminating operations.

(42) "Regional administrator" means the regional administrator of the Region IV office of the EPA or the authorized representative of the regional administrator.

(43) "Schedule of compliance" means a schedule of remedial measures included in a permit, including an enforceable sequence of interim requirements leading to compliance with KRS Chapter 224 and regulations promulgated pursuant thereto.

(44) "Secondary industry category" means any industry category which is not a primary industry category.

(45) "Sewage from vessels" means human body wastes and the wastes from toilets and other receptacles intended to receive or retain body wastes that are discharged from vessels and regulated under Section 312 of CWA (33 U.S.C Section 1324).

(46) "Sewage sludge" means the solids, residues, and precipitate separated from or created in sewage by the unit processes of a publicly owned treatment works. Sewage as used in this definition means any wastes, including wastes from humans, households, commercial establishments, industries, and storm water runoff, that are discharged to or otherwise enter a publicly owned treatment works.

(47) "Site" means the land or water area where any facility or activity is physically located or conducted, including adjacent land used in connection with the facility or activity.

(48) "Total dissolved solids *(TDS)*" means the total dissolved (filterable) solids as determined by use of the method specified in 40 CFR Part 136.

(49) "Toxic pollutant" means any pollutant listed as toxic in 401 KAR *5:080* [5:060], Section *5* [14].

(50) "Twenty-four (24) hour composite sample" means not less than twelve (12) effluent portions collected at regular intervals over a period of twenty-four (24) hours which are composited in proportion to flow; "grab sample" means a single effluent portion which is not a twenty-four (24) hour composite sample.

(51) "Underground injection" means a "well injection."

(52) [(50)] "Variance" means any mechanism or provision under the KPDES regulations which allows modification to or waiver of the generally applicable effluent limitation requirements or time deadlines.

(53) [(51)] "Waters of the Commonwealth" means as defined in KRS 224.005(26) [, except groundwater].

(54) "Well" means a bored, drilled or driven shaft, or a dug hole, whose depth is greater than the largest surface dimension.

(55) "Well injection" means the subsurface implacement of fluids through a bored, drilled or driven well; or through a dug well, where the depth of the dug well is greater than the largest surface dimension.

(56) [(52)] "Wetlands" means those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstance do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas.

Section 2. Compatibility With the CWA. The KPDES regulations promulgated pursuant to KRS Chapter 224 are intended to be compatible with the federal regulations adopted pursuant to CWA.

Section 3. Conflicting Provisions. The provisions of the KPDES regulations are to be construed as being compatible with and complimentary to each other. In the event that any of these regulations are found by a court of competent jurisdiction to be contradictory, the more stringent provisions shall apply.

Section 4. Severability. In the event that any provision of KRS Chapter 224 or any regulation promulgated pursuant thereto is found to be invalid by a court of competent jurisdiction, the remaining KPDES regulations shall not be affected or diminished thereby.

Section 5. Abbreviations and Acronyms. The following abbreviations and acronyms, as used throughout the KPDES regulations, shall have the meaining given below:

(1) "BAT" means best available technology economically achievable;

(2) "BCT' means best conventional pollutant control technology;

(3) 'BOD" means biochemical oxygen demand;

(4) "BPT" means best practicable technology currently available;

(5) "BMPs" means best management practices;

(6) "COD" means chemcial oxygen demand;

(7) "CFR" means code of federal regulation, as subsequently amended;

(8) "DMR" means discharge monitoring report;

(9) "KAR" means Kentucky Administrative Regulation;

(10) "KPDES" means Kentucky Pollutant Discharge Elimination System;

(11) "KRS" means Kentucky Revised Statutes;

(12) "NPDES" means National Pollutant Discharge Elimination System;

(13) "POTW" means publicly owned treatment works;

(14) "SIC" means standard industrial classification; and

(15) "TSS" means total suspended solids.

Section 6. Date of Applicability. The provisions of this regulation shall become effective upon the date of program approval.

JACKIE SWIGART, Secretary
ADOPTED: March 15, 1983
RECEIVED BY LRC: March 15, 1983 at 4 p.m.

NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION CABINET
Department for Environmental Protection
Division of Water
As Amended

401 KAR 5:055. Scope and applicability of the KPDES program.

RELATES TO: KRS Chapter 224
PURSUANT TO: KRS 13.082,224.033(19), (21), (22), (23), 224.034, 224.060, 224.994(1), (4)
EFFECTIVE: June 1, 1983
NECESSITY AND FUNCTION: KRS 224.033(21) provides that the Natural Resources and Environmental Protection Cabinet may require for persons discharging into the waters of the Commonwealth, by regulation, technological levels of treatment and effluent limitations. KRS 224.034(1) provides that the cabinet may issue federal permits pursuant to 33 U.S.C. Section 1342(b) of the Federal Water Pollution Control Act (33 U.S.C. Section 1251 et seq.) subject to the conditions imposed in 33 U.S.C. Sections 1342(b) and 1342(d), KRS 224.034(1) requires that any exemptions granted in the issuance of such permits shall be pursuant to 33 U.S.C. Sections 1311, 1312 and 1326(a). Further, KRS 224.034(4) requires that the cabinet shall not impose under any permit issued pursuant to this regulation any effluent limitation, monitoring requirement or other condition which is more stringent than the effluent limitation, monitoring requirement or other condition which would have been applicable under the federal regulation if the permit were issued by the federal government. This regulation contains the scope and applicability of the KPDES program including specific inclusions and exclusions, prohibitions, requirements for general permits, and requirements for disposal into wells, into POTWS and by land application.

Section 1. Applicability of the KPDES Requirements. The KPDES program requires permits for the discharge of pollutants from any point source into waters of the Commonwealth. *Compliance with the KPDES program requirements constitutes compliance with the operational permit requirements of 401 KAR 5:005, Section 3(2) and requirements related to the operational permit.*

(1) Specific inclusions. The following are *examples of specific categories of* point sources requiring KPDES permits for discharges. These terms are further defined in 401 KAR 5:060, Sections 5 through 12.

(a) Concentrated animal feeding operations;

(b) Concentrated aquatic animal production facilities;
(c) Discharges into aquaculture projects;
(d) Discharges from separate storm sewers; and
(e) Silviculture point sources.

(2) Specific exclusions. The following discharges do not require KPDES permits:

(a) Any discharge of sewage from vessels, effluent from properly functioning marine engines, laundry, shower, and galley sink wastes, or any other discharge incidental to the normal operation of a vessel. This exclusion does not apply to rubbish, trash, garbage, or other such materials discharged overboard; nor to other discharges when the vessel is operating in a capacity other than as a means of transportation such as when used as an energy or mining facility, a storage facility or a seafood processing facility, or when secured to a storage facility or a seafood processing facility, or when secured in waters of the Commonwealth for the purpose of mineral or oil exploration or development.

(b) Discharges of dredged or fill material into waters of the Commonwealth which are regulated under Section 404 of CWA (33 U.S.C. Section 1314).

(c) The introduction of sewage, industrial wastes, or other pollutants into publicly owned treatment works by indirect discharges. Plans or agreements to switch to this method of disposal in the future do not relieve dischargers of the obligation to have and comply with permits until all discharges of pollutants to waters of the Commonwealth are eliminated. [A KPDES permit is required for the introduction of pollutants to privately owned treatment works or to other discharges through, pipes, sewers, or other conveyances owned by the Commonwealth of Kentucky, a municipality, or other party not leading to treatment works.]

(d) Any discharge in compliance with the instructions of an on-scene coordinator pursuant to 40 CFR 1510 (The National Oil and Hazardous Substances Pollution Plan) or 33 CFR 153.10(e) (Pollution by Oil and Hazardous Substances) or discharges in compliance with the state hazardous substance contingency plan issued pursuant to KRS 224.877(5).

(e) Any introduction of pollutants from non-point source agricultural and silvicultural activities, including runoff from orchards, cultivated crops, pastures, range lands, and forest lands, but not discharges form concentrated animal feeding operations as defined in Section 5 of 401 KAR 5:060, discharges from concentrated aquatic animal production facilities as defined in Section 6 of 401 KAR 5:060, discharges to aquaculture projects as defined in Section 7 of 401 KAR 5:060, and discharges from silvicultural point sources as defined in Section 9 of 401 KAR 5:060.

(f) Return flows from irrigated agriculture.

(g) Discharges into a privately owned treatment works, except as the director may otherwise require under 401 KAR 5:065, Section 2(12).

(h) Authorizations by permit or by rule which are prepared to assure that underground injection will not endanger drinking water supplies, pursuant to the Safe Drinking Water Act (42 USC 300f et seq.), and which are issued under a state or federal Underground Injection Control program; [other permitting programs] and, underground injections and disposal wells which are permitted by the cabinet pursuant to 401 KAR Chapter 5.

(i) Discharges which are not regulated by the U.S. EPA under Section 402 of the Clean Water Act (33 U.S.C. Section 1412).

Section 2. Prohibitions. No permit may be issued *by the director:* (1) When the conditions of the permit do not provide for compliance with the applicable requirements of KRS Chapter 224, or regulations promulgated pursuant thereto;

(2) *When* [By the director where] the regional administrator has objected to issuance of the permit in writing under the procedures specified in 40 CFR 123.75;

(3) When the imposition of conditions cannot ensure compliance with the applicable water quality requirements of Kentucky and all affected states;

(4) When, in the judgment of the secretary of the U.S. Army, acting through the Chief of Engineers, anchorage and navigation in or on any of the waters of the United States would be substantially impaired by the discharge;

(5) For the discharge of any radiological, chemical, or biological warfare agent or high-level radioactive waste;

(6) For the discharge inconsistent with a *water quality management* plan or plan amendment approved by EPA;

(7) To a new source or a new discharger, if the discharge from its construction or operation will cause or contribute to the violation of water quality standards. The owner or operator of a new source or new discharger proposing to discharge into a water segment which does not meet Kentucky water quality standards or is not expected to meet those standards even after the application of the effluent limitations required by the KPDES regulations and for which the cabinet has performed a pollutant load allocation for the pollutants to be discharged, must demonstrate, before the close of the public comment period, that:

(a) There are sufficient remaining pollutant load allocations to allow for the discharge; and

(b) The existing dischargers into that segment are subject to [compliance] schedules *of compliance* designed to bring the segment into compliance with Kentucky water quality standards.

Section 3. Variance Requests by Non-POTWs. A discharger which is not a publicly owned treatment works (POTW) may request a variance from otherwise applicable effluent limitations under any of the following statutory or regulatory provisions within the times specified in this section:

(1) Fundamentally different factors. A request for a variance based on the presence of "fundamentally different factors" from those on which the effluent limitations guideline was based shall be made by the close of the public comment period under Section 5 of 401 KAR 5:075. The request shall explain how the requirements of 401 KAR 5:080, Section 3, have been met.

(2) Non-conventional pollutants. A request for a variance from the BAT requirements for "non-conventional" pollutants, pursuant to Section *7(1)* [8(1)] of this regulation because of the economic capability of the owner or operator, or pursuant to Section *7(2)* [8(2)] of this regulation because of certain environmental considerations, must be made as follows. A completed request must be submitted no later than the close of the public comment period under Section 5 of 401 KAR 5:075 demonstrating that the applicable requirements of 401 KAR 5:080 have been met.

(3) Innovative technology. An extension under Section *7(3)* [8(3)] of this regulation from the deadline in Section 1 of 401 KAR 5:080 for best available technology (BAT), based on the use of innovative technology, may be requested no later than the close of the public comment period under Section 5 of 401 KAR 5:075 for the discharger's initial permit requiring compliance with applicable effluent limitations. The request shall demonstrate that the requirements of [Section 3 of] 401 KAR 5:080 have been met.

[(4) Water quality related effluent limitations. A modification under Section 8(4) of this regulation for achieving water quality related effluent limitations may be requested no later than the close of the public comment period under 401 KAR 5:075, Section 5, on the permit from which the modification is sought.]

(4) [(5)] Thermal discharges. A variance under Section *7(4)* [8(5)] of this regulation for the thermal component of any discharge must be filed with a timely application for a permit under 401 KAR 5:060, except that if thermal effluent limitations are established by EPA or are based on Kentucky water quality standards the request for a variance may be filed by the close of the public comment period under Section 5 of 401 KAR 5:075.

[Section 4. Variance Requests by POTWs. A discharger which is a publicly owned treatment works (POTW) may request a variance from otherwise applicable EPA effluent limitations. A modification under Section 8(4) of this regulation shall be requested no later than the close of the public comment period under Section 5 of 401 KAR 5:075 on the permit from which the modification is sought.]

Section *4.* [5.] Expedited Variance Procedures and Time Extensions. Notwithstanding the time requirements in Section[s] 3 [and 4] of this regulation, the director may notify a permit applicant before a draft permit is issued under Section 3 of 401 KAR 5:075 that the draft permit will likely contain limitations which are eligible for variances.

(1) In the notice the director may require the applicant as a condition of consideration of any potential variance request to submit a request explaining how the requirements of 401 KAR 5:080 applicable to the variance have been met. The director may require the submittal within a specified reasonable time after receipt of the notice. The notice may be sent before the permit application has been submitted. The draft or final permit may contain the alternative limitations which may become effective upon final grant of the variance.

(2) A discharger who cannot file a complete request required under Section 3(2) of this regulation may request an extension. The extension may be granted or denied at the discretion of the director. Extensions should be no more than six (6) months in duration.

Section *5.* [6.] General Permits. (1) Coverage. The director may issue a general permit in accordance with the following:

(a) Area. The general permit will be written to cover a category of discharges described in the permit under paragraph (b) of this subsection, except those covered by individual permits, within a geographic area. The area will correspond to existing geographic or political boundaries, such as:

1. Designated planning areas under Sections 208 and 303 of CWA (33 U.S.C. 1288 and 1313);
2. City, county, or state political boundaries;
3. State highway systems;
4. Standard metropolitan statistical areas as defined by the University of Louisville Urban Studies Center, consistent with the U.S. Office of Management and Budget;
5. Urbanized areas as designated by the University of Louisville Urban Studies Center consistent with the U.S. Bureau of the Census; or
6. Any other appropriate division or combination of boundaries.

(b) Sources. The general permit will be written to regulate, within the area described in paragraph (a) of this subsection; either:

1. Separate storm sewers; or
2. A category of point sources other than separate storm sewers if the sources all:

a. Involve the same or substantially similar types of operations;

b. Discharge the same types of wastes;

c. Require the same effluent limitations or operating conditions;

d. Require the same or similar monitoring; and

e. In the opinion of the director, are more appropriately controlled under a general permit than under individual permits.

(2) Administration.

(a) General permits may be issued, modified, revoked and reissued, or terminated in accordance with applicable requirements of 401 KAR 5:075.

(b) Requiring an individual permit.

1. The director may require any person authorized by a general permit to apply for and obtain an individual KPDES permit. Any interested person may petition the director to take action under this paragraph. Cases where an individual KPDES permit may be required include the following:

a. The discharger(s) is a significant contributor of pollution as determined by the factors set forth in Section 8(3)(b) of 401 KAR 5:060;

b. The discharger is not in compliance with the conditions of the general KPDES permit;

(c) A change has occurred in the availability of demonstrated technology or practices for the control or abatement of pollutants applicable to the point source;

d. Effluent limitation guidelines are promulgated for point sources covered by the general KPDES permit;

e. A Kentucky Water Quality Management Plan containing requirements applicable to such point sources is approved; or

f. The requirements of subsection (1) of this section are not met.

2. Any owner or operator authorized by a general permit may request to the excluded from the coverage of the general permit by applying for an individual permit. The owner or operator shall submit an application under 401 KAR 5:060, Section 1, to the director with reasons supporting the request. The request shall be submitted no later than ninety (90) days after the notice by the cabinet in accordance with 401 KAR 5:075, Section 5. The request shall be processed under 401 KAR 5:075. If the reasons cited by the owner or operator are adequate to support the request, the cabinet may issue an individual permit.

3. When an individual KPDES permit is issued to an owner or operator otherwise subject to a general KPDES permit, the applicability of the general permit to the individual KPDES permittee is automatically terminated on the effective date of the individual permit.

4. A permittee, excluded from a general permit solely because he already has an individual permit, may request that the individual permit be revoked. the permittee shall then request to be covered by the general permit. Upon revocation of the individual permit, the general permit shall apply to the source.

Section *6.* [7.] Disposal of Pollutants into Wells, into POTWs or by Land Application. *(1) The cabinet may issue permits to control the disposal of pollutants into wells, when necessary to protect the public health and welfare*

and to prevent the pollution of ground and surface waters.

(2) [(1)] When part of a discharger's process wastewater is not being discharged into waters of the Commonwealth because it is disposed into a well, into a POTW, or by land application thereby reducing the flow or level of pollutants being discharged into waters of the Commonwealth, applicable effluent standards and limitations for the discharge in a KPDES permit permit shall be adjusted to reflect the reduced raw waste resulting from such disposal. Effluent limitations and standards in the permit shall be calculated by one (1) of the following methods:

(a) If none of the waste from a particular process is discharged into waters of the Commonwealth, and effluent limitations guidelines provide separate allocation for wastes from that process, all allocations for the process shall be eliminated from calculation of permit effluent limitations or standards.

(b) In all cases other than those described in paragraph (a) of this subsection, effluent limitations shall be adjusted by multiplying the effluent limitation derived by applying effluent limitation guidelines to the total waste stream by the amount of wastewater now to be treated and discharged into waters of the Commonwealth, and dividing the result by the total wastewater flow. Effluent limitations and standards so calculated may be further adjusted under 401 KAR 5:080, Section 3, to make them more stringent if discharges to wells, publicly owned treatment works, or by land application change the character or treatability of the pollutants being discharged to receiving waters. This method may be algebraically expressed as:

$$P = E \times N/T$$

When P is the permit effluent limitation, E is the limitation derived by applying effluent guidelines to the total waste stream, N is the wastewater flow to be treated and discharged to waters of the Commonwealth and T is the total wastewater flow.

(3) [(2)] Subsection *(2)* [(1)] of this section shall not apply to the extent that promulgated effluent limitations guidelines:

(a) Control concentrations of pollutants discharged but not mass; or

(b) Specify a different specific technique for adjusting effluent limitations to account for well injection, land application, or disposal into POTWs.

(4) [(3)] Subsection *(2)* [(1)] of this section does not alter a discharger's obligation to meet any more stringent requirements established under 401 KAR 5:065.

Section *7.* [8.] Variances Available to KPDES Applicants. *Consistent with KRS 224.034(1), the variance provisions in this section and in Sections 3 and 4 of 401 KAR 5:080 lists, inclusively, those variances available to KPDES applicants.*

(1) Economic capability. The director, with the concurrence of EPA, may modify the BAT requirements set out in 401 KAR 5:080, Section 1, for a point source, upon a showing by the owner or operator of that point source, satisfactory to the director that the modified requirement will:

(a) Represent the maximum use of technology within the economic capability of the owner or operator; and

(b) Result in reasonable further progress toward the elimination of the discharge of pollutants.

(2) Environmental considerations.

(a) The director, with the concurrence of EPA, may modify the BAT requirement set out in 401 KAR 5:080, Section 1, for a point source which does not discharge toxic pollutants identified in Section *5* [6] of 401 KAR 5:080, conventional pollutants, or the thermal component of that discharge upon a showing by the owner or operator satisfactory to the director that:

1. The modified requirement will result, at a minimum, in compliance with the BPT requirement identified in 401 KAR 5:080 or Kentucky water quality standards, whichever is applicable;

2. The modified requirement will not result in *any* [an] additional requirement on any other point or non-source point; and

3. The modification will not:

a. Interfere with the attainment or maintenance of that water quality which will assure protection of public water supplies, protection and propagation of a balanced population of shellfish, fish, and wildlife, and allow recreational activities in and on the water; and

b. Result in the discharge of pollutants in quantities which may reasonably be anticipated to pose an unacceptable risk to human health or the environment because of bioaccumulation, persistency in the environment, acute toxicity, chronic toxicity, including carcinogenicity, mutagenicity or teratogenicity, or synergistic propensities.

(b) If an owner or operator of a point source applies for a modification under this section for any pollutant, that owner or operator will be eligible to apply for a modification under subsection (1) of this section with respect to that pollutant only during the same time period as he is eligible to apply for a modification under this section.

(3) Innovative technology.

(a) The director may establish a date for complying with the deadline for achieving BAT set out in Section 1 of 401 KAR 5:080 no later than July 1, 1987, if the owner or operator establishes to the satisfaction of the director the following:

1. That the existing production capacity of the facility will be replaced with an innovative production process which will result in an effluent reduction significantly greater than that required by the limitation otherwise applicable to that facility, and which moves toward the state's goal of eliminating the discharge of all pollutants; or

2. That an innovative control technique will be installed which has a substantial likelihood for enabling the facility to comply with the applicable effluent limitation by achieving a significantly greater effluent reduction than that required by the applicable effluent limitation, and which moves toward the state's goal of eliminating the discharge of all pollutants; or

3. That an innovative system will be installed which has the potential for significantly lower costs than the system which has been determined by the director to be economically achievable.

(b) The innovative system must have the potential for industrywide application.

(c) The director may not modify any requirement under this section which applies to a pollutant on the toxic pollutant list set out at 401 KAR 5:080, Section *5* [6].

[(4) Water quality related effluent limitations. The director may modify water quality related effluent limitations, promulgated to assure protection of specific portions of waters of the Commonwealth, which are established in addition to effluent limitations for achieving BAT, if the following conditions are met:]

[(a) The person affected by such limitation demonstrates that there is no reasonable relationship between the economic and social costs of the effluent limitation and the benefits to be obtained; and]

[(b) The request for modification is made no later than

the close of the public comment period under 401 KAR 5:075, Section 5, on the permit from which the modification is sought.]

(4) [(5)] Thermal pollution.

(a) The director may impose an *alternative* effluent limitation for the thermal component of a discharge from a point source if the owner or operator can establish to the satisfaction of the director that the original effluent limitation proposed by the director is more stringent than necessary to assure the protection and propagation of a balanced indigenous population of shellfish, fish and wildlife in and on the body of water into which the discharge will be made.

(b) The *alternative* effluent limitation imposed by the director upon request by the owner or operator will take into account the interaction of the thermal component with other pollutants, and will assure the protection and propagation of a balanced, indigenous population of shellfish, fish and wildlife in and on that body of water.

Section 8. Variances from Categorical Pretreatment Standards for Fundamentally Different Factors. (1) Definitions. "Requester" means an industrial user or a POTW seeking a variance from the limits specified in a categorical pretreatment standard.

(2) The criteria and standards for evaluating a request for a fundamentally different factors variance shall be pursuant to 401 KAR 5:080, Section 3.

(3) Application procedure.

(a) Application deadline.

1. Requests for a variance and supporting information must be submitted in writing to the director.

2. In order to be considered, request for variances must be submitted within 180 days after the effective date of the categorical pretreatment standard unless the user has requested a categorical determination.

3. When the user has requested a categorical determination the user may elect to await the results of the category determination before submitting a variance request under this section. When the user so elects, the user must submit the variance request within thirty (30) days after a final decision has been made on the categorical determination.

(b) Contents of submission. Written submissions for variance request shall include:

1. The name and address of the requester;

2. Identification of the interest of the requester which is affected by the categorical pretreatment standard for which the variance is requested;

3. Identification of the POTW currently receiving the waste from the industrial user for which alternative discharge limits are regulated;

4. Identification of the categorical pretreatment standards which are applicable to the industrial user;

5. A list of each pollutant or pollutant parameter for which an alternative discharge limit is sought;

6. The alternative discharge limits proposed by the requester for each pollutant or pollutant parameter identified in subparagraph 5 of this paragraph;

7. A description of the industrial user's existing water pollution control facilities;

8. A schematic flow representation of the industrial user's water system including water supply, process wastewater systems, and points of discharge; and

9. A statement of facts clearly establishing why the variance request should be approved, including detailed support data, documentation, and evidence necessary to fully evaluate the merits of the request.

(c) Deficient requests. The director will only act on written requests for variances that contain all of the information required. Requesters who have made incomplete submissions will be notified by the director that their requests are deficient and unless the time period is extended, will be given up to thirty (30) days to correct the deficiency. If the deficiency is not corrected within the time period allowed by the director, the request for a variance shall be denied.

(d) Public notice. Upon receipt of a complete request, the director will provide notice of receipt, opportunity to review the submission, and opportunity to comment.

1. The public notice will be circulated in a manner designed to inform interested and potentially interested persons of the request. Procedures for the circulation of public notice will include mailing notices to:

a. The POTW into which the industrial user discharges;

b. Adjoining states whose waters may be affected; and

c. Designated CWA Section 208 (33 U.S.C. Section 1288) planning agencies, federal and state fish, shellfish and wildlife resource agencies, and to any other person or group who has requested individual notice, including those on appropriate mailing lists.

2. The public notice will provide for a period not less than thirty (30) days following the date of the public notice during which time interested persons may review the request and submit their written views on the request.

3. Following the comment period, the director will make a determination on the request taking into consideration any comments received. Notice of this final decision will be provided to the requester and all persons who submitted comments on the request.

(e) Review of requests by state.

1. When the director finds that fundamentally different factors do not exist, the director may deny the request, and notify the requester of the denial.

2. When the director finds that fundamentally different factors do exist the director will forward the request, with a recommendation that the request be approved, to the enforcement division director of EPA region IV.

Section 9. Pretreatment. (1) Applicability.

(a) This section applies to the following:

1. Pollutants from non-domestic sources covered by pretreatment standards which are indirectly discharged, transported by truck or rail, or otherwise introduced into POTWs;

2. POTWs which receive wastewater from sources subject to national pretreatment standards; and

3. Any new or existing source subject to national pretreatment standards.

(b) National pretreatment standards do not apply to sources which discharge to a sewer which is not connected to a POTW treatment plant.

(2) Definitions. The following definitions pertain to indirect dischargers and POTWs subject to pretreatment standards under the KPDES program.

(a) "Approved POTW pretreatment program" means a program administered by a POTW that meets the criteria established in subsection (8) of this section and which has been approved by the director in accordance with subsection (9) of this section.

(b) "Indirect discharge" or "discharge" means the introduction of pollutants into a POTW from any nondomestic source regulated by the KPDES program.

(c) "Industrial user" or "user" means a source of indirect discharge.

(d) "Interference" means an inhibition or disruption of the POTWs, its treatment processes or operations, or its sludge processes, use or disposal which is a cause of or

significantly contributes to a violation of any requirement of the POTW's KPDES permit, including an increase in the magnitude or duration of a violation, or to the prevention of sewage sludge use or disposal by the POTW in violation of any applicable regulation. An industrial use significantly contributes to a permit violation or prevention of sludge use or disposal whenever the user:

1. Discharges a daily pollutant loading in excess of that allowed by contract with the POTW or by applicable law;

2. Discharges wastewater which substantially differs in nature or constitutents from the user's average discharge; or

3. Knows or has reason to know that its discharge, alone or in conjunction with discharges from other sources, would result in a POTW permit violation or prevent sewage sludge use or disposal in accordance with the POTW's approved method of sludge management.

(e) "National pretreatment standard" means any regulation containing pollutant discharge limits promulgated by EPA in accordance with Section 307(b) and (c) of the CWA (33 U.S.C. Section 1317(b) and (c)) which applies to industrial users. This includes prohibitive discharge limits established pursuant to subsection (4) of this section.

(f) "Pass through" means the discharge of pollutants through the POTW into waters of the Commonwealth in quantities or concentrations which are a cause of or significantly contribute to a violation of any requirement of the POTW's KPDES permit, including an increase in the magnitude or duration of a violation. An industrial user significantly contributes to such permit violation when it:

1. Discharges a daily pollutant loading in excess of that allowed by contract with the POTW or by applicable law;

2. Discharge wastewater which substantially differs in nature and constituents from the user's average discharge;

3. Knows or has reason to know that its discharge, alone or in conjunction with discharges from other sources, would result in a permit violation; or

4. Knows or has reason to know that the POTW is, for any reason, violating its final effluent limitations in its permit and that such industrial user's discharge either alone or in conjunction with discharges from other sources, increases the magnitude or duration of the POTW's violations.

(g) "POTW treatment plan" means that portion of the POTW which is designed to provide treatment, including recycling and reclamation of municipal sewage and industrial waste.

(h) "Pretreatment" means the reduction of the amount of pollutants, the elimination of pollutants, or the alteration of the nature of pollutant properties in wastewater prior to or in lieu of discharging or otherwise introducing such pollutants into a POTW. The reduction or alteration may be obtained by physical, chemical or biological processes, process changes or by other means except as prohibited by this section.

(i) "Pretreatment requirements" means any substantive or procedural requirements related to pretreatment, other than a national pretreatment standard, imposed on an industrial user.

(3) Local law. Nothing in this regulation is intended to affect any pretreatment requirements, including any standards or prohibitions, established by local law as long as the local requirements are not less stringent than any set forth in national pretreatment standards, or any other requirements or prohibitions established by the cabinet or by EPA.

(4) National pretreatment standards: prohibited discharges.

(a) A non-domestic source introducing pollutants into a POTW shall comply with the general and specific prohibitions set forth in 40 CFR 403.5.

(b) A POTW developing a pretreatment program pursuant to subsection (7) of this section shall develop and enforce effluent limits to implement the prohibitions of paragraph (a) of this subsection pursuant to 40 CFR 403.5.

(c) A POTW without an approved pretreatment program shall, in cases where pollutants contributed by users result in interference or pass-through, and such violation is likely to recur, develop and enforcement specific effluent limits pursuant to 40 CFR 403.5.

(d) If, within thirty (30) days after notice of an interference violation has been sent by the cabinet to the POTW and to persons who have requested notice, the POTW fails to begin appropriate enforcement action, the cabinet may take appropriate enforcement action, pursuant to KRS 224.994 and 224.995.

(e) 40 CFR 403.5 is hereby incorporated by reference, revised as of July 1, 1982, as published by the Office of the Federal Register, National Archives and Register Service General Services Administration, and available from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402.

(5) Pretreatment standards: categorical standards.

(a) In addition to the general prohibitions in subsection (4) of this section, all indirect discharges shall comply with national pretreatment standards promulgated by EPA and codified in 40 CFR Chapter I, Subchapter N. Compliance shall be required within the time specified in the appropriate subpart of Subchapter N.

(b) Industrial users may request the director to provide written certification on whether an industrial user falls within a praticular subcategory. The director will act upon that request in accordance with the procedures in 40 CFR 403.6.

(c) Limitations for industrial users will be imposed in accordance with 40 CFR 403.6(c) through (e).

(d) 40 CFR Chapter I, Subchapter N, and 40 CFR 403.6 are hereby incorporated by reference, revised as of July 1, 1982, as published by the Office of the Federal Register, National Archives and Register Service General Services Administration, and available from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402, Division of Water, Permits Branch, Frankfort, Kentucky.

(6) Revision of categorical pretreatment standards to reflect POTW removal of pollutants. This subsection provides the criteria and procedures to be used by a POTW in revising the pollutant discharge limits specified in categorical pretreatment standards to reflect removal of pollutants by the POTW.

(a) Definitions. For the purpose of this subsection:

1. "Removal" means a reduction in the amount of a pollutant in the POTW's effluent or alteration of the nature of a pollutant during treatment at the POTW. The reduction or alteration can be obtained by physical, chemical or biological means and may be the result of specifically designed POTW capabilities, or it may be incidental to the operation of the treatment system. Removal does not mean dilution of a pollutant in the POTW. The demonstration of removal shall consist of data which reflect the removal achieved by the POTW for those specific pollutants of concern included on the list developed pursuant to Section 307(a) of the CWA (33 U.S.C. Section 1317(a)). Each categorical pretreatment

standard will specify whether or not a removal allowance may be granted for indicator or surrogate pollutants regulated in that standard.

2. "Consistent removal" means the average of the lowest fifty (50) percent of the removals measured according to paragraph (d)2 of this subsection. All sample data obtained for the measured pollutant during the time period prescribed in that paragraph shall be reported and used in computing consistent removal. If a substance is measurable in the influent but not in the effluent, the effluent level may be assumed to be the limit of measurement, and those data may be used by the POTW at its discretion and subject ot approval by the director. If the substance is not measurable in the influent, the data may not be used. When the number of samples with concentrations equal to or above the limit of measurement is between eight (8) and twelve (12), the average of the lowest six (6) removals shall be used. If there are less than eight (8) samples with concentrations equal to or above the limit of measurement, the director may approve alternate means for demonstrating consistent removal.

3. "Measurement" refers to the ability of the analytical method or protocol to quantify as well as identify the presence of the substance in question.

4. "Overflow" means the intentional or unintentional diversion of flow from the POTW before the POTW treatment plant.

(b) Revision of categorical pretreatment standards to reflect POTW pollutant removal. A POTW receiving wastes from an industrial user to which a categorical pretreatment standard applies may, pursuant to this subsection, revise the discharge limits for a specific pollutant covered in the categorical pretreatment standard applicable to that user. Revisions shall only be made when the POTW demonstrates consistent removal of each pollutant for which the discharge limit in a categorical pretreatment standard is to be revised at a level which justifies the amount of revision to the discharge limit. In addition, revision of pollutant discharge limits in categorical pretreatment standards by a POTW may only be made as follows:

1. Application. The POTW shall apply for, and receive authorization from the director in accordance with subsections (8) and (9) of this section;

2. POTW pretreatment program. The POTW shall have a pretreatment program approved in accordance with subsections (7), (8) and (9) of this section. However, a POTW may conditionally revise the discharge limits for specific pollutants, even though a pretreatment program has not been approved, as follows. These provisions also govern the issuance of provisional authorizations under paragraph (d)2g of this subsection;

a. An industrial user wishing to receive a conditional or provisional revision of categorical pretreatment standards shall submit to the POTW the information required in subsection (10)(b)1 through 7 of this section, except that the compliance schedule is not required when a provisional allowance is requested. The submission shall indicate what additional technology, if any, will be needed to comply with the categorical pretreatment standards as revised by the POTW.

b. The POTW shall compile and submit data demonstrating removal in accordance with the requirements of paragraphs (d)1 through 7 of this subsection. The POTW shall submit to the director a removal report which comports with the signatory and certification requirements of subsection (10)(l) and (m) of this section. This report shall contain a certification by any of the persons specified in subsection (10)(l) of this section or by an independent engineer, containing the following statement: "I have personally examined and am familiar with the information submitted in the attached document, and I hereby certify under penalty of law that this information was obtained in accordance with the requirements of Section 9(6)(d) of this regulation. Moreover, based upon my inquiry of those individuals immediately responsible for obtaining the information reported herein, 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."

c. The POTW shall submit to the director an application for pretreatment program approval meeting the requirements of subsections (7) and (8)(a) or (b) of this section in a timely manner, not to exceed the time limitation set forth in a compliance schedule for development of a pretreatment program included in the POTW's KPDES permit.

d. If a POTW grants a conditional or provisional revision and the director subsequently makes a final determination, after notice and an opportunity for a hearing, that the POTW failed to comply with the conditions in paragraphs (b)2a or b of this subsection, or that its sludge use or disposal practices are not in compliance with the provisions of paragraph (b)4 of this subsection, the revision shall be terminated by the director and all industrial users to whom the revised discharge limits had been applied shall achieve compliance with the applicable categorical pretreatment standard within a reasonable time, not to exceed the period of time prescribed in the applicable categorical pretreatment standard as specified by the director. However, the revision will not be terminated when the POTW has not made a timely application for program approval if the POTW has made demonstrable progress towards and has demonstrated and continues to demonstrate an intention to submit an approvable pretreatment program as expeditiously as possible within an additional period of time, not to exceed one (1) year, established by the director.

e. If a POTW grants a conditional or provisional revision and the POTW or director subsequently makes a final determination after notice and an opportunity for a hearing, that the industrial user failed to comply with conditions in paragraph (b)1d of this subsection, including in the case of a conditional revision, the dates specified in the compliance schedule required by subsection (10)(b)7 of this section, the revision shall be terminated by the POTW or the director for the noncomplying industrial user and each noncomplying industrial user to whom the revised discharge limits had been applied shall achieve compliance with the applicable categorical pretreatment standards within the time period specified in that standard. The revision will not be terminated when a violation of the provisions of this subparagraph results from causes entirely outside the control of the industrial user or the industrial user has demonstrated substantial compliance.

f. The POTW shall submit to the director by December 31 of each year the name and address of each industrial user that has received a conditionally or provisionally revised discharge limit. If the revised discharge limit is revoked, the POTW shall submit the information in paragraph (b)2a of this subsection to the director.

3. Compensation for overflow. POTW's which at least once annually overflow untreated wastewater to receiving waters may claim consistent removal of a pollutant only by complying with either subparagraph a or b of this paragraph. However, this paragraph will not apply when an industrial user can demonstrate that overflow does not occur between the industrial user and the POTW treatment plant.

a. Consistent removal may be claimed if the industrial user provides containment or otherwise ceases or reduces discharges from the regulated processes which contain the pollutant for which an allowance is requested during all circumstances in which an overflow event can reasonably be expected to occur at the POTW or at a sewer to which the industrial user is connected. Discharges shall cease or be reduced, or pretreatment shall be increased, to the extent necessary to compensate for the removal not being provided by the POTW. Allowances under this provision will only be granted when the POTW submits to the director evidence that:

(i) All industrial users to which the POTW proposes to apply this provision have demonstrated the ability to contain or otherwise cease or reduce, during circumstances in which an overflow event can reasonably be expected to occur, discharges from the regulated processes which contain pollutants for which an allowance is requested;

(ii) The POTW has identified circumstances in which an overflow event can reasonably be expected to occur, and has a notification or other viable plan to insure that industrial users will learn of an impending overflow in sufficient time to contain, cease or reduce discharging to prevent untreated overflows from occurring. The POTW shall also demonstrate that it will monitor and verify the data required in paragraph (b)3a(iii) of this subsection to insure that industrial users are containing, ceasing or reducing operations during POTW system overflow; and

(iii) All industrial users to which the POTW proposes to apply this provision have demonstrated the ability and commitment to collect and make available upon request by the POTW, director or regional administrator daily flow reports or other data sufficient to demonstrate that all discharges from regulated processes containing the pollutant for which the allowance is requested were contained, reduced or otherwise ceased, as appropriate, during all circumstances in which an overflow event was reasonably expected to occur; or

b. (i) Consistent removal may be claimed if reduced pursuant to the following equation:

$$r_c = r_m = \frac{8760\text{-}Z}{8760}$$

Where:

r_m = POTW's consistent removal rate for that pollutant as established under paragraphs (a)1 and (d)2 of this subsection.

r_c = removal corrected by the overflow factor.

Z = hours per year that overflow occurred between the industrial user and the POTW treatment plant, the hours either to be shown in the POTW's current NPDES permit application or the hours, as demonstrated by verifiable techniques, that a particular industrial user's discharge overflows between the industrial user and the POTW treatment plant.

(ii) After July 1, 1983, consistent removal may be claimed only when efforts to correct the conditions resulting in untreated discharges by the POTW are underway in accordance with the policy and procedures set forth in "PRM 75-34" (Program Guidance Memorandum-61) published on December 16, 1975 by EPA Office of Water Program Operations (WH-546). Revisions to discharge limits in categorical pretreatment standards may not be made when efforts have not been committed to by the POTW to minimize pollution from overflows. At a minimum, by July 1, 1983, the POTW shall have completed the analysis required by PRM 75-34 and be making an effort to implement the plan.

(iii) If, by July 1, 1983, a POTW has begun the PRM 75-34 analysis but due to circumstances beyond its control has not completed it, consistent removal, subject to the approval of the director may continue to be claimed according to the formula in paragraph (b)3b(i) of this subsection as long as the POTW acts in a timely fashion to complete the analysis and makes an effort to implement the non-structural cost-effective measures identified by the analysis; and as long as the POTW has expressed its willingness to apply, after completing the analysis, for a construction grant necessary to implement any other cost-effective overflow controls identified in the analysis should federal funds become available, so applies for such funds, and proceeds with the required construction in an expeditious manner. In addition, consistent removal may, subject to the approval of the director, continue to be claimed according to the formula in paragraph (b)3b(i) of this subsection when the POTW has completed and the director has accepted the analysis required by PRM 75-34, and the POTW has requested inclusion in its KPDES permit of an acceptable compliance schedule providing for timely implementation of cost-effective measures identified in the analysis. In considering what is timely implementation, the director will consider the availability of funds, cost of control measures and seriousness of the water quality problem.

4. Compliance with applicable sludge requirements. A revision shall not contribute to the POTW's inability to comply with its KPDES permit or with any applicable statutes or regulations pertaining to sludge management.

(c) POTW application for authorization to revise discharge limits.

1. An application for authorization to revise discharge limits for industrial users who are or in the future may be subject to categorical pretreatment standards, or approval of discharge limits conditionally or provisionally revised for industrial users by the POTW shall be submitted by the POTW to the director.

2. A POTW may submit an application no more than once per year for:

a. Any categorical pretreatment standard promulgated in the prior eighteen (18) months;

b. Any new or modified facilities or production changes resulting in the discharge of pollutants which were not previously discharged and which are subject to promulgated categorical standards; or

c. Any significant increase in removal efficiency attributable to specific identifiable circumstances or corrective measures, such as improvements in operation and maintenance practices, new treatment or treatment capacity, or a significant change in the influent to the POTW treatment plant.

3. The director may, however, elect not to review the application upon receipt, in which case the POTW's conditionally or provisionally revised discharge limits will remain in effect until reviewed by the director. This review may occur at any time in accordance with the procedures of subsection (9) of this section, but in no event later than the time of any pretreatment program approval or any KPDES permit reissuance thereafter.

4. If the consistent removal claimed is based on an analytical technique other than the technique specified for the applicable categorical pretreatment standard, the director may require the POTW perform additional analyses.

(d) Contents of application to revise discharge limits. Requests for authorization to revise discharge limits in categorical pretreatment standards shall be supported by the following information:

1. List of pollutants. The POTW shall submit a list of pollutants for which discharge limit revisions are proposed.

2. Consistent removal data. The POTW shall submit influent and effluent operational data demonstrating consistent removal, or other information provided for in paragraph (a)2 of this subsection which demonstrates consistent removal of the pollutants for which discharge limit revisions are proposed. This data shall meet the following requirements:

a. Representative data: seasonal. The data shall be representative of yearly and seasonal conditions to which the POTW is subjected for each pollutant for which a discharge limit revision is proposed.

b. Representative data: quality and quantity. The data shall be representative of the quality and quantity of normal effluent and influent flow if that data can be obtained. If such data are unobtainable, alternate data or information may be presented for approval to demonstrate consistent removal as provided for in paragraph (a)2 of this subsection.

c. Sampling procedures: composite.

(i) The influent and effluent operational data shall be otained through twenty-four (24) hour flow-proportional composite samples. Sampling may be done manually or automatically, and discretely or continuously. For discrete sampling, at least twelve (12) aliquots shall be composited. Discrete sampling may be flow-proportioned either by varying the time interval between each aliquot or the volume of each aliquot. All composites must be flow-proportional to either stream flow at time of collection of influent aliquot or to the total influent flow since the previous influent aliquot. Volatile pollutant aliquots must be combined in the laboratory immediately before analysis.

(ii) Twelve (12) samples shall be taken at approximately equal intervals throughout one (1) full year. Sampling must be evenly distributed over the days of the week so as to include non-workdays as well as workdays. If the director determines that this schedule will not be most representative of the actual operation of the POTW treatment plant, an alternative sampling schedule will be approved.

(iii) Upon the director's concurrence, a POTW may utilize a historical data base amassed prior to the effective date of this subsection provided that such data otherwise meet the requirements of this subparagraph. In order for the historical data base to be approved it must present a statistically valid description of daily, weekly and seasonal sewage treatment plant loadings and performance for at least one (1) year.

(iv) Effluent sample collection need not be delayed to compensate for hydraulic detention unless the POTW elects to include detention time, compensation or unless the director requires detention time compensation. The director may require that each effluent sample be taken approximately one (1) detention time later than the corresponding influent sample when failure to do so would result in an unrepresentative portrayal of actual POTW operation. The detention period is to be based on a twenty-four (24) hour average daily flow value. The average daily flow used will be based upon the average of the daily flows during the same month of the previous year.

d. Sampling procedures: grab. When composite sampling is not an appropriate sampling is not an appropriate sampling technique, grab samples shall be taken to obtain influent and effluent operational data. Collection of influent grab samples should preceed collection of effluent samples by approximately one (1) detention period. The detention period is to be based on a twenty-four (24) hour average daily flow value. The average daily flow used will be based upon the average of the daily flows during the same month of the previous year. Grab samples will be required, for example, when the parameters being evaluated are those, such as cyanide and phenol, which may not be held for any extended period because of bilogical, chemical or physical interactions which take place after sample collection and affect the results. A grab sample is an individual sample collected over a period of time not exceeding fifteen (15) minutes.

e. Analytical methods. Sampling and an analysis of these samples shall be performed in accordance with the techniques prescribed in 40 CFR Part 136. When 40 CFR Part 136 does not contain sampling or analytical techniques for the pollutant in question, or when the director, with the concurrence of the administrator, determines that the Part 136 sampling and analytical techniques are inappropriate for the pollutant in question, sampling and analysis shall be performed using validated analytical methods or any other applicable sampling and analytical procedures, including procedures suggested by the POTW or other parties, approved by the director.

f. Calculation of removal. All data shall be submitted to the director. Removal for a specific pollutant shall be determined either, for each sample, by measuring the difference between the concentrations of the pollutant in the influent and effluent of the POTW and expressing the difference as a percent of the influent concentration, or, when such data cannot be obtained, removal may be demonstrated using other data or procedures subject to concurrence by the director.

g. Exception to sampling data requirement: provisional removal demonstration. For pollutants which are not currently being discharged, application may be made by the POTW for provisional authorization to revise the applicable categorical pretreatment standard prior to initial discharge of the pollutant. Consistent removal may be based provisionally on data from treatability studies or demonstrated removal at other treatment facilities when the quality and the quantity of influent are similar. In calculating and applying for provisional removal allowances, the POTW shall comply with the provision of paragraphs (b)1 through 4 of this subsection. Within eighteen (18) months after the commencement of discharge of the pollutants in question, consistent removal shall be demonstrated.

3. List of industrial subcategories. The POTW shall submit a list of the industrial subcategories for which discharge limits in categorical pretreatment standards will be revised, including the number of industrial users in each subcategory and an identification of which of the pollutants on the list are discharged by each subcategory.

4. Calculation or revised discharge limits. The POTW shall submit proposed revised discharge limits for each of the subcategories of industrial users calculated in the following manner:

a. The proposed revised discharge limit for a specified pollutant shall be derived by use of the following formula:

$$Y = \frac{x}{1-r}$$

where:

x = pollutant discharge limit specified in the applicable categorical pretreatment standard.

r = POTW's consistent removal rate for that pollutant as established under paragraphs (a)2, (d)2, and if appropriate, (b)3b1 of this subsection (percentage expressed as a decimal).

y = revised discharge limit for the specified pollutant (expressed in same units as x).

b. In calculating revised discharge limits, the revision shall be applied equally to all existing and new industrial users in an industrial subcategory subject to categorical

pretreatment standards which discharge that pollutant to the POTWs.

5. Data on sludge characteristics. The POTW shall submit data showing the concentrations and amounts in the POTW's sludge of the pollutants for which discharge limit revisions are proposed and for which EPA, the director or municipality have published sludge disposal or use criteria applicable to the POTW's current method of sludge use or disposal. These data shall meet the following requirements:

a. The data shall be obtained through a composite sample taken during the same sampling periods selected to measure consistent POTW removals in accordance with the requirements of paragraph (d)2 of this subsection. Each composite sample shall contain a minimum of twelve (12) discrete samples taken at equal time intervals over a twenty-four (24) hour period. When a composite sample is not an appropriate sampling technique, grab samples shall be taken.

b. Sampling and analysis shall be performed in accordance with the sampling and analytical techniques described previously in paragraph (d)2e of this subsection.

6. Description of sludge management. The POTW shall submit a specific description of the POTW's current methods of use or disposal of its sludge and data demonstrating that the current sludge use or disposal methods comply and will continue to comply with the requirements of paragraph (b)4 of this subsection.

7. Certification statement. The POTW shall submit the certification statement required by paragraph (b)2b of this subsection stating that the pollutant removals and associated revised discharged limits have been or will be calculated in accordance with this section and any guidelines issued by EPA under Section 304(g) of the CWA (33 U.S.C. Section 1314(g)).

(e) Procedure for authorizing modification of standards.

1. Application for authorization to revise national pretreatment standards shall comply with subsection (8) of this section and paragraphs (c) and (d) of this subsection. Notice, public comment, and review by the director will comply with subsection (9) of this section.

2. A POTW which has received a construction grant from funds authorized for any fiscal year beginning after September 30, 1978, will only be considered for authorization to modify national standards after it has completed the analysis required by Section 201(g)(5) of the CWA (33 U.S.C. Section 1288(g)(5) and demonstrated that modification of the discharge limits in national standards will not preclude the use of innovative or alternative technology. In addition, when sludge disposal or treatment technology is or will be acquired or constructed with construction grant funds, POTWs should refer to 40 CFR 35.917(d)(6) and Appendix A to determine the funding eligibility of sludge disposal or treatment facilities.

3. The director shall, at such time as it elects to review the submission, or at the time of POTW pretreatment program approval or KPDES permit reissuance thereafter, authorize the POTW to revise industrial user discharge limits, consistent with the provisions of this subsection.

4. An industrial user or other interested party may assist the POTW in preparing and presenting the information necessary to apply for authorization to revise categorical pretreatment standards.

(f) Continuation and withdrawal of authorization.

1. Monitoring and reporting of consistent removal. Following authorization to revise the discharge limits in pretreatment standards, the POTW shall continue to monitor and report on, at frequencies and over intervals specified by the director, with the concurrence of the regional administrator, but in no case less than two (2) times per year, the POTW's removal capabilities for all pollutants for which authority to revise the standards was granted. Monitoring and reporting shall be in accordance with subsection (10)(i) and (j) of this section pertaining to pollutant removal capability reports.

2. Re-evaluation of revisions. Approval of authority to revise pretreatment standards will be re-examined whenever the POTW's KPDES permit is reissued, unless the director, with the concurrence of the regional administrator determines the need to re-evaluate the authority. In order to maintain a removal allowance, the POTW shall comply with all federal, state and local statutes, regulations, and permits applicable to the POTW's selected method of sludge use or disposal. In addition, where overflows of untreated waste by the POTW continue to occur, the director, with the concurrence of the regional administrator, may condition continued authorization to revise discharge limits upon the POTW's performing additional analysis and/or implementing additional control measures as is consistent with EPA policy on POTW overflows.

3. Inclusion in POTW permit. Once authority to revise discharge limits for a specified pollutant is granted, the revised discharge limits for industrial users of the system as well as the consistent removal documented by the POTW for that pollutant and the other requirements of paragraph (b) of this subsection, shall be included in the POTW's KPDES permit upon the earliest reissuance or modification, at or following program approval, and shall become enforceable requirements of the POTW's KPDES permit.

4. Modication or withdrawal of revised limits.

a. Notice to POTW. The director shall notify the POTW if, on the basis of pollutant removal capability reports received pursuant to paragraph (f)1 of this subsection or other information available to it, the director determines:

(i) That one (1) or more of the discharge limit revisions made by the POTW, or the POTW itself, no longer meets the requirements of this subsection; or

(ii) That such discharge limit revisions are causing or significantly contributing to a violation of any conditions or limits contained in the POTW's KPDES permit. A revised discharge limit is significantly contributing to a violation of the POTW's permit if it satisfies the definitions set forth in subsection (2)(d) or (f) of this section.

b. Corrective action. If appropriate corrective action is not taken within a reasonable time, not to exceed sixty (60) days unless the POTW or the affected industrial users demonstrate that a longer time period is reasonably necessary to undertake the appropriate corrective action, the director shall either withdraw such discharge limits or require modifications in the revised discharge limits.

c. Public notice of withdrawal or modification. The director will not withdraw or modify revised discharge limits unless it shall first have notified the POTW and all industrial users to whom revised discharge limits have been applied and made public in writing, the reasons for withdrawal or modification, and an opportunity is provided for a hearing. Following notice and withdrawal or modification, all industrial users to whom revised discharge limits had been applied, shall be subject to the modified discharge limits or the discharge limits prescribed in the applicable categorical pretreatment standards, as appropriate, and shall achieve compliance with those limits within a reasonable time not to exceed the period of time prescribed in the applicable categorical pretreatment standard as may be specified by the director.

(7) POTW pretreatment programs: development by POTW.

(a) POTWs required to develop a pretreatment pro-

gram. Any POTW, or combination of POTWs operated by the same authority, with a total design flow greater than 5 million gallons per day (mgd) and receiving from industrial users pollutants which pass through or interfere with the operation of the POTW or are otherwise subject to pretreatment standards shall be required to establish a POTW pretreatment program. The director may require that a POTW with a design flow of 5 mgd or less develop a POTW pretreatment program if it is found that the nature or volume of the industrial influent, treatment process upsets, violations of POTW affluent limitations, contamination of municipal sludge, or other circumstances so warrant. In addition, a POTW desiring to modify categorical pretreatment standards for pollutants removed by the POTW pursuant to subsection (6) of this section shall have an approved pretreatment program prior to obtaining final approval of a removal allowance, unless conditional approval of a removal allowance is granted by the director pursuant to subsection (6) of this section.

(b) Deadline for program approval. A POTW which meets the criteria of this subsection will receive approval of a POTW pretreatment program no later than three (3) years after the reissuance or modification of its existing permit but in no case later than July 1, 1983.

(c) Incorporation of approved programs in permits. A POTW may develop an approvable POTW pretreatment program any time before the time limit set forth in paragraph (b) of this subsection. The POTW's KPDES permit will be reissued or modified to incorporate the approved program conditions as enforceable conditions of the permit.

(d) Incorporation of compliance schedules in permits. If the POTW does not have an approved pretreatment program at the time the POTW's existing permit is reissued or modified, the reissued or modified permit will contain the shortest reasonable compliance schedule, not to exceed three (3) years or July 1, 1983, whichever is sooner, for the approval of the legal authority, procedures and funding required by paragraph (f) of this subsection.

(e) Cause for reissuance or modification of permits. The director may modify or revoke and reissue a POTW's permit in order to:

1. Put the POTW on a compliance schedule for the development of a POTW pretreatment program when the addition of pollutants into a POTW by an industrial user or combination of industrial users presents a substantial hazard to the functioning of the treatment works, quality of the receiving waters, human health, or the environment;

2. Coordinate the issuance of a CWA Section 201 (33 U.S.C. Section 1281) construction grant with the incorporation into a permit of a compliance schedule for POTW pretreatment program;

3. Incorporate an approved POTW pretreatment program in the POTW permit; or

4. Incorporate a compliance schedule for the development of a POTW pretreatment program in the POTW permit.

(f) POTW pretreatment program requirements. A POTW pretreatment program shall meet the following requirements:

1. Legal authority. The POTW shall operate pursuant to enforceable legal authority, which authorizes or enables the POTW to apply and to enforce the requirements of this section. The authority may be contained in a statute, ordinance, or series of contracts or joint powers agreements which the POTW is authorized to enact, enter into or implement, and which are authorized by law. At a minimum, this legal authority shall enable the POTW to:

a. Deny or condition new or increased contributions of pollutants, or changes in the nature of pollutants, to the POTW by industrial users when such contributions do not meet applicable pretreatment standards and requirements or when such contributions would cause the POTW to violate its permit;

b. Require compliance with applicable pretreatment standards and requirements by industrial users;

c. Control, through permit, contract, order or similar means, the contribution to the POTW by each industrial user to ensure compliance with applicable pretreatment standards and requirements;

d. Require the development of a compliance schedule by each industrial user for the installation of technology required to meet applicable pretreatment standards and requirements, including but not limited to the reports required in subsection (10) of this section;

e. Require the submission of all notices and self-monitoring reports from industrial users as are necessary to assess and assure compliance by industrial users with pretreatment standards and requirements;

f. Carry out all inspection, surveillance and monitoring procedures necessary to determine, independent of information supplied by industrial users, compliance or noncompliance with applicable pretreatment standards and requirements by industrial users. Representatives of the POTW shall be authorized to enter any premises of any industrial user in which a discharge source or treatment system is located or in which records are required to be kept under subsection (12) of this section to assure compliance with pretreatment standards. Such authority shall be at least as extensive as the authority provided under CWA Section 308 (33 U.S.C. Section 1318);

g. Obtain remedies for noncompliance by any industrial user with any pretreatment standard and requirement. A POTW shall be able to seek injunctive relief for noncompliance by industrial users with pretreatment standards and requirements. A POTW shall seek and assess civil and criminal penalties, as authorized by law. A POTW may enter into contracts with industrial users to assure compliance by industrial users with pretreatment standards and requirements. A contract may provide for liquidated damages for violation of pretreatment standards and requirements and may include an agreement by the industrial user to submit to the remedy of specific performance for breach of contract;

h. Pretreatment requirements enforced through the remedies set forth in subparagraph g of this paragraph shall include but not be limited to, the duty to allow or carry out inspections, entry, or monitoring activities; any rules, regulations, or orders issued by the POTW; or any reporting requirements imposed by the POTW or this section. The POTW shall have authority and procedures to halt or prevent any discharge of pollutants to the POTW which reasonably appears to present an imminent danger to the health or welfare of persons. The POTW shall also have authority and procedure to halt or prevent any discharge to the POTW which presents or may present danger to the environment or which threatens to interfere with the operation of the POTW. The director shall have authority to seek enforcement for noncompliance by industrial users when the POTW has acted to seek such relief but has sought a penalty which the director finds to be insufficient; and

i. Comply with the confidentiality requirements set forth in subsection (11) of this section.

2. Procedures. The POTW shall develop and implement procedures to ensure compliance with the requirements of a pretreatment program. At a minimum, these procedures shall enable the POTW to:

a. Identify and locate all possible industrial users which might be subject to the POTW pretreatment program. Any compilation, index or inventory of industrial users made under this paragraph shall be made available to the director upon request;

b. Identify the character and volume of pollutants contributed to the POTW by the industrial user identified under subparagraph 2a of this paragraph. This information shall be made available to the director upon request;

c. Notify industrial users identified under subparagraph 2a of this paragraph of applicable pretreatment standards and any other applicable requirements;

d. Receive and analyze self-monitoring reports and other notices submitted by industrial users in accordance with the self-monitoring requirements of subsection (10) of this section;

e. Randomly sample and analyze the effluent from industrial users and conduct surviellance and inspection activities in order to identify, independent of information supplied by industrial users, occasional and continuing noncompliance with pretreatment standards. The results of these activities shall be made available to the director upon request;

f. Investigate instances of noncompliance with pretreatment standards and requirements, as indicated in the reports and notices required by subsection (10) of this section, or indicate by analysis, inspection, and surviellance activities. Sample taking and analysis and the collection of other information shall be performed with sufficient care to produce evidence admissible in enforcement proceedings or in judicial actions; and

g. Comply with all applicable public participation requirements. These procedures shall include provision for at least annually providing public notification, in the largest daily newspaper published in the municipality in which the POTW is located, of industrial users which, during the previous twelve (12) months, were significantly violating applicable pretreatment standards or other pretreatment requirements. For the purposes of this provision, a significant violation is a violation which remains uncorrected forty-five (45) days after notification of noncompliance; which is part of a pattern of noncompliance over a twelve (12) month period; which involves a failure to accurately report noncompliance; or which resulted in the POTW exercising its emergency authority.

3. Funding. The POTW shall have sufficient resources and qualified personnel to carry out all required authorities and procedures. In some limited circumstances, funding and personnel may be delayed by the director when the POTW has adequate legal authority and procedures to carry out the pretreatment program requirements and a limited aspect of the program does not need to be implemented immediately.

(8) POTW pretreatment programs and authorization to revise pretreatment standards: submission for approval.

(a) Who approves program. A POTW requesting approval of a POTW pretreatment program shall develop a program description which includes the information set forth in paragraphs (b)1 through 4 of this subsection. This description shall be submitted to the director, who will make a determination on the request for program approval in accordance with procedure described in subsection (9) of this section.

(b) Contents of POTW program submission.

1. The program submission shall contain a statement from the city attorney or a city official acting in a comparable capacity, or the attorney for those POTWs which have independent legal counsel, that the POTW has authority adequate to carry out the programs described in subsection (7) of this section. This statement shall:

a. Identify the provision of the legal authority under subsection (7)(f)1 of this section which provides the basis for each procedure under subsection (7)(f)2 of this section;

b. Identify the manner in which the POTW will implement the program requirements set forth in subsection (7) of this section including the means by which pretreatment standards will be applied to individual industrial users; and

c. Identify how the POTW intends to ensure compliance with pretreatment standards and requirements, and to enforce them in the event of noncompliance by industrial users.

2. The program submission shall contain a copy of any statutes, ordinances, regulations, contracts, agreements, or other authorities relied upon by the POTW for its administration of the program. This submission shall include a statement reflecting the endorsement or approval of the local boards or bodies responsible for supervising and/or funding the POTW pretreatment program if approved.

3. The program submission shall contain a brief description, including organization charts of the POTW organization which will administer the pretreatment program. If more than one (1) agency is responsible for administration of the program the responsible agencies should be identified, their respective responsibilities delineated and their procedures for coordination set forth.

4. The program description shall contain a description of the funding levels and full and part-time manpower available to implement the program.

(c) Conditional POTW program approval. The POTW may request conditional approval of the pretreatment program pending the acquisition of funding and personnel for certain elements of the program. The request for conditional approval shall meet the requirements of paragraph (b) of this subsection except that the requirements of paragraph (b) of this subsection may be relaxed if the submission demonstrates that:

1. A limited aspect of the program does not need to be implemented immediately;

2. The POTW had adequate legal authority and procedures to carry out those aspects of the program which will not be implemented immediately; and

3. Funding and personnel for the program aspects to be implemented at a later date will be available when needed. The POTW shall describe in the submission the mechanism by which this funding will be acquired. Upon receipt of a request for conditional approval, the director will establish a fixed date for the acquisition of the needed funding and personnel. If funding is not acquired by this date the conditional approval of the POTW pretreatment program and any removal allowances granted to the POTW may be modified or withdrawn.

(d) Content of removal allowance submission. The request for authority to revise categorical pretreatment standards shall contain the information required in subsection (6)(d) of this section.

(e) Approval authority action. A POTW requesting POTW pretreatment program appproval shall submit to the director three (3) copies of the submission described in paragraph (b) of this subsection. Upon a preliminary determination that the submission meets the requirements of paragraph (b) of this subsection the director will:

1. Notify the POTW that the submission has been received and is under review; and

2. Commence the public notice and evaluation activities set forth in subsection (9) of this section.

(f) Notification where submission is defective. If after review of the submission as provided for in paragraph (c) of this subsection, the director determines that the submission does not comply with the requirements of paragraphs (b) or (c) and, if appropriate, (d) of this subsection, the

director will provide notice in writing to the applying POTW and each person who has requested individual notice. This notification will identify any defects in the submission and advise of the means by which the POTW can comply with the applicable requirements of paragraphs (b) and (c) and, if appropriate, (d) of this subsection.

(g) Consistency with water quality management plans.

1. In order to be approved, the POTW pretreatment program shall be consistent with any approved water quality management plan developed in accordance with 40 CFR Parts 130 and 131, when the CWA Section 208 (33 U.S.C. Section 1288) plan includes management agency designations and addresses pretreatment in a manner consistent with this section. In order to assure such consistency the director will solicit the review and comment of the appropriate CWA Section 208 planning agency during the public comment period provided for in subsection (9) of this section prior to approval or disapproval of the program.

2. When no 208 plan has been approved or when a plan has been approved but lacks management agency designations and/or does not address pretreatment in a manner consistent with this section, the director will solicit the review and comment of the appropriate 208 planning agency.

(9) Approval procedures for POTW pretreatment programs and POTW revision of categorical pretreatment standards. The following procedure will be adopted in approving or denying requests for approval of POTW pretreatment programs and revising categorical pretreatment standards:

(a) Deadline for review of submission. The director will have ninety (90) days from the date of public notice of a submission complying with the requirements of subsection (8) of this section, or if a removal allowance is sought with the requirements of subsection (6) of this section, to review the submission. The director will review the submission to determine compliance with the requirements of subsection (8) of this section, and when a removal allowance is sought, with subsection (6) of this section. The director may have up to an additional ninety (90) days to complete the evaluation of the submission if the public comment period provided for in paragraph (b)1a of this subsection is extended beyond thirty (30) days or if a public hearing is held as provided for in paragraph (b)2 of this subsection. In no event, however, will the time for evaluation of the submission exceed a total of 180 days from the date of public notice of a submission.

(b) Public notice and opportunity for hearing. Upon receipt of a submission the director will commence its review. Within five (5) days after making a determination that a submission meets the requirements of subsection (8)(b) of this section, and when a removal allowance is sought with subsections (6)(d) and (8)(d) of this section, the director will:

1. Issue a public notice of request for approval of the submission:

a. This public notice will be circulated in a manner designed to inform interested and potentially interested persons of the submission. Procedures for the circulation of public notice will include mailing notices of the request for approval of the submission to designated CWA Section 208 (33 U.S.C. 1288) planning agencies, federal and state fish, shellfish, and wildlife resource agencies; and to any other person or group who has requested individual notice, including those on appropriate mailing lists; and publication of a notice of request for approval of the submission in the largest daily newspaper within the jurisdiction served by the POTW.

b. The public notice will provide a period of not less than thirty (30) days following the date of the public notice during which time interested persons may submit their written views on the submission.

c. All written comments submitted during the thirty (30) day comment period will be retained by the director and considered in the decision on whether or not to approve the submission. The period for comment may be extended at the discretion of the director.

2. The director will also provide an opportunity for the applicant, any affected state, any interested state or federal agency, person or group of persons to request a public hearing with respect to the submission.

a. This request for public hearing shall be filed within the thirty (30) day or extended comment period described in paragraph (b)1b of this subsection and will indicate the interest of the person filing such request and the reasons why a hearing is warranted.

b. The director will hold a hearing if the POTW so requests. In addition, a hearing will be held if there is a significant public interest in issues relating to whether or not the submission should be approved.

c. Public notice of a hearing to consider a submission and sufficient to inform interested parties of the nature of the hearing and the right to participate will be published in the same newspaper as the notice of the original request. In addition notice of the hearing will be sent to those persons requesting individual notice.

3. When the director elects to defer review of a submission which authorizes a POTW to grant conditional revised discharge limits, the director will publish public notice of its election, pursuant to paragraph (b)1 of this subsection.

(c) Director's decision. At the end of the thirty (30) day or extended comment period and within the ninety (90) day or extended period provided for in paragraph (a) of this subsection, the director will approve or deny the submission based upon the evaluation in paragraph (a) of this subsection and taking into consideration comments submitted during the comment period and the record of the public hearing, if held. When the director makes a determination to deny the request, the director will so notify the POTW and each person who has requested individual notice. This notification will include suggested modification and the director may allow the requestor additional time to bring the submission into compliance with applicable requirements.

(d) EPA objection to director's decision. No POTW pretreatment program will be approved by the director if following the thirty (30) day or extended evaluation period provided for in paragraph (b)1b of this subsection and any hearing held pursuant to paragraph (b)2 of this subsection, the regional administrator sets forth in writing objections to the approval of such submission and the reasons for such objections. A copy of the regional administrator's objections will be provided to the applicant, and each person who has requested individual notice.

(e) Notice of decision. The director will notify those persons who submitted comments and participated in the public hearing, if held, of the approval or disapproval of the submission. In addition, the director will cause to be published a notice of approval or disapproval in the same newspapers as the original notice of request was published. The director will identify any authorization to modify categorical pretreatment standards by the POTW for removal of pollutants subject to the pretreatment standards.

(f) Public access to submission. The director will ensure that the submission and any comments on the submission are available to the public for inspection and copying.

(10) Reporting requirements for POTWs and industrial users.

(a) Definition. "Control authority" as it is used in this subsection means the POTW if the POTW's submission for its pretreatment program has been approved or the director if the submission has not been approved.

(b) Reporting requirement for industrial users upon effective date of categorical pretreatment standards—baseline report. Within 180 days after the effective date of a categorical pretreatment standard, or 180 days after the final administrative decision made upon a category determination submission under subsection (5)(a)4 of this section, whichever is later, existing industrial users subject to categorical pretreatment standards and currently discharging to or scheduled to discharge to a POTW shall be required to submit to the control authority a report which contains the information listed in subparagraphs 1 through 7 of this paragraph. When reports containing this information already have been submitted to the director in compliance with the requirements of 40 CFR Part 128.140(b), the industrial user will not be required to submit this information again. New sources shall be required to submit to the control authority a report which contains the information listed in subparagraphs (1) through (5) of this paragraph:

1. Identifying information. The user shall submit the name and address of the facility including the name of the operator and owner.

2. Permits. The user shall submit a list of any environmental control permits held by or for the facility.

3. Description of operations. The user shall submit a brief description of the nature, average rate of production and standard industrial classification of the operation carried out by the industrial user. This description may include a schematic process diagram which indicates points of discharge to the POTW from the regulated processes.

4. Flow measurement. The user shall submit information showing the measured average daily and maximum daily flow in gallons per day to the POTW from regulated process streams. The control authority may allow for verifiable estimates of these flows when justified by cost or feasibility considerations.

5. Measurement of pollutants.

a. The user shall identify the pretreatment standards applicable to each regulated process;

b. The user shall submit the results of sampling and analysis identifying the nature and concentration, or mass, of regulated pollutants in the discharge from each regulated process when required by the control authority. Both daily maximum and average concentration, or mass, where required shall be reported. The sample shall be representative of daily operations;

c. When feasible samples must be obtained through the flow-proportional composite sampling techniques specified in the applicable categorical pretreatment standard. When composite sampling is not feasible, a grab sample is acceptable;

d. When the flow of the stream being sampled is less than or equal to 950,000 liters/day (approximately 250,000 gpd) the user shall take three (3) samples within a two (2) week period. When the flow of the stream being sampled is greater than 950,000 liters/day, the user shall take six (6) samples within a two (2) week period;

e. Samples shall be taken immediately downstream from pretreatment facilities if such exist or immediately downstream from the regulated process if no pretreatment exists. If other wastewaters are mixed with the regulated wastewater prior to pretreatment, the user should measure the flows and concentrations necessary to allow use of the combined wastestream formula of subsection (5) of this section in order to evaluate compliance with the pretreatment standards. When an alternate concentration or mass limit has been calculated in accordance with the combined wastestream formula of subsection (5) of this section, this adjusted limit along with supporting data shall be submitted to the control authority;

f. Sampling and analysis shall be performed in accordance with the techniques prescribed in 40 CFR Part 136. When 40 CFR Part 136 does not contain sampling or analytical techniques for the pollutant in question, or when the director determines that the Part 136 sampling and analytical techniques are inappropriate for the pollutant in question, sampling and analysis shall be performed by using validated analytical methods or any other applicable sampling and analytical procedures, including procedures suggested by the POTW or other parties, approved by the director;

g. The control authority may allow the submission of a baseline report which utilizes only historical data so long as the data provides information sufficient to determine the need for industrial pretreatment measures;

h. The baseline report shall indicate the time, date, and place of sampling, and methods of analysis, and shall certify that such sampling and analysis is representative of normal work cycles and expected pollutant discharges to the POTW.

6. Certification. The user shall submit a statement, reviewed by an authorized representative of the industrial user and certified to be a qualified professional, indicating whether pretreatment standards are being met on a consistent basis, and, if not, whether additional operation and maintenance and/or additional pretreatment is required for the industrial user to meet the pretreatment standards and requirements.

7. Compliance schedule. If additional pretreatment and/or operation and maintenance are required to meet the pretreatment standards, the user shall submit the shortest schedule by which the industrial user will provide such additional pretreatment and/or operation and maintenance. The completion date in this schedule shall not be later than the compliance date established for the applicable pretreatment standard.

a. When the industrial user's categorical pretreatment standard has been modified by a removal allowance under subsection (6) of this section, or by a fundamentally different factors variance under 401 KAR 5:055, Section 8, at the time the user submits the report required by paragraph (b) of this subsection, the information required by paragraphs (b)6 and 7 of this subsection shall pertain to the modified limits.

b. If the categorical pretreatment standard is modified by a removal allowance under subsection (6) of this section or by a fundamentally different factors variance under 401 KAR 5:055, Section 8, after the user submits the report required by paragraph (b) of this subsection, any necessary amendments to the information requested by paragraphs (b)6 and 7 of this subsection shall be submitted by the user to the control authority within sixty (60) days after the modified limit is approved.

(c) Compliance schedule for meeting categorical pretreatment standards. The following conditions shall apply to the schedule required by paragraph (b)7 of this subsection:

1. The schedule shall contain increments of progress in the form of dates for the commencement and completion of major events leading to the construction and operation of additional pretreatment required for the industrial user to meet the applicable categorical pretreatment standards.

2. No increment referred to in paragraph (c)1 of this subsection shall exceed nine (9) months.

3. Not later than fourteen (14) days following each date in the schedule and the final date for compliance, the industrial user shall submit a progress report to the control authority including, at a minimum, whether or not it complied with the increment of progress to be met on that date and if not, the date on which it expects to comply with this increment of progress, the reason for delay, and the steps being taken by the industrial user to return the construction to the schedule established. In no event shall more than nine (9) months elapse between such progress reports to the control authority.

(d) Report on compliance with categorical pretreatment standard deadline. Within ninety (90) days following the date for final compliance with applicable categorical pretreatment standards or in the case of a new source following commencement of the introduction of wastewater into the POTW, any industrial user subject to pretreatment standards and requirements shall submit to the control authority a report indicating the nature and concentration of all pollutants in the discharge from the regulated process which are limited by pretreatment standards and requirements and the average and maximum daily flow for these process units in the industrial user which are limited by such pretreatment standards and requirements. The report shall state whether the applicable pretreatment standards or requirements are being met on a consistent basis and, if not, what additional operation and maintenance and/or pretreatment is necessary to bring the industrial user into compliance with the applicable pretreatment standards or requirements. This statement shall be signed by an authorized representative of the industrial user and certified by a qualified professional.

(e) Periodic reports on continued compliance.

1. Any industrial user subject to a categorical pretreatment standard, after the compliance date of that pretreatment standard, or, in the case of a new source, after commencement of the discharge into the POTW, shall submit to the control authority during the months of June and December, unless required more frequently in the pretreatment standard or by the control authority, a report indicating the nature and concentration of pollutants in the effluent which are limited by such categorical pretreatment standards. In addition, this report shall include a record of measured or estimated average and maximum daily flows for the reporting period for the discharge reported in paragraph (b)4 of this subsection except that the control authority may require more detailed reporting of flows. At the discretion of the control authority and in consideration of such factors as local high or low flow rates, holidays, budget cycles, etc., the control authority may agree to alter the months during which the above reports are to be submitted.

2. When the control authority has imposed mass limitations on industrial users as provided by subsection (5)(c) of this section, the report required by paragraph (c)1 of this subsection shall indicate the mass of pollutants regulated by pretreatment standards in the discharge from the industrial user.

(f) Notice of slug loading. The industrial user shall notify the POTW immediately of any slug loading, as defined by subsection (4)(a) of this section by the industrial user.

(g) Monitoring and analysis to demonstrate continued compliance. The reports required in paragraphs (b)5, (d), and (e) of this subsection shall contain the results of sampling and analysis of the discharge, including the flow and the nature and concentration, or production and mass where requested by the control authority, of pollutants contained therein which are limited by the applicable pretreatment standards. The frequency of monitoring shall be prescribed in the applicable pretreatment standard. All sampling and analyses shall be performed in accordance with procedures established by the administrator pursuant to Section 304(g) of the CWA (33 U.S.C. Section 1314(g)). and set forth in 40 CFR Part 136. If 40 CFR Part 136 does not include sampling or analytical techniques for the pollutants in question, or if the director determines that the Part 136 sampling and analytical techniques are inappropriate for the pollutant in question, sampling and analyses shall be performed using validated analytical methods or any other sampling and analytical procedures, including procedures suggested by the POTW or other parties and approved by the director.

(h) Compliance schedule for POTWs. The following conditions and reporting requirements shall apply to the compliance schedule for development of an approvable POTW pretreatment program.

1. The schedule shall contain increments of progress in the form of dates for the commencement and completion of major events leading to the development and implementation of a POTW pretreatment program.

2. No increment referred to in paragraph (h)(1) of this section shall exceed nine (9) months.

3. Not later than fourteen (14) days following each date in the schedule and the final date for compliance, the POTW shall submit a progress report to the director including, as a minimum, whether or not it complied with the increment of progress to be met on such date and, if not, the date on which it expects to comply with this increment of progress, the reason for delay, and the steps taken by the POTW to return to the schedule established. In no event shall more than nine (9) months elapse between such progress reports to the director.

(i) Initial POTW report on compliance with approved removal allowance. A POTW which has received authorization to modify categorical pretreatment standards for pollutants removed by the POTW in accordance with the requirements of subsection (6) of this section shall submit to the director within sixty (60) days after the effective date of a pretreatment standard for which authorization to modify has been approved, a report which contains all information required by subsection (6) of this section. A minimum of one (1) sample per month during the reporting period is required.

(j) Periodic reports by POTW to demonstrate continued compliance with removal allowance. The reports referred to in paragraph (i) of this subsection shall be submitted to the approval authority at six (6) month intervals beginning with the submission of the initial report referred to in paragraph (i) of this subsection unless required more frequently by the director.

(k) Signatory requirements for industrial user reports. The reports required by paragraphs (b), (d), and (e) of this section shall be signed by an authorized representative of the industrial user. An authorized representative may be:

1. A principal executive officer of at least the level of vice president, if the industrial user is a corporation.

2. A general partner or proprietor if the industrial user is a partnership or sole proprietorship respectively.

3. A duly authorized representative of the individual designated in paragraph (k)1 or 2 of this subsection if such representative is responsible for the overall operation of the facility from which the indirect discharge originates.

(l) Signatory requirements for POTW reports. Reports submitted to the approval authority by the POTW in accordance with paragraphs (h), (i) and (j) of this subsection

shall be signed by a principal executive officer, ranking elected official or other duly authorized employee if such employee is responsible for overall operation of the POTW.

(m) Provisions governing fraud and false statements. The reports required by paragraphs (b), (d), (e), (h), (i) and (j) of this subsection shall be subject to KRS 224.994(4) and all other state and federal laws pertaining to fraud and false statements.

(n) Recordkeeping requirements.

1. Any industrial user and POTW subject to the reporting requirements established in this subsection shall maintain records of all information resulting from any monitoring activities required by this section. Such records shall include for all samples:

a. The date, exact place, method, and time of sampling and the names of the person or persons taking the samples;

b. The dates analyses were performed;

c. Who performed the analyses;

d. The analytical techniques or methods used; and

e. The results of the analyses.

2. Any industrial user or POTW subject to these reporting requirements established shall be required to retain for a minimum of three (3) years any records of monitoring activities and results, whether or not such monitoring activities are required by this section, and shall make such records available for inspection and copying by the director, and by the POTW in the case of an industrial user. This period of retention shall be extended during the course of any unresolved litigation regarding the industrial user or POTW or when requested by the director.

3. A POTW to which reports are submitted by an industrial user pursuant to paragraphs (b), (d), and (e) of this subsection shall retain such reports for a minimum of three (3) years and shall make such reports available for inspection and copying by the director. This period of retention shall be extended during the course of any unresolved litigation regarding the discharge of pollutants by the industrial user or the operation of the POTW pretreatment program or when requested by the director.

(11) Confidentiality. Any information submitted to the director in accordance with this section may be claimed confidential, as provided in 401 KAR 5:060, Section 2, except that effluent data provided to the director pursuant to this section shall be available to the public without restriction.

(12) Net/gross limitations. Categorical pretreatment standards may be adjusted to reflect the presence of pollutants in an industrial user's intake water in accordance with 40 CFR 403.15. 40 CFR 403.15 is hereby incoporated by reference, revised as of July 1, 1982, as published by the Office of the Federal Register, National Archives and Register Service, General Services Administration, and available from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402.

(13) Upset provision.

(a) Definition. "Upset" as used in this subsection means an exceptional incident in which there is unintentional and temporary noncompliance with categorical pretreatment standards because of factors beyond the reasonable control of the industrial user. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.

(b) Effect of an upset. An upset constitutes an affirmative defense to an action brought for noncompliance with categorical pretreatment standards if the requirements of paragraph (c) of this subsection are met.

(c) Conditions necessary for a demonstration of upset. An industrial user who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs, or other relevant evidence that:

1. An upset occurred and the industrial user can identify the specific cause of the upset;

2. The facility was at the time being operated in a prudent and workmanlike manner and in compliance with applicable operation and maintenance procedures;

3. The industrial user has submitted the following information to the POTW and control authority within twenty-four (24) hours of becoming aware of the upset or if this information is provided orally, a written submission within five (5) days:

a. A description of the indirect discharge and cause of noncompliance;

b. The period of noncompliance, including exact dates and times or, if not corrected, the anticipated time the noncompliance is expected to continue;

c. Steps being taken and/or planned to reduce, eliminate and prevent recurrence of the noncompliance.

(d) Burden of proof. In any enforcement proceeding the industrial user seeking to establish the occurrence of an upset shall have the burden of proof.

(e) Reviewability of agency consideration of claims of upset. In the usual exercise of prosecutorial discretion, cabinet enforcement personnel will review any claims that noncompliance was caused by an upset. No determinations made in the course of the review constitutes final agency action subject to judicial review under KRS 224.081(2). Industrial users will have the opportunity for a judicial determination on any claim of upset only in an enforcement action brought for noncompliance with categorical pretreatment standards.

(f) User responsibility in case of upset. The industrial user shall control production or discharges to the extent necessary to maintain compliance with categorical pretreatment standards upon reduction, loss, or failure of its treatment facility until the facility is restored or an alternative method of treatment is provided. This requirement applies in the situation where, among other things, the primary source of power of the treatment facility is reduced, lost or fails.

[Section 9. Suspension of an NPDES Regulation. The director may suspend any permit requirement already expressly suspended by EPA under CWA. In the KPDES program, suspension will be effected by giving notice to permittees. Provisions suspended on the date of adoption of the KPDES regulations are noted in the respective regulation.]

[Section 10. Certified Laboratories. The cabinet will designate public agencies, private consulting firms, institutions, or other types of analytical laboratories which can provide the services required under KPDES regulations.]

[(1) Certification guidelines. Such laboratories shall meet all eligibility requirements specified in laboratory certification guidelines published by the cabinet.]

[(2) All data required to be included in KPDES permit applications, under 401 KAR 5:060, Section 4(7) and (13); in monitoring and records under 401 KAR 5:065, Section 1(10) and (12)(d), and Section 2(8); and, as required by the cabinet, must be supplied by a laboratory certified by the cabinet.]

[(3) Requirement to apply. Any person who desires to be certified shall apply to the cabinet and provide all information necessary to establish required qualifications.]

[(4) Laboratories shall be deemed to hold interim cer-

tification on the effective date of this regulation unless otherwise notified by the cabinet.]

Section *10.* [11.] Date of Applicability. The provisions of this regulation shall become effective upon the date of program approval.

JACKIE SWIGART, Secretary
ADOPTED: March 15, 1983
RECEIVED BY LRC: March 15, 1983 at 4 p.m.

NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION CABINET
Department for Environmental Protection
Division of Water
As Amended

401 KAR 5:060. KPDES application requirements.

RELATES TO: KRS Chapter 224
PURSUANT TO: KRS 13.082, *224.020,* 224.033(19), (21), (22), (23), 224.034, 224.060
EFFECTIVE: June 1, 1983
NECESSITY AND FUNCTION: KRS 224.033(19) authorizes the Natural Resources and Environmental Protection Cabinet to issue, continue in effect, revoke, modify, suspend or deny under such conditions as the cabinet may prescribe, permits to discharge into any waters of the Commonwealth. KRS 224.034 further empowers the cabinet to issue federal permits pursuant to 33 U.S.C. 1342(b) of the Federal Water Pollution Control Act (33 U.S.C. Section 1251 et seq.) subject to the conditions imposed in 33 U.S.C. Sections 1342(b) and 1342(d) and that any exemptions granted shall be pursuant to the Federal Water Pollution Control Act. This regulation sets forth the application requirements for all KPDES permits and contains additional requirements for general and specific categories of dischargers.

Section 1. Applying for a KPDES Permit. (1) Application requirements.

(a) Any person who is required to have a permit, including new applicants and permittees with expiring permits shall complete, sign, and submit an application to the director as described in this regulation and 401 KAR 5:055. On the date of KPDES program approval by EPA, all persons permitted or authorized under NPDES shall be deemed to hold a KPDES permit, including those expired permits which EPA has continued in effect according to 40 CFR 122.6, continuation of expiring permits. *For the purpose of this section, the director will accept the information required under subsection (4) of this section, for existing facilities, which has been submitted to EPA as part of a NPDES renewal. The applicant may be requested to update any information which is not current.*

(b) Any person who is required to have a permit and who does not have an effective permit, shall submit a complete application to the director in accordance with this section and 401 KAR 5:075. A complete application shall include a BMP program, if necessary, under 401 KAR *5:065* [5:080], Section *2(10)* [5]. The following are exceptions to the application requirements:

1. Persons covered by general permits under 401 KAR 5:055, Section *5* [6];
2. Discharges excluded under 401 KAR 5:055, Section 1; and
3. Users of a privately owned treatment works unless the director requires otherwise under 401 KAR *5:065* [5:070], Section 2*(12)*.

(2) Time to apply. Any person proposing a new discharge shall submit an application at least *150* [180] days before the date on which the discharge is to commence, unless permission for a later date has been granted by the director.

(3) Duty to apply. When a facility or activity is owned by one (1) person but is operated by another person, it is the [*owner's* []operator's[]] duty to obtain a permit.

(4) Duty to reapply.

(a) Any person with a currently effective permit shall submit a new application at least *150* [180] days before the expiration date of the existing permit, unless permission for a later date has been granted by the director. The director shall not grant permission for applications to be submitted later than the expiration date of the existing permit.

(b) Continuation of expiring permits. The conditions of an expired permit continue in force until the effective date of a new permit if:

1. The permittee has submitted a timely application under subsection (2) of this section which is a complete application for a new permit; and
2. The director, through no fault of the permittee, does not issue a new permit with an effective date under 401 KAR 5:075, Section 11, on or before the expiration date of the previous permit.
3. Effect. Permits continued under this paragraph remain fully effective and enforceable until the effective date of a new permit.
4. Enforcement. When the permittee is not in compliance with the conditions of the expiring or expired permit the director may choose to do any or all of the following:

a. Initiate enforcement action based upon the permit which has been continued;
b. Issue a notice of intent to deny the new permit under 401 KAR 5:075, Section 3(2);
c. Issue a new permit under 401 KAR 5:075 with appropriate conditions; or
d. Take other actions authorized by the KPDES regulations.

(5) Completeness. The director will not issue a KPDES permit before receiving a complete application for a permit. A permit application is complete when the cabinet receives an application form with any supplemental information which is completed to the director's satisfaction.

(6) Information requirements. All applicants for KPDES permits shall provide the following information to the director, using the application form provided by the director.

(a) The activities being conducted which require the applicant to obtain a KPDES permit.
(b) Name, mailing address, and location of the facility for which the application is submitted.
(c) From one (1) to four (4) SIC codes which best reflect the principal products or services provided by the facility.
(d) The operator's name, address, telephone number, ownership status, and status as to federal, state, private, public, or other entity.
(e) A listing of all other relevant environmental permits, *or construction approvals* [including air pollution, water quality and solid or hazardous waste permits] issued by the cabinet or other state or federal permits, as requested.
(f) A topographic map, or other map if a topographic map is unavailable, extending one (1) mile beyond the property boundaries of the source, depicting the facility and

each of its intake and discharge structure and those wells, springs, other surface water bodies, and drinking water wells listed in public records or otherwise known to the applicant within *one-quarter (¼)* [one (1)] mile of the facility property boundary.

(g) A brief description of the nature of the business.

(h) Additional information may also be required of new sources, new dischargers and major facilities to determine any significant adverse environmental effects of the discharge *pursuant to new source regulations promulgated by the cabinet [subsection (9) of this section and the "Water Protection Guidelines for the New Source KPDES Program"].*

(7) Recordkeeping. Applicants shall keep records of all data used to complete permit applications and any supplemental information submitted under this regulation for a period of at least three (3) years from the date the application is signed.

(8) Service of process. Every applicant and permittee shall provide the cabinet *an address* [and others] for receipt of any legal nature *for* [or] service *of* process. The last address provided to the cabinet pursuant to this provision shall be the address at which the cabinet may tender any legal notice including but not limited to service of process in connection with any enforcement action. Service, whether by bond or by mail, shall be complete upon tender of the notice, process or order and shall not be deemed incomplete because of refusal to accept or if the addressee is not found.

[(9) Special provisions for applications from new sources.]

[(a) The owner or operator of any facility which may be a new source, as defined in 401 KAR 5:050, must comply with the provisions of this subsection.]

[(b) 1. Before beginning any on-site construction as defined in water protection guidelines, the owner or operator of any facility which may be a new source may be required to submit information to the director so that he can determine if the facility is a new source. At a minimum, the owner or operator of any facility which may be a new source discharge affecting any outstanding resource waters, as designated in 401 KAR 5:031, will be required to submit information for a new source determination. The director may request any additional information needed to determine whether the facility is a new source.]

[2. The director may make an initial determination whether the facility is a new source within thirty (30) days of receiving all necessary information under paragraph (b)1 of this subsection.]

[(c) The director shall issue a public notice in accordance with Section 5(1)(a)4 of 401 KAR 5:075 of the new source determination under paragraph (b) of this subsection. If the director has determined that the facility is a new source, the notice shall state that the applicant must comply with the environmental review requirements of the "Water Protection Guidelines for the New Source KPDES Program."]

[(d) Any interested person may challenge the director's initial new source determination by requesting a hearing under 401 KAR 5:075 within thirty (30) days of issuance of the public notice of the initial determination. The director may defer the evidentiary hearing on the determination until after a final permit decision is made, and consolidate the hearing on the determination with any hearing on the permit.]

Section 2. Confidentiality of Information. (1) In accordance with KRS 224.035 any information submitted to the cabinet pursuant to the KPDES regulations may be claimed as confidential by the submitter. Any such claim must be asserted at the time of submission in the manner prescribed on the application form or instructions or, in the case of other submissions, by stamping the words "confidential business information" on each page containing such information. If no claim is made at the time of submission, the cabinet may make the information available to the public without further notice. If a claim is asserted, the information will be treated in accordance with the procedures in KRS 224.035.

(2) Information, which includes effluent data, required by KPDES application forms provided by the director under Section 1 of this regulation may not be claimed confidential. Information contained in KPDES permits or permit applications may not be claimed as confidential business information.

Section 3. Signatories to Permit Applications and Reports. (1) Applications. All permit applications shall be signed as follows:

(a) For a corporation: by a principal executive officer of at least the level of vice-president;

(b) For a partnership or sole proprietorship: by a general partner or the proprietor, respectively; or

(c) For a municipality, state, federal, or other public agency: by either a principal executive officer or ranking elected official.

(2) Reports. All reports required by permits and other information requested by the director shall be signed by a person described in subsection (1) of this section, or by a duly authorized representative of that person. A person is a duly authorized representative only if the following conditions are met:

(a) The authorization is made in writing by a person described in subsection (1) of this section;

(b) The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity, such as the position of plant manager, superintendent, or position of equivalent responsibility;

(c) The written authorization is submitted to the director.

(3) Changes to authorization. If an authorization under subsection (2) of this section is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of subsection (2) of this section must be submitted to the director prior to or together with any reports, information, or applications to be signed by an authorized representative.

(4) Certification. Any person signing a document under 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."

Section 4. Application Requirements for Existing Manufacturing, Commercial, Mining, and Silvicultural Dischargers. Existing manufacturing, commercial, mining, and silvicultural dischargers applying for KPDES permits

shall provide the following information to the director, using application forms provided by the director:

(1) Outfall location. The latitude and longitude to the nearest fifteen (15) seconds and the name of the receiving water shall be provided by the applicant.

(2) Line drawing. A line drawing of the water flow through the facility with a water balance, showing operations contributing wastewater to the effluent and treatment units shall be included in the application. Similar processes, operations, or production areas may be indicated as a single unit, labeled to correspond to the more detailed identification under subsection (3) of this section. The water balance shall show approximate average flows at intake and discharge points and between units, including treatment units. If a water balance cannot be determined the applicant may provide a pictorial description of the nature and amount of any sources of water and any collection and treatment measures.

(3) Average flows and treatment. The applicant shall provide a narrative identification of each type of process, operation, or production area which contributes wastewater to the effluent for each outfall, including process wastewater, cooling water; and storm water runoff; the average flow which each process contributes; and a description of the treatment the wastewater receives, including the ultimate disposal of any solid or fluid wastes other than by discharge. Processes, operations or production areas may be described in general terms, for example, dye-making reactor, distillation tower. For a privately owned treatment works, this information shall include the identity of each user of the treatment works.

(4) Intermittent flows. If any of the discharges described in subsection 3 of this section are intermittent or seasonal, the applicant shall provide a description of the frequency, duration and flow rate of each discharge occurrence, except for storm water runoff, spillage, or leaks.

(5) Maximum production. If an EPA effluent guideline applies to the applicant and is expressed in terms of production or other measure of operation, a reasonable measure of the applicant's actual production reported in the units used in the applicable effluent guideline shall be included. The reported measure shall reflect the actual production of the facility as required by 401 KAR 5:065, Section *3(2)* [1].

(6) Improvements. If the applicant is subject to any present requirements or compliance schedules for construction, upgrading or operation of waste treatment equipment, an identification of the abatement requirement, a description of the abatement project, and a listing of the required and projected final compliance dates shall be included.

(7) Effluent characteristics. Information on the discharge of pollutants specified in this subsection shall be provided by the applicant. When quantitative data for a pollutant is required, the applicant must collect a sample of effluent and analyze it for the pollutant in accordance with analytical methods approved under 40 CFR Part 136. When no analytical method is approved the applicant may use any suitable method but shall provide a description of the method. When an applicant has two (2) or more outfalls with substantially identical effluents, the director may allow the applicant to test only one (1) outfall and report that the quantitative data also applies to the substantially identical outfalls. The requirements in paragraphs (c) and (d) of this subsection that an applicant shall provide quantitative date for certain pollutants known or believed to be present does not apply to pollutants present in a discharge solely as the result of their presence in intake water; however, an applicant shall report such pollutants as present. Grab samples must be used for pH, temperature, cyanide, total phenols, residual chlorine, oil and grease, and fecal coliform. For all other pollutants, twenty-four (24) hour composite samples must be used. An applicant is expected to know or have reason to believe that a pollutant is present in an effluent based on an evaluation of the expected use, production, or storage of the pollutant, or on any previous analyses for the pollutant.

(a)1. Every applicant shall report quantitative data for every outfall for the following pollutants:

a. Biochemical oxygen demand (BOD).
b. Chemical oxygen demand.
c. Total organic carbon.
d. Total suspended solids.
e. Ammonia (as N).
f. Temperature (both winter and summer).
g. pH.

2. At the applicant's request, the director may waive the reporting requirements for one (1) or more of the pollutants listed in subparagraph 1 of this paragraph.

(b) Each applicant with processes in one (1) or more primary industry category, listed in Section 10 of this regulation, and contributing to a discharge, shall report quantitative data for the following pollutants in each outfall containing process wastewater:

1. The organic toxic pollutants in the fractions designated in Section 13(1) of this regulation for the applicant's industrial category or categories unless the applicant qualifies as a small business under subsection (8) of this section. Section 13(2) of this regulation lists the organic toxic pollutants in each fraction. The fractions result from the sample preparation required by the analytical procedure which uses gas chromotography/mass spectrometry. A determination that an applicant falls within a particular industrial category for the purposes of selecting fractions for testing is not conclusive as to the applicant's inclusion in that category for any other purposes.

2. The pollutants listed in Section 13(3) of this regulation: the toxic metals, cyanide, and total phenols.

(c) Each applicant must report for each outfall quantitative data for the following pollutants, if the applicant knows or has reason to believe that the pollutant is discharged from the outfall:

1. All pollutants listed in Section 13(2) or (3) of this regulation, the toxic pollutants, for which quantitative data is not otherwise required under paragraph (b) of this subsection except that an applicant qualifying as a small business under subsection 8 of this section is not required to analyze for the pollutants listed in Section 13(2) of this regulation, the organic toxic pollutants.

2. All pollutants in Section 13(4) of this regulation, certain conventional and nonconventional pollutants.

(d) Each applicant shall indicate any knowledge or to believe that any of the pollutants in Section 13(5) of this regulation, certain hazardous substances and asbestos is discharged from each outfall. For every pollutant expected to be discharged, the applicant shall briefly describe the reasons the pollutant is expected to be discharged, and report any quantitative data for any pollutant.

(e) Each applicant shall report qualitative data, generated using a screening procedure not calibrated with analytical standards, for 2,3,7,8-tetrachlorodibenzo-p-dioxin (TCDD) if it:

1. Uses or manufactures 2,4,5-trichlorophenoxy acetic acid (2,4,5-T); 2-(2,4,5-trichlorophenoxy) propanoic acid (Silvex, 2,4,5-TP); 2-(2,4,5-trichlorophenoxy) ethyl 2,2-dichloropropionate (Erbon); 0,0-dimethyl 0-(2,4,5-

trichlorophenyl) phosphorothioate (Ronnel); 2,4,5-trichlorophenol (TCP); or hexachlorophene (HCP); or

2. Knows or has reason to believe that TCDD is or may be present in an effluent.

(8) Small business exemption. An applicant which qualifies as a small business under one (1) of the following criteria is exempt from the requirements in paragraphs (b)1 or (c)1 of this subsection to submit quantitative data for the pollutants listed in Section 13(2) of this regulation, organic toxic pollutants:

(a) For coal mines, a probable total annual production of less than 100,000 tons per year.

(b) For all other applicants, gross total annual sales averaging less than $100,000 per year, in second quarter 1980 dollars.

(9) Used or manufactured toxics. The application shall include a listing of any toxic pollutant which the applicant:

(a) Does use or manufacture as an intermediate or final product or byproduct currently; or

(b) Expects to use or manufacture as an intermediate or final product or byproduct during the next five (5) years.

(10) Potential discharges. The applicant shall provide a description of the expected levels of and the reasons for any discharges of pollutants which the applicant knows or has reason to believe will exceed two (2) times the values reported in subsection (7) of this section over the next five (5) years.

(11) Biological toxicity tests. The applicant shall identify any biological toxicity tests which it knows or has reason to believe have been made within the last three (3) years on any of the applicant's discharges or on a receiving water in relation to a discharge.

(12) Contract analyses. If a contract laboratory or consulting firm performed any of the analyses required by subsection (7) of this regulation, the identity of each laboratory or firm and the analyses performed shall be included in the application.

(13) Additional information. In addition to the information reported on the application form, applicants shall provide to the director, upon request, other information as the director may reasonably require to assess the discharges of the facility and to determine whether to issue a KPDES permit. The additional information may include additional quantitative data and bioassays to assess the relative toxicity of discharges to aquatic life and requirements to determine the cause of the toxicity.

Section 5. Concentrated Animal Feeding Operations: Specific Application Requirements. (1) Permit required. Concentrated animal feeding operations are point sources subject to the KPDES permit program.

(2) Definitions.

(a) "Animal feeding operation" means a lot or facility, other than an aquatic animal production facility, where the following conditions are met:

1. Animals, other than aquatic animals, have been, are, or will be stabled or confined and fed or maintained for a total of forty-five (45) days or more in any twelve (12) month period; and

2. Crops, vegetation forage growth, or post-harvest residues are not sustained in the normal growing season over any portion of the lot or facility.

(b) Two (2) or more animal feeding operations under common ownership are considered, for the purposes of the KPDES regulations, to be a single animal feeding operation if they adjoin each other or if they use a common area or system for the disposal of wastes.

(c) "Concentrated animal feeding operation" means an "animal feeding operation" which meets the criteria in Section 11 of this regulation or which the director designates under subsection (3) of this section.

(3) Case-by-case designation of concentrated animal feeding operations.

(a) The director may designate any animal feeding operation as a concentrated animal feeding operation upon determining that it is a significant contributor of pollution to the waters of the Commonwealth. In making this designation the director will consider the following factors:

1. The size of the animal feeding operation and the amount of wastes reaching waters of the Commonwealth;

2. The location of the animal feeding operation relative to waters of the Commonwealth;

3. The means of conveyance of animal wastes and process wastewaters into waters of the Commonwealth;

4. The slope, vegetation, rainfall, and other factors affecting the likelihood or frequency of discharge of animal wastes and process wastewaters into waters of the Commonwealth; and

5. Other relevant factors.

(b) No animal feeding operation with less than the numbers of animals set forth in Section 11 of this regulation will be designated as a concentrated animal feeding operation unless:

1. Pollutants are discharged into waters of the Commonwealth through a manmade ditch, flushing system, or other similar manmade device; or

2. Pollutants are discharged directly into the waters of the Commonwealth which originate outside of the facility and pass over, across, or through the facility or otherwise come into direct contact with the animals confined in the operation.

(c) A permit application will not be required from a concentrated animal feeding operation designed under this section until the director or an authorized representative has conducted an on-site inspection of the operation and determined that the operation should and could be regulated under the KPDES permit program.

(4) Information required. New and existing concentrated animal feeding operations shall provide the following information to the director, using the application form provided by the director:

(a) The type and number of animals in open confinement and housed under roof.

(b) The number of acres used for confinement feeding.

(c) The design basis for the runoff diversion and control system, if one exists, including the number of acres of contributing drainage, the storage capacity, and the design safety factor.

Section 6. Concentrated Aquatic Animal Production Facilities: Specific Application Requirements. (1) Permit required. Concentrated aquatic animal production facilities, as defined in this section, are point sources subject to the KPDES permit program.

(2) Definitions. "Concentrated aquatic animal production facility" means a hatchery, fish farm, or other facility which meets the criteria in Section 12 of this regulation or which the director designates under subsection (3) of this section.

(3) Case-by-case designation of concentrated aquatic animal production facilities.

(a) The director may designate any warm or cold water aquatic animal production facility as a concentrated aquatic animal production facility upon determining that it is a significant contributor of pollution to the waters of the Commonwealth. In making this designation the director will consider the following factors:

1. The location and quality of the receiving waters of the Commonwealth;

2. The holding, feeding, and production capacities of the facility;
3. The quantity and nature of the pollutants reaching waters of the Commonwealth; and
4. Other relevant factors.
(b) A permit application will not be required from a concentrated aquatic animal production facility designated under this section until the director or authorized representative has conducted on-site inspection of the facility and has determined that the facility should and could be regulated under the KPDES permit program.
(4) Information required. New and existing concentrated aquatic animal production facilities shall provide the following information to the director, using the application form provided by the director:
(a) The maximum daily and average monthly flow from each outfall.
(b) The number of ponds, raceways, and similar structures.
(c) The name of the receiving water and the source of intake water.
(d) For each species of aquatic animals, the total yearly and maximum harvestable weight.
(e) The calendar month of maximum feeding and the total mass of food fed during that month.

Section 7. Aquaculture Projects: Specific Application Requirements. (1) Permit required. Discharges into aquaculture projects, as defined in this section, are subject to the KPDES permit program and in accordance with 401 KAR 5:080, Section 2.
(2) Definitions.
(a) "Aquaculture project" means a defined managed water area which uses discharges of pollutants into that designated area for the maintenance or production of harvestable freshwater plants and animals.
(b) "Designated project area" means the portions of the waters of the Commonwealth within which the permittee or permit applicant plans to confine the cultivated species, using a method or plan of operation, including, but not limited to, physical confinement, which, on the basis of reliable scientific evidence, is expected to ensure that specific individual organisms comprising an aquaculture crop will enjoy increased growth attributable to the discharge of pollutants, and be harvested within a defined geographic area.

Section 8. Separate Storm Sewers: Specific Application Requirements. (1) Permit requirement. Separate storm sewers, as defined in this section are point sources subject to the KPDES permit program. Separate storm sewers may be permitted either individually or under a general permit. A KPDES permit for discharges into waters of the Commonwealth from a separate storm sewer covers all conveyances which are a part of that separate storm sewer system, even though there may be several owners or operators of these conveyances. However, discharges into separate storm sewers from point sources which are not part of the separate storm sewer systems may also require a permit.
(2) Definition and criteria.
(a) "Separate storm sewer" means a conveyance or system of conveyances, including pipes, conduits, ditches, and channels, primarily used for collecting and conveying storm water runoff and which is either:
1. Located in an urbanized area as designated by the University of Louisville's Urban Studies Center consistent with the Bureau of the Census; or
2. Not located in an urbanized area but designated under subsection (3) of this section.
(b) Except as provided in paragraph (c) of this subsection, a conveyance or system of conveyances operated primarily for the purpose of collecting and conveying storm water runoff which is not located in an urbanized area and has not been designated by the director under subsection (3) of this section is not considered a point source and is not subject to the provisions of this subsection.
(c) Conveyances which discharge process wastewater or storm water runoff contaminated by contact with wastes, raw materials, or pollutant-contaminated soil, from lands or facilities used for industrial or commercial activities, into waters of the Commonwealth or into separate storm sewers are point sources that must obtain KPDES permits but are not separate storm sewers.
(d) Whether a system of conveyances is or is not a separate storm sewer for purposes of this section shall have no bearing on whether the system is eligible for funding under Title II of CWA.
(3) Case-by-case designation of separate storm sewers. The director may designate a storm sewer not located in an urbanized area as a separate storm sewer. This designation may be made to the extent allowed or required by EPA promulgated effluent guidelines for point sources in the separate storm sewer category; or when:
(a) A Kentucky water quality management plan which contains requirements applicable to such point sources is approved by EPA; or
(b) The director determines that a storm sewer is a significant contributor of pollution to the waters of the Commonwealth. In making this determination the director will consider the following factors.
1. The location of the discharge with respect to waters of the Commonwealth;
2. The size of the discharge;
3. The quantity and nature of the pollutants reaching waters of the Commonwealth; and
4. Other relevant factors.

Section 9. Silvicultural Activities: Specific Application Requirements. (1) Permit requirement. Silvicultural point sources, as defined in this section, are point sources subject to the KPDES permit program.
(2) Definitions.
(a) "Silvicultural point source" means any discernible, confined, and discrete conveyance related to rock crushing, gravel washing, log sorting, or log storage facilities which are operated in connection with silvicultural activities and from which pollutants are discharged into waters of the Commonwealth. The term does not include non-point source silvicultural activities such as nursery operations, site preparation, reforestation and subsequent cultural treatment, thinning, prescribed burning, pest and fire control, harvesting operations, surface drainage, or road construction and maintenance from which there is natural runoff.
(b) "Rock crushing and gravel washing facilities" means facilities which process crushed and broken stone, gravel, and riprap.
(c) "Log sorting and log storage facilities" means facilities whose discharges result from the holding of unprocessed wood, for example, logs or roundwood with bark or after removal of bark held in self-contained bodies of water or stored on land where water is applied intentionally on the logs.

Section 10. Primary Industry Categories. Any KPDES permit issued to dischargers in the following categories shall include effluent limitations and a compliance schedule to meet the requirements of the KPDES regulations whether or not applicable effluent limitations guidelines have been promulgated.

(1) Adhesives and sealants.
(2) Aluminum forming.
(3) Auto and other laundries.
(4) Battery manufacturing.
(5) Coal mining.
(6) Coil coating.
(7) Copper forming.
(8) Electorical and electronic components.
(9) Electroplating.
(10) Explosives manufacturing.
(11) Foundries.
(12) Gum and wood chemicals.
(13) Inorganic chemicals manufacturing.
(14) Iron and steel manufacturing.
(15) Leather tanning and finishing.
(16) Mechanical products manufacturing.
(17) Nonferrous metals manufacturing.
(18) Ore mining.
(19) Organic chemicals manufacturing.
(20) Paint and ink formulation.
(21) Pesticides.
(22) Petroleum refining.
(23) Pharmaceutical preparations.
(24) Photographic equipment and supplies.
(25) Plastics processing.
(26) Plastic and synthetic materials manufacturing.
(27) Porcelain enameling.
(28) Printing and publishing.
(29) Pulp and paper mills.
(30) Rubber processing.
(31) Soap and detergent manufacturing.
(32) Steam electric power plants.
(33) Textile mills.
(34) Timber products processing.

Section 11. Criteria for Determining a Concentrated Animal Feeding Operation. An animal feeding operation is a concentrated animal feeding operation for purposes of Section 5 of this regulation if either of the following criteria are met:

(1) Criteria of number only. The facility meets the criteria if more than the numbers of animals specified in any of the following categories are confined:

(a) 1,000 slaughter and feeder cattle;
(b) 700 mature dairy cattle, whether milked or dry cows;
(c) 2,500 swine each weighing over twenty-five (25) kilograms, approximately fifty-five (55) pounds;
(d) 500 horses;
(e) 10,000 sheep or lambs;
(f) 55,000 turkeys;
(g) 100,000 laying hens or broilers, if the facility has continuous overflow watering;
(h) 30,000 laying hens or broilers, if the facility has a liquid manure handling system;
(i) 5,000 ducks; or
(j) 1,000 animal units.

(2) Criteria of number and condition of the discharge. The facility meets the criteria if more than the following number and types of animals are confined:

(a) 300 slaughter or feeder cattle;
(b) 200 mature dairy cattle, whether milker or dry cows;
(c) 750 swine each weighing over twenty-five (25) kilograms, approximately fifty-five (55) pounds;
(d) 150 horses;
(e) 3,000 sheep or lambs;
(f) 16,500 turkeys;
(g) 30,000 laying hens or broilers, if the facility has continuous overflow watering;
(h) 9,000 laying hens or broilers, if the facility has a liquid manure handling system;
(i) 1,500 ducks; or
(j) 300 animal units; and
(k) Either one (1) of the following conditions are met:

1. Pollutants are discharged into waters of the Commonwealth through a manmade ditch, flushing system or other similar manmade device; or

2. Pollutants are discharged directly into waters of the Commonwealth which originate outside of and pass over, across, or through the facility or otherwise come into direct contact with the animals confined in the operation.

(3) Special provision. No animal feeding operation is a concentrated animal feeding operation as defined in subsections (1) and (2) of this section if such animal feeding operation discharges only in the event of a twenty-five (25) year, twenty-four (24) hour storm event.

(4) Definitions.

(a) "Animal unit" means a unit of measurement for any animal feeding operation calculated by adding the following numbers: the number of slaughter and feeder cattle multiplied by 1.0, plus the number of mature dairy cattle multiplied by 1.4, plus the number of swine weighting over twenty-five (25) kilograms (approximately fifty-five (55) pounds) multiplited by 0.4, plus the number of sheep multiplied by 0.1, plus the number of horses multiplied by 2.0.

(b) "Manmade" means constructed by man and used for the purpose of transporting wastes.

Section 12. Criteria for Determining a Concentrated Aquatic Animal Production Facility. A hatchery, fish farm, or other facility is a concentrated aquatic animal production facility for purposes of Section 6 of this regulation if it contains, grows, or holds aquatic animals in either of the following categories:

(1) Cold water aquatic animals. Cold water fish species or other cold water aquatic animals in ponds, raceways, or other similar structures which discharge at least thirty (30) days per year but does not include:

(a) Facilities which produce less than 9,090 harvest weight kilograms (approximately 20,000 pounds) of aquatic animals per year; and

(b) Facilities which feed less than 2,272 kilograms (approximately 5,000 pounds) of food during the calendar month of maximum feeding.

(c) Cold water aquatic animals include, but are not limited to the Salmonidoe family of the fish; e.g. trout and salmon.

(2) Warm water aquatic animals. Warm water fish species or other warm water aquatic animals in ponds, raceways, or other similar structures which discharge at least thirty (30) days per year, but does not include:

(a) Closed ponds which discharge only during periods of excess runoff; or

(b) Facilities which produce less than 45,454 harvest weight kilograms (approximately 100,000 pounds) of aquatic animals per year.

(c) "Warm water aquatic animals" include, but are not limited to, the Ameiuride, Centrachidae and Cyprinidae

families of fish; e.g., respectively, catfish, sunfish and minnows.

Section 13. KPDES Permit Application Testing Requirements. (1) Table I—Testing Requirements for Organic Toxic Pollutants for Industrial Category for Existing Dischargers

Industrial category	GC/MS fraction[1]			
	Volatile	Acid	Base/neutral	Pesticide
Adhesives and sealants	(*)	(*)	(*)	—
Alumimum forming	(*)	(*)	(*)	—
Auto and other laundries	(*)	(*)	(*)	(*)
Battery manufacturing	(*)	—	(*)	—
Coal mining	(*)	(*)	(*)	(*)
Coil coating	(*)	(*)	(*)	—
Cooper forming	(*)	(*)	(*)	—
Electric and electronic components	(*)	(*)	(*)	(*)
Electroplating	(*)	(*)	(*)	—
Explosives manufacturing	—	(*)	(*)	—
Foundries	(*)	(*)	(*)	—
Gum and wood chemicals	(*)	(*)	(*)	(*)
Inorganic chemicals manufacturing	(*)	(*)	(*)	—
Iron and steel manufacturing	(*)	(*)	(*)	—
Leather tanning and finishing	(*)	(*)	(*)	(*)
Mechanical products manufacturing	(*)	(*)	(*)	—
Nonferrous metals manufacturing	(*)	(*)	(*)	(*)
Ore mining	(*)	(*)	(*)	(*)
Organic chemicals manufacturing	(*)	(*)	(*)	(*)
Paint and ink formulation	(*)	(*)	(*)	(*)
Pesticides	(*)	(*)	(*)	(*)
Petroleum refining	(*)	(*)	(*)	(*)
Pharmaceutical preparations	(*)	(*)	(*)	—
Photographic equipment and supplies	(*)	(*)	(*)	(*)
Plastic and synthetic materials manufacturing	(*)	(*)	(*)	(*)
Plastic processing	(*)	—	—	—
Porcelain enameling	(*)	—	(*)	(*)
Printing and publishing	(*)	(*)	(*)	(*)
Pulp and paper mills	(*)	(*)	(*)	(*)
Rubber processing	(*)	(*)	(*)	—
Soap and detergent manufacturing	(*)	(*)	(*)	—
Steam electric power plants	(*)	(*)	(*)	—
Textile mills	(*)	(*)	(*)	(*)
Timber products processing	(*)	(*)	(*)	(*)

[1]The toxic pollutants in each fraction are listed in Table II.
*Testing required.

(2) Table II—Organic Toxic Pollutants in Each of Four (4) Fractions in Analysis by Gas Chromatography/Mass Spectroscopy (GC/MS)

(a) Volatiles

1V acrolein
2V acrylonitrile
3V benzene
4V bis (chloromethyl) ether
5V bromoform
6V carbon tetrachloride
7V chlorobenzene
8V chlorodibromomethane
9V chloroethane
10V 2-chloroethylvinyl ether
11V chloroform
12V dichlorobromomethane
13V dichlorodifluoromethane
14V 1,1-dichloroethane
15V 1,2-dichloroethane
16V 1,1-dichloroethylene
17V 1,2-dichlorpropane
18V 1,2-dichloropropylene
19V ethylbenzene
20V methyl bromide
21V methyl chloride
22V methylene chloride
23V 1,1,2,2-tetrachloroethane
24V tetrachloroethylene
25V toluene
26V 1,2-trans-dichloroethylene
27V 1,1,1-trichloroethane
28V 1,1,2-trichloroethane
29V trichloroethylene
30V trichlorofluoromethane
31V vinyl chloride

(b) Acid compounds

1A 2-chlorophenol
2A 2,4-dichlorophenol
3A 2,4-dimethylphenol
4A 4,6-dinitro-o-cresol
5A 2,4-dinitrophenol
6A 2-nitrophenol
7A 4-nitrophenol
8A p-chloro-m-cresol
9A pentachlorophenol
10A phenol
11A 2,4,6-trichlorophenol

(c) Base/neutral

1B acenaphthene
2B acenaphthylene
3B anthracene
4B benzidine
5B benzo(a)anthracene
6B benzo(a)pyrene
7B 3,4-benzofluoranthene
8B benzo(ghi)perylene
9B benzo(k)fluoranthene
10B bis(2-chloroethoxy)methane
11B bis(2-chloroethyl)ether
12B bis(2-chloroisopropyl)ether
13B bis(2-ethylhexyl)phthalate
14B 4-bromophenyl phenyl ether
15B butylbenzyl phthalate
16B 2-chloronaphthalene
17B 4-chlorophenyl phenyl ether
18B chrysene
19B dibenzo(a,h)anthracene
20B 1,2-dichlorobenzene
21B 1,3-dichlorobenzene
22B 1,4-dichlorobenzene
23B 3,3-dichlorobenzidine
24B diethyl phthalate
25B dimethyl phthalate
26B di-n-butyl phthalate
27B 2,4-dinitrotoluene
28B 2,6-dinitrotoluene
29B di-n-octyl phthalate
30B 1,2-diphenylhydrazine (as azobenxene)
31B fluoranthene
32B fluorene
33B hexachlorobenzene
34B hexachlorobutadiene
35B hexachlorocyclopentadiene
36B hexachloroethane
37B indeno(1,2,3-cd)pyrene
38B isophorone
39B naphthalene
40B nitrobenzene
41B N-nitrosodimethylamine
42B N-nitrosodi-n-propylamine
43B N-nitrosodiphenylamine
44B phenanthrene
45B pyrene
46B 1,2,4-trichlorobenzene

(d) Pesticides.

1P aldrin
2P α-BHC
3P β-BHC
4P γ-BHC
5P δ-BHC
6P chlordane
7P 4,4'-DDT
8P 4,4'-DDE
9P 4,4'-DDD
10P dieldrin
11P α-endosulfan
12P β-endosulfan
13P endosulfan sulfate
14P endrin
15P endrin aldehyde
16P heptachlor
17P heptachlor epoxide
18P PCB-1242
19P PCB-1254
20P PCB-1221
21P PCB-1232
22P PCB-1248
23P PCB-1260
24P PCB-1016
25P toxaphene

(3) Table III—Other Toxic Pollutants: Metals, Cyanide, and Total Phenols

(a) antimony, total
(b) arsenic, total
(c) beryllium, total
(d) cadmium, total
(e) chromium, total
(f) copper, total
(g) lead, total
(h) mercury, total
(i) nickel, total
(j) selenium, total
(k) silver, total
(l) thallium, total
(m) zinc, total
(n) cyanide, total
(o) phenols, total

(4) Table IV—Conventional and Nonconventional Pollutants Required to be Tested by Existing Dischargers if Expected to be Present

(a) bromide

(b) chlorine, total residual
(c) color
(d) fecal coliform
(e) fluoride
(f) nitrate-nitrite
(g) nitrogen, total organic
(h) oil and grease
(i) phosphorus, total
(j) radioactivity
(k) sulfate
(l) sulfide
(m)sulfite
(n) surfactants
(o) aluminum, total
(p) barium, total
(q) boron, total
(r) cobalt, total
(s) iron, total
(t) magnesium, total
(u) molybdenum, total
(v) manganese, total
(w)tin, total
(x) titanium, total

(5) Table V—Toxic Pollutants and Hazardous Substances Required to be Identified by Existing Dischargers if Expected to be Present
(a) Toxic pollutants-asbestos
(b) Hazardous substance
1. acetaldehyde
2. allyl alcohol
3. allyl chloride
4. amyl acetate
5. aniline
6. benzonitrile
7. benzyl chloride
8. butyl acetate
9. butylamine
10. captan
11. carbaryl
12. carbofuran
13. carbon disulfide
14. chlorpyrifos
15. coumaphos
16. cresol
17. crotonaldehyde
18. cyclohexane
19. 2,4-D(2,4-dichlorophenoxy acetic acid)
20. diazinon
21. dicamba
22. dichlobenil
23. dichlone
24. 2,2-dichloropropionic acid
25. dichlorvos
26. diethyl amine
27. dimethyl amine
28. dintrobenzene
29. diquat
30. disulfoton
31. diuron
32. epichlorohydrin
33. ethanolamine
34. ethion
35. ethylene diamine
36. ethylene dibromide
37. formaldehyde
38. furfural
39. guthion
40. isoprene
41. isopropanolamine
42. kelthane
43. kepone
44. malathion
45. mercaptodimethur
46. methoxychlor
47. methyl mercaptan
48. methyl methacrylate
49. methyl parathion
50. mevinphos
51. mexacarbate
52. monethyl amine
53. monomethyl amine
54. naled
55. napthenic acid
56. nitrotoluene
57. parathion
58. phenolsulfanate
59. phosgene
60. propargite
61. propylene oxide
62. pyrethrins
63. quinoline
64. resorcinol
65. strontium
66. strychnine
67. styrene
68. 2,4,5-T(2,4,5-trichlorophenoxy acetic acid)
69. TDE(tetrachlorodiphenylethane)
70. 2,4,5-TP (2,-(2,4,5-trichlorophenoxy) propanoic acid)
71. trichlorofon
72. Triethylamine
73. trimethylamine
74. uranium
75. vanadium
76. vinyl acetate
77. xylene
78. xylenol
79. zirconium

[Section 14. Date of Applicability. The provisions of this regulation shall become effective upon the date of program approval.]

[* NOTE: The Environmental Protection Agency has suspended until further notice 40 CFR 122.53(d)(7)(ii)(A) as it applies to the categories listed below. The Natural Resources and Environmental Protection Cabinet hereby suspends the corresponding section of this regulation, Section 4(7)(b)1, until such time as EPA publishes notice in the Federal Register of a final decision on this provision.]

Section 14. Application Requirements of Section 4(7)(b)1 of this Regulation Exempted for Certain Categories and Subcategories of Primary Industries. Categories of dischargers for which Section 4(7)(b)1 of this regulation is *exempted* [suspended] for categories and subcategories of the primary industries listed in Section 10 of this regulation.

(1) [1.] Coal mines.

(2) [2.] Testing and reporting for all four (4) organic fractions in the Greige Mills Subcategory of the Textile Mills industry and testing and reporting for the pesticide fraction in all other subcategories of this industrial category.

(3) [3.] Testing and reporting for the volatile, base/neutral and pesticide fractions in the Base and

Precious Metals Subcategory of the Ore Mining and Dressing industry, and testing and reporting for all four (4) fractions in all other subcategories of this industrial category.

(4) [4.] Testing and reporting for all four (4) GC/MS fractions in the Porcelain Enameling industry.

(5) [5.] Testing and reporting for the pesticide fraction in the Tall Oil Rosin Subcategory and Rosin-Based Derivatives Subcategory of the Gum and Wood Chemicals industry and testing and reporting for the pesticide and base/neutral fractions in all other subcategories of this industrial category.

(6) [6.] Testing and reporting for the pesticide fraction in the Leather Tanning and Finishing, Paint and Ink Formulation, and Photographic Supplies industrial categories.

(7) [7.] Testing and reporting for the acid, base/neutral and pesticide fractions in the Petroleum Refining industrial category.

(8) [8.] Testing and reporting for the pesticide fraction in the Papergrade Sulfite Subcategories of the Pulp Paper industry; testing and reporting for the base/neutral and pesticide fractions in the following subcategories: Deink Dissolving Draft and Paperboard from Waste Paper; testing and reporting for the volatile, base/neutral and pesticide fractions in the following subcategories: BCT Bleached Kraft, Semi-Chemical and Nonintegrated Fine Papers; and testing and reporting for the acid, base/neutral, and pesticide fractions in the following subcategories: Fine Bleached Kraft, Dissolving Sulfite Pulp, Groundwood-Fine Papers, Market Bleached Kraft, Tissue from Wastepaper, and Nonintegrated-Tissue Papers.

(9) [9.] Testing and reporting for the base/neutral fraction in the Once-Through Cooling Water, Fly Ash and Bottom Ash Transport Water process wastestreams of the Steam Electric Power Plant industrial category.

Section 15. Date of Applicability. The provisions of this regulation shall become effective upon the date of program approval.

JACKIE SWIGART, Secretary
ADOPTED: March 15, 1983
RECEIVED BY LRC: March 15, 1983 at 4 p.m.

NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION CABINET
Department for Environmental Protection
Division of Water
As Amended

401 KAR 5:085. KPDES discharge permit and variance fees.

RELATES TO: KRS 224.020, 224.033(19), (20), 224.034, 224.060, 224.073
PURSUANT TO: KRS 13.082, 224.033(17)
EFFECTIVE: June 1, 1983
NECESSITY AND FUNCTION: This regulation defines the assessment of fees applicable to the issuance of discharge permits and variances. This regulation establishes permit and variance requirements in addition to those requirements of 401 KAR 5:005, 5:031, 5:045, 5:055, 5:060, 5:065, 5:070, 5:075 and 5:080 as are necessary to implement the fee schedule established herein.

Section 1. Applicability. The provisions of this regulation shall apply to the owner or operator of each source required by 401 KAR 5:060, Section 1 to have a permit except for publicly owned sources and sources permitted under a general permit issued under 401 KAR 5:055, Section *5* [6].

Section 2. Definitions. The following definitions described terms used in this regulation. Terms not further defined in this regulation have the meaning given by KRS 224.005 or, if not defined, the meaning attributed by common use.

(1) "Agriculture operation" means operations that use confined feeding in livestock or livestock-byproduct production with manure handling facilities that qualify as concentrated animal feeding operations in accordance with 401 KAR 5:050.

(2) "Conventional pollutant" means biochemical oxygen demand (BOD), chemical oxygen demand (COD), total organic carbon (TOC), total suspended solids (TSS), ammonia (as N), bromide, chlorine (total residual), color, fecal coliform, fluoride, nitrate, kjeldahl nitrogen, oil and grease, and phosphorus.

(3) "Large non-publicly owned treatment work [(POTW)]" means facilities which [either] discharge a design flow rate greater than or equal to *10,000* [1,000,000] gallons per day [, or receives greater than or equal to 50,000 gallons per day] of [industrial process] wastewater *containing only conventional pollutants.*

(4) "Major industry" means industries that generate and discharge process-related wastewater while engaged in commercial activities including, *but not limited to,* resource recovery, manufacturing, products distribution, and wholesale and retail trade. These industries discharge a design flow rate greater than or equal to *50,000* [1,000,000] gallons per day of process wastewater containing [a mix of] "conventional," "nonconventional," *or* [and] thermal pollutants. *A "major industry" designation, as defined in this regulation, is not a criteria for classification as a major facility, as defined in 401 KAR 5:050.*

(5) "Minor industry" means industries that generate and discharge process-related wastewater while engaged in commercial activities including, *but not limited to,* resource recovery, manufacturing, products distribution, and wholesale and retail trade. These industries discharge a design flow rate less than *50,000* [1,000,000] gallons per day of process wastewater containing [a mix of] "conventional," "nonconventional," *or* [and] thermal pollutants. *If a facility discharges process-related wastewater and does not qualify under this definition, then the facility shall be considered to be a "major industry."*

(6) "Non-conventional pollutant" means all pollutants not considered to be a "conventional pollutant" as defined in this regulation and including priority pollutants indentified in Section 13 of 401 KAR 5:060.

(7) "Non-process industry" means industries that generate and discharge *only* non-process wastewater while engaged in commercial activities including manufacturing, resource recovery, products distributions, and wholesale and retail trade. These industries discharge [a design flow rate less than l0,000 gallons per day of] non-process wastewater, for example, non-contact cooling or stockpile run-off, and discharge wastewater that neither contains nor *is* [are] likely to contain toxic *pollutants in concentrations equal to or greater than the ninety-six (96) hour lethal concentration (LC) for fifty percent (50%) mortality (96 hr. LC 50) for a representative indigenous aquatic organism* [materials]. If any of the above conditions is not met, then the discharge is considered to be a "minor industry."

(8) "Small non-publicly owned treatment work [(POTW)]" means facilities which [either] discharge a design flow rate less than *10,000* [1,000,000] gallons per day [, or receive less than 50,000 gallons per day] of [industrial process] wastewater *containing only conventional pollutants. If the facility does not qualify under this definition then the facility shall be considered to be a "large non-publicly owned treatment work."*

(9) "Surface mining operation" means *only* those facilities required to have a permit by 405 KAR Chapters *7 through 26* [16] [*and would not qualify as a "non-process industry" or "minor industry" or "major industry"*].

Section 3. Filing Fees. (1) Any owner or operator who submits an application for a permit to discharge from a wastewater treatment unit will be assessed a filing fee in the amount of twenty (20) percent of the base fee in Section 4(2)(a) of this regulation.

(2) Any owner or operator who submits an application for a variance will include with the application a filing fee in the amount of the base fee in Section 6(2)(a) of this regulation.

(3) A filing fee is not refundable if a discharge permit or variance application to which it is related is denied or withdrawn.

(4) The filing fee will be applied toward the discharge permit or variance fee assessed respectively in Section 4 and 6 of this regulation.

Section 4. Discharge Permit Fees. (1)(a) Every owner or operator who is issued a discharge permit shall be assessed a discharge permit fee in accordance with the provisions set forth in subsection (2) of this section.

(b) Upon making the determination that the discharge permit can be issued, under 401 KAR 5:075, Section 11, the cabinet will notify the applicant and send a bill for the discharge permit fee. The discharge permit will be issued by the cabinet upon receipt of the total amount of the permit fee less the filing fee. Failure by the applicant to pay the assessed permit fee on or before the due date shall result in the forfeiture of the filing fee and denial of the permit.

(c) Facilities which fall into multiple categories as specified in Section 2 of this regulation shall be assessed the highest fee.

(2) Each discharge permit fee will be determined by adding the base fee in paragraph (a) of this subsection *to* [with] all other applicable component fees listed in paragraph (b) of this subsection.

(a) Base fee. The base fee for a discharge permit for any point source water pollutant shall depend on the type of wastewater treatment unit or facility and the required permit action. The amount of the base fee will be assessed according to the following schedule:

Facility Category	1st Issuance and Renewals New and Existing Facilities
Major industry	$*800* [1,000]
Minor industry	*500* [400]
Non-process industry	*300* [100]
Large non-POTW	*400* [300]
Small non-POTW	*200* [100]
Agriculture	200
Surface mining operation	50

(b) Component fees. The component fee for each addition necessary to complete the evaluation of the discharge permit shall be as follows:

1. Redraft permit based on agencies' comments . . $ 80.
2. Public hearing and 33 USC Section 1311 variances . . . . . $325.

(3) The provisions of this section will apply with respect to fees for temporary discharge permits except that the fee as determined by subsection (2) of this section will be multiplied by the ratio of the length of time covered by the temporary discharge permit to five (5) years.

Section 5. Duplicate Discharge Permit Fee. Upon application for the issuance of a duplicate discharge permit, the duplicate permit shall be issued by the cabinet upon receipt of a fifteen (15) dollar fee.

Section 6. Variance Fee. (1) Any owner or operator granted a variance by the cabinet shall be assessed a variance fee. Upon determining that the variance can be granted, the cabinet shall notify the applicant and send a bill for the variance fee. Failure by the applicant to pay the variance fee on or before the due date shall result in the forfeiture of the filing fee and denial of the variance. The variance shall be granted by the cabinet upon receipt of the total amount of the variance fee less the filing fee.

(2) Variance fees shall be determined by adding the base fee in paragraph (a) of this subsection with the component fee, if applicable, listed in paragraph (b) of this subsection.

(a) Base fee. The base fee for a variance for any point source water pollutant shall be equal to $270, the cost of reviewing the feasibility of the variance request reviewing the applicant's plan of study for the hydrologic-water quality investigation, assessment, or appraisal.

(b) Component fee. The component fee for completing an evaluation of a variance request shall be equal to $690, the cost of a technical review of the study data, results, and conclusions, and for making the variance recommendation.

Section 7. Terms of Payment. (1) Payment of a discharge permit or variance fee, and a duplicate discharge permit fee, as the case may be, will be made within thirty (30) days of the billing date.

(2) Payment of a filing fee shall accompany the application for a discharge permit or variance.

(3) With respect to all fees assessed in Sections 3, 4, 5, and 6 of this regulation, payment, if mailed, should be sent by certified mail. Certified checks or money orders, if used, shall be payable to the Kentucky State Treasurer.

Section 8. Date of Applicability. The provisions of this regulation will become effective upon the date of program approval.

JACKIE SWIGART, Secretary
ADOPTED: March 15, 1983
RECEIVED BY LRC: March 15, 1983 at 4 p.m.

Amended After Hearing

(Republished prior to Subcommittee consideration as required by KRS 13.085(4).)

NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION CABINET
Department for Environmental Protection
Division of Water
Amended After Hearing

401 KAR 5:090. Control of water pollution from oil and gas facilities.

RELATES TO: KRS Chapters 151, 224
PURSUANT TO: KRS 13.082, 151.125, 224.033, 224.060
NECESSITY AND FUNCTION: KRS 224.033 requires that the cabinet promulgate regulations pertaining to the issuance of permits and the prevention, abatement and control of water pollution. This regulation provides for preventing, abating, and controlling water pollution from oil and gas facilities.

Section 1. Applicability. The provisions of this regulation shall apply to the owner or operator of any facility which causes or is capable of causing produced water.

Section *2.* [1.] Definitions. The following definitions describe terms used in this regulation. Terms not defined below shall have the meaning given to them by KRS Chapters 151 and 224 or the meaning attributed by common use.

(1) "Cabinet" means the Natural Resources and Environmental Protection Cabinet.

(2) "Director" means the secretary of the cabinet or an authorized representative. For purposes of permit issuance decisions, the director is the Director of the Division of Water.

(3) [(2)] "Disposal well" means a borehole drilled or proposed to be drilled, or a well converted to be used, for the sole purpose of disposing of any water, gas, produced water or other fluid by injection or other method into a subsurface zone.

(4) [(3)] "Division" means Division of Water, Natural Resources and Environmental Protection Cabinet.

(5) [(4)] "Facility" means any well, tank, pit, structure, appurtenance or improvement used in the exploration, drilling, or production of oil or gas or used for treating, storing or disposing of produced water.

(6) [(5)] "Gas" means all natural gas, including casinghead gas, and all other hydrocarbons not defined herein as oil.

(7) "Geologically isolated" means a zone separated from drinking water aquifers and free of known open faults or fractures and any unprotected wells within the area of review.

(8) [(6)] "Holding pit" means an earthen excavated depression [or continuous bermed area at least two (2) feet above ground level] designed to receive and hold produced water at a facility.

(9) [(7)] "Kentucky Pollutant Discharge Elimination System (KPDES)" means the Kentucky program for issuing, modifying, revoking and reissuing, terminating, monitoring and enforcing permits to discharge and imposing and enforcing pretreatment requirements. The KPDES regulations are 401 KAR 5:050 to 5:085.

(10) [(8)] "Oil" means natural crude oil or petroleum and other hydrocarbons, regardless of specific gravity, which are produced at the well in liquid form and which are not the result of condensation of gas after it leaves the underground reservoir.

(11) [(9)] "Operate" means any act relating to the construction, operation or maintenance of any facility.

(12) [(10)] "Operator" means any person who operates any facility.

(13) [(11)] "Owner" means any person who possesses any interest in:

(a) The right to develop, operate, or produce oil or gas; or

(b) Any facility.

(14) [(12)] "Person" means as defined in KRS [Chapter] 224.*005(12).*

(15) [(13)] "Pollutant" means as defined in KRS [Chapter] 224.*005(28).*

(16) [(14)] "Produced water" means any and all water and pollutants and combination thereof resulting, obtained or produced from the exploration, drilling, or production of oil or gas.

(17) [(15)] "Register" means *to file* [the filing of] forms [provided by the division] with the division which contain information as to oil and gas well geographic location, production, produced water production, methods used for treating, storing or disposing of produced water, and other information deemed necessary by the division.

(18) [(16)] "Total dissolved solids" means the total dissolved (filtrable) solids as determined by use of the method specified in 40 CFR Part 136.

(19) [(17)] "Waters of the Commonwealth" means waters of the Commonwealth as defined in KRS [Chapter] 224.*005(26).*

(20) [(18)] "Well" means a borehole drilled, or proposed to be drilled for the purpose of producing gas or oil or one through which gas or oil is being produced, or a borehole drilled or proposed to be drilled for the purpose of injecting any water, gas, produced water or other fluid therein or one into which any water, gas, produced water or other fluid is being injected.

(21) [(19)] "Zone" means a layer or stratum capable of producing or receiving fluids.

Section *3.* [2. General] Prohibition. No person shall construct, modify, or operate a facility in *violation of state or federal water quality standards or other applicable standards in this regulation* [such a manner as to cause water pollution or disposal of any pollutant].

[Section 3. Applicability. The provisions of this regulation shall apply to the owner or operator of any facility which produces or is reasonably capable of producing produced water.]

Section 4. Registration. (1) All [owners or] operators shall register their facilities with the division *using a form approved by the director.* All contiguous facilities operated

or to be operated *under a single lease* [in a single geographical oil or gas field] by one (1) owner or operator may register as one (1) facility operation.

(2) [Owners or] Operators who previously registered their facilities with the division on the form entitled "Division of Water, Crude Oil Producers Brine Disposal Registration Form" shall not be required to register under this section unless there has been a change *in operators or* to the reported quantity of produced water or a modification to the facility has occurred which affects the operations used for treating, storing or disposing of produced water.

Section 5. Approval Requirements for Continuation for Operation of Existing Facilities. (1) Applicability. The provisions of this section shall apply to [owners or] operators of facilities in existence prior to the effective date of this regulation.

(2) Continuation requirements. [Owners or] Operators may continue to operate existing facilities for a period not to exceed one (1) year from the effective date of this regulation provided all the following provisions are met:

(a) A written request to continue operating existing facilities is submitted to the [division] director. This request shall include a detailed description of existing operations for treating, storing or disposing of produced water.

(b) A plan is submitted to the [division] director which *proposes* [includes] a schedule and outlines the procedures for meeting the requirements of this *and other applicable* regulations.

(c) Both the written request and plan shall be submitted to the [division] director within ninety (90) days of the effective date of this regulation.

(d) Approval for continuation of operation of existing facilities has been obtained from the [division] director pursuant to subsection (3) of this section and the [owner or] operator has on display at the facility the division's approval identification number.

(3) Approval procedures. After receiving the written request and plan specified in subsection (2) of this section, the [division] director will:

(a) Review the plan and request any additional information from the [owner or] operator, if needed;

(b) Develop a compliance schedule for each facility or contiguous facility operation; and

(c) Issue a written approval to the [owner or] operator containing the compliance schedule and an identification number.

Section 6. Discharges of Produced Water. (1) Applicability. The provisions of this section apply to [owners or] operators of facilities discharging produced water into waters of the Commonwealth [as defined in KPDES regulation 401 KAR 5:050].

(2) General requirements. No *produced water shall be discharged* [owner or operator shall cause the discharge of produced water] from a facility *unless* [except as] authorized by and in accordance with a KPDES permit. *A KPDES permit is not required for the disposal of produced water through a permitted disposal well.* KPDES permits may be issued to [owners or] operators of facilities provided the [following conditions are met:

(a) The] facility meets the criteria for inclusion within Subpart F—Stripper Subcategory of 40 CFR Part 435. [; and]

[(b) The produced water discharge from the facility meets the water quality standards of 401 KAR 5:031.]

[(c) Discharges of produced water from facilities included in Subpart B—Onshore Subcategory of 40 CFR Part 435 are prohibited.]

Section 7. Holding Pits. (1) Applicability. The provisions of this section apply to *the* [owners or] operators of holding pits *which are constructed after the effective date of this regulation, and to the operators of existing pits that are incapable of demonstrating pursuant to Section 5 of this regulation that those pits do not contaminate surface or groundwaters.*

(2) Exemption. Spill Prevention Control and Countermeasure (SPCC) pits developed pursuant to Section 11 of this regulation are exempted from the requirements of this section.

(3) [(2)] General requirements. [Owners or] Operators of holding pits shall supplement the registration form required under Section 4 of this regulation with information regarding the construction and operation of any holding pit and any other information deemed necessary by the [division] director. This information shall be submitted to the [division] director on forms provided by the division [director].

(4) [(3)] Permits. The [division] director will issue permits to [owners or] operators of holding pits to contain any condition [which he deems] necessary to satisfy any requirement of this regulation notwithstanding any less stringent provision of the law to the contrary.

(5) [(4)] Conditions applicable to [all] holding pits.

(a) Construction requirements.

1. *Holding pits shall be constructed in accordance with KRS Chapter 151 and Division of Waste Management regulation 401 KAR 34:200, Section 2, et seq.* [No holding pit shall be constructed within the 100-year floodplain of any stream or water course as defined in KRS 151.100 unless it is surrounded by a continuous impermeable wall to the elevation of the 100-year flood and has a permit issued pursuant to KRS 151.250.]

2. [All] Holding pits shall be constructed with an impermeable *synthetic* liner *having a minimum thickness of twenty (20) mils.*

3. Holding pits shall be designed with a continuous bermed area at least two (2) feet above ground level.

(b) Operating requirements.

[1. No holding pit may be used for the final disposition of produced water.]

1. [2.] No holding pit may discharge produced water into waters of the Commonwealth [as defined in the KPDES regulation 401 KAR 5:050] except in accordance with a KPDES permit.

2. [3.] All surface water shall be diverted away from the holding pit [by berms] so that the holding pit shall have no additional drainage area.

3. [4.] All wastes shall be removed from the holding pit when the design storage volume has filled. Disposal of wastes shall be in accordance with Kentucky laws and regulations.

(c) Closure requirements.

1. *Except as provided in subsection (2) of this section,* any holding pit no longer used for the purpose for which it was intended shall be backfilled, graded, and revegetated. The vegetative cover shall be capable of stablizing the soil surface from erosion. This closure shall be conducted within the time period specified in the permit issued pursuant to subsection (3) of this section.

2. A holding pit may remain as a permanent structure *or be used for other purposes* upon written approval from the [division] director.

3. Disposal of all wastes shall be in accordance with

Kentucky laws and regulations.

(6) A tank, of a size and type approved by the director, may be used in lieu of a holding pit.

Section 8. Drilling Pits. Facilities shall be constructed for the collection of fluids, other than produced water, associated with well construction, acidizing and chemically enhanced recovery in areas where waters of the Commonwealth may be affected. If the life of the facilities is longer than thirty (30) days, they must meet all requirements of Section 7(5)(c) of this regulation.

Section *9.* [8.] Disposal Wells. (1) Applicability. The provisions of this section apply to [owners or] operators of disposal wells. *The provisions of this section will not apply to operators of disposal wells upon issuance of an individual Underground Injection Control (UIC) permit by the agency having jurisdiction under the Safe Drinking Water Act (42 USC 300f, et seq.).* [This section does not apply to wells used to inject water, gas, produced water, or other fluids into an oil producing zone to enhance the recovery of oil.]

(2) General requirements. [Owners or] Operators of disposal wells shall supplement [to] the registration form required under Section 4 of this regulation with information regarding the construction and operation of any disposal well, *a plan showing the location of all existing and abandoned wells within the zone of influence* and any other information deemed necessary by the [division] director. This information shall be submitted to the [division] director on forms provided by the division [director].

(3) Permits. The [division] director will issue permits to [owners or] operators of disposal wells to contain any condition necessary to satisfy any requirement of this regulation notwithstanding any less stringent provision of law to the contrary.

(4) Conditions applicable to all disposal wells. Disposal wells shall [be operated to] reinject all produced waters into *a formation which is geologically isolated and* [or below the level of a known production zone in that geographical oil or gas field provided that the known production zone] contains more than 10,000 mg/l of total dissolved solids. *Disposal well failure or shutdown shall be reported immediately to the director.*

Section *10.* [9.] Inspection and Enforcement. The cabinet may inspect any facility pursuant to KRS 224.033 and may provide written notification of any violation to the [owner or] operator. Following the determination of any violation of any applicable provision of law, the cabinet may initiate any enforcement action including an order to abate and alleviate such condition or activity pursuant to KRS 224.071 and any other applicable remedy including civil penalties pursuant to KRS 224.994. *Operators shall post waterproof signs, or a size and type approved by the director, at tank batteries and at disposal wells which shall identify the operator's name, address, permit or registration number, phone number and other information defined by the director. All plugging, casing, and operation of wells shall be done in accordance with Department of Mines and Minerals regulations 805 KAR 1:020, 1:060, and 1:070.*

Section *11.* [10.] Spills and Leaks. (1) General provision. [Owners or] Operators of facilities shall develop and implement Spill Prevention Control and Countermeasure (SPCC) Plans when required under 40 CFR Part 112.

(2) Reporting.

(a) [Owners or] Operators shall report to the division all spills and bypasses of oil and produced water from facilities in accordance with 401 KAR 5:015.

(b) [Owners or] Operators shall report all spills, discharges and bypasses of oil from a facility in accordance with the procedures in 40 CFR Part 110.

JACKIE SWIGART, Secretary
ADOPTED: June 15, 1983
RECEIVED BY LRC: June 15, 1983 at 4:30 p.m.

CABINET FOR HUMAN RESOURCES
Department for Health Services
Certificate of Need and Licensure Board
Amended After Hearing

902 KAR 20:111. [Operations and services;] Medical [alcohol emergency] detoxification *services* [centers].

RELATES TO: KRS 216B.010 to 216B.130, 216B.990(1),(2)
PURSUANT TO: KRS 13.082, 216B.040, 216B.105[(3)]
NECESSITY AND FUNCTION: KRS 216B.040 and 216B.105[(3)] mandate that the Kentucky Health Facilities and Health Services Certificate of Need and Licensure Board regulate health facilities and health services. This regulation provides for the licensure requirements [for the operation and services] of medical [alcohol emergency] detoxification *services* [centers].

Section 1. *Scope of Operation and Services. A facility with a medical detoxification service provides examination, diagnosis, treatment, and referral for intoxicated persons and persons evaluated by a physician to be alcoholics or abusers of other chemical substances in need of detoxification. Medical detoxification services are provided in a facility licensed as a hospital, psychiatric hospital or chemical dependency treatment service and are available on a twenty-four (24) hour basis.* [Definition. Medical alcohol emergency detoxification services means a service providing treatment for intoxicated persons, or for persons evaluated by physicians to be alcoholics in need of acute emergency care in hospitals or skilled nursing facilities which operate on a twenty-four (24) hour basis and are licensed for this purpose in accordance with KRS 222.230.]

Section 2. Definitions. (1) "Detoxification" means the systematic reduction of the amount of a toxic agent in the body or the elimination of a toxic agent from the body.

(2) "Service" means a medical detoxification service.

Section *3.* [2.] Minimum Standards of Operation. (1) The medical [alcohol emergency] detoxification service shall be provided on the premises of a facility licensed as a hospital, *psychiatric hospital* or *chemical dependency treatment service* [skilled nursing facility] under the applicable health service and health facility licensure regulations. The [medical alcohol emergency detoxification] service shall have staff, [and] operating procedures *and records* appropriate to the licensure category of the facility *providing* [housing] the *service* [program].

(2) *A psychiatric hospital or chemical dependency treatment service providing medical detoxification* [The hospital or skilled nursing facility] shall have *provisions*

for obtaining emergency medical treatment *through a licensed hospital with an organized emergency department* [capability].

(3) The facility shall provide extended medical care of the patient within the primary facility or through cooperative arrangement with or referral to another licensed medical care facility if services required for the patient are not available in the primary facility.

(4) The service shall be operated by licensed staff [specially] trained in alcohol *and drug* [emergency] treatment procedures *who receive regular in-service training relating to their job activities. There shall be at least one (1) person on duty at all times who has [shall have] received training in cardio-pulmonary resuscitation* [as certified by the Department for Human Resources, except that the certification shall in no way be construed as interfering with the individual practice privileges granted medical, nursing, and other personnel through licensure in their respective professions].

(5) The service shall have twenty-four (24) hour capability, and shall provide examination, [and/or] diagnosis, [medical emergency outpatient] treatment, and appropriate referral for all *patients* [clients].

(6) *A physical examination shall be conducted prior to commencing detoxification or administering medications to determine whether the patient requires transfer to a more appropriate level of care.* Admission *for* [to] inpatient treatment [status] shall be determined by an attending or examining staff physician. *The medical care of the patient during detoxification shall be directed by a physician.*

(7) Prior to discharge from the detoxification service an assessment of the patient's condition shall be conducted to determine an appropriate referral for continuing care.

(8) [(7)] The facility shall designate the number of beds to be available for *detoxification services* [medical alcohol emergencies,] and [shall] assure space is available [for at least one (1) bed] with reasonable privacy [and appropriate stretcher or bed access] for examination, detoxification, observation, evaluation and treatment of the medical alcohol *or drug* emergency patient.

(9) [(8)] The facility shall *have* [show evidence of] written affiliation [or efforts to affiliate for reciprocal services] with [as many of the] other licensed alcohol *and drug* services [as possible and] available in the community *such as: chemical dependency treatment services and services licensed under 902 KAR Chapter 3* including [but not limited to:] situation, identification, and disposition *(SID)* units, thirty (30) day residential units, halfway houses *and* outpatient services [; and shall have written affiliation with at least two (2) such services if existing within the community].

(10) [(9)] The facility shall have the following *equipment immediately available* [on hand and operational at all times]:

(a) Complete parenteral treatment equipment; [and capability.]

(b) Appropriate pharmaceutical supplies to include tranquilizers, anti-convulsants, oral and parenteral vitamins; [.]

(c) *Ventilation equipment including masks and cannulae for administration of oxygen and suction equipment; and* [Inhalation equipment including suction and positive pressure breathing equipment.]

(d) An emergency crash cart. [; and]

[(e) Defibrillator.]

(11) [(10)] The facility shall have twenty-four (24) hour [immediate] access to physician services *on at least an on-call basis.*

FRANK W. BURKE, SR., Chairman
ADOPTED: June 9, 1983
APPROVED: BUDDY H. ADAMS, Secretary
RECEIVED BY LRC: June 10, 1983 at 2:30 p.m.

CABINET FOR HUMAN RESOURCES
Department for Health Services
Certificate of Need and Licensure Board
Amended After Hearing

902 KAR 20:160. Chemical dependency treatment services and facility specifications.

RELATES TO: KRS 216B.010 to 216B.131, 216B.990 (1)(2)

PURSUANT TO: KRS 13.082, 216B.040(2), 216B.105

NECESSITY AND FUNCTION: KRS 216.040 and 216B.105 mandate that the Kentucky Health Facilities and Health Services Certificate of Need and Licensure Board regulate health facilities and health services. This regulation provides the licensure requirements for the operation and services and facility specifications of chemical dependency treatment programs.

Section 1. Scope of Operation and Services. A chemical dependency treatment service has a structured inpatient program which provides medical, social, diagnostic and treatment services to persons who suffer from illness related to the misuse or abuse of alcohol and other drugs. Chemical dependency treatment services last generally for a duration of less than thirty (30) days, are hospital based or free-standing with eight (8) or more patient beds and under the medical direction of a physician with continuous nursing services.

Section 2. Definitions. (1) "Aftercare" means the process of providing continued contact following primary chemical dependency treatment which will support and increase the gains made in the treatment process.

(2) "Governing authority" means the individual, agency, partnership or corporation in which the ultimate responsibility and authority for the operation of the facility is vested.

(3) "Interdisciplinary team" means a group of *at least four (4)* professionals including a physician, [psychologist,] registered nurse, *certified chemical dependency counselor and a person with a master's degree in psychology, social work or counseling* [social worker and other individuals with experience in a chemical dependency program].

(4) "Qualified dietitian" means:

(a) A person who has a Bachelor of Science degree in foods and nutrition, food service management, institutional management or related services and has successfully completed a dietetic internship or coordinated undergraduate program accredited by the American Dietetic Association (ADA) and is a member of the ADA or is registered as a dietitian by ADA; or

(b) A person who has a Masters Degree in nutrition and is a member of ADA or is eligible for registration by ADA; or

(c) A person who has a Bachelor of Science degree in home economics and three (3) years of work experience with a registered dietitian.

(5) "Restraint" means any physical or mechanical device used to restrict the movement of the patient or the movement of a portion of the patient's body.

Section 3. Administration and Operation. (1) Governing authority/licensee.

(a) The program shall have a recognized governing authority that has overall responsibility for the management and operation of the program and for compliance with federal, state and local laws and regulations pertaining to its operation.

(b) The governing authority shall appoint a program administrator who has a Bachelor's degree in a health or human services field or a Bachelor's degree in another field supplemented with one (1) year of work experience in the field of chemical dependency *or who is a high school graduate with four (4) years of experience in the field of chemical dependency.*

(c) The governing authority shall develop goals and objectives for the program and establish a written evaluation plan to assess the attainment of these goals and objectives on an annual basis.

(2) Program administrator.

(a) The program administrator shall be responsible for the daily management of the facility and provide liaison between the governing authority and staff members.

(b) The program administrator shall keep the governing authority fully informed of the operations of the facility through periodic reports and attendance at meetings of the governing authority.

(3) Administrative records and reports.

(a) Administrative reports shall be established, maintained and utilized as necessary to guide the operation, measure productivity and reflect the programs of the facility.

(b) A written report of any incident or accident involving a patient (including medication errors and drug reactions), visitor or staff shall be made and signed by the program administrator and any staff member who witnessed the incident. The report shall be placed in an incident file.

(c) Licensure inspection reports, plans of correction and program evaluations shall be available to the public upon request at the facility.

(4) Policies.

(a) Administrative policies. The program shall have written administrative policies covering all aspects of the facility's operation to include:

1. A description of the organizational structure, staffing and allocation of responsibility and accountability;
2. A description of referral linkages with other facilities and providers;
3. A description of the services included in the program;
4. A policy for an expense and revenue accounting system following generally accepted accounting procedures;
5. A policy describing the use of volunteers in program activities; and
6. A policy for conducting program evaluation and quality assurance review.

(b) Patient care policies. Patient care policies shall be developed for all aspects of the program and include:

1. Actions to be taken when a patient is determined to be lost, unaccounted for or on other unauthorized absence;
2. A policy which specifies provisions for patient visitation and use of telephones;
3. A policy to specify the provision of emergency medical services; and
4. Admission and discharge policies including the categories of individuals accepted and not accepted by the program.

(c) Patient rights policies. There shall be written policies designed to enhance the dignity of all patients and to protect their rights as human beings. These policies shall assure that each patient:

1. Is informed of all rules and regulations governing patient conduct and responsibilities, including a procedure for handling grievances;
2. Is informed, prior to admission for rehabilitation, of the services available at the facility and of charges for treatment including any charges not covered under Medicare, Medicaid, or other third-party payor arrangements;
3. Is encouraged and assisted to understand and exercise patient rights, voice grievances and recommend changes in policies and services. Upon the patient's request the grievances and recommendations shall be conveyed within a reasonable time to an appropriate decision making level within the organization which has authority to take corrective action;
4. Is afforded the opportunity to participate in the planning of his/her treatment and to refuse to participate in experimental research;
5. Is assured confidential treatment of records and is afforded the opportunity to approve or refuse their release to any individual not involved in his care except as required by Kentucky law or third party payment contract; and
6. Is treated with consideration, respect and full recognition of personal dignity and individuality including privacy in treatment and in the care of personal health needs.

(5) Personnel.

(a) The licensee shall establish personnel policies for the program which shall be reviewed, revised, approved and updated on an annual basis.

(b) There shall be an individual personnel record for each person employed by the facility which shall include the following:

1. All employees shall have a test for tuberculosis either prior to or within the first week of employment and annually thereafter;
2. Evidence of education, training and experience of the individual along with a copy of the current license or certification credentials, if applicable;
3. Evidence that employees have received orientation to the facility's written policies within the first week of employment; and
4. Evidence of regular in-service training which corresponds with job duties and includes a list of training and dates completed.

(6) Staffing requirements. The program shall have adequate personnel to meet the needs of patients on a twenty-four (24) hour basis. The number and classification of personnel required shall be based on the number of patients and the individual treatment plans. If the staff/patient ratio does not meet the needs of the patients, the Division for Licensing and Regulation shall determine and inform the program administrator in writing how many additional personnel are to be added and of what job classification, and shall give the basis for this determination.

(a) Medical director. There shall be a medical director who is a physician having responsibility for the medical direction of the program including admission of individuals, approving individual treatment plans and participating in the quality assurance review. The medical

director or a physician designated by the medical director shall be available twenty-four (24) hours a day on at least an on-call basis.

(b) Interdisciplinary team. There shall be an interdisciplinary team responsible for developing the individual treatment plans, aftercare plans and conducting the quality assurance reviews.

(c) Treatment coordinator. The program shall have a full time treatment director whose qualifications are defined in writing and approved by the governing authority. The treatment director shall be responsible for:

1. Coordinating the interdisciplinary team in developing the individual treatment plans;
2. Initiating a periodic review of each patient's treatment plan for necessary changes;
3. Supervising the proper maintenance of patient records; and
4. Coordinating the interdisciplinary team in developing an aftercare plan for each patient which assures continuity of care.

(d) Nursing services. Nursing services shall be available on a twenty-four (24) hour basis. The program shall have at least one (1) full-time registered nurse. When a registered nurse is not on duty there shall be a licensed practical nurse present who is responsible for the nursing care of patients during her tour of duty. When a licensed practical nurse is on duty, a registered nurse shall be on call.

(e) Medical supervision. A physician, or registered nurse under the direction of a physician, shall supervise implementation of the medical aspects of the treatment plan and all staff directly involved in patient medical care.

(f) In-service training. All personnel shall participate in ongoing in-service training programs relating to their respective job activities. These programs shall include thorough job orientation for new personnel and regular in-service training programs emphasizing professional competence and the human relationship necessary for effective health care.

(7) Patient records.

(a) An individual record shall be maintained for all patients with entries signed and dated by the person making the entry.

(b) At the time of admission the following information shall be entered into the patient's record:

1. Name, date of admission, birth date and place, marital status and social security number;
2. Person to contact in case of emergency;
3. Next of kin; and
4. Type and place of employment.

(c) The record shall contain documentation of all medical services provided during detoxification and rehabilitation including the results of physical examinations.

(d) The record shall contain the patient's treatment plan outlining goals and objectives for the individual during treatment. The record shall also contain documentation of how the plan was implemented and of patient progress in meeting the goals and objectives outlined in the treatment plan.

(e) The record shall contain notation of all medication administered including date, time, dosage, frequency of administration and the name of the person administering each dose.

(f) The record shall contain a discharge summary and a plan for aftercare.

(g) The discharge summary shall be entered in the patient's record within seven (7) days after discharge and include:

1. The course and progress of the patient with regard to the individual treatment plan;
2. The general observations of the patient's condition initially, during treatment and at discharge; and
3. The recommendations and arrangements for further treatment including prescribed medications and aftercare.

(h) If the patient is referred to other service providers after discharge, a copy of the discharge summary shall be promptly sent to the provider with the patient's permission.

(i) After a patient's death or discharge the completed record shall be placed in an inactive file and retained for five (5) years or in case of a minor, three (3) years after the patient reaches the age of majority under state law, whichever is longest.

(8) Linkage agreements. The program shall have linkages through written agreements with providers of other levels of care which may be medically indicated to supplement the services available in the program. These linkages shall include a hospital and an emergency medical transportation service in the area.

(9) Quality assurance. In order to determine the appropriateness and the quality of the services delivered the service shall have a quality assurance program that includes effective mechanisms for reviewing and evaluating patient care on a regular basis by the interdisciplinary team.

(10) Medications.

(a) All prescription and nonprescription medications administered to patients shall be noted in writing with the date, time and dosage and signed by the person administering the medication.

(b) All prescription medications shall be plainly labeled with the patient's name, the name of the drug, strength, name of pharmacy, date, physician name, caution statement and directions for use.

(c) Prescription and nonprescription medication shall not be administered to any patient except on the written order of a physician. All medications shall be administered by licensed personnel.

(d) All medicines shall be kept in a locked storage area which shall be well lighted and of sufficient size to permit storage without crowding. Medications requiring refrigeration shall be kept in a separate locked box in a refrigerator. Drugs for external use shall be stored separately from those administered by mouth or injection.

(e) Medication errors and drug reactions shall be reported immediately to the medical director and treatment coordinator and an entry made in the patient's record.

(f) An emergency medical kit, with contents approved by a physician, shall be maintained at the facility. It shall be inspected after use or at least monthly to remove deteriorated and outdated drugs and ensure completeness of content.

(11) Restraints. Requirements for the use of restraints shall be met pursuant to the Kentucky mental patients bill of rights, 902 KAR 12:020.

(12) Activities schedule. A daily schedule of program activities shall be posted in the facility.

Section 4. Provision of Services. (1) Detoxification. Medical detoxification services pursuant to the requirements of 902 KAR 20:111 shall be available directly or through another licensed provider for patients who require detoxification.

(2) Rehabilitation. The program shall provide at least the following services:

(a) Medical services as needed, provided under the supervision of a physician;

(b) Scheduled individual, group, and family counseling;
(c) Psychological testing and evaluation as needed;
(d) Education of patients on the subject of chemical dependency and related lifestyle issues including nutrition and communication skills;
(e) Recreational activities with facilities and equipment shall be available consistent with the patient's needs and the therapeutic program;
(f) Referral to other rehabilitative or community service agencies providing services not available through the program; and
(g) Aftercare services provided directly or through arrangement with other agencies.
(3) Physical examinations. Within ten (10) days prior to or three (3) days after admission for rehabilitation all patients shall have a physical examination with tests ordered by physician.
(4) Psycho-social history. All patients shall have a psycho-social history and assessment interview within seventy-two (72) hours after admission for rehabilitation entered into the patient record which includes:
(a) Drinking and drug use history;
(b) A determination of current emotional state;
(c) Vocational history;
(d) Familial relationships; and
(e) Educational background.
(5) Treatment plan. The interdisciplinary team, with the participation of the patient, shall develop an individual treatment plan within four (4) days after admission for rehabilitation based on the patient's medical evaluation and psycho-social history and assessment. The treatment plan shall:
(a) Specify the services required for meeting the patient's needs;
(b) Identify goals necessary for the patient to achieve, maintain or re-establish physical health and adaptive capabilities;
(c) Establish goals with both long-term and short-term objectives and the anticipated time expected to meet these goals; and
(d) Identify the locations and frequency of treatment procedures including referrals for any required services which are not provided by the program.
(6) The treatment plan shall be reviewed and updated at least weekly for the duration of the inpatient treatment.
(7) The patient's family or significant others shall be involved in the treatment process, if approved by the patient. Documentation shall be included in the medical record which establishes that an attempt was made to involve family members or significant others.
(8) Aftercare plan.
(a) There shall be a written individual aftercare plan developed by the interdisciplinary team, the patient and, with the patient's permission, the patient's family or significant others prior to the completion of treatment. The individual aftercare plan shall be designed to establish continued contact for the support of the patient.
(b) The aftercare plan shall include the methods and procedures whereby the needs of the individual are met by the aftercare personnel through direct patient contact or assistance from other community human services organizations.
(c) When aftercare services are provided directly, a periodic review and updating of the aftercare plan shall be conducted with the frequency of review determined by the interdisciplinary team, the patient, and with the patient's permission, the patient's family or significant others. If the patient is referred to another agency for aftercare services, follow-up shall be conducted to determine if services are being provided.

Section 5. Compliance with Building Codes, Ordinances and Regulations. (1) Nothing stated herein shall relieve the licensee from compliance with building codes, ordinances, and regulations which are enforced by city, county, or state jurisdictions.
(2) The following requirements shall apply where applicable and as adopted by the respective agency authority:
(a) Requirements for safety pursuant to 815 KAR 10:020, as amended;
(b) Requirements for plumbing pursuant to 815 KAR 20:010 through 20:191, as amended;
(c) Requirements for making buildings and facilities accessible to and useable by the physically handicapped pursuant to KRS 198B.260 and regulations promulgated thereunder.
(3) The facility shall be currently approved by the Fire Marshal's office before licensing and relicensure is granted by the licensure agency.
(4) All facilities shall receive any necessary approval from appropriate agencies prior to occupancy and licensure.
(5) Physical and sanitary environment.
(a) The condition of the physical plant and overall facility environment shall be maintained in such a manner that the safety and well-being of patients, personnel and visitors are assured.
(b) A person shall be designated responsible for services and for the establishment of practices and procedures in each of the following areas: plant maintenance, laundry operations (on site or off site) and housekeeping.
(c) The facility buildings, equipment, and surroundings shall be kept in good repair, neat, clean, free from all accumulations of dirt and rubbish and free from foul, stale or musty odors.
1. An adequate number of housekeeping and maintenance personnel shall be provided.
2. Written housekeeping procedures shall be established for the cleaning of all areas and copies shall be made available to personnel.
3. Equipment and supplies shall be provided for cleaning of all surfaces. Such equipment shall be maintained in a safe, sanitary condition.
4. Hazardous cleaning solutions, compounds, and substances shall be labeled, stored in approved containers and kept separate from other cleaning materials.
5. The facility shall be kept free from insects and rodents with harborages for these eliminated.
6. Garbage and trash shall be stored in closed containers in areas separate from those used for the preparation and storage of food and shall be cleaned regularly and in good repair.
(d) The facility shall have available at all times a quantity of linen essential to the proper care and comfort of residents.
1. Clean linen and clothing shall be stored in clean, dry, dust-free areas designated exclusively for this purpose.
2. Soiled linen and clothing shall be placed in suitable bags or closed containers and stored in separate areas ventilated to the exterior of the building.

Section 6. Facility Requirements and Special Conditions. (1) Patient rooms. Each patient room shall meet the following requirements:
(a) The maximum room capacity shall be six (6) patients.
(b) The minimum room areas exclusive of toilet rooms, closets, lockers, wardrobes or vestibules shall be 100 square feet in one (1) bed room and eighty (80) square feet per bed in multibed rooms.
(c) In multiperson rooms partitioning, cubicle curtains or placement of furniture shall be used to provide privacy.

An ample closet and drawer space shall be provided for the storage of patient's personal property.

(d) The placement of patients in multibed rooms shall be appropriate to the ages and program needs of the patients.

(2) Lavatory. In single and multibed rooms with a private toilet room, the lavatory may be located in the toilet room. Where two (2) or more patients share a common toilet a lavatory shall be provided in each patient room.

(3) Centralized toilet area. Where a contralized toilet area is used, the facility shall provide the following for each sex on every floor: One (1) toilet for each eight (8) residents or a major fraction thereof. Toilets must be separated by a permanent partition and at least one (1) toilet for each sex must be designed for wheelchair use.

(4) Patient baths. There shall be one (1) shower stall or one (1) bathtub for each fifteen (15) patients not individually served. Each bathtub or shower shall provide space for the private use of the fixture and for dressing.

(5) Patients shall be encouraged to take responsibility for maintaining their own living quarters and for other day-to-day housekeeping activities of the program, as appropriate to their clinical status.

(6) Dietary services.

(a) The facility shall have a dietary department, organized, directed and staffed to provide quality food service and optimal nutritional care.

1. The dietary department shall be directed on a full-time basis by an individual who by education or specialized training and experience is knowledgeable in food service management.

2. The dietary service shall have at least one (1) qualified dietitian to supervise the nutritional aspects of patient care and approve all menus on at least a consultative basis.

3. If any food service personnel are assigned duties outside the dietary department, the duties shall not interfere with the sanitation, safety or time required for regular dietary assignments.

(b) Menus shall be planned, written and rotated to avoid repetition. Nutritional needs shall be met in accordance with recommended dietary allowances of the Food and Nutrition Board of the National Research Council of the National Academy of Sciences and in accordance with physician orders.

(c) Meals served shall correspond with the posted menu. When changes in the menu are necessary, substitution shall provide equal nutritive value and the changes shall be recorded on the menu. Menus shall be kept on file for thirty (30) days.

(d) Food shall be prepared by methods that conserve nutritive value, flavor and appearance, and shall be served at the proper temperature.

(e) At least three (3) meals shall be served daily with not more than a fifteen (15) hour span between a substantial evening meal and breakfast. Meals shall be served at regular times with between-meal or bedtime snacks of nourishing quality offered.

(f) The facility shall comply with all applicable provisions of KRS 219.011 to KRS 219.081 and 902 KAR 45:005 (Kentucky's Food Service Establishment Act and Food Service Code). The Division for Licensing and Regulation, Office of the Inspector General, Cabinet for Human Resources, shall carry out the provisions of the Act as they relate to inspections, follow-up and recommendations for issuance or revocation of food service permits.

FRANK W. BURKE, SR., Chairman
ADOPTED: June 9, 1983
APPROVED: BUDDY H. ADAMS, Secretary
RECEIVED BY LRC: June 13, 1983 at 11:30 a.m.

Proposed Amendments

HIGHER EDUCATION ASSISTANCE AUTHORITY
(Proposed Amendment)

11 KAR 5:010. Authority, purpose, name of grant programs.

RELATES TO: KRS 164.740 to 164.764, 164.780, 164.785
PURSUANT TO: KRS 13.082, 164.748(4)
NECESSITY AND FUNCTION: The Kentucky Higher Education Assistance Authority administers grant programs to provide financial assistance to students to attend Kentucky educational institutions. This regulation sets forth the purpose and names of these grant programs.

Section 1. The State Student Incentive Grant Program (SSIG) authorized under KRS 164.740 to 164.764 provides eligible Kentucky residents grant assistance in order to pursue eligible courses of study at Kentucky educational institutions.

Section 2. The Kentucky Tuition Grant Program (KTG) authorized under KRS 164.780 and 164.785 provides qualified Kentucky residents who bear the major costs of attending accredited independent colleges and universities within the Commonwealth a tuition or fees grant as supplementary aid where need exists.

Section 3. Awards from the State Student Incentive Grant Program, the Kentucky Tuition Grant Program, or a combination of the two (2) may be referred to as KHEAA grants.

Section 4. The KHEAA grant programs are administered in accordance with procedures established by the authority and delineated in the *1983-84* [1982-83] KHEAA Grant Manual, incorporated herein by reference. A current copy of the manual shall be maintained on file with the Legislative Research Commission. Copies of the manual may be obtained upon request to the authority.

PAUL P. BORDEN, Executive Director
ADOPTED: April 20, 1983
RECEIVED BY LRC: May 17, 1983 at 2:30 p.m.
SUBMIT COMMENT OR REQUEST FOR HEARING TO: The Executive Director, Kentucky Higher Education Assistance Authority, 1050 U.S. 127 South, Frankfort, Kentucky 40601.

REVENUE CABINET
Department of Professional and Support Services
(Proposed Amendment)

103 KAR 17:010. Residence.

RELATES TO: KRS 141.020
PURSUANT TO: KRS 13.082
NECESSITY AND FUNCTION: This regulation provides guidelines for determining whether a person qualifies as a resident or nonresident for Kentucky income tax purposes and provides special instruction to cover some of the more common problem areas.

Section 1. Resident. "Resident" means any individual domiciled within Kentucky on the last day of the taxable year [(for taxable years beginning after December 31, 1979, the term also] *and* includes any individual who spends more than 183 days in Kentucky and maintains a place of abode in Kentucky during this period. [) (See Section 4)] All other individuals are nonresidents.

Section 2. Nonresident Requirements. To qualify as a nonresident, the taxpayer shall submit proof of his bona fide intention to reside permanently elsewhere before the last day of the taxable year, and that he has spent less than 183 days in Kentucky. If any person who has moved out of Kentucky returns to Kentucky within six (6) months from the time he had moved, it shall be construed that the removal from Kentucky was not intended to be permanent and such person shall be considered a resident during the time in which his abode may have been elsewhere. Any person changing his domicile during a taxable year may also be required to furnish evidence of compliance with requirements of the other state with respect to taxation and qualifications as a resident citizen. Persons residing in Kentucky and living part of the year in other states will be considered residents of Kentucky unless it can be shown that abode in another state is of a permanent nature, and that less than 183 days were spent in Kentucky.

Section 3. Domicile. Generally, a domicile is the place where an individual has established permanent residence. A domicile once obtained continues until a new one is acquired. Domicile is not changed by removal for a definite period or for incidental purposes. To constitute a change, there must be intent to change, actual removal, and a new abode.

Section 4. Nonresident Citizens. An individual *residing in a foreign country* who is permitted to file federal income tax returns as a nonresident citizen, and who immediately prior to residing in a foreign country was domiciled in Kentucky, is *presumed to be a Kentucky resident and is required to file a resident Kentucky income tax return. Such individual may, however, overcome this presumption by presenting sufficient evidence that the Kentucky domicile has been abandoned.* [considered a Kentucky resident and must file a resident individual income tax return. A person must also show that his United States citizenship was relinquished if he claims residence in another country. The fact that ordinary rights of citizenship, including voting at public elections, are not exercised, shall not prevent his classification as a resident if he meets the test prescribed in this regulation.]

Section 5. Federal Employees. Federal employees working outside of Kentucky but having a domicile in Kentucky are taxable as residents. Such persons, once domiciled in Kentucky, are considered Kentucky residents if a domicile has not been established elsewhere. If the individual's domicile is claimed to be outside Kentucky, the requirements of Section 3 of this regulation must be met.

Section 6. Military Personnel. Under the provisions of the Soldiers' and Sailors' Civil Relief Act of 1940 as amended, a member of the Armed Forces retains the domicile which he had when he entered military service. Persons domiciled in Kentucky at the time of induction will continue to be liable for the payment of Kentucky income taxes on all income regardless of where their military services are performed. However, military personnel (usually career personnel) may change their domicile from Kentucky to another state as any other individual. Conclusive evidence must be submitted showing that their Kentucky domicile has been abandoned and a new domicile established in another state.

Section 7. Reciprocity States. (1) Kentucky has reciprocal tax agreements with the states of Indiana, Illinois, Michigan, Ohio, Virginia, West Virginia, and Wisconsin. These agreements provide that salaries and wages earned in Kentucky by residents of those states are exempt from Kentucky income tax. Kentucky residents are exempt from income tax, imposed by such states, on salaries and wages earned there. The Virginia Agreement, however, applies only to taxpayers who commute daily to their employment in the nonresident state.

(2) A Kentucky resident, working in one (1) of the states listed above, must file the required certificate of nonresidence with his employer. That certificate is the employer's authority to exempt the employee's income from withholding. A resident of a state listed above must file Revenue Form 41A809, Certificate of Nonresidence, with his Kentucky employer to exempt his income from Kentucky withholding.

DONALD G. GEARY, Secretary
ADOPTED: June 6, 1983
RECEIVED BY LRC: June 8, 1983 at 3:10 p.m.
SUBMIT COMMENT OR REQUEST FOR HEARING TO: Alex W. Rose, Commissioner, Department of Professional and Support Services, Capitol Annex Building, Frankfort, Kentucky 40620.

FINANCE AND ADMINISTRATION CABINET
Kentucky State Board of Medical Licensure
(Proposed Amendment)

201 KAR 9:030. Examinations.

RELATES TO: KRS 311.530 to 311.620, 311.990
PURSUANT TO: KRS 13.082
NECESSITY AND FUNCTION: KRS 311.565 requires the Board to prescribe the scope and content of the examinations to practice medicine and osteopathy in Kentucky. The purpose of this regulation is to provide for uniform requirements for examinations.

Section 1. Scope of Examination. Examinations for regular *licensure* [and limited licenses] shall be in writing and shall be *sufficent* [adequate] to test the knowledge, education and training of applicants. Examinations shall consist, *at a minimum,* of the following subjects or sections [, to wit]:

(1) Basic sciences;
(2) Clinical sciences; and
(3) Clinical competency.

The applicant shall be deemed to have passed an examination if he obtains an overall average score of seventy-five (75). The overall examination score will be determined on the basis of a single sitting and scores based on an average of scores from previous sittings will not be considered.

Section 2. *Osteopathic Examination. All applicants for osteopathic licensure shall take a written examination in osteopathic principles and practice in addition to the examination described in Section 1 of this regulation. The applicant shall be deemed to have successfully passed the osteopathic examination if the applicant obtains a score of seventy-five (75) or higher.* [Examination Grades. No person shall be deemed to have successfully passed a written examination conducted by the board unless he makes an overall average of at least seventy-five (75). In addition, osteopathic applicants must make at least a grade of seventy-five (75) in osteopathic practice and principles.]

Section 3. Re-Examination. [In the event an applicant fails the examination he may, upon proper application, retake the exam upon payment of the prorated fee therefor.]

(1) Applicants for licensure may satisfy the examination requirement by means of the Federation Licensing Examination (FLEX), or its successor if approved by the board. Provided, however, that the board will recognize a passing score on this examination only upon a showing that the applicant has taken the examination no more than three (3) times, regardless of where the examinations were taken.

(2) If an applicant seeks licensure by means of the Federation Licensing Examination (FLEX) or its approved successor, he shall be denied the right to take the examination in this state if he has taken the examination three (3) times previously, regardless of where the previous examinations were taken.

(3) Irregardless of the provisions set forth in subsections (1) and (2) of this section, an applicant who has successfully taken the Federation Licensing Examination (FLEX) on three (3) previous occasions, without regard to where taken, shall be allowed to take the examination one (1) additional time upon a showing that the applicant has completed immediately prior to the re-examination a year of internship or prescribed course of post-graduate training approved by the board, in addition to the year of such training already required for licensure. The score of this re-examination will be recognized by the board.

(4) The board will not, under any circumstance, allow an applicant to take the Federation Licensure Examination (FLEX), or its approved successor, in this state if the applicant has previously taken the examination four (4) times, without regard to where the previous examinations were taken. The board, further, will not recognize any scores of this examination other than those denoted in subsections (1) through (3) of this section.

FRANK M GAINES, JR., Secretary
ADOPTED: May 19, 1983
RECEIVED BY LRC: June 9, 1983 at 11:30 a.m.
SUBMIT COMMENT OR REQUEST FOR HEARING TO: C. William Schmidt, Assistant Secretary, Kentucky State Board of Medical Licensure, 3532 Ephraim McDowell Drive, Louisville, Kentucky 40205.

FINANCE AND ADMINISTRATION CABINET
Division of Occupations and Professions
Kentucky Board of Ophthalmic Dispensers
(Proposed Amendment)

201 KAR 13:010. Board; powers, duties, meetings.

RELATES TO: KRS 326.020
PURSUANT TO: KRS 13.082, 326.020(3)
NECESSITY AND FUNCTION: To specify the powers, duties, and meeting dates of the board and its officers.

Section 1. "Board" means the Kentucky Board of Ophthalmic Dispensers.

Section 2. Officers; Duties; Meetings. (1) The officers of the board shall be a chairman and a secretary-treasurer.

(2) Three (3) members of the board shall constitute a quorum for the transaction of business.

(3) Officers of the board shall be elected by ballot, and shall hold their respective offices at the pleasure of the board.

(4) The board shall meet at least three (3) times a year, namely; on the third Wednesday in March, the third Wednesday in July and the third Wednesday in November of each year. Other meetings of the board shall be called by the chairman on his own motion or by written request of three (3) board members. The secretary-treasurer shall give timely notice of the time and place of such meetings to each member.

(5) The officers of the board shall discharge the duties that usually pertain to their respective offices.

(6) Meetings of the board shall be conducted as nearly as possible under Roberts Rules of Order.

(7) These rules and regulations may be amended at any regular or special meeting of the board, provided such proposed amendments have been submitted to the members of the board at least ten (10) days prior to such meeting. Such ten (10) day notice may be waived provided there is written unanimous consent.

(8) The board shall hold examinations for candidates for ophthalmic dispensers' licenses at its regular March and November meetings, and at such other time as the board may determine.

(9) The examination of applicants for a license shall be upon the following subjects:

(a) Ophthalmic lenses;
(b) Dispensing procedure;
(c) Visual aids; and
(d) Mechanical optics.

(10) Examinations shall be conducted in such manner that the result shall be entirely fair and impartial, the applicants being known by numbers only, so that no member of the board shall be able to identify the written examination of any applicant until it has been graded. All applicants examined at the same time shall have the same written questions asked them, and they shall be required to make an average grade of sixty (60) with a minimum grade of fifty (50) in any one (1) branch. Part of the examination may be oral or demonstrative.

(11) All written, *oral or demonstrative* examinations *administered by this board* shall be conducted in the presence of at least one (1) board member [, but the oral or demonstrative examination must be held in the presence of at least three (3) board members].

(12) An applicant who has been rejected may become an applicant at any future examination by submitting a new application on a prescribed form and the payment of the required fee of twenty-five dollars ($25).

(13) An application for a license shall be filed with the board at least twenty (20) days before the examination.

(14) The secretary-treasurer shall keep a permanent record of the names and addresses of all persons holding a license.

(15) The Secretary of State, Commonwealth of Kentucky, shall have the names and addresses of the current chairman and the secretary-treasurer and the board's business address.

(16) All licenses shall be signed by both the chairman and the secretary-treasurer.

(17) All fees and monies collected shall be paid to the secretary-treasurer of the board and shall be deposited in the State Treasury and to the credit of an agency fund for the use of the board.

FRANK B. SANNING, Chairman
ADOPTED: March 15, 1983
RECEIVED BY LRC: May 31, 1983 at 10:15 a.m.
SUBMIT COMMENT OR REQUEST FOR HEARING TO: Suzanne Guss, Assistant Attorney General, Office of the Attorney General, Division of General Legal Services, Capitol Building, Frankfort, Kentucky 40601.

FINANCE AND ADMINISTRATION CABINET
Division of Occupations and Professions
Kentucky Board of Ophthalmic Dispensers
(Proposed Amendment)

201 KAR 13:040. Licensing; application, examination; temporary permit.

RELATES TO: KRS 326.020
PURSUANT TO: KRS 13.082, 326.020(3)
NECESSITY AND FUNCTION: To provide for the licensure of ophthalmic dispensers, apprentice ophthalmic dispensers, and temporary permits; specification of requirements for licensure and applications for licenses.

Section 1. Application for License. (1) Any person wishing to obtain the right to practice the vocation of dispensing optician, under KRS Chapter 326, shall make application to the Kentucky Board of Ophthalmic Dispensers upon Form O.D. No.3-1, adopted by the board May 17, 1966, herein filed by reference; and shall obtain a license from the board permitting him to do so. Unless such person shall have obtained a license as above stated, it shall be unlawful for him to engage in the vocation of dispensing optician within the state of Kentucky, and he shall be subject to the penalties prescribed under the statute. The board shall admit to examination any candidate who pays the required fee of twenty-five dollars ($25) and who submits satisfactory evidence to the board, under oath, that he qualifies under the rules and regulations adopted by the board.

(2) The applicant must be eighteen (18) years of age, of good moral character, a citizen of the United States, and must have completed at least two (2) years of satisfactory training and experience in ophthalmic dispensing under the supervision of a licensed ophthalmic dispenser, licensed physician, osteopath or optometrist, or be a graduate of an accepted school of ophthalmic dispensing. Such two (2) years of training and experience must be as a licensed apprentice as hereinafter mentioned unless it is clearly shown to the satisfaction of the board, in its sole discretion, that

the training and experience of the applicant is otherwise satisfactory; provided, however, that any time spent in a recognized school for ophthalmic dispensing or in an optical laboratory as an ophthalmic technician may, at the discretion of the board, be considered as a part of the two (2) years of satisfactory training and experience.

(3) Applicants for examination may be examined by the board upon matters pertaining to mathematics and physics, ophthalmic materials and laboratory techniques, ophthalmic optics, ophthalmic dispensing and practical subjects. When any applicant passes the necessary examination and meets the qualifications as set forth, the board shall issue a license to such person to engage in the vocation of dispensing optician within the state of Kentucky. Such license shall be subject to renewal on December 31 of each year, upon renewal application Form No. 2, herein filed by reference; and upon the payment of the required fee of ten dollars ($10), wherein a renewal certificate will be issued.

(4) An applicant training as an apprentice must pass the examination within five (5) years of expiration of his apprenticeship term.

Section 2. Apprentice License Application. For the encouragement and protection of those desiring to enter the vocation of ophthalmic dispensing as defined by KRS Chapter 326, the board has provided an apprentice training program. Applicants for apprentice licenses shall use the same form provided for other applicants in Section 1 of this regulation, and shall answer all questions except Sections (3) and (7), A, B, C. All other questions must be filled out and the applicant must show good faith of his intention to learn the vocation of ophthalmic dispensing; that he intends to apply himself to the subject; and that at the earliest date after the expiration of two (2) years apprenticeship training, he intends to apply to the board for examination to be licensed as an ophthalmic dispenser. Since this program is designed to encourage apprenticeship training and the development of highly skilled and well qualified ophthalmic dispensers, the board will limit the number of apprentices to not more than one (1) apprentice to each active registered ophthalmic dispenser in each establishment.

Section 3. Temporary Permit Application. The board may issue a temporary permit to qualified ophthalmic dispensers, who otherwise would qualify for a license but are in the state on a temporary basis or who have not yet had an opportunity to take an examination to procure a license and whose immediate employment depends upon being licensed by the board. Applicants for temporary permits shall use the same form provided for other applicants in Section 1 of this regulation, and shall answer only Sections (7) and (8). The permit shall be valid only until the next regular examination date and in no case shall exceed six (6) months following date of issuance. The fee for a temporary permit shall be ten dollars ($10), which amount shall accompany the application.

Section 4. Board Action, Notification. (1) The board will act only upon those applications which are completely and properly filled out by the applicant. Each applicant must enclose the prescribed license fee in the form of a check or money order made payable to the Commonwealth of Kentucky State Treasurer.

(2) Applicants will be notified of the action of the board; and, if favorable, when and where the examination will be held.

FRANK B. SANNING, Chairman

ADOPTED: March 15, 1983

RECEIVED BY LRC: May 31, 1983 at 10:15 a.m.

SUBMIT COMMENT OR REQUEST FOR HEARING TO: Suzanne Guss, Assistant Attorney General, Office of the Attorney General, Division of General Legal Services, Capitol Building, Frankfort, Kentucky 40601.

NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION CABINET
Department for Environmental Protection
Division of Waste Management
(Proposed Amendment)

401 KAR 30:010. Definitions.

RELATES TO: KRS 224.033, 224.835, 224.846, 224.855 to 224.889

PURSUANT TO: KRS 13.082, *13.083,* 224.017, 224.033(24)

NECESSITY AND FUNCTION: KRS 224.017 and the waste management provisions of KRS Chapter 224 require the Natural Resources and Environmental Protection Cabinet to adopt rules and regulations for the management of solid and hazardous wastes. This chapter establishes the general administrative procedures which are applicable to 401 KAR Chapters 31 through 49. This regulation defines essential terms used in connection with the waste management regulations.

Section 1. Definitions. Unless otherwise specifically defined in KRS Chapter 224 or otherwise clearly indicated by their context, terms in KRS Chapter 224 and in the waste management regulations shall have the meanings given in this regulation.

(1) "Active fault" means a land area which, according to the weight of geological evidence, has a reasonable probability of being affected by movement along a fault to the extent that a hazardous waste site or facility would be damaged and thereby pose a threat to human health and the environment.

(2) "Active life of a facility" means that period of time for a facility between the beginning of construction and continuing through the closure period.

(3) [(2)] "Active portion" means any area of a facility where treatment, storage or disposal operations are being conducted. It includes the treated area of a landfarm and the active face of a landfill. Covered, closed, or inactive portions of landfills, building roofs, and roads are excluded unless designated as "active portions" by the secretary.

(4) [(3)] "Administrator" means the administrator of the United States Environmental Protection Agency, or his designee.

(5) "Admixed liner" means a liner made from a mixture of any of a multitude of materials, often asphalt or cement, with widely varying physical and chemical properties. Admixed liners must be demonstrated to be structurally sound and chemically resistant to the waste placed in it so as to be capable of supporting the waste without cracking or disintegrating or allowing waste or leachate to escape.

(6) [(4)] "Agricultural waste" means any non-hazardous waste resulting from the production and processing of on-

the-farm agricultural products, including manures, prunings and crop residues.

(7) "Ampule" means a small sealed glass container for one (1) dose of sterile medicine.

(8) [(5)] "Aquifer" means a geologic formation, group of formations, or part of a formation capable of yielding a significant amount of groundwater to wells or springs.

(9) [(6)] "Attenuation" means any decrease in the maximum concentration or total quantity of an applied chemical or biological constituent in a fixed time or distance traveled resulting from a physical, chemical, and/or biological reaction or transformation occurring in the zone of aeration or zone of saturation.

(10) "Authorized representative" means the person responsible for the overall operation of a facility or an operational unit (i.e., part of a facility), e.g., the plant manager, superintendent or person of equivalent responsibility.

(11) [(7)] "Base flood" means a flood that has a one (1) percent or greater chance of recurring in any year or a flood of a magnitude equalled or exceeded once in 100 years on the average over a significantly long period.

(12) "Board" means the Kentucky regional integrated waste treatment and disposal facility siting board (KRS 224.2201(1)).

(13) "Cabinet" means the Natural Resources and Environmental Protection Cabinet (KRS 224.005(7)).

(14) [(8)] "Cation exchange capacity" means the sum of exchangeable cations a soil can absorb expressed in milliequivalents per 100 grams of soil as determined by sampling the soil to the depth of cultivation or solid waste placement, whichever is greater, and analyzing by the summation method for distinctly acid soils or the sodium acetate method for neutral, calcareous or saline soils.

(15) [(9)] "Cell" means a portion of a landfill which is isolated, usually by means of an approved barrier.

(16) "Certificate" means a certificate of environmental safety and public necessity (KRS 224.2201(2)).

(17) "Certification" means a statement of professional opinion based upon knowledge and belief.

(18) [(10)] "Closed portion" means that portion of a facility which an owner or operator has closed in accordance with the approved facility closure plan and all applicable closure requirements.

(19) [(11)] "Closure" means the time at which a waste treatment, storage or disposal facility permanently ceases to accept wastes, and includes those actions taken by the owner or operator of the facility to prepare the site for post-closure monitoring and maintenance or to make it suitable for other uses *(KRS 224.005(4)).*

(20) [(12)] "Coal mining solid waste" means solid waste as defined by KRS 224.005 which is generated at, and is incidental to, a coal exploration operation or surface mining and reclamation operation regulated under KRS Chapter 350, and shall not include wastes generated by households, communities, cities, counties, or any person or business other than those regulated under KRS Chapter 350.

(21) [(13)] "Coal mining waste" means earth materials which are combustible, physicially unstable, or acid-forming or toxic-forming, that are generated during and incidental to the mining and extraction of coal and to the washing and crushing of coal. The term does not include used oil, paints or flammable liquids. The term includes the following:

(a) Refuse which is that waste material in the raw coal which it is the object of cleaning to remove;

(b) Overburden which includes all of the earth and other geologic materials, excluding topsoil, which lie above a natural deposit of coal and also means such earth and other material after removal from their natural state in the process of mining; and

(c) Coal mining by-products which include any material that is not one (1) of the primary products of a particular coal mining operation, is a secondary and incidental product of the particular operation and would not be solely and separately mined by the particular operation. The term does not include an intermediate mining product which results from one (1) of the steps in a mining process and is processed through the next step of the process within a short time. An example of a coal mining by-product is that part of the ore deposit that is too low in grade to be of economic value at the time, but which is stored separately in the hope that it can be profitably treated later.

(22) [(14)] "Confined aquifer" means an aquifer bounded above and below by impermeable beds or by beds of distinctly lower permeability than that of the aquifer itself; an aquifer containing confined groundwater.

(23) [(15)] "Constituent" or "hazardous waste constituent" means a constituent which caused the cabinet to list the hazardous waste in 401 KAR 31:040, or a constituent listed in [Table I of 40 CFR 261.24 which is incorporated by reference in] Section 5*(3)* of 401 KAR 31:030.

(24) [(16)] "Construction materials" means non-hazardous non-soluble material, including but not limited to steel, concrete, brick, asphalt roofing material, or lumber from a construction or demolition project. Mixture of construction and demolition debris with any amount of other types of waste may cause it to be classified as other than construction materials.

(25) "Contained landfill" see subsection (137)(c) of this section.

(26) [(17)] "Container" means any portable enclosure in which a material is stored, transported, treated, disposed, or otherwise handled.

(27) [(18)] "Contaminate" means introduce a substance that would cause:

(a) The concentration of that substance in the groundwater to exceed the maximum contaminant level specified in Section 2 of 401 KAR 30:030.

(b) An increase in the concentration of that substance in the groundwater where the existing concentration of that substance exceeds the maximum contaminant level specified in Section 2 of 401 KAR 30:030.

(28) [(19)] "Contamination" means the degradation of naturally occurring water, air, or soil quality either directly or indirectly as a result of human activities.

(29) [(20)] "Contingency plan" means a document setting out an organized, planned, and coordinated course of action to be followed in the event of a fire, explosion or release of waste or waste constituents into the environment which has the potential for endangering human health and the environment. Financial planning to identify resources for initiation of such action is a part of contingency plan development.

(30) [(21)] "Cover material" means soil or other suitable material that is spread and compacted on the top and side slopes of disposed waste in order to control disease vectors, gases, erosion, fires, and infiltration of precipitation or run-on; support vegetation; provide trafficability; or assure an aesthetic appearance.

(31) "Decontaminated" means all artificially-placed harmful or toxic materials have been removed returning the material to its original background contamination levels.

(32) [(22)] "Destruction or adverse modification" means a direct or indirect alteration of critical habitat

which appreciably diminishes the likelihood of the survival and recovery of threatened or endangered species using that habitat.

(33) [(23)] "Dike" means an embankment or ridge of either natural or man-made materials used to prevent the movement of liquids, sludges, solids, or other materials.

(34) [(24)] "Director" means the director of the cabinet's division of waste management.

(35) [(25)] "Discharge" means *but is not limited to* [the accidental or intentional] spilling, leaking, pumping, pouring, emitting, emptying, or dumping *(KRS 224.877(a))* [of solid or hazardous waste into or on any land or water].

(36) [(26)] "Disease vector" means all insects, birds or gnawing animals such as rats, mice or ground squirrels, which are capable of transmitting pathogens.

(37) [(27)] "Disposal" means the discharge, deposit, injection, dumping, spilling, leaking, or placing of any solid waste or hazardous waste into or on any land or water so that such solid waste or hazardous waste or any constituent thereof may enter the environment, be emitted into the air or be discharged into any water, including groundwaters *(KRS 224.005(8))*.

(38) "Disposal facility" see subsection (64)(a) of this section.

(39) "Elementary neutralization unit" see subsection (64)(b) of this section.

(40) [(28)] "Endangered or threatened species" means any species listed as such pursuant to Section 4 of the Endangered Species Act, as amended, 16 U.S.C. 1536.

(41) "Environmental emergency" includes any release or threatened release of materials into the environment in such quantities or concentrations as cause or threaten to cause an imminent and substantial danger to human health or the environment; the term includes, but is not limited to, discharges of oil and hazardous substances prohibited by section 311(b)(3) of the federal Clean Water Act (P.L. 92-500), as amended (KRS 224.877(1)(d).

(42) [(29)] "EPA hazardous waste number" means the number assigned by EPA *and the cabinet* to each hazardous waste listed in 401 KAR 31:040, and to each characteristic identified in 401 KAR 31:030.

(43) [(30)] "EPA identification number" means the number assigned by EPA or the cabinet to each generator, transporter, and treatment, storage, or disposal facility.

(44) "EPA region" means the states and territories found in any one (1) of the following ten (10) regions:

Region I—Maine, Vermont, New Hampshire, Massachusetts, Connecticut, and Rhode Island.

Region II—New York, New Jersey, Puerto Rico, and the Virgin Islands.

Region III—Pennsylvania, Delaware, Maryland, West Virginia, Virginia, and the District of Columbia.

Region IV—Kentucky, Tennessee, North Carolina, Mississippi, Alabama, Georgia, South Carolina, and Florida.

Region V—Minnesota, Wisconsin, Illinois, Michigan, Indiana, and Ohio.

Region VI—New Mexico, Oklahoma, Arkansas, Louisiana, and Texas.

Region VII—Nebraska, Kansas, Missouri, and Iowa.

Region VIII—Montana, Wyoming, North Dakota, South Dakota, Utah, and Colorado.

Region IX—California, Nevada, Arizona, Hawaii, Guam, American Samoa, and Commonwealth of Northern Mariana Islands.

Region X—Washington, Oregon, Idaho, and Alaska.

(45) [(31)] "Equivalent method" means any testing or analytical method, approved *jointly* by the administrator *and* [or] the secretary under 401 KAR Chapter 31, or methods in 401 KAR 47:040 or 401 KAR 47:050, approved by the secretary of the cabinet.

(46) [(32)] "Existing hazardous waste *site or* [management] facility" *or "existing facility"* means a hazardous waste facility which was in operation, or for which continuous construction had commenced, on or before November 19, 1980. A facility *has* [had] commenced construction if*:*

(a) The owner or operator had obtained *the federal, state and local* [all necessary governmental] approvals or permits necessary to begin physical construction; and

(b) Either:

1. A continuous on-site, physical construction program has begun; or

2. The owner or operator has entered into contractual obligations, which cannot be cancelled or modified without substantial loss, for physical construction of the facility to be completed within a reasonable time. [Such construction had begun or contractual obligations for physical construction which cannot be cancelled or modified without substantial loss are established.]

(47) "Existing portion" means that land surface area of an existing hazardous waste management unit, included in the original Part A permit application, on which wastes have been placed prior to the issuance of a permit.

(48) [(33)] "Explosive gas" means methane (CH_4) in 401 KAR 30:030, Section 1(1).

(49) [(34)] "Facility" means all contiguous land, and structures, other appurtenances, and improvements on the land, used for treating, storing, or disposing of waste. A facility may consist of several treatment, storage, or disposal operational units (e.g., one (1) or more landfills, surface impoundments, or combination of them).

(50) [(35)] "Facility structures" means any buildings and sheds or utility or drainage lines on the solid waste site or facility.

(51) [(36)] "Federal agency" means any department, agency, or other instrumentality of the federal government, any independent agency or establishment of the federal government including any government corporation, and the United States Government Printing Office.

(52) [(37)] "Final closure of a waste facility" means the procedures which must be followed by a facility owner/operator when it is determined that the facility will no longer accept waste for treatment, storage, or disposal on the entire facility.

(53) [(38)] "Final cover" means cover material, soil or other suitable material, that is applied upon closure of a landfill or sanitary landfill and is permanently exposed to the natural elements.

(54) [(39)] "Flood plain" means areas adjoining inland waters which are inundated by the base flood, unless othewise specified in 401 KAR 47:040.

(55) [(40)] "Food chain crops" means tobacco, crops grown for human consumption, and crops grown for feed for animals whose products are consumed by humans.

(56) [(41)] "Freeboard" means the vertical distance between the top of a tank or surface impoundment dike and the surface of the waste contained therein.

(57) [(42)] "Free liquids" means liquids which readily separate from the solid portion of a waste under ambient temperature and pressure.

(58) [(43)] "Generator" means any person, by site, whose act or process produces hazardous waste identified or listed in 401 KAR Chapter 31 or whose act first causes a hazardous waste to become subject to regulation.

(59) [(44)] "Groundwater" means water which is in the

zone of perennial saturation. It is differentiated from water held in the soil, from water in downward motion under the force of gravity in the perennially unsaturated zone, and from water held in chemical or electrostatic bondage. It is synonymous with the term "phreatic water."

(60) [(45)] "Groundwater table" means the upper boundary of the saturated zone in which the hydrostatic pressure of the groundwater is equal to the atmospheric pressure.

(61) "Hazardous substance" means any substance or combination of substances including wastes of a solid, liquid, gaseous or semi-solid form which, because of its quantity, concentration or physical, chemical or infectious characteristics, may cause or significantly contribute to an increase in mortality or an increase in serious irreversible or incapacitating reversible illness, or pose a substantial present or potential hazard to human health or the environment. Such substances may include but are not limited to those which are, according to criteria established by the cabinet, toxic, corrosive, ignitable, irritants, strong sensitizers or explosive (KRS 224.877(b)).

(62) "Hazardous waste constituent" means a constituent that caused the administrator to list the hazardous waste in 401 KAR 31:040, or a constituent listed in Section 5(3) of 401 KAR 31:030.

(63) [(46)] "Hazardous waste management" means the systematic control of the collection, source separation, storage, transportation, processing, treatment, recovery, and disposal of hazardous waste.

(64) [(47)] "Hazardous waste site or facility" means any place at which hazardous waste is treated, stored, and/or disposed of by landfilling, incineration, or any other method.

(a) "Disposal facility" means a facility or part of a facility at which hazardous waste is intentionally placed into or on any land or water and at which waste will remain after closure.

(b) "Elementary neutralization unit" means a tank, container, transport vehicle, or vessel which is used for neutralizing wastes which are hazardous wastes only because they exhibit the corrosivity characteristic defined in 401 KAR Chapter 31 or are wastes listed in 401 KAR Chapter 31 only for this reason.

(c) "Incinerator" means an enclosed device using controlled flame combustion, the primary purpose of which is to thermally break down hazardous waste. Examples of incinerators are rotary kiln, fluidized bed, and liquid injection incinerators.

(d) "Injection well" means a well into which fluids are injected to achieve subsurface emplacement.

(e) "Landfill" means a disposal facility or part of a facility where hazardous waste is placed in or on land and which is not a land treatment facility, a surface impoundment, or an injection well.

(f) "Land treatment facility" means a facility or part of a facility at which hazardous waste is applied onto or incorporated into the soil surface; such facilities are disposal facilities if the waste will remain after closure.

(g) "Pile" or "waste pile" means any non-containerized accumulation of solid, nonflowing hazardous waste that is used for treatment or storage.

(h) "Storage facility" means a facility or part of a facility at which hazardous waste is held for a temporary period, at the end of which the hazardous waste is treated, disposed, or stored elsewhere. A generator who accumulates his own hazardous wastes in an approved manner for less than ninety (90) days for subsequent transport on-site or off-site is not operating or maintaining a storage facility.

(i) "Surface impoundment" means a facility or part of a facility which is a natural topographic depression, man-made excavation, or diked area formed primarily of earthen materials (although it may be lined with man-made materials), which is designed to hold an accumulation of liquid wastes or wastes containing free liquids, and which is not an injection well. Examples of surface impoundments are holding, storage, settling, and aeration pits, ponds, and lagoons.

(j) "Tank" means a stationary device designed to contain an accumulation of hazardous waste which is constructed primarily of non-earthern materials (e.g., wood, concrete, steel, plastic) which provide structural support.

(k) "Thermal treatment facility" means a facility or part of a facility which uses elevated temperatures as the primary means to change the chemical, physical or biological character or composition of hazardous waste. Examples of thermal treatment processes are incineration, molten salt, pyrolysis, calcination, wet air oxidation, and microwave discharge.

(l) "Totally enclosed treatment facility" means a facility for the treatment of hazardous waste which is directly connected to an industrial production process and which is constructed and operated in a manner which prevents the release of any hazardous waste or any constituent thereof into the environment during treatment. An example is a pipe in which acid is neutralized.

(m) "Treatment facility" means a facility or part of a facility using any method, technique or process, including neutralization, designed to change the physical, chemical, or biological character or composition of any hazardous waste so as to neutralize such waste, or so as to recover energy or material resources from the waste, or so as to render such waste non-hazardous or less hazardous; safer to transport, store, or dispose of; or amenable for recovery, amenable for storage, or reduced in volume.

(n) "Wastewater treatment unit" means a tank which is part of a wastewater treatment facility which is subject to regulation under either Section 402 or Section 307(b) of the Clean Water Act of 1972 and which receives, treats, stores, generates, or accumulates influent wastewater or receives, stores, treats, generates or accumulates wastewater treatment sludge, either of which is a hazardous waste.

(65) [(48)] "Inactive portion" means that portion of a hazardous waste site or facility which is not operated after November 19, 1980.

(66) "Incinerator" see subsection (64)(c) of this section.

(67) [(49)] "Incompatible waste" means a hazardous waste which is unsuitable for placement in a particular device or facility because it may cause corrosion or decay of containment materials, or unsuitable for commingling with another waste or material under uncontrolled conditions because the commingling might produce heat or pressure, fire or explosion, violent reaction, toxic dusts, mists, fumes, or gases, or flammable fumes or gases.

(68) "Individual generation site" means the contiguous site at or on which one (1) or more hazardous wastes are generated. An individual generation site, such as a large manufacturing plant, may have one (1) or more sources of hazardous waste but is considered a single or individual generation site if the site or property is contiguous.

(69) "Inert landfill" see subsection (137)(a) of this section.

(70) [(50)] "Infectious waste" means those wastes which may cause disease or reasonably be suspected of harboring pathogenic organisms; included are wastes resulting from the operation of medical clinics, hospitals, and other facilities producing wastes which may consist of, but are

not limited to, diseased human and animal parts, contaminated bandages, pathological specimens, hypodermic needles, contaminated clothing, and surgical gloves.

(71) "Injection well" see subsection (64)(d) of this section.

(72) [(51)] "Inner liner" means a continuous layer of material placed inside a tank or container which protects the construction materials of the tank or container from the contained hazardous waste or reagents used to treat the hazardous waste.

(73) "In operation" refers to a facility which is treating, storing or disposing of hazardous waste.

(74) [(52)] "Interim status" means the designation of a hazardous waste site or facility which was in existence on November 19, 1980, and has submitted a Part A application under 401 KAR Chapter 38 or under 40 CFR Part *270* [122] and is treated as having a permit until such time as final administrative disposition of such application is made.

(75) [(53)] "International shipment" means the transportation of hazardous waste into or out of the jurisdiction of the United States.

(76) "KPDES" means Kentucky Pollutant Discharge System.

(77) "Labpack" means any large container equal to or smaller than fifty-five (55) gallons that holds many smaller containers of various content tightly secured with packing material.

(78) "Landfarming facility" see subsection (137)(e) of this section.

(79) "Landfill" see subsection (64)(e) of this section.

(80) [(54)] "Landfill cell" means a discrete volume of a hazardous waste landfill which uses a liner to provide isolation of wastes from adjacent cells or wastes. Examples of landfill cells are trenches and pits.

(81) "Land treatment facility" see subsection (64)(f) of this section.

(82) [(55)] "Leachate" means any liquid including any suspended components in the liquid, that has percolated through or drained from waste.

(83) [(56)] "Liner" means a continuous layer of natural or man-made material, beneath or on the sides of a hazardous waste *site or facility, including but not limited to a waste pile,* surface impoundment, landfill, or landfill cell, or beneath or on the sides of a solid waste site or facility which restricts the movement of the wastes, waste constituents, or leachate.

(84) [(57)] "Lower explosive limit" means the lowest percent by volume of a mixture of explosive gases which will propagate a flame in air at twenty-five (25) degrees Celsius and atmospheric pressure.

(85) [(58)] "Major modification" means a change in ownership where the cabinet determines that other changes in the permit are necessary as a result of the change in ownership or operational control, area occupied, disposal method, or other significant change in the operation of a waste management facility. (Note: Minor modifications are described in Section *3* [2(5)] of 401 KAR 38:040.)

(86) [(59)] "Manifest" means the shipping document originated and signed by the generator, *used in a management control system to trace the movement of hazardous wastes from generation to final disposal (KRS 224.005(30))* [which contains information required by 401 KAR Chapter 32].

(87) [(60)] "Manifest document number" means the serially increasing number assigned to the manifest by the generator for recordkeeping and reporting purposes.

(88) [(61)] "Mining overburden returned to the mine site" means any material overlying an economic mineral deposit which is removed to gain access to that desposit and is then used for reclamation of a surface mine.

(89) [(62)] "Monitoring" means the act of systematically inspecting and collecting data on operational parameters or on the quality of the air, soil, groundwater, or surface water.

(90) [(63)] "Monitoring well" means a well used to obtain water samples for water quality and quantity analysis and groundwater levels.

(91) [(64)] "Movement" means that hazardous waste transported to a facility in an individual vehicle.

(92) "NPDES" means National Pollutant Discharge Elimination System (KRS 224.005(29)).

(93) [(65)] "New" means any hazardous waste site or facility that commenced construction after November 19, 1980.

(94) "Off-site" means properties non-contiguous to the generation site.

(95) [(g)] "On-site" means on the same or geographically contiguous property which may be divided by public or private right-of-way, provided the entrance and exit between the properties is at a cross-roads intersection, and access is by crossing, as opposed to going along the right-of-way. Non-contiguous properties owned by the same person but connected by a right-of-way which he controls and to which the public does not have access is also considered on-site property.

(96) [(66)] "One-hundred year flood" means a flood that has a one (1) percent or one (1) in 100 or greater chance of recurring in any year, or a flood of a magnitude equalled or exceeded once in 100 years on the average over a significantly long period, taking into consideration the present engineering aspect of the floodplain.

(97) [(67)] "Open burning" means the combustion of any material without:

(a) Control of combustion air to maintain adequate temperature for efficient combustion;

(b) Containment of the combustion reaction in an enclosed device to provide sufficient residence time and mixing for complete combustion; and

(c) Control of emission of the gaseous combustion products.

(98) "Open dump" means any facility or site for the disposal of solid waste which does not meet the criteria for a sanitary landfill under regulations promulgated by the department which shall be consistent with regulations promulgated under section 4004, Resource Conservation and Recovery Act of 1976, as amended (P.L. 94-580), and which is not a facility for disposal of hazardous waste (KRS 224.005(31)).

(99) [(68)] "Operational plan" means the approved plan of operations filed with the cabinet which describes the method of operation that the permittee will use in the treatment, storage, and/or disposal of wastes.

(100) [(69)] "Owner/operator of a waste facility" means the owner of an on-site or off-site waste treatment, storage, or disposal facility, as well as any person with whom rests ultimate decision-making authority over the facility.

(101) [(70)] "Part A of the application" or "Part A" means the standard forms or format for applying for a hazardous waste site or facility permit as required in 401 KAR *38:080. [38:070, Section 8. Specifically, Part A consists of Forms 1 and 3 of the federal consolidated permit application found in 40 CFR 122.24 or the Kentucky equivalent, Registration of Intent to Apply for a Permit.]*

(102) [(71)] "Part B of the application" or "Part B"

means the standard format for applying for a hazardous waste site or facility permit as required in *401 KAR 38:090 through 401 KAR 38:210* [Sections 9 and 10 of 401 KAR 38:070 and Sections 1 through 6 of 401 KAR 38:080]. Specifically, Part B consists of submitting all of the information required in Sections 9 and 10 of 401 KAR 38:070 and Sections 1 through 6 of 401 KAR 38:080; there are no official forms for the submission.

(103) [(72)] "Partial closure of a hazardous waste facility" means the closure of a discrete part of a facility in accordance with the applicable closure requirements of 401 KAR Chapter 34 or 35.

(104) [(73)] "Periodic application of cover material" means the application and compaction of soil or other suitable material over disposed waste at a solid waste site or facility at the end of each operating day or at such frequencies and in such a manner as to reduce the risks of fire and to impede disease vector's access to the waste.

(105) [(74)] "Permit" means the authorization or other control document issued by the cabinet to implement the requirements of the waste management regulations. *The term* "permit" includes *also* "permit by rule," and "emergency permit." *However, the term* "permit" does not include "draft permit" or a "proposed permit:"

(a) "Emergency permit" means a permit issued by the cabinet to temporarily store, treat or dispose of hazardous waste in accordance with the provisions of 401 KAR 38:010, Section 4.

(b) "Permit by rule" means that certain classes of sites or facilities are presumed to hold a permit so long as the operations of such sites or facilities meet interim status requirements and/or do not present a threat of imminent hazard to public health or a substantial environmental impact, in violation of any of the environmental performance standards specified in 401 KAR 30:020 or 30:030.

(106) [(75)] "Permittee" means any person holding a valid permit issued by the cabinet to manage, treat, store, and/or dispose of waste.

(107) "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, or any interstate body (KRS 224.005(12)).

(108) [(76)] "Personnel" or "facility personnel" means all persons who work at or oversee the operations of a waste facility, and whose actions or failure to act may result in noncompliance with the requirements of the waste management regulations.

(109 [(77)] "Pile" *see subsection (64)(g) of this section* [means any non-containerized accumulation of solid, nonflowing hazardous waste that is used for treatment or storage].

(110) [(78)] "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, or vessel or other floating craft from which polluants are or may be discharged. This term does not include return flows from irrigated agriculture.

(111) [(79)] "Post closure care" means the manner in which a facility must be maintained when it no longer accepts hazardous waste for disposal.

(112) [(80)] "Post-closure monitoring and maintenance" means the routine care, maintenance and monitoring of a solid waste *disposal facility* or hazardous waste treatment, storage, or disposal facility following closure of the facility.

(113) "Preventive measures" means the installation or testing of equipment or devices, designated way of performing a specified operation or the preparation of an emergency response plan (KRS 224.877(c)).

(114) [(81)] "Publicly owned treatment works" or "POTW" means any device or system used in the treatment (including reclamation) of any municipal sewage or industrial wastes of a liquid nature which is owned by the state, any political subdivision, municipality (as defined by Section 502(4) of the Clean Water Act) or other public entity. This definition includes sewers, pipes, or other conveyances only if they convey wastewater to a POTW providing treatment.

(115) [(82)] "Putrescible" means susceptible to rapid decomposition by bacteria, fungi, or oxidation sufficient to cause nuisances such as odors, gases, or other offensive conditions.

(116) [(83)] "Recharge zone" means an area supplying the water which enters an underground drinking water source.

(117) "Recovered material" means waste material and by-products which have been recovered or diverted from waste, but does not include those materials and by-products generated from, and commonly reused within, an original manufacturing process (KRS 224.005(15)).

(118) "Recycling" means any treatment process for the reclamation of material or energy from waste (KRS 224.005(16)).

(119) [(84)] "Regional Administrator" means the regional administrator for the EPA region in which the facility is located, or his designee.

(120) "Regional integrated waste treatment and disposal demonstration facility" means a model hazardous waste facility receiving wastes from a region larger than the county boundaries in which it is located, from more than one (1) person, and utilizing multiple treatment and disposal technologies, one (1) of which must be a secure landfill, and one (1) of which must be a high technology incinerator, and designed so as to promote resource recovery and energy generation from hazardous waste and the use of state-of-the-art techniques for rendering waste non-hazardous, and the disposal of waste in a manner that minimizes the risk to public health and long term environmental impacts (KRS 224.2201(4)).

(121) "Regulated unit" means hazardous waste land disposal sites or facilities, or portions of existing hazardous waste land disposal sites or facilities that continue to receive waste after January 26, 1983.

(122) "Residential landfill" see subsection (137)(b) of this section.

(123) "Residual landfill" see subsection (137)(d) of this section.

(124) [(85)] "Representative sample" means a sample of a universe or whole (e.g., wastepile, lagoon, groundwater) which can be expected to exhibit the average properties of the universe or whole.

(125) [(86)] "Resource recovery" means the process by which materials subject to the waste management regulations which still have useful physical or chemical properties are reused for the same or other purposes, including uses as an energy source.

(126) [(87)] "Run-off" means any rainwater, leachate, or other liquid that drains overland from any part of a facility.

(127) [(88)] "Run-on" means any rainwater, leachate, or other liquid that drains overland onto any part of a facility.

(128) [(89)] "Salvaging" means the controlled removal of waste materials for utilization in a manner approved by

the cabinet.

(129) [(90)] "Sanitary landfill" means a facility for the disposal of solid waste which complies with the "Environmental performance standards" specified in 401 KAR 30:030.

(130) [(91)] "Saturated zone (zone of saturation)" means that part of the earth's crust containing groundwater in which all voids, large and small, are filled with liquid.

(131) [(92)] "Scavenging" means the removal of waste materials from a waste management site or facility in a manner deemed by the cabinet to be dangerous to the health and safety of any person.

(132) "Secretary" means the secretary of the Natural Resources and Environmental Protection Cabinet (KRS 224.005(17)).

(133) [(93)] "Sludge" means any solid, semisolid, or liquid waste generated from a municipal, commercial, or industrial wastewater treatment plant, water supply treatment plant, or air pollution control facility exclusive of the treated effluent from a wastewater treatment plant or any other such waste having similar characteristics and effects.

(134) "Solid waste management" means the administration of solid waste activities: collection, source separation, storage, transportation, transfer, processing, treatment and disposal, which shall be in accordance with a departmentally approved county or multi-county solid waste management plan (KRS 224.005(32)).

(135) "Solid waste management area" or "area" means any county or group of counties so designated by the cabinet by approval of the local solid waste management plan (KRS 224.005(33)).

(136) "Solid waste management facility" means any resource recovery system or component thereof, any system, program or facility for resource conservation, and any facility for collection, source separation, storage, transportation, transfer, processing, treatment or disposal of solid waste, whether such facility is associated with facilities generating such wastes or otherwise (KRS 224.005(34)).

(137) [(94)] "Solid waste site or facility" means one (1) of the four (4) categories of sanitary landfills or a land farming facility permitted by the cabinet for the disposal of solid waste involving the placement of solid waste on or into the land surface as follows:

(a) "Inert landfill" means a facility for the proper disposal of inert, non-soluble and non-putrescible solid waste, including construction materials, certain industrial or special wastes, and other waste material with specific approval from the cabinet. Certain putrescible wood product wastes (such as cardboard, paper, sawdust, woodchips, and tree trimming, etc.) may be considered by the cabinet for disposal at inert landfills.

(b) "Residential landfill" means a facility for the proper disposal of solid waste including residential waste, commercial waste, institutional waste, and those sludges, industrial or special waste with specific approval from the cabinet.

(c) "Contained landfill" means a facility for the proper disposal of solid waste including those industrial wastes, special wastes, or hazardous wastes exempted by regulation and any non-hazardous waste without case-by-case approval from the cabinet.

(d) "Residual landfill" means a facility for the disposal of specific solid waste(s), including special waste, which is located, designed, constructed, operated, maintained and closed in conformance with the "Environmental performance standards" of 401 KAR 30:030, Section 1(1) and which receives a case-by-case design review by the cabinet.

(e) "Landfarming facility" means a facility for land application of sludges or other residual waste by any method for purposes of disposal. It can be on any piece or pieces of land and may improve the physical and chemical qualities of the land for agricultural purposes, but does not alter the topography of the application area as revealed by contours and will not disturb the soil below three (3) feet from the surface.

(138) [(95)] "Special wastes" means those wastes of high volume and low hazard which [commonly] include, but are not [necessarily] limited to, *mining waste,* utility wastes (fly ash, bottom ash, scrubber sludge), [mining wastes,] sludge from [pollution control equipment,] water treatment facilities and *waste water* [sewage] treatment facilities, cement kiln dust, gas and oil drilling muds and oil production brines *(KRS 224.868(1)(a)).*

(139) [(96)] "Spill" means any accidental spilling, leaking, pumping, pouring, emitting, or dumping of hazardous wastes or materials which, when spilled, become hazardous wastes into or on any land or water.

(140) "State" means any of the fifty (50) states, the District of Columbia, the Commonwealth of Puerto Rico, the Virgin Islands, American Samoa, or Guam but does not include any foreign country.

(141) "Storage facility" see subsection (64)(h) of this section.

(142) [(97)] "Storage of hazardous waste" means the holding of hazardous waste for a temporary period, at the end of which the hazardous waste is treated, disposed, or stored elsewhere.

(143) "Surface impoundment" see subsection (64)(i) of this section.

(144) "Tank" see subsection (64)(j) of this section.

(145) [(98)] "Termination" means the final actions taken by the cabinet as to a solid waste or hazardous waste *treatment, storage or disposal* site or facility when formal responsibilities for post-closure monitoring and maintenance cease *(KRS 224.005(19)).*

(146) "Thermal treatment" means the treatment of hazardous waste in a device which uses elevated temperatures as the primary means to change the chemical, physical, or biological character or composition of the hazardous waste. Examples of thermal treatment processes are incineration, molten salt, pyrolysis, calcination, wet air oxidation, and microwave discharge (see also "incinerator" and "open burning").

(147) "Thermal treatment facility" see subsection (64)(k) of this section.

(148) "Totally enclosed treatment facility" see subsection (64)(l) of this section.

(149) [(99)] 'Transfer facility" means any transportation related facility including loading docks, parking areas, storage areas, and other similar areas where shipments of hazardous waste are held during the normal course of transportation.

(150) [(100)] "Transport vehicle" means a motor vehicle or rail car used for the transportation of cargo by any mode. Each cargo-carrying body (trailer, railroad freight car, etc.) is a separate transport vehicle.

(151) "Transportation" means any off-site movement of waste by any mode, and any loading, unloading, or storage incidental thereto (KRS 224.005(22)).

(152) [(101)] "Transporter" means a person engaged in the off-site transportation of hazardous waste by air, rail, highway or water.

(153) "Treatment" means any method, technique, or process including neutralization, designed to change the

physical, chemical, or biological character or composition of any waste so as to neutralize such waste or so as to render such waste nonhazardous, safer for transport, amenable for recovery, amenable for storage, or reduced in volume. Such term includes any activity or processing designed to change the physical form or chemical composition of hazardous waste so as to render it nonhazardous (KRS 224.005(23)).

(154) "Treatment facility" see subsection (64)(m) of this section.

(155) "Treatment zone" means a soil area of the unsaturated zone of a land treatment unit within which hazardous constituents are degraded, transformed, or immobilized.

(156) [(102)] "Trenching or burial operation" means the placement of sewage sludge or septic tank pumpings in a trench or other natural or man-made depression and the covering with soil or other suitable material at the end of each operating day such that the waste does not migrate to the surface.

(157) [(103)] "Underground drinking water source" means:

(a) An aquifer supplying drinking water for human consumption; or

(b) An aquifer in which the groundwater contains less than 10,000 mg/l total dissolved solids.

(158) [(104)] "Underground injection" means the subsurface emplacement of fluids through a bored, drilled or driven well; or through a dug well, where the depth of the dug well is greater than the largest surface dimension. (See also "hazardous waste site or facility, injection well.")

(159) [(105)] "Unsaturated zone (zone of aeration)" means that region of the soil or rock between the land surface and the nearest saturated zone in which the interstices are occupied partially by air.

(160) "Uppermost aquifer" means the geologic formation nearest the natural ground surface that is an aquifer, as well as lower aquifers that are hydraulically interconnected with this aquifer within the facility's property boundary.

(161) [(106)] "Vapor recovery system" means that equipment, device, or apparatus capable of collecting vapors and gases discharged from a storage tank, and a vapor processing system capable of affecting such vapors and gases so as to prevent their emission into the atmosphere.

(162) [(107)] "Vessel" includes every description of watercraft used or capable of being used as a means of transportation on the water.

(163) [(108)] "Washout" means the carrying away of waste by waters of the base flood.

(164) "Waste" means:

(a) "Solid waste" means any garbage, refuse, sludge and other discarded material, including solid, liquid, semisolid, or contained gaseous material resulting from industrial, commercial, mining (excluding coal mining wastes, coal mining by-products, refuse and overburden) and agricultural operations, and from community activities, but does not include solid or dissolved material in domestic sewage, or solid or dissolved material in irrigation return flows or industrial discharges which are point sources subject to permits under section 402 of the federal Water Pollution Control Act, as amended (86 Stat. 880), or source, special nuclear, or by-product material as defined by the Atomic Energy Act of 1954, as amended (68 Stat. 923) (KRS 224.005(24)(a));

(b) "Hazardous waste" means any discarded material or material intended to be discarded or substance or combination of such substances intended to be discarded, in any form which because of its quantity, concentration or physical, chemical or infectious characteristics may cause, or significantly contribute to an increase in mortality or an increase in serious irreversible, or incapacitating reversible, illness or pose a substantial present or potential hazard to human health or the environment when improperly treated, stored, transported, or disposed of, or otherwise managed; nothing in this chapter shall be construed to apply to any activity or substance which is subject to the federal Atomic Energy Act of 1954, as amended (68 Stat. 923) (KRS 224.005(24)(b)).

(165) [(109)] "Waste boundary" means [either:]

[(a)] the outermost perimeter of the waste (projected in the horizontal plane) as it would exist at completion of the disposal activity. [; or]

[(b) An alternative boundary for a facility which may be used in lieu of paragraph (a) when the cabinet finds that such a change would not result in the contamination of groundwater which may be needed or used for human consumption. Such a finding shall be based on an analysis and consideration of all the factors identified in the following subparagraphs of this paragraph that are relevant:]

[1. The hydrogeological characteristics of the facility and surrounding land including any natural attenuation and dilution characteristics of the aquifer;]

[2. The volume and physical and chemical characteristics of the leachate;]

[3. The quantity, quality, and direction of flow of groundwater underlying the facility;]

[4. The proximity and withdrawal rates of groundwater users;]

[5. The availability of alternative drinking water supplies;]

[6. The existing quality of the groundwater, including other sources of contamination and their cumulative impacts on the groundwater; and]

[7. Public health, safety, and welfare effects.]

(166) "Waste management district" means any county or group of counties electing to form under the provisions of KRS 109.071 and operate in conformance with the provisions of KRS Chapter 109 and with Section 4006, Resource and Conservation and Recovery Act of 1976, as amended (P.L. 94-580) (KRS 224.005(25)).

(167) "Wastewater treatment unit" see subsection (64)(n) of this section.

(168) [(110)] "Water (bulk shipment)" means the bulk transportation of hazardous waste which is loaded or carried on board a vessel without containers or labels.

(169) "Water" or "waters of the Commonwealth" means and includes any and all rivers, streams, creeks, lakes, ponds, impounding reservoirs, springs, wells, marshes and all other bodies of surface or underground water, natural or artificial, situated wholly or partly within or bordering upon the Commonwealth or within its jurisdiction (KRS 224.005(26)).

(170) "Well" means any shaft or pit dug or bored into the earth, generally of cylindrical form, and often walled with bricks or tubing to prevent the earth from caving in.

(171) [(111)] "Wetlands" means those areas that are inundated by surface water or groundwater with a frequency and duration sufficient to support a prevalence of vegetation or aquatic life that requires saturated or seasonally saturated soil conditions for growth and reproduction. Wetlands include swamps, marshes, bogs, and similar areas, such as sloughs, potholes, wet meadows, river overflows, mud flats, and natural ponds.

(172) [(112)] "Zone of incorporation" means the depth

to which the soil on a landfarm is plowed, tilled, or otherwise designed to receive waste.

Section 2. Acronyms and Abbreviations. The acronyms and abbreviations used in 401 KAR Chapters 30 through 49 can be found in Table 1.

Table 1. Acronyms and Abbreviations

Am.	*Amended*
C	*Corrosive waste*
CAA	*Clean Air Act*
CFR	*Code of Federal Regulations*
cm	*Centimeter*
cm2	*Centimeter squared*
CO	*Carbon monoxide*
CO2	*Carbon dioxide*
CWA	*Clean Water Act*
DOT	*Department of Transportation*
DRE	*Destruction and removal efficiency*
E	*Explosive waste*
eff.	*Effective*
EPA	*United States Environmental Protection Agency*
EP Toxicity	*Extraction procedure toxicity*
FIA	*Federal Insurance Administration*
FR	*Federal Register*
H	*Acutely hazardous waste*
ha	*Hectare*
I	*Ignitable waste*
KAR	*Kentucky Administrative Regulation*
kg	*Kilogram*
KPDES	*Kentucky Pollution and Discharge Elimination System*
KRS	*Kentucky Revised Statute*
Ky.R.	*Administrative Register of Kentucky*
l	*Liter*
LC	*Lethal concentration*
LD	*Lethal dose*
ml	*Milliliter*
mm	*Millimeter*
N	*Normal*
NESHAPS	*National Emissions Standards for Hazardous Pollutants*
NPDES	*National Pollution and Discharge Elimination System*
PCB	*Polychlorinated biphenyl*
pCi/l	*Picocuries per liter*
PHC	*Principal hazardous constituent*
Permit POHC	*Permitted principal organic hazardous constituent*
POHC	*Principal organic hazardous constituent*
Trial POHC	*Trial burn principal organic hazardous constituent*
POTW	*Publicly owned treatment works*
PSD	*Prevention of significant deterioration*
psi	*Pounds per square inch*
psig	*Pounds per square inch gauge*
R	*Reactive waste*
RCRA	*Resource Conservation and Recovery Act, as amended*
SDWA	*Safe Drinking Water Act*
SEC	*Securities and Exchange Commission*
SIC	*Standard Industrial Classification Code*
SPCC	*Spill Prevention, Control, and Countermeasures Plan*
T	*Toxic waste*
UIC	*Underground Injection Control*
UICP	*Underground Injection Control Program*
USC	*United States Code*
USEPA	*United States Environmental Protection Agency*
USPS	*United States Postal Service*

Section 3. References. Title 401, Chapter 30 through 49, incorporate certain publications by reference. The publications listed in 40 CFR Part 260.11 are adopted and filed herein by reference. Copies of these publications may be obtained as follows:

(1) "ASTM Standard Test Methods for Flash Point of Liquids by Setaflash Closed Tester," ASTM Standard D-3278-78, availablve from American Society for Testing and Materials, 1916 Race Street, Philadelphia, PA 19103.

(2) "Flammable and Combustible Liquids Code" (1977 or 1981), available from the National Fire Protection Association, Battery March Park, Quincy, Massachusetts 02269.

(3) "Test Methods for the Evaluation of Solid Waste, Physical/Chemical Methods" (1980), EPA publication number SW-846, available from the U.S. Environmental Protection Agency, Solid Waste Information, 26 W. St. Clair Street, Cincinnati, Ohio 45268.

(4) "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Publication, SW-846 (Second Edition, 1982), copies are available from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402, (202) 783-3238, on a subscription basis, and future updates will automatically be mailed to this subscriber.

JACKIE SWIGART, Secretary
ADOPTED: June 10, 1983
RECEIVED BY LRC: June 13, 1983 at 11:30 a.m.
See public hearings scheduled on page 1.

NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION CABINET
Department for Environmental Protection
Division of Waste Management
(Proposed Amendment)

401 KAR 30:020. General provisions.

RELATES TO: KRS 224.033, 224.830 to 224.846, 224.855 to 224.889
PURSUANT TO: KRS 13.082, *13.083,* 224.017, 224.033(24)
NECESSITY AND FUNCTION: KRS 224.017, 224.033 and the waste management provisions of KRS Chapter 224 require the Natural Resources and Environmental Protection Cabinet to adopt rules and regulations for the generation, treatment, storage, recycling and disposal of hazardous wastes and the disposal of solid wastes. This chapter establishes the general administrative procedures which are applicable 401 KAR Chapters 31 through 49. This regulation sets forth general provisions which apply to the waste management regulations with regard to applicability, scope, exceptions, variances, general prohibitions, compatibility, conflicting provisions, and severability.

Section 1. Applicability. The waste management regulations shall apply to the disposal of solid waste and the management of all liquid, semisolid, solid, or gaseous waste defined or identified as hazardous in KRS Chapter

224 or the appropriate regulations (401 KAR 30:010, 401 KAR Chapter 31) by all persons and state and federal agencies who engage in the generation, treatment, storage, or disposal of such wastes, including hazardous substances spilled into the environment, thereby meeting the criteria of hazardous waste.

(1) The waste management regulations apply to all waste disposal sites or facilities with the following exceptions:

(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. *(Note:* these *exemptions* [regulations] do *not* apply to sludges generated by the treatment of domestic sewage.*)*

(b) Industrial wastewater discharges that are point source discharges subject to regulation under Section 402 of the Clean Water Act, as amended. *(Note:* these *exemptions* [regulations] do *not* apply to sludges generated by the treatment of industrial wastewater.*)*

(c) Solid or dissolved materials in irrigation return flows.

(d) Source special nuclear or by-product material as defined by the Atomic Energy Act, as amended 42 U.S.C. 2011 et seq.

(e) Materials subjected to in situ mining techniques which are not removed from the ground as part of the extraction process.

(2) Any waste that is not excepted by subsection (1) of this section and that is identified or listed under 401 KAR Chapter 31 is subject to the waste management regulations pertaining to hazardous waste.

(3) Any waste which is not excepted by subsection (1) and which is not subject to subsection (2) is subject to the waste management regulations pertaining to solid waste except for:

(a) Agricultural wastes including manures and crop residues, returned to the soil as fertilizers or soil conditioners.

(b) Overburden resulting from mining operations intended for return to the mine site and coal mining wastes, refuse, overburden and coal mining by-products.

(c) The location and operation of septic tanks. These regulations do, however, apply to the disposal of septic tank pumpings.

(d) Disposal of waste by underground well injection subject to the regulations (40 CFR Part 146) for the Underground Injection Control Program (UICP) under the Safe Drinking Water Act, as amended, 42 U.S.C. 3007 et seq.

Section 2. Variance. A variance, except as provided in 401 KAR Chapter 38, is a written waiver from any provision of the waste management regulations, [except the "Environmental performance standards" (401 KAR 30:030)] upon the finding by the cabinet that the absence of such provision(s) will provide adequate protection to health and the environment in a manner consistent with the purpose of the waste management regulations and KRS Chapter 224.

(1) The cabinet may grant a variance or permit modification from the requirements of the waste management regulations if a waste or permit requirement is determined by the cabinet to be either:

(a) Insignificant as a potential hazard to public health or the environment because of its small quantity, low concentration, or physical, biological, or chemical characteristics; or

(b) Handled, processed, or disposed of pursuant to regulations of another governmental agency, providing the regulations of other agencies meet the requirements of the waste management regulations, including federal [delisting or] exemption rulemaking actions pertaining to hazardous waste management.

(2) A request for variance from a requirement of the waste management regulations shall be submitted in a report as prescribed by the cabinet in sufficient detail to describe clearly the analyses, procedures, controls, and other pertinent data necessary to support the request. The granting of such a request by the cabinet shall be in writing and shall specify appropriate conditions such as duration, limitations, and review procedures.

(3) The cabinet will not grant any request for a variance which:

(a) Would make the program less stringent than the federal hazardous waste management program; or

(b) Would be in conflict with Kentucky Revised Statutes; or

(c) Would be in conflict with a regulatory provision stating that no variance shall be granted; or

(d) Would vary the requirements of 401 KAR 30:030; or

(e) Would vary the financial responsibility requirements in a manner conflicting with Section 1 of 401 KAR 34:080 or Section 1 of 401 KAT 35:080.

Section 3. Compatability with the Federal Acts. The regulations promulgated pursuant to the waste management provisions of KRS Chapter 224 are intended to be compatible with federal regulations adopted pursuant to Public Law 94-580, the "Resource Conservation and Recovery Act of 1976," as amended.

Section 4. Conflicting Provisions. The provisions of the waste management regulations are to be construed as being compatible with and complimentary to each other. In the event that any of these regulations are found to be contradictory, the more stringent provisions shall apply.

Section 5. Severability. In the event that any provision of KRS Chapter 224 or any regulation promulgated pursuant thereto is found to be invalid, the remaining waste management regulations shall not be affected or diminished thereby.

Section 6. Use of Number and Gender. As used in 401 KAR Chapters 30 through 49:

(1) Words in masculine gender also include the feminine and neuter genders; and

(2) Words in the singular include the plural; and

(3) Words in the plural include the singular.

JACKIE SWIGART, Secretary

ADOPTED: June 10, 1983

RECEIVED BY LRC: June 13, 1983 at 11:30 a.m.

See public hearings scheduled on page 1.

NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION CABINET
Department for Environmental Protection
Division of Waste Management
(Proposed Amendment)

401 KAR 30:030. Environmental performance standards.

RELATES TO: KRS 224.033, 224.830 to 224.846, 224.855 to 224.889
PURSUANT TO: KRS 13.082, 224.017, 224.033(24)
NECESSITY AND FUNCTION: KRS 224.017, 224.033 and the waste management provisions of KRS Chapter 224 require the Natural Resources and Environmental Protection Cabinet to adopt rules and regulations for the generation, treatment, storage, recycling, disposal of hazardous wastes and the disposal of solid wastes. This chapter establishes the general administrative procedures which are applicable to 401 KAR Chapters 31 through 49. This regulation sets forth the environmental performance standards *which the permit applicant must demonstrate compliance with and* which are applicable to any waste *management* site or facility.

Section 1. Standards. These standards are for use under the waste management provisions of KRS Chapter 224 in determining which waste *management* [disposal] sites or facilities pose a reasonable probability of adverse effects on health or the environment. Solid waste *management* [disposal] sites or facilities failing to satisfy the applicable standards will be considered open dumps which are prohibited by KRS 224.835. Hazardous wastes *management* [disposal] sites or facilities failing to satisfy the standards of this section will be considered to be in violation of the hazardous waste management provisions of KRS Chapter 224.

(1) No waste *management* [disposal] site or facility shall:

(a) Restrict the flow of the base flood, reduce the temporary water storage capacity of the floodplain, or result in washout of waste, so as to pose a hazard to human life, wildlife, or land or water resources.

(b) Cause or contribute to the taking of any endangered or threatened species of plants, fish, or wildlife.

(c) Result in the destruction or adverse modification of the critical habitat of endangered or theatened species as identified in the Endangered Species Act and subsequent regulations.

(d) Cause a discharge of pollutants into waters of the Commonwealth that is in violation of the requirements of KRS Chapter 224.

(e) Cause a discharge of dredged material or fill material to waters of the Commonwealth that is in violation of the requirements under Section 404 of the Clean Water Act, as amended.

(f) Cause non-point source pollution of waters of the Commonwealth that violates applicable legal requirements established to implement an areawide or statewide water quality management plan that has been approved by the cabinet.

(g) Contaminate an underground drinking water source beyond the waste boundary. The maximum contaminant levels for this paragraph are contained in Section 2 of this regulation.

(h) Exist or occur which applies solid waste or special waste to within three (3) feet (one (1) meter) of the surface of land used for the production of food-chain crops unless in compliance with all the requirements of subparagraphs 1, 2, 3 or with all the requirements of subparagraphs 6, 7, 8, and 9 of this paragraph:

1. The pH of the solid waste or special waste and soil mixture is 6.5 or greater at the time of each solid waste or special waste application, except for solid waste or special waste containing cadmium at concentrations of 2 mg/kg (dry weight) or less;

2. And the annual application of cadmium from solid waste or special waste does not exceed 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:

Time Period	Annual Cd Application Rate (kg/ha)
Present to June 30, 1984	2.0
July 1, 1984 to Dec. 31, 1986	1.25
Beginning Jan. 1, 1987	0.5

3. And the cumulative application of cadmium from the waste does not exceed the levels in either subparagraphs 4 or 5 of this paragraph:

4. Table.

Soil Cation Exchange Capacity (meq/100g)	Maximum cumulative application (kg/ha) Background Soil pH <6.5	Background Soil pH >6.5
<5	5	5
5-15	5	10
>15	5	20

5. For soils with a background pH of less than 6.5, the cumulative cadmium application rate does not exceed the levels below: Provided, that the pH of the waste and soil mixture is adjusted to and maintained at 6.5 or greater whenever food-chain crops are grown.

Soil Cation Exchange Capacity (meq/100g)	Maximum Cumulative Application (kg/ha)
<5	5
5-15	10
>15	20

6. The only food-chain crop produced is animal feed.

7. And the pH of the waste and soil mixture is 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.

8. And there is a facility operating plan which demonstrates how the animal feed will 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.

9. And 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 should not be grown due to a possible health hazard.

(i) Exist or occur which applies solid waste or special waste containing concentrations of polychlorinated biphenyls (PCBs) equal to or greater than 10 mg/kg (dry

weight) to within three (3) feet (one (1) meter) of the surface of land used for producing animal feed, including pasture crops for animals raised for milk. Incorporation of the solid waste or special waste into the soil is not required if it is assured that the PCB content is less than 0.2 mg/kg (actual weight) in animal feed or less than 1.5 mg/kg (fat basis) in milk.

(j) Exist or occur unless the on-site population of disease vectors is minimized through the periodic application of cover material or other techniques as appropriate so as to protect public health.

(k) Exist or occur which applies sewage sludge or septic tank pumpings to within three (3) feet (one (1) meter) of the surface of the land unless a method to reduce pathogens has been utilized.

(l) Engage in open burning solid waste, special waste or hazardous wastes. This requirement does not apply to infrequent burning of agricultural wastes in the field, silvicultural wastes for forest management purposes, land-clearing debris, diseased trees, debris from emergency clean-up operations, and ordnance.

(m) Violate applicable *air pollution* requirements developed under the state implementation plan approved or promulgated by the cabinet pursuant to KRS Chapter 224.

(n) Exceed the concentration of explosive gases:

1. Twenty-five percent (25%) of the lower explosive limit for the gases in facility structures (excluding gas control or recovery system components); and

2. The lower explosive limit for the gases at the facility boundary.

(o) Pose a hazard to the safety of persons or property from fires. This may be accomplished through compliance with paragraphs (l) and (m) of this subsection through the periodic application of cover material or other techniques as appropriate.

(p) Allow uncontrolled public access so as to expose the public to potential health and safety hazards at the disposal site.

(q) Result in a public nuisance because of blowing litter, debris, dust or other waste or material.

(r) Exist which poses the threat of allowing pollution to enter karstic terrain.

(2) In addition to the requirements of subsection (1) of this section, no hazardous waste *management* [disposal] site or facility [, except for facilities regulated pursuant to the interim status standards,] shall cause a reasonable probability of adverse effects on groundwater quality, surface water quality, and air quality or cause a reasonable probability of adverse effects due to migration of waste constituents considering:

(a) The volume and physical and chemical characteristics of the waste in the facility, including its potential for migration through soil or through *natural or* synthetic liner materials and its potential for volatilization and wind dispersal;

(b) The hydrogeological and geological characteristics of the facility and surrounding land, including the topography of the area around the facility;

(c) The quantity, quality and directions of groundwater flow;

(d) The proximity and withdrawal rates of groundwater users;

(e) The existing quality of groundwater, including other sources of contamination and their cumulative impact on the groundwater;

(f) The potential for health risks caused by human exposure to waste constituents;

(g) The potential damage to wildlife, crops, vegetation and physical structures caused by exposure to waste constituents;

(h) The persistence and permanence of the potential adverse effects;

(i) The patterns of rainfall in the region;

(j) The proximity of the facility to surface waters;

(k) The uses of nearby surface waters and any water quality standards established for those surface waters;

(l) The existing quality of surface water, including other sources of contamination and their cumulative impact on surface water;

(m) The potential for migration of waste constituents into sub-surface physical structures; and

(n) The potential for migration of waste constituents into the root zone of food-chain crops and other vegetation.

Section 2. Maximum Groundwater Contaminant Levels. The maximum contaminant levels promulgated herein are for use in determining whether solid *or hazardous* waste *management* [disposal] activities comply with the groundwater criteria of Section 6(1)(g). Analytical methods for these contaminants may be found in 40 CFR 141 which should be consulted in its entirety.

(1) Maximum contaminant levels for inorganic chemicals. The following are the maximum levels of inorganic chemicals other than fluoride:

Contaminant	Level[1] [(milligrams per liter)]
Arsenic	0.05 *mg/l*
Barium	1.0 *mg/l*
Cadmium	0.01 *mg/l*
Chloride, total	*250 mg/l*
Chromium	0.05 *mg/l*
Coliform bacteria	*1 per 100 ml*
Color	*75 platinum-cobalt units*
Copper	*1.0 mg/l*
Foaming agents	*0.5 mg/l*
Iron	*0.3 mg/l*
Lead	0.05 *mg/l*
Manganese	*0.05 mg/l*
Mercury	0.002 *mg/l*
Nitrate (as N)	10.0 *mg/l*
Odor	*3 threshold odor no.*
pH	*6.5-8.5*
Selenium	0.01 *mg/l*
Silver	0.05 *mg/l*
Sulfate, total	*250 mg/l*
Total dissolved solids	*750 mg/l*
Zinc	*5.0 mg/l*

[1]*Metal criteria are total metals to be measured in an unfiltered sample.*

The maximum contaminant levels for fluoride are:

Temperature[1]		
Degrees Fahrenheit	Degrees Celsius	Level (milligrams per liter)
53.7 and below	12 and below	2.4
53.8 to 58.3	12.1 to 14.6	2.2
58.4 to 63.8	14.7 to 17.6	2.0
63.9 to 70.6	17.7 to 21.4	1.8
70.7 to 79.2	21.5 to 26.2	1.6
79.3 to 90.5	26.3 to 32.5	1.4

[1] Annual average of the maximum daily air temperature.

(2) Maximum contaminant levels for organic chemicals. The following are the maximum contaminant levels for organic chemicals:

	Level (milligrams per liter
(a) Chlorinated hydrocarbons:	
Endrin (1,2,3,4,10,10-Hexachloro-6, 7-epoxy-1,4,4a, 5,6,7,8,8a-octahydro-1,4-endo-endo-5,8-dimethano-naphthalene)	0.0002
Lindane (1,2,3,4,5,6-Hexachlorocyclohexane, gamma isomer)	0.004
Methoxychlor (1,1,1-Trichloro-2,2-bis (p-methoxyphenyl) ethane)	0.1
Toxaphene ($C_{10}H_{10}Cl_8$-Technical chlorinated camphene, 67 to 69 percent chlorine)	0.005
(b) Chlorophenoxys:	
2,4-D (2,4-Dichlorophenoxyacetic acid)	0.1
2,4,5-TP Silvex (2,4,5-Trichlorophenoxypropionic acid)	0.001

(3) Maximum microbiological contaminant levels. The maximum contaminant level for coliform bacteria from any one (1) well is as follows:

(a) Using the membrane filter technique:

1. Four (4) coliform bacteria per 100 milliliters if one (1) sample is taken; or

2. Four (4) coliform bacteria per 100 milliliters in more than one (1) sample of all the samples analyzed in one (1) month.

(b) Using the five (5) tube most probable number procedure (the fermentation tube method) in accordance with the analytical recommendations set forth in "Standard Methods for Examination of Water and Waste Water," American Public Health Association, and using a standard sample, each portion being one-fifth (1/5) of the sample.

1. If the standard portion is ten (10) milliliters, coliform in any five (5) consecutive samples from a well shall not be present in three (3) or more of the twenty-five (25) portions; or

2. If the standard portion is 100 milliliters, coliform in any five (5) consecutive samples from a well shall not be present in five (5) portions in any of five (5) samples or in more than fifteen (15) of the twenty-five (25) portions.

(4) Maximum contaminant levels for radium-226, radium-228, and gross alpha particle radioactivity. The following are the maximum contaminant levels for radium-226, radium-228, and gross alpha particle radioactivity:

(a) Combined radium-226 and radium-228-5 pCi/l:

(b) Gross alpha particle activity (including radium-226 but excluding radon and uranium)-15 pCi/l.

JACKIE SWIGART, Secretary
ADOPTED: June 10, 1983
RECEIVED BY LRC: June 13, 1983 at 11:30 a.m.
See public hearings scheduled on page 1.

NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION CABINET
Department for Environmental Protection
Division of Waste Management
(Proposed Amendment)

401 KAR 31:010. General provisions for hazardous wastes.

RELATES TO: KRS *224.830 through 224.877, 224.994* [224.864(3), 224.868, 224.876]

PURSUANT TO: KRS 13.082, 224.017, 224.864(3)

NECESSITY AND FUNCTION: KRS 224.864(3) requires the Natural Resources and Environmental Protection Cabinet to identify the characteristics of and to list hazardous wastes. This chapter identifies and list hazardous waste. This 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 regulation as hazardous wastes under 401 KAR Chapters 32 through 40 and which are subject to the notification and permitting requirements of KRS 224.830 through 224.877. In this chapter:*

(a) This regulation defines the terms "waste" and "hazardous waste," identifies those waste which are excluded from regulation under 401 KAR Chapters 32 through 40 and establishes special management requirements for hazardous waste produced by small quantity generators and hazardous waste which is used, reused, recycled or reclaimed.

(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) The definition of waste contained in this chapter applies only with respect to the hazardous waste regulations implementing KRS 224.212, 224.213, and 224.2201 through 224.2215, and KRS 224.862 through 224.877. This chapter identifies only some of the materials which are hazardous wastes under KRS 224.033(10) and 224.071. A material which is not a hazardous waste identified in this chapter is still a hazardous waste for purposes of those sections if:

(a) In the case of KRS 224.033(10), the cabinet has reason to believe that the material may be a hazardous waste within the meaning of KRS 224.005(24)(b).

(b) In the case of KRS 224.071, the statutory elements are established. [General. A hazardous waste is any material that is a waste as defined in Section 2 of this regulation that meets the criteria set forth in Section 3 of this regulation.]

Section 2. Definition of a Waste. (1) A waste is any garbage, refuse, sludge or any other waste material which is not excluded under Section 4(1) of this regulation.

(2) An "other waste material" is any solid, liquid, semi-solid or contained gaseous material, resulting from industrial, commercial, mining or agricultural operations, or from community activities which:

(a) Is discarded or is being accumulated, stored or physically, chemically or biologically treated prior to being discarded; or

(b) Has served its original intended use and sometimes is discarded; or

(c) Is a manufacturing or mining by-product and sometimes is discarded.

(3) A material is "discarded" if it is abandoned (and not used, re-used, reclaimed or recycled) by being:

(a) Disposed of; or

(b) Burned or incinerated, except where the material is being burned as a fuel for the purpose of recovering usable energy; or

(c) Physically, chemically, or biologically treated (other than burned or incinerated) in lieu of or prior to being disposed.

(4) A material is "disposed of" if it is discharged, deposited, injected, dumped, spilled, leaked or placed into or on any land or water so that such material or any constituent thereof may enter the environment or be emitted into the air or discharged into ground or surface waters.

(5) A "manufacturing or mining by-product" is a material that is not one (1) of the primary products of a particular manufacturing or mining operation, is a secondary and incidental product of the particular operation and would not be solely and separately manufactured or mined by the particular manufacturing or mining operation. The term does not include an intermediate manufacturing or mining product which results from one (1) of the steps in a manufacturing or mining process and is processed through the next step of the process within a short time.

Section 3. Definition of a Hazardous Waste. (1) A waste, as defined in Section 2 of this regulation is a hazardous waste if:

(a) It is not excluded from regulation as a hazardous waste under Section 4(2) of this 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.

2. It is listed in 401 KAR 31:040 and has not been excluded from the lists in Section 1(2) of 401 KAR 31:040.

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 31:040, 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 Section 1(2) of 401 KAR 31:040, 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 wastewater the discharge of which is subject to regulation under either Section 402 or Section 307(b) of the Clean Water Act (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 3 of 401 KAR 31:040, carbon tetrachloride, tetrachloroethylene, 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 pre-treatment system does not exceed one (1) part per million; or

b. One (1) or more of the following spent solvents listed in Section 3 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, 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 pre-treatment system does not exceed twenty-five (25) parts per million; or

c. One (1) of the following wastes listed in Section 4 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 5 of 401 KAR 31:040, arising from de minimis 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, "de minimis" losses include those from normal material handling operations (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 pre-treatment system, or provided the wastes' combined annualized average concentration does not exceed one (1) part million in the headworks of the facility's wastewater treatment or pre-treatment 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 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 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 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) 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 will remain a hazardous waste.

(b) 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.

(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.

(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(2) of 401 KAR 31:040.

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;

(b) Industrial wastewater discharges that are point source discharges subject to regulation under Section 402

of the Clean Water Act, 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.;

(e) Materials subjected to in situ mining techniques which are not removed from the ground as part of the extraction process;

(f) Mining overburden returned to the mine site; and

(g) Material from the extraction, beneficiation and processing of ores and minerals (including coal), including phosphate rock and overburden from the mining of uranium ore.

(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 (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).

(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.

(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 characteristic of EP toxicity because chromium is present or are listed in *401 KAR 31:040* [Section 9 of this regulation] due to the presence of chromium, which do not fail the test for the characteristic of EP toxicity 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 non-oxidizing 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 beamhouse; 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 beamhouse; 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 beamhouse; 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 beamhouse; 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 beamhouse; 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.

(h) Cement kiln dust waste.

(i) [Solid] Waste which consists of discarded wood or wood products which fails the test for the characteristic of EP toxicity and which is not a hazardous waste for any other reason if the waste is generated by persons who utilize the arsenical-treated wood and wood products for these materials' intended end use.

(3) 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 non-waste-treatment-manufacturing unit, is not subject to regulation under 401 KAR Chapters 32, 33, 34, 35, 38 and 39 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 or 401 KAR Chapter 32, 33, 34, 35, 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 exam-

ple, 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 must:

1. Comply with U.S. Department of Transportation (DOT), U.S. Postal Service (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.

Section 5. Special Requirements for Hazardous Waste Generated by Small Generators. (1) A generator is a small quantity generator in a calendar month if he generates less than 1,000 kilograms of hazardous waste in that month.

(2) Except for those wastes identified in subsections (5) and (6) of this section, a small quantity generator's hazardous wastes are not subject to regulation under 401 KAR Chapters 32 *through* [, 33, 34, 35, 38 and] 39 provided the generator complies with the requirements of subsection (7) of this section.

(3) Hazardous waste that is benefically used or re-used or legitimately recycled or reclaimed and that is excluded from certain regulations by Section 6(1) of this regulation, is not included in the quantity determinations of this section and is not subject to any requirements of this section. Hazardous waste that is subject to the special requirements of Section 6(2) of this regulation is included in the quantity determinations of this section, and is subject to the requirements of this section.

(4) In determining the quantity of hazardous waste he generates, a generator need not include:

(a) His hazardous waste when it is removed from on-site storage; or

(b) Hazardous waste produced by on-site treatment of his hazardous waste.

(5) If a small quantity generator generates acutely hazardous waste in a calendar month in quantities greater than set forth below, all quantities of that acutely hazardous waste are subject to regulation under 401 KAR Chapters 32 *through* [, 33, 34, 35 38 and] 39, and *the notification and permitting requirements of KRS 224.855 and 224.864 through 224.877:* [401 KAR 30:020 and 30:030.]

(a) A total of one (1) kilogram of commercial chemical products and manufacturing chemical intermediates having the generic names listed in Section *4* [5](5) of 401 KAR 31:040 and off-specification commercial chemical products and manufacturing chemical intermediates which, if they met specification, would have the generic names listed in Section *4* [5](5) of 401 KAR 31:040.

(b) A total of 100 kilograms of any residue or contaminated soil water or other debris resulting from the clean-up of a spill into or on any land or water or any commercial chemical products or manufacturing chemical intermediates having the generic names listed in Section *4* [5](5) of 401 KAR 31:040, *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 commercial chemical products or manufacturing chemical intermediates which, if they met specifications, would have the generic names listed in Section 4(5) of 401 KAR 31:040.*

(6) A small quantity generator may accumulate hazardous waste on-site. If he accumulates at any time more than a total of 1000 kilograms of his hazardous waste, or his acutely hazardous wastes in quantities greater than set forth in paragraphs (a) and (b) of subsection (5) of this section, all of those accumulated wastes for which the accumulation limit was exceeded are subject to regulation under 401 KAR Chapters 32 *through* [, 33, 34, 35, 38 and] 39 *and the notification and permitting requirements of KRS 224.830 through 224.877.* The time period set out in 401 KAR 32:030, Section 5 for accumulation of wastes on-site begins for a small quantity generator when the accumulated wastes exceed the applicable exclusion level.

(7) In order for hazardous waste generated by a small quantity generator to be excluded from full regulations under this section, the generator must:

(a) Comply with the requirements of 401 KAR 32:010, Section 2;

(b) If he stores his hazardous waste on-site, stores it in compliance with the requirements of subsection (6) of this section; and

(c) Either treat or dispose of his hazardous waste in an on-site facility, or ensure delivery to an off-site storage, treatment, or disposal facility, either of which 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* [122];

4. [3.] 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* [123]; [or]

5. [4.] Permitted to manage municipal or industrial solid waste and is specifically approved for that waste; [.]

6. *A facility which:*

a. Beneficially uses or reuses, or legitimately recycles or reclaims his waste; or

b. Treats his 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 non-hazardous 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 small quantity generator mixes a solid waste with a hazardous waste that exceeds the quantity exclusion level of this section, the mixture is subject to full regulation.

Section 6. Special Requirements for Hazardous Waste Which is Used, Re-used, Recycled or Reclaimed.

(1) Except as otherwise provided in subsection[s] (2) [and (3)] of this section, a hazardous waste which meets *any* [either] of the following criteria is not subject to regulation under 401 KAR Chapters 32, 33, 34, 35, 38 and

39 and is not subject to the notification and permitting requirements of KRS 224.830 through 224.877 until the cabinet promulgates regulations to the contrary:

(a) It is being beneficially used or re-used or legitimately recycled or reclaimed.

(b) It is being accumulated, stored or physically, chemically or biologically treated prior to beneficial use or re-use or legitimate recycling or reclamation.

(c) It is one (1) of the following materials being used, reused, recycled or reclaimed in the specified manner: spent pickle liquor which is reused in wastewater treatment at a facility holding a National Pollutant Discharge Elimination System (NPDES) permit, or which is being accumulated, stored, or physically, chemically or biologically treated before such reuse.

(2) Except for those wastes listed in subsection (1)(c) of this section, a hazardous waste *that* [which] is a sludge, or *that* [which] is listed in *Section 2 or 3 of* 401 KAR 31:040, *or that contains one (1) or more hazardous waste listed in Section 2 or 3 of 401 KAR 31:040,* and *that* [which] is transported or stored prior to being used, re-used, recycled or reclaimed is subject to the *following* requirements *with respect to such transportation and storage:* [of 401 KAR Chapters 32, 33, 34, 35, 38 and 39, and 401 KAR 30:020 and 30:030.]

(a) The notification and permitting requirements under KRS 224.830 through 224.877.

(b) 401 KAR Chapter 32.

(c) 401 KAR Chapter 33.

(d) The applicable provisions of 401 KAR 34:010 through 34:210.

(e) The applicable provisions of 401 KAR 35:010 through 35:210.

(f) 401 KAR Chapters 38 and 39 with respect to storage facilities.

(g) 401 KAR 30:020 and 30:030.

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 regulation under 401 KAR Chapters 32, 33, 34, 35, 38 and 39 *but is subject to regulations under 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 regulations under 401 KAR Chapters 32, 33, 34, 35, 38 and 39, and 401 KAR 30:020 and 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 in Section 5(3) 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, e.g., pouring, pumping, and aspirating; and

2. No more than 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 0.3 (three tenths) 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 a hazardous waste identified in Section 5(3) 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.

JACKIE SWIGART, Secretary
ADOPTED: June 10, 1983
RECEIVED BY LRC: June 13, 1983 at 11:30 a.m.
See public hearings scheduled on page 1.

NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION CABINET
Department for Environmental Protection
Division of Waste Management
(Proposed Amendment)

401 KAR 31:030. Characteristics of hazardous waste.

RELATES TO: KRS *224.830 through 224.877, 224.994* [224.864(3), 224.868, 224.876]
PURSUANT TO: KRS 13.082, *13.083,* 224.017, 224.864(3)
NECESSITY AND FUNCTION: KRS 224.864(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 regulation establishes the characteristics of a hazardous waste.

Section 1. General. (1) A waste, as defined in Section 2 of 401 KAR 31:010 which is not excluded from regulation as a hazardous waste under Section 4(2) of 401 KAR 31:010, is a hazardous waste if it exhibits any of the characteristics identified in this section.

(2) A hazardous waste which is identified by a characteristic in this section, but is not listed as a hazardous waste in 401 KAR 31:040, is assigned the EPA Hazardous Waste Number set forth in the respective characteristics in this section. This number must be used in complying with the notification requirements of 401 KAR Chapters 32 and 38 and certain recordkeeping and reporting requirements under the waste management regulation relating to hazardous waste.

(3) For purposes of this section, the cabinet will consider a sample obtained using any of the applicable sampling methods specified in 401 KAR 31:100 to be a representative sample within the meaning of 401 KAR 30:010.

Section 2. Characteristic of Ignitability. *(1) A waste exhibits the characteristic of ignitability if a representative sample of the waste has any of the following properties:* [The characteristic of ignitability as contained in 40 CFR 261.21 is adopted and herein filed by reference.]

(a) It is a liquid, other than an aqueous solution contain-

ing less than twenty-four (24) percent alcohol by volume and has a flash point less than sixty (60) degrees Centigrade 140 degrees Fahrenheit), as determined by a Pensky-Martens Closed Cup Tester, using the test method specified in ASTM Standard D-93-79 or D-93-80 (incorporated by reference, see Section 3 of 401 KAR 30:010), or a Setaflash Closed Cup Tester, using the test method specified in ASTM Standard D-3278-78 (incorporated by reference, see Section 3 of 401 KAR 30:010), or as determined by an equivalent test method approved by the director and the administrator under procedures set forth in Section 2 of 401 KAR 30:020.

(b) It is not a liquid and is capable, under standard temperature and pressure, of causing fire through friction, absorption of moisture or spontaneous chemical changes and, when ignited, burns so vigorously and persistently that it creates a hazard.

(c) It is an ignitable compressed gas as defined in 49 CFR 173.300 and as determined by the test methods described in that regulation or equivalent test methods approved by the director and the administrator under Section 2 of 401 KAR 30:020.

(d) It is an oxidizer as defined in 49 CFR 173.151.

(2) A waste that exhibits the characteristic of ignitability, but is not listed as a hazardous waste in 401 KAR 31:040, has the EPA hazardous waste number of D001.

Section 3. Characteristic of Corrosivity. *(1) A waste exhibits the characteristic of corrosivity if a representative sample of the waste has either of the following properties:* [The characteristic of corrosivity as contained in 40 CFR 261.22 is adopted and herein filed by reference.]

(a) It is aqueous and has a pH less than or equal to two (2) or greater than or equal to twelve and five-tenths (12.5), as determined by a pH meter using either an EPA test method or an equivalent test method approved by the director and the administrator under the procedures set forth in Section 2 of 401 KAR 30:020. The EPA test method for pH is specified as Method 5.2 in "Test Methods for the Evaluation of Solid Waste, Physical/Chemical Methods" (incorporated by reference, see Section 3 of 401 KAR 30:010).

(b) It is a liquid and corrodes steel (SAE 1020) at a rate greater than 6.35 mm (approximately 0.250 inch) per year at a test temperature of fifty-five (55) degrees Centigrade (approximately 130 degrees Fahrenheit) as determined by the test method specified in NACE (National Association of Corrosion Engineers) Standard TM-01-69 as standardized in "Test Methods for the Evaluation of Solid Waste, Physical/Chemical Methods" (incorporated by reference, see Section 3 of 401 KAR 30:010) or an equivalent test method approved by the director and the administrator under the procedures set forth in Section 2 of 401 KAR 30:020.

(2) A waste that exhibits the characteristic of corrosivity, but is not listed as a hazardous waste in 401 KAR 31:040, has the EPA Hazardous Waste Number of D002.

Section 4. Characteristic of Reactivity. *(1) A waste exhibits the characteristic of reactivity if a representative sample of the waste has any of the following properties:* [The characteristic of reactivity as contained in 40 CFR 261.23 is adopted and herein filed by reference.]

(a) It is normally unstable and readily undergoes violent change without detonating.

(b) It reacts violently with water.

(c) It forms potentially explosive mixtures with water.

(d) When mixed with water, it generates toxic gases, vapors or fumes in a quantity sufficient to present a danger to human health or the environment.

(e) It is a cyanide or sulfide bearing waste which, when exposed to pH conditions between two (2) and twelve and five-tenths (12.5), can generate toxic gases, vapors or fumes in a quantity sufficient to present a danger to human health or the environment.

(f) It is capable of detonation or explosive reaction if it is subjected to a strong initiating source or if heated under confinement.

(g) It is readily capable of detonation or explosive decomposition or reaction at standard temperature and pressure.

(h) It is a forbidden explosive as defined in 49 CFR 173.51, or a Class A explosive as defined in 49 CFR 173.53 or a Class B explosive as defined in 49 CFR 173.88.

(2) A waste that exhibits the characteristic of reactivity, but is not listed as a hazardous waste in 401 KAR 31:040, has the EPA Hazardous Waste Number of D003.

Section 5. Characteristic of EP Toxicity. *(1) A waste exhibits the characteristic of EP toxicity if, using the test methods described in 401 KAR 31:110 or equivalent methods approved by the director and the administrator under the procedures set forth in Section 2 of 401 KAR 30:020, the extract from a representative sample of the waste contains any of the contaminants listed in Table 1 (see subsection (3) of this section) at a concentration equal to or greater than the respective value given in that Table. Where the waste contains less than five-tenths (0.5) percent filterable solids, the waste itself, after filtering, is considered to be the extract for the purposes of this section.* [The characteristic of EP toxicity as contained in 40 CFR 261.24 is adopted and herein filed by reference.]

(2) A waste that exhibits the characteristic of EP toxicity, but is not listed as a hazardous waste in 401 KAR 31:040, has the EPA Hazardous Waste Number specified in Table 1 which corresponds to the toxic contaminant causing it to be hazardous.

(3) Table 1. Maximum Concentration of Contaminants for Characteristic of EP Toxicity

EPA Hazardous Waste Number	*Contaminant*	*Maximum Concentration (milligrams per liter)*
D004	*Arsenic*	*5.0*
D005	*Barium*	*100.0*
D006	*Cadmium*	*1.0*
D007	*Chromium*	*5.0*
D008	*Lead*	*5.0*
D009	*Mercury*	*0.2*
D010	*Selenium*	*1.0*
D011	*Silver*	*5.0*
D012	*Endrin (1,2,3,4,10, 10-hexachloro-1,7-epoxy-1, 4,4a,5,6,7,8,8a-octahydro-1,4-endo,endo-5,8-dimethano naphthalene)*	*0.02*
D013	*Lindane (1,2,3,4,5, 6-hexachlorocyclohexane, gamma isomer)*	*0.4*
D014	*Methoxychlor (1,1,1-Trichloro-2, 2-bis(p-methoxyphenyl) ethane)*	*10.0*
D015	*Toxaphene ($C_{10}H_{10}Cl_8$ technical chlorinated camphene, 67-69 percent chlorine)*	*0.5*

D016	*2,4-D,(2,4-Dichloro phenoxyacetic acid)*	*10.0*
D017	*2,4,5-TP Silvex (2,4, 5-Trichlorophenoxypropionic acid)*	*1.0*

JACKIE SWIGART, Secretary
ADOPTED: June 10, 1983
RECEIVED BY LRC: June 13, 1983 at 11:30 a.m.
See public hearings scheduled on page 1.

NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION CABINET
Department for Environmental Protection
Division of Waste Management
(Proposed Amendment)

401 KAR 31:040. Lists of hazardous waste.

RELATES TO: KRS *224.830 through 224.877, 224.994* [224.864(3), 224.868, 224.876]
PURSUANT TO: KRS 13.082, *13.083,* 224.017, 224.864(3)
NECESSITY AND FUNCTION: KRS 224.864(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 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 regulation unless it has been excluded from that list *under 401 KAR 31:060 and 31:070* [by meeting the requirements of subsection (2) of this section].

(2) *The cabinet will indicate the basis for listing the classes or types of wastes listed in this regulation by employing one (1) or more of the following Hazard Codes:* [A waste will be excluded from the list in any section of this regulation where:]

[(a) A petition is filed with the secretary, which meets the requirements of 40 CFR 260.22 herein filed by reference and which results in a variance that excludes the waste from lists in this regulation; and]

[(b) The secretary notifies the petitioner that the cabinet has excluded that waste by a variance granted under Section 2 of 401 KAR 30:020.]

[(3) Petitions for equivalent testing or analytical methods may be granted by the cabinet as specified in 40 CFR 260.21, herein filed by reference.]

[Section 2. General Requirements. (1) All wastes listed in this regulation are assigned hazard codes identical to the hazard codes contained in those lists adopted by this regulation from 40 CFR 261 Subpart D.]

[(a) These codes are to be used wherever required to complete registration forms, annual reports, manifest documents or permit applications required by the hazardous waste regulations and represent the basis for listing that class or type of waste in this section.]

[(b) The hazard codes referred to above shall mean:]

Hazardous Code	*Class or Type of Waste*
[1.] (I)	Ignitable waste
[2.] (C)	Corrosive waste
[3.] (R)	Reactive waste
[4.] (E)	EP toxic waste
[5.] (H)	Acute hazardous waste
[6.] (T)	Toxic waste

[(c) Appendix II to 40 CFR 261] *401 KAR 31:160* identifies the constituent which caused *the cabinet to list the* [each] waste [listed] as an EP toxic waste (E) or toxic waste (T) [to be listed] in *Sections 2 and 3 of* this regulation.

(3) [(2)] Each hazardous waste listed in this regulation is assigned an EPA Hazardous Waste Number, *which precedes the name of the waste. This number must be used in complying with the notification requirements of KRS 224.864 and certain recordkeeping and reporting requirements under 401 KAR Chapters 32 through 40.* [identical to that number which precedes the waste name in each list adopted by this section from 40 CFR 261 Subpart D. That number shall be used as required to complete registration forms, annual reports, manifest documents or permit applications required by the hazardous waste regulations.]

(4) The following hazardous wastes listed in Section 2 or 3 of this regulation are subject to the exclusion limits for acutely hazardous wastes established in Section 5 of 401 KAR 31:010.

Section *2.* [3.] Hazardous Wastes from Non-Specific Sources. Hazardous wastes from non-specific sources [as contained in 40 CFR 261.31] are: [adopted and herein filed by reference.]

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; and sludges from the recovery of these solvents in degreasing operations.*	*(I,T)*
F002	*The following spent halogenated solvents: tetrachloroethylene, methylene chloride, trichloroethylene, 1,2,1-trichoroethane, chlorobenzene, 1,1,2-trichloro-1,2,2-trifluoroethane, orthodichlorobenzene, and trichlorofluoromethane; and the still bottoms from the recovery of these solvents.*	*(T)*
F003	*The following spent non-halogenated solvents: xylene, acetone, ethyl acetate, ethyl benzene, ethyl ether, methyl isobutyl ketone, n-butyl alcohol, cyclohexanone, and methanol; and the still bottoms from the recovery of these solvents.*	*(I)*
F004	*The following spent non-halogenated solvents: cresols and cresylic acid, and nitrobenzene; and the still bottoms from the recovery of these solvents.*	*(T)*
F005	*The following spent non-halogenated solvents: toluene, methyl ethyl ketone, carbon disulfide, isobutanol, and pyridine; and the still bottoms from the recovery of these solvents.*	*(I,T)*
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)*

d-10034

F019	Wastewater treatment sludges from the chemical conversion coating of aluminum.	(T)
F007	Spent cyanide plating bath solutions from electroplating operations (except for precious metals electroplating spent cyanide plating bath solutions).	(R,T)
F008	Plating bath sludges from the bottom of plating baths from electroplating operations where cyanides are used in the process (except for precious metals electroplating plating bath sludges).	(R,T)
F009	Spent stripping and cleaning bath solutions from electroplating operations where cyanides are used in the process (except for precious metals electroplating spent stripping and cleaning bath solutions).	(R,T)
F010	Quenching bath sludge from oil baths from metal heat treating operations where cyanides are used in the process (except for precious metals heat-treating quenching bath sludges).	(R,T)
F011	Spent cyanide solutions from salt bath pot cleaning from metal heat treating operations where cyanides are used in the process (except for precious metals heat treating spent cyanide solutions from salt bath pot cleaning).	(R,T)
F012	Quenching wastewater treatment sludges from metal heat treating operations where cyanides are used in the process (except for precious metals heat treating quenching wastewater treatment sludges).	(T)

Section 3. [4.] Hazardous Wastes from Specific Sources. Hazardous wastes from specific sources [as contained in 40 CFR 261.32] are: [adopted and herein filed by reference.]

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 and/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 of 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)
K093	Distillation light ends from the production of phthalic anhydride from ortho-xylene.	(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)*

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 productionof chlordane.*	*(T)*
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)*
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)*

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 from steel finishing operations.*	*(C,T)*

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 organo-arsenic compounds.*	*(T)*
K101	*Distillation tar residues from the distillation of aniline-based compounds in the production of veterinary pharmaceuticals from arsenic or organo-arsenic compounds.*	*(T)*
K102	*Residue from the use of activated carbon for decolorization in the production of veterinary pharmaceuticals from arsenic or organo-arsenic 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. [5.] Discarded Commercial Chemical Products, Off-Specification Species, Container Residues, and Residues Thereof. The following materials or items are hazardous wastes if and when they are discarded or intended to be discarded:

(1) Any commercial chemical product, or manufactur-

ing 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 container or inner liner removed from a container that has been used to hold any commercial chemical product or manufacturing chemical intermediate having the generic names listed in subsection (5) of this section, or any container or inner liner removed from a container that has been used to hold any off-specification chemical product and manufacturing chemical intermediate which, if it met specifications, would have the generic name listed in subsection (5) of this section unless:

(a) The container or inner liner has been triple rinsed using a solvent capable of removing the commercial chemical product or manufacturing chemical intermediate; or

(b) The container or inner liner has been cleansed by another method that has been shown in the scientific literature, or by tests conducted by the generator, to achieve equivalent removal; or

(c) 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.

(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 or manufacturing chemical intermediates referred to in subsections (1) through (4) of this section, are identified as acute hazardous wastes (H) and are subject to the small quantity exclusion defined in Section 5 of 401 KAR 31:010.* [Those materials listed in 40 CFR 261.33, paragraph (e), herein filed by reference.]

(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
P023	Acetaldehyde, chloro-
P002	Acetamide, N-(Aminothioxomethyl)-
P057	Acetamide, 2-fluoro-
P058	Acetic acid, fluoro-, sodium salt
P066	Acetimidic acid, N-((methylcarbamoyl)oxy) thio-, methyl ester
P001	3-(alpha-acetonylbenzyl)-4-hydroxycoumarin and salts
P002	1-Acetyl-2-thiourea
P003	Acrolein
P070	Aldicarb
P004	Aldrin
P005	Allyl alcohol
P006	Aluminum phosphide
P007	5-(Aminomethyl)-3-isoxazolol
P008	4-aAminopyridine
P009	Ammonium picrate (R)
P119	Ammonium vanadate
P010	Arsenic acid
P012	Arsenic (III) oxide
P011	Arsenic (V) oxide
P011	Arsenic pentroxide
P012	Arsenic trioxide
P038	Arsine, diethyl-
P054	Aziridine
P013	Barium cyanide
P024	Benzenamine, 4-chloro-
P077	Benzenamine, 4-nitro-
P028	Benzene, (chloromethyl)-
P042	1,2-Benzenediol, 4-(1-hydroxy-2-(methylamino)ethyl)-
P014	Benzenethiol
P028	Benzyl chloride
P015	Beryllium dust
P016	Bis(chloromethyl) ether
P017	Bromoacetone
P018	Brucine
P021	Calcium cyanide
P123	Camphene, octachloro-
P103	Carbamimidoselenoic acid
P022	Carbon bisulfide
P022	Carbon disulfide
P095	Carbonyl chloride
P033	Chlorine cyanide
P023	Chloroacetaldehyde
P024	p-Chloroaniline
P026	1-(o-Chlorophyenyl)thiourea
P027	3-Chloropropionitrile
P029	Copper cyanides
P030	Cyanides (soluble cyanide salts), not elsewhere specified
P031	Cyanogen
P033	Cyanogen chloride
P036	Dichlorophenylarsine
P037	Dieldrin
P038	Diethylarsine
P039	O,O-Diethyl S-(2-(ethylthio)ethyl) phosphorothioate
P041	Diethyl-p-nitrophenyl phosphate
P040	O,O-Diethyl O-pyrazinyl phosphorothioate
P043	Diisopropyl fluorophosphate
P044	Dimethoate
P045	3,3-Dimethyl-1-(methylthio)-2-butanone, O-((methylamino)carbonyl) oxime
P071	O,O-Dimethyl O-p-nitrophenyl phosphorothioate
P082	Dimethylnitrosamine
P046	alpha, alpha-Dimethylphenethylamine
P047	4,6-Dinitro-o-cresol and salts
P034	4,6-Dinitro-o-cyclohexyphenol
P048	2,4-Dinitrophenol
P020	Dinoseb
P085	Diphosphoramide, octamethyl-
P039	Disulfoton
P049	2,4-Dithiobiuret
P109	Dithiopyrophosphoric acid, tetraethyl ester
P050	Endosulfan
P088	Endothall
P051	Endrin
P042	Epinephrine
P046	Ethanamine, 1,1-dimethyl-2-phenyl-
P084	Ethenamine, N-methyl-N-nitroso-
P101	Ethyl cyanide
P054	Ethylenimine
P097	Famphur

P056	Fluorine
P057	Fluoroacetamide
P058	Fluoroacetic acid, sodium salt
P065	Fulminic acid, mercury (II) salt (R, T)
P059	Heptachlor
P051	1,2,3,4,10,10-Hexachloro-6,7-epoxy-1,4,4a, 5,6,7,8,8a-octahydro-endo, endo-1,4:5,8-dimethanonaphthalene
P037	1,2,3,4,10,10-Hexachloro-6,7-epoxy-1,4, 4a,5,6,7,8,8a-octahydro-endo, exo-1, 4:5, 8-demethanonaphthalene
P060	1,2,3,4,10,10-Hexachloro-1,4,4a,5,8,8a-hexahydro-1,4:5,8-endo, endo-dimethanophthalene
P004	1,2,3,4,10,10-Hexachloro-1,4,4a,5,8,8a-hexahydro-1,4:5,8-endo, exodimethanonaphthalene
P060	Hexachlorohexahydro-exo-dimethanonaphthalene
P062	Hexaethyl tetraphosphate
P116	Hydrazinecarbothioamide
P068	Hydrazine, methyl
P063	Hydrocyanic acid
P063	Hydrogen cyanide
P096	Hydrogen phosphide
P064	Isocyanic acid, methyl ester
P007	3(2H)-Isoxazolone,5-(aminomethyl)-
P092	Mercury, (acetato-O) phenyl-
P065	Mercury fulminate (R, T)
P016	Methane, oxybis (chloro-)
P112	Methane, tetranitro-(R)
P118	Methanethiol, trichloro-
P059	4,7-Methano-1H-indene,1,4,5,6,7,8,8-heptachloro-3a,4,7,7a-tetrahydro-
P066	Methomyl
P067	2-Methylaziridine
P068	Methyl hydrazine
P064	Methyl isocyanate
P069	2-Methyllactonitrile
P071	Methyl parathion
P072	alpha-Naphthylthiourea
P073	Nickel carbonyl
P074	Nickel cyanide
P074	Nickel (II) cyanide
P073	Nickel tetracarbonyl
P075	Nicotine and salts
P076	Nitric oxide
P077	p-Nitroaniline
P078	Nitrogen dioxide
P076	Nitrogen (II) oxide
P078	Nitrogen (IV) oxide
P081	Nitroglycerine (R)
P082	N-Nitrosodimethylamine
P084	N-Nitrosomethylvinylamine
P050	5-Norbornene-2,3-dimethanol,1,4,5,6,7, 7-hexachloro, cyclic sulfite
P085	Octamethylpyrophosphoramide
P087	Osmium oxide
P087	Osmium tetroxide
P088	7-Oxabicyclo (2.2.1)heptane-2,3-dicarboxylic acid
P089	Parathion
P034	Phenol, 2-cyclohexyl-4, 6-dinitro-
P048	Phenol,2, 4-dinitro
P047	Phenol, 2, 4-dinitro-6-methyl-
P020	Phenol, 2,4-dinitro-6-(1-methylpropyl)-
P009	Phenol, 2,4,6-trinitro-, ammonium salt (R)
P036	Phenyl dichloroarsine
P092	Phenylmercuric acetate
P093	N-Phenylthiourea
P094	Phorate
P095	Phosgene
P096	Phosphine
P041	Phosphoric acid, diethyl p-nitrophenyl ester
P044	Phosphorodithioic acid, O, O-dimethyl S-(2(methylamino)-2-oxoethyl) ester
P043	Phosphorofluoric acid, bis(1-methylethyl)-ester
P094	Phosphorothioic acid, O, O-diethyl S-(ethylthio) methyl ester
P089	Phosphorothioic acid, O, O-diethyl O-(p-nitrophenyl) ester
P040	Phosphorothioic acid, O, O-diethyl O-pyrazinyl ester
P097	Phosphorothioic acid, O, O-dimethyl O-(p((dimethylamino)-sulfonyl)phenyl) ester
P110	Plumbane, tetraethyl-
P098	Potassium cyanide
P099	Potassium silver cyanide
P070	Propanal, 2-methyl-2-(methylthio)-, O-((methylamino)carbonyl)oxime
P101	Propanenitrile
P027	Propanenitrile, 3-chloro-
P069	Propanenitrile, 2-hydroxy-2-methyl-
P081	1,2,3-Propanetriol, trinitrate-(R)
P017	2-Propanone, 1-bromo-
P102	Propargyl alcohol
P003	2-Propenal
P005	2-Propen-1-o1
P067	1,2-Propylenimine
P102	2-Propyn-1-ol
P008	4-Pyridinamine
P075	Pyridine, (S)-3-(1-methyl-2-pyrrolidinyl); and salts
P111	Pyrophosphoric acid, tetraethyl ester
P103	Selenourea
P104	Silver cyanide
P105	Sodium azide
P106	Sodium cyanide
P107	Strontium sulfide
P108	Strychnidin-10-one, and salts
P018	Strychnidin-10-one, 2, 3-dimethoxy
P108	Strychnine and salts
P115	Sulfuric acid, thallium(I) salt
P109	Tetraethyldithiopyrophosphate
P110	Tetraethyl lead
P111	Tetraethylpyrophosphate
P112	Tetranitromethane (R)
P062	Tetraphosphoric acid, hexaethyl ester
P113	Thallic oxide
P113	Thallium (III) oxide
P114	Thallium (I) selenite
P115	Thallium (I) sulfate
P045	Thiofanox
P049	Thioimidodicarbonic diamide
P014	Thiophenol
P116	Thiosemicarbazide
P026	Thiourea, (2-chlorophenyl)-
P072	Thiourea, 1-naphthalenyl-
P093	Thiourea, phenyl-
P123	Toxaphene
P118	Trichloromethanethiol
P119	Vanadic acid, ammonium salt
P120	Vanadium pentoxide
P120	Vanadium (V) oxide
P001	Warfarin

P121	Zinc cyanide
P122	Zinc phosphide (R,T)

(6) The commercial chemical products, manufacturing chemical intermediates, or off-specification commercial chemical products referred to in subsections (1) through (4) of this section, are identified as toxic wastes (T) unless otherwise designated and are subject to the small quantity exclusion defined in Section 5(1) and (6) of 401 KAR 31:010. [Those materials listed in 40 CFR 261.33, paragraph (f), herein filed by reference.]

(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
U001	Acetaldehyde (I)
U034	Acetaldehyde, trichloro-
U187	Acetamide, N-(4-ethoxyphenyl)-
U005	Acetamide, N-9H-fluoren-2-yl-
U112	Acetic acid, ethyl ester (I)
U144	Acetic acid, lead salt
U214	Acetic acid, thallium (I) salt
U002	Acetone (I)
U003	Acetonitrile (I,T)
U004	Acetophenone
U005	2-Acetylaminofluorene
U006	Acetyl chloride (C,R,T)
U007	Acrylamide
U008	Acrylic acid (I)
U009	Acrylonitrile
U150	Alanine, 3-(p-bis(2-chlorethyl)amino) phenyl-,L-
U011	Amitrole
U012	Aniline (I,T)
U014	Auramine
U015	Azaserine
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-
U157	Benz(j)aceanthrylene, 1,2-dihydro-3-methyl-
U016	Benz(c)acridine
U016	3,4-Benzacridine
U017	Benzal chloride
U018	Benz(a)anthracene
U018	1,2-Benzanthracene
U094	1,2-Benzanthracene, 7,12-dimethyl-
U012	Benzenamine (I,T)
U014	Benzenamine, 4,4′-carbonimidoylbis (N, N-dimethyl-)
U049	Benzenamine, 4-chloro-2-methyl-
U093	Benzenamine, N, N′-dimethyl-4-phenylazo-
U158	Benzenamine, 4,4′-methylenebis (2-chloro-)
U222	Benzenamine, 2-methyl-, hydrochloride
U181	Benzenamine, 2-methyl-5-nitro
U019	Benzene (I,T)
U038	Benzeneacetic acid, 4-chloro-alpha-(4-chlorophenyl)-alpha-hydroxy, ethyl ester
U030	Benzene, 1-bromo-4-phenoxy-
U037	Benzene, chloro-
U190	1,2-Benzenedicarboxylic acid anhydride
U028	1,2-Benzenedicarboxylic acid, (bis(2-ethyl-hexyl)) ester
U069	1,2-Benzenedicarboxylic acid, dibutyl ester
U088	1,2-Benzenedicarboxylic acid, diethyl ester
U102	1,2-Benzenedicarboxylic acid, dimethyl ester
U107	1,2-Benzenedicarboxyic acid, di-n-octyl ester
U070	Benzene, 1,2-dichloro-
U071	Benzene, 1,3-dichloro-
U072	Benzene, 1,4-cichloro-
U017	Benzene, (dichloromethyl)-
U223	Benzene, 1,3-diisocyanatomethyl- (R,T)
U239	Benzene, dimethyl- (I,T)
U201	1,3-Benzenediol
U127	Benzene, hexachloro-
U056	Benzene, hexahydro (I)-
U188	Benzene, hydroxy-
U220	Benzene, methyl-
U105	Benzene, 1-methyl-1-2, 4-dinitro-
U106	Benzene, 1-methyl-2,6-dinitro-
U203	Benzene, 1,2-methylenedioxy-4-allyl-
U141	Benzene, 1,2-methylenedioxy-4-propenyl-
U090	Benzene, 1,2-methylenedioxy-4-propyl-
U055	Benzene, (1-methylethyl),(I)
U169	Benzene, nitro- (I,T)
U183	Benzene, pentachloro-
U185	Benzene, pentachloro-nitro-
U020	Benzenesulfonic acid chloride (C,R)
U020	Benzenesulfonyl chloride (C,R)
U207	Benzene, 1,2,4,5-tetrachloro-
U023	Benzene, (trichloromethyl)- (C,R,T)
U234	Benzene, 1,3,5-trinitro- (R,T)
U021	Benzidine
U202	1,2-Benzisothiazolin-3-one,1, 1-dioxide
U120	Benzo(j,k)fluorene
U022	Benzo(a)pyrene
U022	3,4-Benzopyrene
U197	p-Benzoquinone
U023	Benzotrichloride (C,R,T)
U050	1,2-Benzphenanthrene
U085	2,2-Bioxirane (I,T)
U021	(1,1′-Biphenyl)-4,4′-diamine
U073	(1,1′-Biphenyl)-4,4′-diamine,3,3′-dichloro-
U091	(1,1′-Biphenyl)-4,4′-diamine,3,3′,dimethoxy-
U095	(1,1′-Biphenyl)-4,4′-diamine,3,3′,dimethyl-
U024	Bis(2-chloroethyoxy) methane
U027	Bis(2-chloroisopropyl) ether
U244	Bis(dimethylthiocarbamoyl) disulfide
U028	Bis(2-ethyhexyl) phthalate
U246	Bromine cyanide
U225	Bromoform
U030	4-Bromophenyl phenyl ether
U128	1,3-Butadiene,1,1,2,3,4,4-hexachloro-
U172	1-Butanamine, N.-butyl-N-nitroso
U035	Butanoic acid, 4-(Bis(2-chloroethyl)amino) benzene-
U031	1-Butanol (I)
U159	2-Butanone (I,T)
U160	2-Butanone peroxide (R,T)
U053	2-Butenal
U074	2-Butene,1,4-dichloro- (I,T)
U031	n-Butyl alcohol (I)
U136	Cacodylic acid

U032	Calcium chromate
U238	Carbamic acid, ethyl ester
U178	Carbamic acid, methylnitroso-, ethyl ester
U176	Carbamide, N-ethyl-N-nitroso-
U177	Carbamide, N-methyl-N-nitroso-
U219	Carbamide, thio-
U097	Carbamoyl chloride, dimethyl-
U215	Carbonic acid, dithallium (I) salt
U156	Carbonochloridic acid, methyl ester (I,T)
U033	Carbon oxyfluoride (R,T)
U211	Carbon tetrachloride
U033	Carbonyl fluoride (R,T)
U034	Chloral
U035	Chlorambucil
U036	Chlordane, technical
U026	Chlornaphazine
U037	Chlorobenzene
U039	4-Chloro-m-cresol
U041	1-Chloro-2,3-epoxypropane
U042	2-Chlorethyl vinyl ether
U044	Chloroform
U046	Chloromethyl methyl ether
U047	beta-Chloronaphthalene
U048	o-Chlorophenol
U049	4-Chloro-o-toluidine, hydrochloride
U032	Chromic acid, calcium salt
U050	Chrysene
U051	Creosote
U052	Cresols
U052	Cresylic acid
U053	Crotonaldehyde
U055	Cumene (I)
U246	Cyanogen bromide
U197	1,4-Cyclohexadienedione
U056	Cyclohexane (I)
U057	Cyclohexanone (I)
U130	1,3-Cyclopentadiene,1,2,3,4,5,5-hexa-chloro-
U058	Cyclophosphamide
U240	2,4-D, salts and esters
U059	Daunomycin
U060	DDD
U061	DDT
U142	Decachlorooctahydro-1,3,4-metheno-2H-cyclobuta (c,d)-pentalen-2-one
U062	Diallate
U133	Diamine (R,T)
U221	Diaminotoluene
U063	Dibenz(a,h) anthracene
U063	1,2:5,6-Dibenzanthracene
U064	1,2:7,8-Dibenzopyrene
U064	Dibenz(a,i) pyrene
U066	1,2-Dibromo-3-chloropropane
U069	Dibutyl phthalate
U062	S-(2,3-Dichloroallyl) diisopropyl-thiocarbamate
U070	o-Dichlorobenzene
U071	m-Dichlorobenzene
U072	p-Dichlorobenzene
U073	3,3′-Dichlorobenzidine
U074	1,4-Dichloro-2-butene (I,T)
U075	Dichlorodifluoromethane
U192	3,5-Dichloro-N-(1,1-dimethyl-2-propynyl) benzamide
U060	Dichloro diphenyl dichloroethane
U061	Dichloro diphenyl trichloroethane
U078	1,1-Dichloroethylene
U079	1,2-Dichloroethylene
U025	Dichloroethyl ether
U081	2,4-Dichlorophenol
U082	2,6-Dichlorophenol
U240	2,4-Dichlorophenoxyacetic acid, salts and esters
U083	1,2-Dichloropropane
U084	1,3-Dichloropropene
U085	1,2:3,4-Diepoxybutane (I,T)
U108	1,4-Diethylene dioxide
U086	N, N-Diethylhydrazine
U087	O, O-Diethyl-S-methyl-dithiophosphate
U088	Diethyl phthalate
U089	Diethylstilbestrol
U148	1,2-Dihydro-3,6-pyradizinedione
U090	Dihydrosafrole
U091	3,3′-Dimethoxybenzidine
U092	Dimethylamine (I)
U093	Dimethylaminoazobenzene
U094	7,12-Dimethylbenz(a)anthracene
U095	3,3′-Dimethylbenzidine
U096	alpha, alpha-Dimethylbenzylhydroperoxide (R)
U097	Dimethylcarbamoyl chloride
U098	1,1-Dimethythydrazine
U099	1,2-Dimethylhydrazine
U101	2,4-Dimethylphenol
U102	Dimethyl phthalate
U103	Dimethyl sulfate
U105	2,4-Dinitrotoluene
U106	2,6-Dinitrotoluene
U107	Di-n-octyl phthalate
U108	1,4-Dioxane
U109	1,2-Diphenylhydrazine
U110	Dipropylamine (I)
U111	Di-N-propylnitrosamine
U001	Ethanal (I)
U174	Ethanamine, N-ethyl-N-nitroso-
U067	Ethane, 1,2-dibromo-
U076	Ethane, 1,1-dichloro-
U077	Ethane, 1,2-dichloro-
U114	1,2-Ethanediylbiscarbamodithioic acid
U131	Ethane, 1,1,1,2,2,2-hexachloro-
U024	Ethane, 1,1′-(methylenebis(oxy))bis (2-chloro-)
U003	Ethanenitrile (I,T)
U117	Ethane, 1,1′-oxybis- (I)
U025	Ethane, 1,1′-oxybis(2-chloro-)
U184	Ethane, pentachloro-
U208	Ethane, 1,1,1,2-tetrachloro-
U209	Ethane, 1,1,2,2-tetrachloro-
U218	Ethanethioamide
U227	Ethane, 1,1,2-trichloro-
U247	Ethane,1,1,1,-trichloro-2,2-bis(p-methoxyphenyl)
U043	Ethene, chloro-
U042	Ethene, 2-chlorethoxy-
U078	Ethene, 1,1-dischloro
U079	Ethene, trans-1,2-dichloro-
U210	Ethene, 1,1,2,2-tetrachloro-
U173	Ethanol, 2,2′-(nitrosoimino) bis-
U004	Ethanone, 1-phenyl
U006	Ethanoyl chloride (C,R,T)
U112	Ethyl acetate (I)
U113	Ethyl acrylate (I)
U238	Ethyl carbamate (urethan)
U038	Ethyl 4,4′-dichlorobenzilate
U114	Ethylenebis (dithiocarbamic acid)
U067	Ethylene dibromide

U077	Ethylene dichloride
U115	Ethlene oxide (I,T)
U116	Ethylene thiourea
U117	Ethyl ether (I)
U076	Ethylidene dichloride
U118	Ethylmethacrylate
U119	Ethyl methanesulfonate
U139	Ferric dextran
U120	Fluoranthene
U122	Formaldehyde
U123	Formic acid (C,T)
U124	Furan (I)
U125	2-Furancarboxaldehyde (I)
U147	2,5-Furandione
U213	Furan, tetrahydro- (I)
U125	Furlural (I)
U124	Furfuran (I)
U206	D-Glucopyranose, 2-deoxy-2(3-methyl-3-nitrosouredo)
U126	Glycidylaldehyde
U163	Guanidine, N-nitroso-N-methyl-N′nitro-
U127	Hexachlorobenzene
U128	Hexachlorobutadiene
U129	Hexachlorocyclohexane (gamma isomer)
U130	Hexachlorocyclopentadiene
U131	Hexachloroethane
U132	Hexachlorophene
U243	Hexachloropropene
U133	Hydrazine (R,T)
U086	Hydrazine,1,2-diethyl
U098	Hydrazine,1,1-dimethyl-
U099	Hydrazine,1,2-dimethyl
U109	Hydrazine,1,2-diphenyl
U134	Hydrofluoric acid (C,T)
U134	Hydrogen fluoride (C,T)
U135	Hydrogen sulfide
U096	Hydroperoxide, 1-methyl-1-phenylethyl (R)
U136	Hydroxydimethylarsine oxide
U116	2-Imidazolidinethione
U137	Indeno(1,2,3-cd) pyrene
U139	Iron dextran
U140	Isobutyl alcohol (I,T)
U141	Isosafrole
U142	Kepone
U143	Lasiocarpine
U144	Lead acetate
U145	Lead phosphate
U146	Lead subacetate
U129	Lindane
U147	Maleic anhydride
U148	Maleic hydrazide
U149	Malononitrile
U150	Melphalan
U151	Mercury
U152	Methacrylonitrile (I,T)
U092	Methanamine, N-methyl- (I)
U029	Methane, bromo-
U045	Methane, chloro- (I,T)
U046	Methane, chloromethoxy-
U068	Methane, dibromo-
U080	Methane, dichloro-
U075	Methane, dichlorodifluoro-
U138	Methane, iodo-
U119	Methanesulfonic acid, ethyl ester
U211	Methane, tetrachloro-
U121	Methane, trichlorofluoro-
U153	Methanethiol (I,T)
U225	Methane, tribromo-
U044	Methane, trichloro-
U121	Methane, trichlorofluoro-
U123	Methanoic acid (C,T)
U036	4,7-Methanoindan,1,2,4,5,6,7,8,8-octachloro-3a,4,7,7a-tetahydro-
U154	Methanol (I)
U155	Methapyrilene
U247	Methoxychlor
U154	Methyl alcohol (I)
U029	Methyl bromide
U186	1-Methylbutadiene (I)
U045	Methyl chloride (I,T)
U156	Methyl chlorocarbonate (I,T)
U226	Methylchloroform
U157	3-Methylcholanthrene
U158	4,4′-Methylenebis (2-chloroaniline)
U132	2,2′-Methylenebis (3,4,6-trichlorophenol)
U068	Methylene bromide
U080	Methylene chloride
U122	Methylene oxide
U159	Methyl ethyl ketone (I,T)
U160	Methyl ethyl ketone peroxide (R,T)
U138	Methyl iodide
U161	Methyl isobutyl ketone (I)
U162	Methyl methacrylate (I,T)
U163	N-Methyl-N′-nitro-N-nitrosoguanidine
U161	4-Methyl-2-pentanone (I)
U164	Methylthiouracil
U010	Mitomycin C
U059	5,12-Naphthacenedione, (8S-cis)-8-acetyl-10-((3-amino-2,3,6-trideoxy-alpha-L-lyxohexopyranosyl)oxyl)-7,8,9,10,tetrahydro-6,8,11-trihydroxy-1-methoxy-
U165	Naphthalene
U047	Naphthalene, 2-chloro-
U166	1,4-Naphthalenedione
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
U166	1,4,Naphthaquinone
U167	1-Naphthylamine
U168	2-Naphthylamine
U167	alpha-Naphthylamine
U168	beta-Naphthylamine
U026	2-Naphthylamine,N,N′-bis(2-chloromethyl)-
U169	Nitrobenzene (I,T)
U170	p-Nitrobenzene
U171	2-Nitropropane (I)
U172	N-Nitrosodi-n-butylamine
U173	N-Nitrosodiethanolamine
U174	N-Nitrosodiethylamine
U111	N-Nitroso-N-propylamine
U176	N-Nitroso-N-ethylurea
U177	N-Nitroso-N-methylurea
U178	N-Nitroso-N-methylurethane
U179	N-Nitrosopiperidine
U180	N-Nitrosopyrrolidine
U181	5-Nitro-o-toluidine
U193	1,2-Oxathiolane,2,2-dioxide
U058	2H-1,3,2-Oxazaphosphorine,2-(bis(2-chloro-ethyl)amino)tetrahydro-, oxide 2-
U115	Oxirane (I,T)
U041	Oxirane,2-(chloromethyl)-
U182	Paraldehyde
U183	Pentachlorobenzene

U184 Pentachloroethane
U185 Pentachloronitrobenzene
U242 Pentachlorophenol
U186 1,3-Pentadiene (I)
U187 Phenacetin
U188 Phenol
U048 Phenol,2-chloro-
U039 Phenol,4-chloro-3-methyl-
U081 Phenol,2,4-dichloro-
U082 Phenol,2,6-dichloro-
U101 Phenol,2,4-dimethyl-
U170 Phenol,4-nitro-
U242 Phenol, pentachloro-
U212 Phenol,2,3,4,6-tetrachloro-
U230 Phenol,2,4,5-trichloro-
U231 Phenol,2,4,6-trichloro
U137 1,10-(1,2-phenylene) pyrene
U145 Phosphoric acid, Lead salt
U087 Phosphorodithioic acid,0,0-diethyl-, S-methylester
U189 Phosphorus sulfide (R)
U190 Phthalic anhydride
U191 2-Picoline
U192 Pronamide
U194 1-Propanamine, (I,T)
U110 1-Propanamine, N-propyl- (I)
U066 Propane, 1,2-dibromo-3-chloro-
U149 Propanedinitrile
U171 Propane, 2-nitro- (I)
U027 Propane,2,2'oxybis (2-chloro-)
U193 1,3-Propane sultone
U235 1-Propanol,2,3-dibromo-, phosphate (3:1)
U126 1-Propanol,2,3-epoxy
U140 1-Propanol, 2-methyl- (I,T)
U002 2-Propanone (I)
U007 2-Propenamide
U084 Propene,1,3-dichloro-
U243 1-Propene,1,1,2,3,3,3-hexachloro-
U009 2-Propenenitrile
U152 2-Propenenitrile, 2-methyl- (I,T)
U008 2-Propenoic acid (I)
U113 2-Propenoic acid, ethyl ester (I)
U118 2-Propenoic acid, 2-methyl-, ethyl ester
U162 2-Propenoic acid, 2-methyl, methyl ester (I,T)
U233 Propionic acid, 2-(2,4,5,-trichlorophenoxy)-
U194 n-Propylamine (I,T)
U083 Propylene dichloride
U196 Pyridine
U155 Pyridine, 2-(2-(dimethylamino)-2-thenylamino)-
U179 Pyridine, hexahydro-N-nitroso-
U191 Pyridine, 2-methyl
U164 4(1H)-Pyrimidinone,2,3-dihydro-6-methyl-2-thioxo-
U180 Pyrrole, tetrahydro-N-nitroso
U200 Reserpine
U201 Resorcinol
U202 Saccharin and salts
U203 Safrole
U204 Selenious acid
U204 Selenium dioxide
U205 Selenium disulfide (R,T)
U015 L-Serine, diazoacetate (ester)
U233 Silvex
U089 4,4'-Stilbenediol, alpha, alpha'-diethyl-
U206 Streptozotocin
U135 Sulfur hydride
U103 Sulfuric acid, dimethyl ester
U189 Sulfur phosphide (R)
U205 Sulfur selenide (R,T)
U232 2,4,5-T
U207 1,2,4,5,-Tetrachlorobenzene
U208 1,1,1,2-Tetrachloroethane
U209 1,1,2,2-Tetrachloroethane
U210 Tetrachloroethylene
U212 2,3,4,6-Tetrachlorophenol
U213 Tetrahydrofuran (I)
U214 Thallium (I) acetate
U215 Thallium (I) carbonate
U216 Thallium (I) chloride
U217 Thallium (I) nitrate
U218 Thioacetamide
U153 Thiomethanol (I,T)
U219 Thiourea
U244 Thiram
U220 Toluene
U221 Toluenediamine
U223 Toluene diisocyantate (R,T)
U222 O-Toluidine hydrochloride
U011 1H-1,2,4-Triazol-3-amine
U226 1,1,1-Trichloroethane
U227 1,1,2-Trichloroethane
U228 Trichloroethene
U228 Trichloroethylene
U121 Trichloromonofluoromethane
U230 2,4,5-Trichlorophenol
U231 2,4,6-Trichlorophenol
U232 2,4,5-Trichlorophenoxyacetic acid
U234 sym-Trinitrobenzene (R,T)
U182 1,3,5-Trioxane,2,4,5-trimethyl-
U235 Tris(2,3-dibromopropyl) phosphate
U236 Trypan blue
U237 Uracil, 5(bis(2-chloromethyl) amino)
U237 Uracil mustard
U043 Vinyl chloride
U239 Xylene (I)
U200 Yohimban-16-carboxylic acid, 11, 17-dimethoxy-18((3,4,5-trimethoxy-benzoyl)oxy)-, methyl ester

JACKIE SWIGART, Secretary
ADOPTED: June 10, 1983
RECEIVED BY LRC: June 13, 1983 at 11:30 a.m.
See public hearings scheduled on page 1.

NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION CABINET
Department for Environmental Protection
Division of Waste Management
(Proposed Amendment)

401 KAR 31:100. Appendix on representative sampling methods.

RELATES TO: KRS *224.830 through 224.877, 224.994* [224.864(3), 224.868, 224.876]
PURSUANT TO: KRS 13.082, *13.083,* 224.017, 224.864(3)
NECESSITY AND FUNCTION: KRS 224.864(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 regulation contains the appendix to this chapter concerning representatives sampling methods.

Section 1. Representative Sampling Methods. *The*

methods and equipment used for sampling waste materials will vary with the form and consistency of the waste materials to be sampled. Samples collected using the sampling protocols listed in subsection (1) through (4) of this section, for sampling waste with properties similar to the indicated materials, will be considered by the cabinet to be representative of the waste. [40 CFR 261 Appendix I—Representative Sampling Methods—is adopted and herein filed by reference for use in intrepreting any requirement of this chapter or any other hazardous waste regulation.]

(1) Extremely viscous liquid - ASTM Standard D140-70; Crushed or powdered material - ASTM Standard D346-75; Soil or rock-like material - ASTM Standard D420-69; Soil-like material - ASTM Standard D1452-65.

(2) Fly ash-like material - ASTM Standard D2234-76 (ASTM Standards are available from ASTM, 1916 Race Street, Philadelphia, PA 19103).

(3) Containerized liquid wastes - "COLIWASA" described in "Test Methods for the Evaluation of Solid Waste, Physical/Chemical Methods." (Note: these methods are also described in "Samplers and Sampling Procedures for Hazardous Waste Streams," EPA 600/2-80-018, January 1980.) U.S. Environmental Protection Agency, Office of Solid Waste, Washington, D.C. 20460. (Copies may be obtained from Solid Waste Information, U.S. Environmental Protection Agency, 26 W. St. Clair Street, Cincinnati, Ohio 45268).

(4) Liquid waste in pits, ponds, lagoons, and similar reservoirs - "Pond Sampler" described in "Test Methods for the Evaluation of Solid Waste, Physical/Chemical Methods." This manual also contains additional information on application of these protocols. (Note: these methods are also described in "Samplers and Sampling Procedures for Hazardous Waste Streams," EPA 600/2-80-018, January 1980.)

JACKIE SWIGART, Secretary
ADOPTED: June 10, 1983
RECEIVED BY LRC: June 13, 1983 at 11:30 a.m.
See public hearings scheduled on page 1.

NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION CABINET
Department for Environmental Protection
Division of Waste Management
(Proposed Amendment)

401 KAR 31:110. Appendix on EP toxicity test procedure.

RELATES TO: KRS *224.830 through 224.877* [224.864(3), 224.868, 224.876]
PURSUANT TO: KRS 13.082, *13.083,* 224.017, 224.864(3)
NECESSITY AND FUNCTION: KRS 224.864(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 regulation contains the appendix to this chapter concerning the EP toxicity test procedure.

Section 1. *Applicability. This regulation contains the EP toxicity procedures.* [EP Toxicity Test Procedure. 40 CFR 261 Appendix II—EP Toxicity Test Procedure—is adopted and is herein filed by reference by use in interpreting any requirement in this chapter or any other hazardous waste regulation.]

Section 2. Extraction Procedure (EP). (1) A representative sample of the waste to be tested (minimum size 100 grams) shall be obtained using the methods specified in 401 KAR 31:100 or any other method capable of yielding a representative sample within the meaning of 401 KAR 30:010. (For detailed guidance on conducting the various aspects of the extraction procedure (EP) see "Test Methods for the Evaluation of Solid Waste, Physical/Chemical Methods" incorporated by reference in Section 3 of 401 KAR 30:010.)

(2) (a) The sample shall be separated into its component liquid and solid phases using the method described in "separation procedure" (see subsection (9) of this section). If the solid residue (see paragraph (b) of this subsection) obtained using this method totals less than five-tenths (0.5) percent of the original weight of the waste, the residue can be discarded and the operator shall treat the liquid phase as the extract and proceed immediately to subsection (8) of this section.

(b) The percent solids is determined by drying the filter pad at eighty degrees Centigrade (80°C) until it reaches constant weight and then calculating the percent solids using the following equation:

$$\text{Percent solids} = \frac{(\text{weight of pad + solid}) - (\text{tare weight of pad}) \times 100}{\text{initial weight of sample}}$$

(3) The solid material obtained from the separation procedure (see subsection (9) of this section) shall be evaluated for its particle size. If the solid material has a surface area per gram of material equal to or greater than 3.1cm^2 or passes through a 9.5 mm (approximately 0.375 inch) standard sieve, the operator shall proceed to subsection (4) of this section. If the surface area is smaller or the particle size larger than specified above, the solid material shall be prepared for extraction by crushing, cutting or grinding the material so that it passes through a 9.5 mm (approximately 0.375 inch) sieve or, if the material is in a single piece, by subjecting the material to the procedure described in Section 3 of this regulation.

(4) The solid material obtained in subsection (3) of this section shall be weighed and placed in an extractor with sixteen (16) times its weight of deionized water. Do not allow the material to dry prior to weighing. For purposes of this test, an acceptable extractor is one (1) which will impact sufficient agitation to the mixture to not only prevent stratification of the sample and extraction fluid but also insure that all sample surfaces are continuously brought into contact with well mixed extraction fluid.

(5) After the solid material and deionized water are placed in the extractor, the operator shall begin agitation and measure the pH of the solution in the extractor. If the pH is greater than five (5.0), the pH of the solution shall be decreased to 5.0 + 0.2 by adding five-tenths (0.5) N acetic acid. If the pH is equal to or less than five (5.0) no acetic acid should be added. The pH of the solution shall be monitored, as described below, during the course of the extraction and if the pH rises above 5.2, five-tenths (0.5) N acetic acid shall be added to bring the pH down to 5.0 + 0.2. However, in no event shall the aggregate amount of acid added to the solution exceed four (4) ml of acid per gram of solid. The mixture shall be agitated for twenty-four (24) hours and maintained at 20°-40° Centigrade (approximately 68°-104° Fahrenheit) during this time. It is recommended that the operator monitor and adjust the pH during the course of the extraction with a device such as the Type 45-A pH Controller manufactured by Chemtrix, Inc., Hillsboro, Orgeon 97123 or its equivalent, in conjunction with a metering pump and reservoir of five-tenths

(0.5) N acetic acid. If such a system is not available, the following manual procedure shall be employed:

(a) A pH meter shall be calibrated in accordance with the manufacturer's specifications.

(b) The pH of the solution shall be checked and, if necessary, five-tenths (0.5) N acetic acid shall be manually added to the extractor until the pH reaches 5.0 + 0.2. The pH of the solution shall be adjusted at fifteen (15), thirty (30) and sixty (60) minute intervals, moving to the next longer interval if the pH does not have to be adjusted more than five-tenths (0.5) N pH units.

(c) The adjustment procedure shall be continued for at least six (6) hours.

(d) If at the end of the twenty-four (24) hours extraction period, the pH of the soluiton is not below 5.2 and the maximum amount of acid (four (4) ml per gram of solids) has not been added, the pH shall be adjusted to 5.0 + 0.2 and the extraction continued for an additional four (4) hours, during which the pH shall be adjusted at one (1) hour intervals.

(6) At the end of the twenty-four (24) hours extraction period, deionized water shall be added to the extractor in an amount determined by the following equation:

$V = (20)(W) - 16(W) - A$

Where:

V = ml deionized water to be added

W = weight in grams of solid charged to extractor

A = ml of 0.5 N acetic acid added during extraction

(7) The material in the extractor shall be separated into its component liquid and solid phases as described under the separation procedure (see subsection (9) of this section).

(8) The liquids resulting from subsections (2) and (7) of this section shall be combined. This combined liquid (or the waste itself if it has less than one-half (½) percent solids, as noted in subsection (2) of this section) is the extract and shall be analyzed for the presence of any of the contaminants specified in Table I of 401 KAR 31:030, Section 5, using the analytical procedures designated in subsection (9) of this section.

(9) Separation procedure. (a) Equipment. A filter holder, designed for filtration media having a nominal pore size of 0.45 micrometers and capable of applying a 5.3 kg/cm^2 (75 psi) hydrostatic pressure to the solution being filtered, shall be used. For mixtures containing nonabsorptive solids, where separation can be effected without imposing a 5.3 kg/cm^2 pressure differential, vacuum filters employing a 0.45 micrometers filter media can be used. (For further guidance on filtration equipment or procedures see "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods" incorporated by reference, in Section 3 of 401 KAR 30:010.)

(b) Procedure. (Note: This procedure is intended to result in separation of the "free" liquid portion of the waste from any solid matter having a particle size 0.45 micrometers. If the sample will not filter, various other separation techniques can be used to aid in the filtration. As described above, pressure filtration is employed to speed up the filtration process. This does not alter the nature of the separation. If liquid does not separate during filtration, the waste can be centrifuged. If separation occurs during centrifugation, the liquid portion (centrifugate) is filtered through the 0.45 micrometers filter prior to becoming mixed with the liquid portion of the waste obtained from the initial filtration. Any material that will not pass through the filter after centrifugation is considered a solid and is extracted.)

1. Following manufacturer's directions, the filter unit shall be assembled with a filter bed consisting of a 0.45 micrometer filter membrane. For difficult or slow to filter mixtures a prefilter bed consisting of the following prefilters in increasing pore size (0.65 micrometer membrane, fine glass fiber prefilter, and coarse glass fiber prefilter) can be used.

2. The waste shall be poured into the filtration unit.

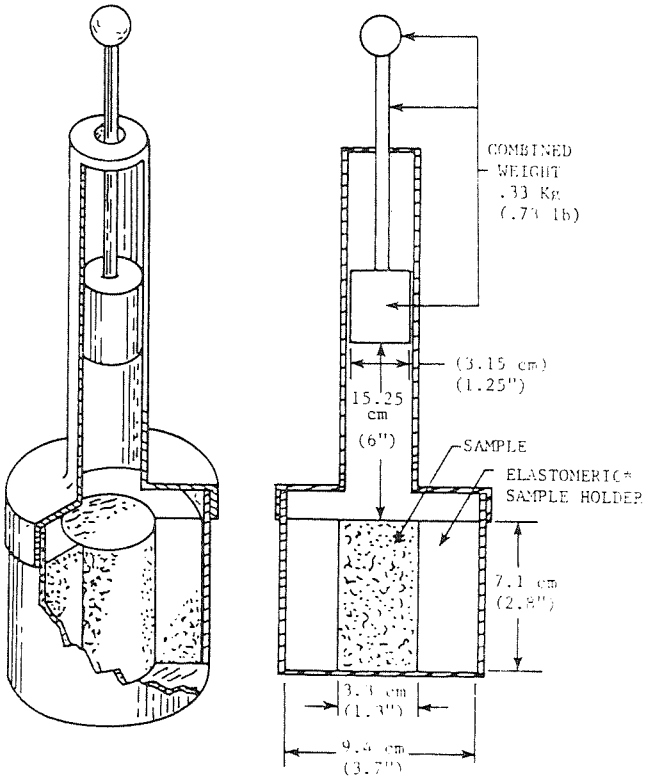
3. The reservoir shall be slowly pressurized until liquid begins to flow from the filtrate outlet at which point the pressure in the filter shall be immediately lowered to ten (10) to fifteen (15) psig. Filtration shall be continued until liquid flow ceases.

4. The pressure should be increased stepwise in ten (10) psi increments to seventy-five (75) psig and filtration continued until flow ceases or the pressurizing gas begins to exit from the filtrate outlet.

5. The filter unit shall be depressurized, the solid material removed and weighed and then transferred to the extraction apparatus, or, in the case of final filtration prior to analysis, discarded. Do not allow the material retained on the filter pad to dry prior to weighing.

6. The liquid phase shall be stored at 4° Centigrade for subsequent use in subsection (8) of this section.

Section 3. Structural Integrity Procedure. (1) Equipment. A structural integrity tester having a 3.18 cm (approximately 1.25 in.) diameter hammer weighing 0.33 kg (approximately 0.73 lbs.) and having a free fall of 15.24 cm (approximately six (6) in.) shall be used. This device is available from Associated Design and Manufacturing Company, Alexandria, VA 22314, as Part No. 125, or it may be fabricated to meet the specifications shown in Figure 1.



*ELASTOMERIC SAMPLE HOLDER FABRICATED OF MATERIAL FIRM ENOUGH TO SUPPORT THE SAMPLE

FIGURE 1
COMPACTION TESTER

(2) Procedure. (Note: This procedure is intended to result in separation of the "free" liquid portion of particle size greater than 0.45 micrometers. If the sample will not filter, various other separation techniques can be used to aid in the filtration. As described above, pressure filtration is employed to speed up the filtration process. This does not alter the nature of the separation. If liquid does not separate during filtration, the waste can be centrifuged. If separation occurs during centrifugation, the liquid portion (centrifugate) is filtered through the 0.45 micrometer filter prior to becoming mixed with the liquid portion of the waste obtained from the initial filtration. Any material that will not pass through the filter after centrifugation is considered a solid and is extracted.)

(a) The sample holder shall be filled with the material to be tested. If the sample of waste is a large monolithic block, a portion shall be cut from the block having the dimensions of a 3.3 cm (approximately 1.3 in.) diameter x 7.1 cm (approximately 2.8 in.) cylinder. For a fixated waste, samples may be cast in the form of a 3.3 cm (approximately 1.3 in.) diameter x 7.1 (approximately 2.8 in.) cylinder for purposes of conducting this test. In such cases, the waste may be allowed to cure for thirty (30) days prior to further testing.

(b) The sample holder shall be placed into the structural integrity tester, then the hammer shall be raised to its maximum height and dropped. This shall be repeated fifteen (15) times.

(c) The material shall be removed from the sample holder, weighed, and transferred to the extraction apparatus for extraction.

(3) Analytical procedures for analyzing extract contaminants. The test methods for analyzing the extract are as follows:

(a) For arsenic, barium, cadmium, chronium, lead, mercury, selenium, silver, endrin, lindane, methozychlor, toxaphene, 2, 4-D(2,4,5-dichlorophenoxyacetic acid) or 2,4,5-TP (2,4,5-trichlorophenoxypropionic acid): "Test Methods for the Evaluation of Solid Waste, Physical/Chemical Methods" (incorporated by reference in Section 3 of 401 KAR 30:010).

(b) For all analyses, the methods of standard addition shall be used for quantification of species concentration.

JACKIE SWIGART, Secretary
ADOPTED: June 10, 1983
RECEIVED BY LRC: June 14, 1983 at 11 a.m.
See public hearings scheduled on page 1.

NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION CABINET
Department for Environmental Protection
Division of Waste Management
(Proposed Amendment)

401 KAR 31:120. Appendix on chemical analysis test methods.

RELATES TO: KRS *224.830 through 224.877, 224.994* [224.864(3), 224.868, 224.876]

PURSUANT TO: KRS 13.082, *13.083,* 224.017, 224.864(3)

NECESSITY AND FUNCTION: KRS 224.864(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 regulation contains the appendix to this chapter concerning the chemical analysis test methods.

Section 1. Chemical Analysis Test Methods. *(1) Tables 1, 2, and 3 specify the appropriate analytical procedures described in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," SW-846, (incorporated by reference in Section 3 of 401 KAR 30:010), which shall be used in determining whether the waste in question contains a toxic constituent given in 401 KAR 31:160 or 31:170.* [40 CFR 261 Appendix III—Chemical Analysis Test Methods—is adopted and herein filed by reference for use in interpreting any requirement in this chapter or any other hazardous waste regulation.]

(2) Table 1 identifies each organic constituent in 401 KAR 31:160 or 31:170 along with the approved measurement method. Table 2 identifies the corresponding methods for the inorganic species. Table 3 summarizes the contents of SW-846 and supplies specific section and method numbers for sampling and analysis methods.

(3) Prior to final sampling and analysis method selection the analyst should consult the specific section or method described in SW-846 for additional guidance on which of the approved methods should be employed for a specific sample analysis situation.

(4) TABLE 1. Analytical Characteristics of Organic Chemicals in SW-846

Compound	*Second Edition Methods*
Acetonitrile	*8030, 8240*
Acrolein	*8030, 8240*
Acrylamide	*8015, 8240*
Acrylonitrile	*8030, 8240*
Benzene	*8020, 8024*
Benz(a)anthracene	*8100, 8250, 8310*
Benzo(a)pyrene	*8100, 8250, 8310*
Benzotrichloride	*8120, 8250*
Benzyl chloride	*8120, 8250*
Benzo(b)fluoanthene	*8100, 8250, 8310*
Bis(2-chloroethoxymethane)	*8010, 8240*
Bis(2-chloroeothyl)ether	*8010, 8240*
Bis(2-chloroisopropyl)ether	*8010, 8240*
Carbon disulfide	*8015, 8240*
Carbon tetrachloride	*8010, 8240*
Chlordane	*8080, 8250*
Chlorinated dibenzodioxins	*8080, 8250*
Chlorinated biphenyls	*8080, 8250*
Chloroacetaldehyde	*8010, 8240*
Chlorobenzene	*8020, 8240*
Chloroform	*8010, 8240*
Chloromethane	*8010, 8240*
2-Chlorophenol	*8040, 8250*
Chrysene	*8100, 8250, 8310*
*Creosote**	*8100, 8250*
Cresol(s)	*8040, 8250*
Cresylic acid(s)	*8040, 8250*
Dichlorobenzene(s)	*8010, 8120, 8250*
Dichloroethane(s)	*8010, 8240*
Dichloromethane	*8010, 8240*
Dichlorophenoxy-acetic acid	*8150, 8250*
Dichloropropanol	*8120, 8250*
2,4-Dimethylphenol	*8040, 8250*
Dinitrobenzene	*8090, 8250*
4,6-Dinitro-o-cresol	*8040, 8250*
2,4-Dinitrotoluene	*8090, 8250*
Endrin	*8080, 8250*
Ethyl ether	*8015, 8240*
Formaldehyde	*8015, 8240*
Formic acid	*8250*
Heptachlor	*8080, 8250*
Hexachlorobenzene	*8120, 8250*

Hexachlorobutadiene	8120, 8250
Hexachloroethane	8010, 8240
Hexachlorocyclopentadiene	8120, 8250
Lindane	8080, 8250
Maleic anhydride	8250
Methanol	8010, 8240
Methomyl	8250
Methyl ethyl ketone	8015, 8240
Methyl isobutyl ketone	8015, 8240
Napththalene	8100, 8250
Napthoquinone	8090, 8250
Nitrobenzene	8090, 8250
4-Nitrophenol	8040, 8240
Paraldehyde (trimer of acetaldehyde)	8015, 8240
Pentachlorophenol	8040, 8250
Phenol	8040, 8250
Phorate	8140
Phosphorodithioic acid esters	8140
Phthalic anhydride	8090, 8250
2-Picoline	8090, 8250
Pyridine	8090, 8250
Tetrachlorobenzene(s)	8120, 8250
Tetrachloroethane(s)	8010, 8240
Tetrachloroethene	8010, 8240
Tetrachlorophenol	8040, 8250
Toluene	8020, 8024
Toluenediamine	8250
Toluene diisocyanate(s)	8250
Toxaphene	8080, 8250
Trichloroethane	8010, 8240
Trichloroethene(s)	8010, 8240
Trichlorofluoromethane	8010, 8240
Trichlorophenol(s)	8040, 8250
2,4,5-Trichlorophenoxy propionic acid	8150, 8250
Trichloropropane	8010, 8240
Vinyl chloride	8010, 8240
Vinylidene chloride	8010, 8240
Xylene	8020, 8240

*Analyze for phenanthrene and carbazole; if these are present in a ratio between 1.4:1 and 5:1, creosote should be considered present.

(5) TABLE 2. Analytical Characteristics of Inorganic Species Contained in SW-846

Species	Second Edition Methods
Antimony	7040, 7041
Arsenic	7060, 7061
Barium	7080, 7081
Cadmium	7090, 7091
Chromium	7190, 7191
Chromium: hexavalent	7195, 7196, 7197
Cyanides	9010
Lead	7420, 7421
Mercury	7470, 7471
Nickel	7520, 7521
Selenium	7740, 7741
Silver	7760, 7761
Sulfides	9030
Total organic halogen	9020

(6) TABLE 3. Sampling and Analysis Methods Contained in SW-846

Title	Section No.	Method No.
Sampling of Solid Wastes	1.0	
Development of Appropriate Sampling Plans	1.1	
Regulatory and Scientific Objectives	1.1.1	
Fundamental Statistical Concepts	1.1.2	
Basic Statistical Strategies	1.1.3	
Simple Random Sampling	1.1.3.1	
Stratified Random Sampling	1.1.3.2	
Systematic Random Sampling	1.1.3.3	
Special Considerations		
Composite Sampling	1.1.4.1	
Subsampling	1.1.4.2	
Cost and Loss Functions	1.1.4.3	
Implementation of Sampling Plan	1.2	
Selection of Sampling Equipment	1.2.1	
Composite Liquid Waste Sampler	1.2.1.1	
Weighted Bottle	1.2.1.2	
Dipper	1.2.1.3	
Thief	1.2.1.4	
Trier	1.2.1.5	
Auger	1.2.1.6	
Scoop and Shovel	1.2.1.7	
Selection of Sample Containers	1.2.2	
Processing and Storage of Samples	1.2.3	
Documentation of Chain of Custody	1.3	
Sample Labels	1.3.1	
Sample Seals	1.3.2	
Field Log Book	1.3.3	
Chain-of-Custody Record	1.3.4	
Sample Analysis Request Sheet	1.3.5	
Sample Delivery to Laboratory	1.3.6	
Shipping of Samples	1.3.7	
Receipt and Logging of Sample	1.3.8	
Assignment of Sample for Analysis	1.3.9	
Sampling Methodology	1.4	
Containers	1.4.1	
Tanks	1.4.2	
Waste Piles	1.4.3	
Landfills and Lagoons	1.4.4	
Waste Evaluation Procedures	2.0	
Characteristics of Hazardous Waste	2.1	
Ignitability	2.1.1	
Pensky-Martens Closed-Gap Method	2.1.1	1010
Setaflash Closed-Cup Method	2.1.1	1020
Corrosivity	2.1.2	
Corrosivity Toward Steel	2.1.2	1110
Reactivity	2.1.3	
Extraction Procedure Toxicity	2.1.4	
Extraction Procedure Toxicity Test Method and Structural Integrity Test	2.1.4	1310
Sample Workup Techniques	4.0	
Inorganic Techniques	4.1	
Acid Digestion for Flame AAS	4.1	3010
Acid Digestion for Furnace AAS	4.1	3020
Acid Digestion of Oil, Grease or Wax	4.1	3030
Dissolution Procedure for Oil, Grease or Wax		
Alkaline Digestion	4.1	3060
Organic Techniques	4.2	
Separatory Funnel Liquid-Liquid Extraction	4.2	3510
Continuous Liquid-Liquid Extraction	4.2	3520
Acid-Base Cleanup Extraction	4.2	3530
Soxhlet Extraction	4.2	3540
Sonication Extraction	4.2	3550
Sample Introduction Techniques	5.0	
Headspace	5.0	5020
Purge-and-Trap	5.0	5030
Inorganic Analytical Methods	7.0	
Antimony, Flame AAS	7.0	7470
Antimony, Furnace AAS	7.0	7471
Arsenic, Flame AAS	7.0	7060
Arsenic, Furnace AAS	7.0	7061
Barium, Flame AAS	7.0	7080
Barium, Furnace AAS	7.0	7081
Cadmium, Flame AAS	7.0	7130
Cadmium, Furnace AAS	7.0	7131
Chromium, Flame AAS	7.0	7090
Chromium, Furnace AAS	7.0	7191
Chromium, Hexavalent, Coprecipitation	7.0	7195
Chromium, Hexavalent, Colorimetric	7.0	7196
Chromium, Hexavalent, Chelation	7.0	7197
Lead, Flame AAS	7.0	7420
Lead, Furnace AAS	7.0	7421
Mercury, Cold Vapor, Liquid	7.0	7470
Mercury, Cold Vapor, Solid	7.0	7471
Nickel, Flame AAS	7.0	7520
Nickel, Furnace AAS	7.0	7521
Selenium, Flame AAS	7.0	7740
Selenium, Gaseous Hydride AAS	7.0	7741
Silver, Flame AAS	7.0	7760
Silver, Furnace AAS	7.0	7761
Organic Analytical Methods	8.0	
Gas Chromatographic Methods	8.1	
Halogenated Volatile Organics	8.1	8010
Nonhalogenated Volatile Organics	8.1	8015
Aromatic Volatile Organics	8.1	8020
Acrolein, Acrylonitrile, Acetonitrile	8.1	8030
Phenols	8.1	8040
Phthalate Esters	8.1	8060
Organochlorine Pesticides and PCB's	8.1	8080
Nitroaromatics and Cyclic Ketones	8.1	8090

Polynuclear Aromatic Hydrocarbons	8.1	8100
Chlorinated Hydrocarbons	8.1	8120
Organophosphorus Pesticides	8.1	8140
Chlorinated Herbicides	8.1	8150
Gas Chromatographic/Mass Spectroscopy Methods (GC/MS)	8.2	
GC/MS Volatiles	8.2	8240
GC/MS Semi-Volatiles, Packed Column	8.2	8250
GC/MS Semi-Volatiles, Capillary	8.2	8270
High Performance Liquid Chromatographic Methods (HPLC)	8.3	
Polynuclear Aromatic Hydrocarbons	8.3	8310
Miscellaneous Analytical Methods	9.0	
Cyanide; Total and Amenable to Chlorination	9.0	9010
Total Organic Halogen (TOX)	9.0	9020
Sulfides	9.0	9030
pH Measurement	9.0	9040
Quality Control/Quality Assurance	10.1	
Introduction	10.1	
Program Design	10.2	
Sampling	10.3	
Analysis	10.4	
Data Handling	10.5	

JACKIE SWIGART, Secretary
ADOPTED: June 10, 1983
RECEIVED BY LRC: June 14, 1983 at 11 a.m.
See public hearings scheduled on page 1.

NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION CABINET
Department for Environmental Protection
Division of Waste Management
(Proposed Amendment)

401 KAR 31:160. Appendix on basis for listing hazardous waste.

RELATES TO: KRS *224.830 through 224.877, 224.994* [224.864(3), 224.868, 224.876]
PURSUANT TO: KRS 13.082, *13.083,* 224.017, 224.864(3)
NECESSITY AND FUNCTION: KRS 224.864(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 regulation contains the appendix to this chapter concerning the basis for listing a hazaroud waste.

Section 1. Basis for Listing Hazardous Waste. [40 CFR 261 Appendix VII—] *The* basis for listing hazardous waste [—is adopted and herein filed by reference] for use in interpreting any requirement in this chapter or any other hazardous waste regulation *are:* [.]

EPA Hazardous Waste No.	*Hazardous Constituents for Which Listed*
F001	*Tetrachloroethylene, methylene chloride trichloroethylene, 1,1,1-trichloroethane, carbon tetrachloride, chlorinated fluorocarbons.*
F002	*Tetrachloroethylene, methylene chloride, trichloroethylene, 1,1,1-trichloroethane, chlorobenzene, 1,1,2-trichloro-1,2,2,-trifluoroethane, ortho-dichlorobenzene, trichlorofluoromethane.*
F003	*Not Applicable (hereafter N.A.).*
F004	*Croseols and cresylic acid, nitrobenzene.*
F005	*Toluene, methyl ethyl ketone, carbon disulfide, isobutanol, pyridine.*
F006	*Cadmium, hexavalent chromium, nickel, cyanide (complexed).*
F007	*Cyanide (salts).*
F008	*Cyanide (salts).*
F009	*Cyanide (salts).*
F010	*Cyanide (salts).*
F011	*Cyanide (salts).*
F012	*Cyanide (complexed).*
F019	*Hexavalent chromium, cyanide (complexed).*
K001	*Pentachlorophenol, phenol, 2-chlorophenol, p-chloro-m-cresol, 2,4-dimethylphenyl, 2,4-dinitrophenol, trichlorophenols, tetrachlorophenols, 2,4-dinitrophenol, cresosote, chrysene, naphthalene, fluoranthene, benzo(b)fluoranthene, benzo(a)pyrene, indenol(1,2,3-cd)pyrene, benz(a)anthracene, dibenz(a)anthracene, acenaphthalene.*
K002	*Hexavalent chromium, lead.*
K003	*Hexavalent chromium, lead.*
K004	*Hexavalent chromium.*
K005	*Hexavalent chromium, lead.*
K006	*Hexavalent chromium.*
K007	*Cyanide (complexed), hexavalent chromium.*
K008	*Hexavalent chromium.*
K009	*Chloroform, formaldehyde, methylene chloride, methyl chloride, paraldehyde, formic acid.*
K010	*Chloroform, formaldehyde, methylene chloride, methyl chloride, paraldehyde, formic acid, chloroacetaldehyde.*
K011	*Acrylonitrile, acetonitrile, hydrocyanic acid.*
K013	*Hydrocyanic acid, acrylonitrile, acetonitrile.*
K014	*Acetonitrile, acrylamide.*
K015	*Benzyl chloride, chlorobenzene, toluene, benzotrichloride.*
K016	*Hexachlorobenzene, hexachlorobutadiene, carbon tetrachloride, hexachloroethane, perchloroethylene.*
K017	*Epichlorohydrin, chloroethers (bis(chloromethyl) ether and bis(2-chloroethyl) ethers), trichloropropane, dichloropropanols.*
K018	*1,2-dichloroethane, trichloroethylene, hexachlorobutadiene, hexachlorobenzene.*
K019	*Ethylene dichloride, 1,1,1-trichloroethane, 1,1,2-trichloroethane, tetrachloroethanes (1,1,2,2-tetrachloroethane and 1,1,1,2-tetrachloroethane), trichloroethylene, tetrachloroethylene, carbon tetrachloride, chloroform, vinyl chloride, vinylidene chloride.*
K020	*Ethylene dichloride, 1,1,1-trichloroethane, 1,1,2-trichloroethane, tetrachloroethanes (1,1,2,2-tetrachloroethane and 1,1,1,2-tetrachloroethane), trichloroethylene, tetrachloroethylene, carbon tetrachloride, chloroform, viny chloride, vinylidene chloride.*
K021	*Antimony, carbon tetrachloride, chloroform.*

K022	*Phenol, tars (polycyclic aromatic hydrocarbons).*
K023	*Phthalic anhydride, maleic anhydride.*
K024	*Phthalic anhydride, 1,4-naphthoquinone.*
K025	*Meta-dinitrobenzene, 2,4-dinitrotoluene.*
K026	*Paraldehyde, pyridines, 2-picoline.*
K027	*Toluene diisocyanate, toluene-2,4-diamine.*
K028	*1,1,1-trichloroethane, vinyl chloride.*
K029	*1,2-dichloroethane, 1,1,1-trichlorethane, vinyl chloride, vinylidene chloride, chloroform.*
K030	*Hexachlorobenzene, hexachlorobutadiene, hexachloroethane, 1,1,1,2-tetrachloroethane, 1,1,2,2-tetrachloroethane, ethylene dichloride.*
K031	*Arsenic.*
K032	*Hexachlorocyclopentadiene.*
K033	*Hexachlorocyclopentadiene.*
K034	*Hexachlorocyclopentadiene.*
K035	*Creosote, chrysene, naphthalene, fluoranthene benzo(b)fluoranthene, benzo(a)pyrene, indeno(1,2,2-cd) pyrene, benzo(a)anthracene, dibenzo(a) anthracene, acenaphthalene.*
K036	*Toluene, phosphorothioic acid esters.*
K037	*Toluene, phosphorodithioic and phosphorothioic acid esters.*
K038	*Phorate, formaldehyde, phosphorodithioic and phosphorothioic acid esters.*
K039	*Phosphorodithioic and phosphorothioic acid esters.*
K040	*Phorate, formaldehyde, phosphorodithioic and phosphorothioic acid esters.*
K041	*Toxaphene.*
K042	*Hexachlorobenzene, ortho-dichlorobenzene*
K043	*2,4-dichlorophenol, 2,6-dichlorophenol, 2,4,6-trichlorophenol.*
K044	*N.A.*
K045	*N.A.*
K046	*Lead*
K047	*N.A.*
K048	*Hexavalent chromium, lead.*
K049	*Hexavalent chromium, lead.*
K050	*Hexavalent chromium.*
K051	*Hexavalent chromium, lead.*
K052	*Lead.*
K060	*Cyanide, naphthalene, phenolic compounds, arsenic.*
K061	*Hexavalent chromium, lead, cadmium.*
K062	*Hexavalent chromium, lead.*
K069	*Hexavalent chromium, lead, cadmium.*
K071	*Mercury.*
K073	*Chloroform, carbon tetrachloride, hexachloroethane, trichloroethane, tetrachloroethylene, dichloroethylene, 1,1,2,2-tetrachloroethane.*
K083	*Aniline, diphenylamine, nitrobenzene, phenylenediamine.*
K084	*Arsenic.*
K085	*Benzene, dichlorobenzenes, trichlorobenzenes, tetrachlorobenzenes, pentachlorobenzene, hexachlorobenzene, benzyl chloride.*
K086	*Lead, hexavalent chromium.*
K087	*Phenol, naphthalene.*
K093	*Phthalic anhydride, maleic anhydride.*
K094	*Phthalic anhydride.*
K095	*1,1,2-trichloroethane, 1,1,1,2-tetrachloroethane, 1,1,2,2-tetrachloroethane.*
K096	*1,2-dichloroethane, 1,1,1-trichloroethane, 1,1,2-trichloroethane.*
K097	*Chlordane, heptachlor.*
K098	*Toxaphene.*
K099	*2,4-dichlorophenol, 2,4,6-trichlorophenol.*
K100	*Hexavalent chromium, lead, cadmium.*
K101	*Arsenic.*
K102	*Arsenic.*
K103	*Aniline, nitrobenzene, phenylenediamine.*
K104	*Aniline, benzene, diphenylamine, nitrobenzene, phenylenediamine.*
K105	*Benzene, monochlorobenzene, dichlorobenzenes, 2,4,6-trichlorophenol.*
K106	*Mercury.*

JACKIE SWIGART, Secretary
ADOPTED: June 10, 1983
RECEIVED BY LRC: June 14, 1983 at 11 a.m.
See public hearings scheduled on page 1.

NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION CABINET
Department for Environmental Protection
Division of Waste Management
(Proposed Amendment)

401 KAR 31:170. Appendix on hazardous constituents.

RELATES TO: KRS *224.830 through 224.877, 224.994* [224.864(3), 224.868, 224.876]
PURSUANT TO: KRS 13.082, *13.083,* 224.017, 224.864(3)
NECESSITY AND FUNCTION: KRS 224.864(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 regulation contains the appendix to this chapter concerning the hazardous waste constituents.

Section 1. Hazardous Waste Constituents. [40 CFR 261 Appendix VIII—] *The list of* hazardous waste constituents [—is adopted and herein filed by reference] for use in interpreting any requirement in this chapter or any other hazardous waste regulation *is:* [.]

Acetonitrile (Ethanenitrile)
Acetophenone (Ethanone, 1-phenyl)
3-(alpha-Acetonylbenzyl)-4-hydroxycoumarin and salts (Warfarin)
2-Acetylaminofluorene (Acetamide, N-(9H-fluoren-2-yl)-)
Acetyl chloride (Ethanoyl chloride)
1-Acetyl-2-thiourea (Acetamide, N-(aminothioxomethyl)-)
Acrolein (2-Propenal)
Acrylamide (2-Propenamide)
Acrylonitrile (2-Propenenitrile)
Aflatoxins
Aldrin(1,2,3,4,10,10-Hexachloro-1,4,4a,5,8,8a-hexahydro-endo,exo-1,4:5,8-Dimethanonaphthalene)
Allyl alcohol (2-Propen-1-ol)
Aluminum phosphide

4-Aminobiphenyl ((1,1'-Biphenyl)-4-amine)
6-Amino-1,1a,2,8,8a,8b-Hexahydro-8-(hydroxymethyl)-8a-methoxy-5-methyl-carbamate azirino(2',3':3,4) pyrrolo(1,2-a)indole-4,7-dione, (ester) (Mitomycin C)
(Azirino(2',3':3,4)pyrrolo(1,2-a)indole-4,7-dione,6-amino-8-(((amino-carbonyl)oxy)methyl)-1,1a,2,8,8a,8b-hexahydro-8-amethoxy-5-methyl)
5-(Aminomethyl)-3-isoxazolol (3(2H)-Isoxazolone, 5-(aminomethyl)-)4-Aminopyridine (4-Pyridinamine)
Amitrole (1H-1,2,4-Triazol-3-amine)
Aniline (Benzenamine)
*Antimony and compounds, N.O.S.**
Aramite (Sulfurous acid, 2-chloroethyl-,2-(4-(1,1-dimethylethyl)phenoxy)-1-methylethyl ester)
*Arsenic and compounds, N.O.S.**
Arsenic acid (Orthoarsenic acid)
Arsenic pentoxide (Arsenic (V) oxide)
Arsenic trioxide (Arsenic (III) oxide)
Auramine (Benzenamine, 4,4'-carbonimidoylbis(N,N-Dimethyl-monohydrochloride)
Azaserine (L-Serine, diazoacetate (ester))
*Barium and compounds, N.O.S.**
Barium cyanide
Benz(c)acridine (3,4-Benzacridine)
Benz(a)anthracene (1,2-Benzanthracene)
Benzene (Cyclohexatriene)
Benzenearsonic acid (Arsonic acid, phenyl-)
Benzene, dichloromethyl-(Benzal chloride)
Benzenethiol (Thiophenol)
Benzidine ((1,1'-Biphenyl)-4,4'diamine)
Benzo(b)fluoranthene (2,3-Benzofluoranthene)
Benzo(j)fluoranthene (7,8-Benzofluoranthene)
Benzo(a)pyrene (3,4-Benzopyrene)
p-Benzoquinone (1,4-Cyclohexadienedione)
Benzotrichloride (Benzene, trichloromethyl-)
Benzyl chloride (Benzene, (chloromethyl)-)
*Beryllium and compounds, N.O.S.**
Bis(2-chloroethoxy)methane (Ethane,1,1'-(methylenebis(oxy))bis(2-chloro-))
Bis(2-chlorethyl) ether (Ethane,1,1'-oxybis(2-chloro-))
N,N-Bis(2-chloroethyl)-2-naphthylamine (Chlornaphazine)
Bis(2-chloroisopropyl) ether (Propane,2,2'-oxybis(2-chloro-)
Bis(chloromethyl) ether (Methane, oxybis(chloro-))
Bis(2-ethylhexyl) phthalate (1,2-Benzenedicarboxylic acid, bis(2)ethylhexyl) ester)
Bromoacetone (2-Propanone, 1-Bromo-)
Bromomethane (Methyl bromide)
4-Bromophenyl phenyl ether (Benzene, 1-bromo-4-phenoxy-)
Brucine (Strychnidin-10-one,2,3-dimethoxy-)
2-Butanone peroxide (Methyl ethyl ketone, peroxide)
Butyl benzyl phthalate (1,2-Benzenedicarboxylic acid, butylphenylmethyl ester)
2-sec-Butyl-4,6-dinitrophenol (DNBP) (Phenol,2,4-dinitro-6-(1-methylpropyl)-)
*Cadmium and compounds N.O.S.**
Calcium chromate (Chromic acid, calcium salt)
Calcium cyanide
Carbon disulfide (Carbon bisulfide)
Carbon oxyfluoride (Carbonyl fluoride)
Chloral (Acetaldehyde, trichloro-)
Chlorambucil (Butanoic acid, 4-(bis(2-chloroethyl)amino)benzene-)
Chlordane (alpha and gamma isomers) (4,7-Methanoindan,1,2,4,5,6,7,8,8-octachloro-3,4,7,7a-tetrahydro-) (alpha and gamma isomers)
*Chlorinated benzenes. N.O.S.**
*Chlorinated ethane, N.O.S.**
*Chlorinated fluorocarbons, N.O.S.**
*Chlorinated naphthalene, N.O.S.**
*Chlorinated phenol, N.O.S.**
Chloroacetaldehyde (Acetaldehyde, chloro-)
*Chloroalkyl ethers, N.O.S.**
p-Chloroaniline (Benzenamine 4-chloro-)
Chlorobenzene (Benzene, chloro-)
Chlorobenzilate (Benzeneacetic acid, 4-chloro-alpha-(4-chlorophenyl)-alphahydroxy-ethyl ester)
p-Chloro-in-cresol (Phenol, 4-chloro-3-methyl)
1-Chloro-2,3-epoxypropane (Oxirane, 2-chloroethoxy)-)
2-Chloroethyl vinyl ether (Ethene, (2-chloroethyoxy)-)
Chloroform (Methane, trichloro-)
Chloromethane (Methyl chloride)
Chloromethyl methyl ether (Methane, chloromethoxy-)
2-Chloronaphthalene (Naphthalene, betachloro-)
2-Chlorophenol (Phenol,o-chloro-)
1-(o-Chlorophenyl)thiourea (Thiourea, (2-chlorophenyl)-)
3-Chloropropionitrile (Propanenitrile, 3-chloro-)
*Chromium and compounds, N.O.S.**
Chrysene (1,2-Benzphenanthrene)
Citrus red No. 2 (2-Naphthol, 1-((2,5-dimethoxyphenyl)axo)-)
Coal tars
Copper cyanide
Creosote (Creosote, wood)
Cresols (Cresylic acid) (Phenol, methyl-)
Crotonaldehyde (2-Butenal)
*Cyanides (soluble salts and complexes), N.O.S.**
Cyanogen (Ethanedinitrile)
Cyanogen bromide (Bromine cyanide)
Cyanogen chloride (Chlorine cyanide)
Cyansin (beta-D-Glucopyranoside, (methyl-ONN-azoxy)methyl-)
2-Cyclohexyl-4,6-dinitrophenol (Phenol, 2-cyclohexyl-4,6-dinitro-)
Cyclophosphamide (2H-1,3,2,-Oxazaphosphorine, (bis(2-chloroethyl)amino)-tetrahydro-,2-oxide)
Daunomycin (5,12-Naphthacenedione, (8s-cis)-8-actyl-10-((3-amino-2,3,6-trideoxy)-alpha-L-lyxo-hexopyranosyl)oxy)-7,8,9,10-tetrahydro-6,8,11-trihydroxy-1-methoxy-)
DDD (Cichlorodiphenyldichloroethane) (Ethane,1,1-dichloro-2,2-bis(p-chlorophenyl)-)
DDE (Ethylene,1,1-dichloro-2,2-bis(4-chlorophenyl)-)
DDT (Dichlorodiphenyltrichloroethane) (Ethane,1,1,1-trichloro-2,2-bis(p-chlorophenyl)-)
Diallate (S-(2,3-dichloroallyl) diisopropylthiocarbamate
Dibenz(a,h)acridine (1,2,5,6-Dibenzacridine)
Dibenz(a,j)acridine (1,2,7,8-Dibenzacridine)
Dibenz(a,h)anthracene (1,2,5,6-Dibenzanthracene)
7H-Dibenzo(c,g)carbazole (3,4,5,6-Dibenzcarbazole)
Dibenzo(a,e)pyrene (1,2,4,5-Dibenzpyrene)
Dibenso(a,h)pyrene (1,2,5,6-Dibenzpyrene)
Dibenzo(a,i)pyrene (1,2,7,8-Dibenzpyrene)
1,2-Dibromo-3-chloropropane (Propane,1,2-dibromo-3-chloro-)
1,2-Dibromoethane (Ethylene dibromide)
Dibromomethane (Methylene bromide)
Di-n-butyl phthalate (1,2-Benzenedicarboxylic acid, dibutyl ester)
o-Dichlorobenzene (Benzene, 1,2-dichloro-)
m-Dichlorobenzene (Benzene, 1,3-dichloro-)
p-Dichlorobenzene (Benzene, 1,4-dichloro-)
Dichlorobenzene, N.O.S. (Benzene, dichloro-, N.O.S.**
3,3'-Dichlorobenzidine ((1,1'-Biphenyl)-4,4'-diamine,3,3'-dichloro-)
1,4-Dichloro-2-butene (2-Butene,1,4-dichloro-)

Dichlorodifluoromethane (Methane, dichlorodifluoro-)
1,1-Dichloroethane (Ethylidene dichloride)
1,2-Dichloroethane (Ethylene dichloride)
trans-1,2-Dichloroethene (1,2-Dichloroethylene)
Dichloroethylene, N.O.S. (Ethene, dichloro- N.O.S.*
Dichloromethane (Methylene chloride)
2,4-Dichlorophenol (Phenol, 2,4-dichloro-)
2,6-Dichlorophenol (Phenol, 2,6-dichloro-)
2,4-Dichlorophenoxyacetic acid (2,4-D), salts and esters (Acetic acid, 2,4-dichlorophenoxy-, salts and esters)
Dichlorophenylarsine (Phenyl dichloroarsine)
Dichloropropane, N.O.S. (Propane, dichloro- N.O.S.*)*
1,2-Dichloropropane (Propylene dichloride)
Dichloropropanol, N.O.S. (Propanol dichloro-, N.O.S.*)*
Dichloropropene, N.O.S. (Propene, dichloro-, N.O.S.*)*
1,3-Dichloropropene (1-Propene, 1,3-dichloro-)
Dieldrin (1,2,3,4,10,10-hexachloro-6,7-epoxy-1,4,4a,5,6,7,8,8a-octa-hydro-endo,exo-1,4:5,8-Dimethanonaphthalene)
1,2:3,4-Diepoxybutane (2,2'-Bioxirane)
Diethylarsine (Arsine, diethyl-)
N,N-Diethylhydrazine (Hydrazine, 1,2-diethyl)
O,O-diethyl S-methyl ester of phosphorodithioic acid (Phosphorodithioic acid, O,O-diethyl S-methyl ester
O,O-Diethylphosphoric acid, O-p-nitrophenyl ester (Phosphoric acid, diethyl p-nitrophenyl ester)
Diethyl phthlate (1,2-Benzenedicarboxylic acid, diethyl ester)
O,O-Diethyl O-2-pyrazinyl phosphorothioate (Phosphorothioic acid, O,O-diethyl O-pyrazinyl ester
Diethylstilbesterol (4,4'-Stilbenediol, alpha, alpha-diethyl, bis(dihydrogen phosphate, (E)-)
Dihydrosafrole (Benzene, 1,2-methylenedioxy-4-propyl-)
3,4-Dihydroxy-alpha-(methylamino)methyl benzyl alcohol (1,2-Benzenediol, 4-(1-hydroxy-2-(methylamino)ethyl)-)
Diisopropylfluorophosphate (DFP) (Phosphorofluoridic acid, bis(1-methylethyl) ester)
Dimethoate (Phosphorodithioic acid, O,O-dimethyl S-(2-(methylamino)-2-oxoethyl) ester
3,3'-Dimethoxybenzidine ((1,1'-Biphenyl)-4,4'diamine, 3,3'-dimethoxy-)
p-Dimethylaminoazobenzene (Benzenamine, N,N-dimethyl-4-(phenylazo)-)
7,12-Dimethylbenz(a)anthracene (1,2-Benzanthracene, 7,12-dimethyl-)
3,3'-Dimethylbenzidine ((1,1'-biphenyl)-4,4'-diamine, 3,3'-dimethyl-)
Dimethylcarbamoyl chloride (carbamoyl chloride, dimethyl-)
1,1-Dimethylhydrazine (Hydrazine, 1,1-dimethyl-)
1,2-Dimethylhydrazine (Hydrazine, 1,2-dimethyl-)
3,3-Dimethyl-1-(methylthio)-2-butanone, O-((methylamino) carbonyl)oxime (Thiofanox)
alpha, alpha-Dimethylphenethylamine (Ethanamine, 1,1-dimethyl-2-phenyl-)
2,4-Dimethylphenol (Phenol,2,4-dimethyl-)
Dimethyl phthalate (1,2-Benzenedicarboxylic acid, dimethyl ester)
Dimethyl sulfate (Sulfuric acid, dimethyl ester)
Dinitrobenzene, N.O.S. (Benzene, dinitro-,N.O.S.*)*
4,6-Dinitro-o-cresol and salts (Phenol, 2,4-dinitro-6-methyl-, and salts)
2,4-Dinitrophenol (Phenol, 2,4-dinitro-)
2,4-Dinitrotoluene (Benzene, 1-methyl-2,4-dinitro-)
2,6-Dinitrotoluene (Benzene, 1-methyl-2,6-dinitro-)
Di-n-octyl phthalate (1,2-Benzenedicarboxylic acid, dioctyl ester)
1,4-Dioxane (1,4-Diethylene oxide)
Diphenylamine (Benzenamine, N-phenyl-)
1,2-Diphenylhydrazine (Hydrazine, 1,2-diphenyl-)
Di-n-propylnitrosamine (N-Nitroso-di-n-propylamine)
Disulfoton (O,O-diethyl S-(ethylthio)ethyl)phosphorodithioate
2,4-Dithiobiuret (Thioimidodicarbonic diamide)
Endosulfan (5-Norbornene, 2,3-dimethanol, 1,4,5,6,7,7-hexachloro-, cyclic sulfite)
Endrin and metabolites (1,2,3,4,10,10-hexachloro-6,7-epoxy-1,4,4a,5,6,7,8,8a-octahydro- endo,endo-1,4:5,8-dimethanonaphthalene, and metabolites)
Ethyl carbamate (Urethan) (Carbamic acid, ethyl ester)
Ethyl cyanide (propanenitril)
Ethylenebisdithiocarbamic acid, salts and esters (1,2-Ethanediylbiscarbamodithioic acid, salts and esters)
Ethyleneimine (Aziridine)
Ethylene oxide (Oxirane)
Ethylenethiourea (2-Imidazolidinethione)
Ethyl methacrylate (2-Propenoic acid, 2-methyl-,ethyl ester)
Ethyl methanesulfonate (Methanesulfonic acid, ethyl ester)
Fluoranthene (Benzo(j,k)fluorene)
Fluorine
2-Fluoroacetamide (Acetamide, 2-fluoro-)
Fluoroacetic acid, sodium salt (Acetic acid, fluoro-, sodium salt)
Formaldehyde (methylene oxide)
Formic acid (Methanoic acid)
Glycidylaldehyde (1-Propanol-2,3-epoxy)
Halomethane, N.O.S.
Heptachlor (4,7-Methano-1H-indene, 1,4,5,6,7,8,8-heptachloro-3a,4,7,7a-tetrahydro-)
Heptachlor epoxide (alpha, beta, and gamma isomers) (4,7-Methano-1H-indene, 1,4,5,6,7,8,8-heptachloro-2,3-epoxy-3a,4,7,7-tetrahydro-, alpha, beta, and gamma isomers)
Hexachlorobenzene (Benzene, hexachloro-)
Hexachlorobutadiene (1,3-Butadiene, 1,1,2,3,4,4-hexachloro-)
Hexachlorocyclohexane (all isomers) (Lindane and isomers)
Hexachlorocyclopentadiene (1,3-Cyclopentadiene, 1,2,3,4,5,5-hexachloro-)
Hexachloroethane (Ethane, 1,1,1,2,2,2-hexachloro-)
1,2,3,4,10,10-Hexachloro-1,4,4a,5,8,8a-hexahydro-1,4:5,8-endo, endo-dimethanonaphthalene (Hexachlorohexahydro-endo,endo-dime thanonaphthalene)
Hexachlorophene (2,2'-Methylenebis(3,4,6-trichlorophenol))
Hexachloropropene (1-Propene, 1,1,2,3,3,3-hexachloro-)
Hexaethyl tetraphosphate (Tetraphosphoric acid, hexaethyl ester)
Hydrazine (Diamine)
Hydrocyanic acid (Hydrogen cyanide)
Hydrofluoric acid (Hydrogen fluoride)
Hydrogen sulfide (Sulfur hydride)
Hydroxydimethylarsine oxide (Cacodylic acid)
Indeno(1,2,3-cd)pyrene (1,10-(1,2-phenylene)pyrene)
Iodomethane (Methyl iodide)
Iron dextran (Ferric dextran)
Isocyanic acid, methyl ester (Methyl isocyanate)
Isobutyl alcohol (1-Propanol, 2-methyl-)
Isosafrole (Benzene, 1,2-methylenedioxy-4-allyl-)
Kepone (Decachlorooctahydro-1,3,4-Methano-2H-cyclobuta(cd)pentalen-2-one)
Lasiocarpine (2-Butenoic acid, 2-methyl-,7-((2,3-dihydroxy-2-1)1-methoxyethyl)-3-methyl-1-oxobutoxy) methyl)-2,3,5,7a-tetrahydro-1H-pyrrolizin-1-yl ester

*Lead and compounds, N.O.S.**
Lead acetate (Acetic acid, lead salt)
Lead phosphate (Phosphoric acid, lead salt)
Lead subacetate (Lead, bis(acetato-O)tetrahydroxytri-)
Maleic anhydride (2,5-Furandione)
Maleic hydrazide (1,2-Dihydro-3,6-pyridazinedione)
Malononitrile (Propanedinitrile)
Melphalan (Alanine, 3-(p-bis)2-chloroethyl)amino) phenyl-,L-)
Mercury fulminate (Fulminic acid, mercury salt)
*Mercury and compounds, N.O.S.**
Methacrylonitrile (2-Propenenitrile, 2-methyl-)
Methanethiol (Thiomethanol)
Methapyrilene (Pyridine, 2-((2-dimethylamino)ethyl)-2-thenylamino-)
Metholmyl (Acetimidic acid, N-((methylcarbamoyl)oxy) thio-,methyl ester
Methoxychlor (Ethane, 1,1,1-trichloro-2,2'-bis(p-methoxyphenyl)-)
2-Methylaziridine (1,2-Propylenimine)
3-Methylcholanthrene (Benz(j)aceanthrylene, 1,2-dihydro-3-methyl-)
Methyl chlorocarbonate (Carbonochloridic acid, methyl ester)
4,4'-Methylenebis(2-chloroaniline) (Benzenamine,4,4'-methylenebis-(2-chloro-)
Methyl ethyl ketone (MEK) (2-Butanone)
Methyl hydrazine (Hydrazine, methyl-)
2-Methyllactonitrile (Propanenitrile, 2-hydroxy-2-methyl-)
Methyl methacrylate (2-Propenoic acid, 2-methyl-, methyl ester)
Methyl methanesulfonate (Methanesulfonic acid, methyl ester)
2-Methyl-2-(methylthio)propionaldehyde-o-(methylcarbonyl) oxime (Propanal, 2-methyl-2-(methylthio)-,O-((methylamino)carbonyl)oxime)
N-Methyl-N'-nitro-N-nitrosoguanidine (Guanidine, N-nitroso-N-methyl-N'-nitro-)
Methyl parathion (O-O-dimethyl O-(4-nitrophenyl) phosophorothioate)
Methylthiouracil (4-1H-Pyrimidinone, 2,3-dihydro-6-methyl-2-thioxo-)
Mustard gas (Sulfide, bis(2-chloroethyl)-)
Naphthalene
1,4-Naphthoquinone (1,4-Naphthalenedione)
1-Naphthylamine (alpha-Naphthylamine)
2-Naphthylamine (beta-Naphthylamine)
1-Nanphthyl-2-thiourea (Thiourea, 1-naphthalenyl-)
*Nickel and compounds, N.O.S.**
Nickel carbonyl (Nickel tetracarbonyl)
Nickel cyanide (Nickel (II) cyanide)
Nicotine and salts (Pyridine, (S)-3-(1-methyl-2-pyrrolidinyl)-, and salts)
Nitric oxide (Nitrogen (II) oxide)
p-Nitroaniline (Benzenamine, 4-nitro-)
Nitrobenzine (Benzene, nitro-)
Nitrogen dioxide (Nitrogen (IV) oxide)
Nitrogen mustard and hydrochloride salt (Ethanamine,2-chloro-, N-(2-chloroethyl)-N-methyl-, and hydrochloride salt)
Nitrogen mustard N-Oxide and hydrochlororide salt (Ethanamine, 2-chloro-, N-(2-chloroethyl)-N-methyl-, and hydrochloride salt)
Nitroglycerine (1,2,3-Propanetriol, trinitrate)
4-Nitrophenol (Phenol, 4-nitro-)
4-Nitroquinoline-1-oxide (Quinoline, 4-nitro-oxide-)
*Nitrosamine, N.O.S.**
N-Nitrosodi-n-butylamine (1-Butanamine, N-butyl-N-nitroso-)
N-Nitrosodiethanoamine (Ethanol, 2,2'-(nitrosoimino)bis-)
N-Nitrosodiethylamine (Ethanamine, N-ethyl-N-nitroso-)
N-Nitrosodimethylamine (Dimethylnitrosamine)
N-Nitroso-N-ethylurea (Cabamide, N-ethyl-N-nitroso-)
N-Nitrosomethylethylamine (Ethanamine, N-methyl-N-nitroso-)
N-Nitroso-N-methylurea (carbamide, N-methyl-N-nitroso-)
N-Nitroso-N-methylurethane (Carbamic acid, methylnitroso-, ethyl ester)
N-Nitrosomethylvinylamine (Ethenamine, N-methyl-N-nitroso-)
N-Nitrosomorpholine (Morpholine, N-nitroso-)
N-Nitrosonornicotine (Nornicotine, N-nitroso-)
N-Nitrosopiperidine (Pyridine, hexahydro-, N-nitroso-)
Nitrosopyrrolidine (Pyrrole, tetrahydro-, N-nitroso-)
N-Nitrososarcosine (Sarcosine, N-nitroso-)
5-Nitro-o-toluidine (Benzenamine, 2-methyl-5-nitro-)
Octamethylpyrophosphoramide (Diphosphoramide, octamethyl-)
Osmium tetroxide (Osmium (VIII) oxide)
7-Oxabicyclo(2,2,1)heptane-2,3-dicarboxylic acid (Endothal)
Paraldehyde (1,3,5--Trioxane, 2,4,6-trimethyl-)
Parathion (Phosphorothioic acid, O,O-diethyl O-(p-nitrophenyl) ester)
Pentachlorobenzene (Benzene, pentachloro-)
Pentachloroethane (Ethane, pentachloro-)
Pentachloronitrobenzene (PCNB) (Benzene, pentachloronitro-)
Pentachlorophenol (Phenol, pentachloro-)
Phenacetin (Acetamide, N-(4-ethoxyphenyl)-)
Phenol (Benzene, hydroxy-)
Phenylenediamine (Benzenediamine)
Phenylmercury acetate (Mercury, acetatophenyl-)
N-Phenylthiourea (Thiourea, phenyl-)
Phosgene (Carbonyl chloride)
Phospine (Hydrogen phosphide)
Phosphorodithioic acid, O,O-dimethyl O-(p-((dimethylamino)sulfonyl)phenyl) ester (Famphur)
Phthalic acid esters, N.O.S. (Benzene, 1,2-dicarboxylic acid, esters, N.O.S.*)*
Phthalic anhydride (1,2-Benzenedicarboxylic acid anhydride)
2-Picoline (Pyridine,2-methyl-)
*Polychlorinated biphenyl, N.O.S.**
Potassium cyanide
Potassium silver cyanide (Argentate(1-),dicyano-,potassium)
Pronamide (3,5-Dichloro-N-(1,1-dimethyl-2-propynyl) benzamide)
1,3-Propane sultone (1,2-Oxathiolane, 2,2-dioxide)
n-Propylamine (1-Propanamine)
Propylthiouracil (Undecamethylenediamine, N,N'-bis(2-chlorobenzyl)-, dihydrochloride) 2-Propyn-1-ol (propargyl alcohol)
Pyridine
Reserpine (Yohimban-16-carboxylic acid, 11,17-dimethoxy-18-((3,4,5-trimethoxybenzoyl)oxy)-,methyl ester
Resorcinol (1,3-Benzenediol)
Saccharin and salts (1,2-Benzoisothiazolin-3-one, 1,1-dioxide, and salts)
Safrole (Benzene, 1,2-methylenedioxy-4-allyl-)
Selenious acid (Selenium dioxide)
*Selenium and compounds, N.O.S.**
Selenium sulfide (Sulfur selenide)
Selenourea (Carbamimidoselenoic acid)
*Silver and compounds, N.O.S.**

Silver cyanide
Sodium cyanide
Streptozotocin (D-Glucopyranose, 2-deoxy-2-(3-methyl-3-nitrosoureido)-)
Strontium sulfide
Strychnine and salts (Strychnidin-10-one, and salts)
1,2,4,5-Tetrachlorobenzene (Benzene, 1,2,4,5-tetrachloro-)
2,3,7,8-Tetrachlorodibenzo-p-dioxin (TCDD) (Dibenzo-p-dioxin, 2,3,7,8-tetrachloro-)
Tetrachloroethane, N.O.S. (Ethane, tetrachloro-, N.O.S.*)*
1,1,1,2-Tetrachlorethane (Ethane, 1,1,1,2-tetrachloro-)
1,1,2,2-Tetrachlorethane (Ethane, 1,1,1-2-tetrachloro-)
Tetrachloroethylene (Ethene, 1,1,2,2-tetrachloro-)
Tetrachloromethane (Carbon tetrachloride)
2,3,4,6-Tetrachlorophenol (Phenol, 2,3,4,6-tetrachloro-)
Tetraethyldithiopyrophosphate (Dithiopyrophosphoric acid, tetraethyl-ester)
Tetraethyl lead (Plumbane, tetraethyl-)
Tetraethylpyrophosphate (Pyrophosphoric acid, tetraethyl ester)
Tetranitromethane (Methane, tetranitro-)
*Thallium and compounds, N.O.S.**
Thallic oxide (Thallium (III) oxide)
Thallium (I) acetate (Acetic acid, thallium (I) salt)
Thallium (I) carbonate (Carbonic acid, dithallium (I) salt)
Thallium (I) chloride
Thallium (I) nitrate (Nitric acid, thallium (I) salt)
Thallium selenite
Thallium (I) sulfate (Sulfuric acid, thallium (I) salt)
Thioacetamide (Ethanethioamide)
Thiosemicarbazide (Hydrazinecarbothioamide)
Thiourea (Carbamide thio-)
Thiuram (Bis(dimethylthiocarbamoyl) disulfide)
Toluene (Benzene, methyl-)
Toluenediamine (Diaminotoluene)
o-Toluidine hydrochloride (Benzenamine, 2-methyl-, hydrochloride)
Tolylene diisocyanate (Benzene, 1,3-diisocyanatomethyl-)
Toxaphene (Camphene, octachloro-)
Tribromomethane (Bromoform)
1,2,4-Trichlorobenzene (Benzene,1,2,4-trichloro-)
1,1,1-Trichloroethane (Methyl chloroform)
1,1,2-Trichloroethane (Ethane, 1,1,2-trichloro-)
Trichloroethene (Trichloroethylene)
Trichloromethanethiol (Methanethiol, trichloro-)
Trichloromonofluoromethane (Methane, trichlorofluoro-)
2,4,5-Trichlorophenol (Phenol, 2,4,5-trichloro-)
2,4,6-Trichlorophenol (Phenol, 2,4,6-trichloro-)
2,4,5-Trichlorophenoxyacetic acid (2,4,5-T) (Acetic acid, 2,4,5-trichlorophenoxy-)
2,4,5-Trichlorophenoxypropionic acid (2,4,5-TP) (Silvex) (Propionoic acid, 2-(2,4,5-trichlorophenoxy)-)
Trichloropropane, N.O.S. (Propane, trichloro-, N.O.S.*)*
1,2,3-Trichloropropane (Propane, 1,2,3-trichloro-)
O,O,O-Triethyl phosphorothioate (Phosphorothioic acid, O,O,O-triethyl ester) sym-Trinitrobenzene (Benzene, 1,3,5-trinitro-)
Tris(1-azridinyl) phosphine sulfide (Phosphine sulfide, tris(1-aziridinyl-)
Tris(2,3-dibromopropyl) phosphate (1-Propanol, 2,3-dibromo-, phosphate)
Trypan blue (2,7-Naphthalenedisulfonic acid, (3,3′-dimethyl(1,1′-biphenyl)-4,4′-diyl)bis(azo))bis(5-amino-4-hydroxy-, tetrasodium salt)
Uracil mustard (Uracil 5-(bis(2-chloroethyl)amino)-)
Vanadic acid, ammonium salt (ammonium vanadate)
Vanadium pentoxide (Vanadium (V) oxide)
Vinyl chloride (Ethene, chloro-)
Zinc cyanide
Zine phosphide

**The abbreviation N.O.S. (not otherwise specified) signifies those members of the general class not specifically listed by name in this appendix.*

[APPENDIX A TO 401 KAR 31:170
READER'S AID]

[40 CFR 260 in this chapter is incorporated from the following Federal Registers:]

[45 FR 12724, February 26, 1980, Effective August 26, 1980; revised by 45 FR 33073, May 19, 1980, Effective November 19, 1980; 45 FR 72028, October 30, 1980; 45 FR 76075, November 17, 1980; 45 FR 76630, November 19, 1980; 45 FR 86968, December 31, 1980; 46 FR 2348, January 9, 1981; 46 FR 27476, May 20, 1981; 46 FR 35247, July 7, 1981; 46 FR 59537, December 7, 1981.]

[40 CFR 261 in this chapter is incorporated from the following Federal Registers:]

[45 FR 33119, May 19, 1980, Effective November 19, 1980; Amended by 45 FR 47833, July 16, 1980; 45 FR 72028, 72037, 72039, 72041, October 30, 1980; 45 FR 74890, November 12, 1980; 45 FR 76620, 76623, November 19, 1980; 45 FR 78529, 78531, 78541, November 25, 1980; 45 FR 80287, December 4, 1980; 46 FR 4617, January 16, 1981; 46 FR 27476, May 20, 1981; 46 FR 29708, June 3, 1981; 46 FR 34587, July 2, 1981; 46 FR 35247, July 7, 1981; 46 FR 44972, September 8, 1981; 46 FR 47429, September 25, 1981; 46 FR 56588, November 17, 1981; 46 FR 61272, December 16, 1981. The Code of Federal Regulations is available for sale from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402. A copy has been filed with the Regulations Compiler of the Legislative Research Commission.]

JACKIE SWIGART, Secretary
ADOPTED: June 10, 1983
RECEIVED BY LRC: June 14, 1983 at 11 a.m.
See public hearings scheduled on page 1.

NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION CABINET
Department for Environmental Protection
Division of Waste Management
(Proposed Amendment)

401 KAR 33:010. General provisions for transporters.

RELATES TO: KRS 224.071, 224.835, 224.873
PURSUANT TO: KRS 13.082, *13.083,* 224.017, 224.033, 224.873
NECESSITY AND FUNCTION: KRS 224.873 requires the Natural Resources and Environmental Protection Cabinet to promulgate regulations establishing standards applicable to transporters of hazardous waste regarding recordkeeping and compliance with the manifest system. This chapter establishes standards for transporters of hazardous waste. This regulation sets forth the general provisions applicable to these transporters.

Section 1. Scope. (1) This chapter establishes standards which apply to persons transporting hazardous waste within the Commonwealth of Kentucky if the transportation requires a manifest under 401 KAR Chapter 32.

(2) This chapter does not apply to on-site transportation of hazardous waste by generators or by owners or operators of permitted hazardous waste management facilities.

(3) A transporter of hazardous waste must also comply with *the manifest requirements in* 401 KAR Chapter 32 if he:

(a) Transports hazardous waste into Kentucky from a foreign country; or

(b) Mixes hazardous wastes of different DOT shipping descriptions by placing them into a single container.

Section 2. EPA Identification Number. (1) A transporter must not transport hazardous wastes *within the Commonwealth of Kentucky* without having received an EPA identification number from the *cabinet* [administrator of the U.S. Environmental Protection Agency (EPA)].

(2) A transporter who has not received an EPA identification number may obtain one (1) by applying to the *cabinet* [administrator] using [EPA Form *DWM-1* [8700-12].

(3) A transporter who transports or intends to transport hazardous waste within the Commonwealth of Kentucky must register with the cabinet. The application for registration shall include but not be limited to:

(a) The name, legal structure and permanent address of the organization;

(b) The EPA identification number.

Section 3. Transfer Facility Requirements. A transporter who stores manifested shipments of hazardous waste in containers meeting the requirements of Section 1 of 401 KAR 32.030 at a transfer facility for a period of ten (10) days or less is not subject to regulation under 401 KAR Chapters 34, 35 and 38 with respect to storage of those wastes.

JACKIE SWIGART, Secretary
ADOPTED: June 10, 1983
RECEIVED BY LRC: June 13, 1983 at 11:30 a.m.
See public hearings scheduled on page 1.

NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION CABINET
Department for Environmental Protection
Division of Waste Management
(Proposed Amendment)

401 KAR 33:020. Compliance with the manifest system and recordkeeping.

RELATES TO: KRS 224.071, 224.835, 224.873
PURSUANT TO: KRS 13.082, *13.083,* 224.017, 224.033, 224.873
NECESSITY AND FUNCTION: KRS 224.873 requires the Natural Resources and Environmental Protection Cabinet to promulgate regulations establishing standards applicable to transporters of hazardous waste regarding recordkeeping and compliance with the manifest system. This chapter establishes standards for transporters of hazardous waste. This regulation sets forth the standards for compliance with the manifest system and recordkeeping.

Section 1. Compliance with the Manifest System. (1) A transporter may not accept hazardous waste from a generator unless it is accompanied by a manifest, signed by the generator in accordance with the provisions of 401 KAR Chapter 32.

(2) Before transporting the hazardous waste, the transporter must sign and date the manifest acknowledging acceptance of the hazardous waste from the generator. The transporter must return a signed copy to the generator before leaving the generator's property.

(3) The transporter must insure that the manifest accompanies the hazardous waste.

(4) A transporter who delivers a hazardous waste to another transporter or to the designated facility must:

(a) Obtain the date of delivery and the handwritten signature of that transporter or of the owner/operator of the designated facility on the manifest; and

(b) Retain one (1) copy of the manifest in accordance with Section 2 of this regulation; and

(c) Give the remaining copies of the manifest to the accepting transporter or designated facility.

(5) The requirements of subsections (3), [and] (4), *and (5)* of this section do not apply to [rail or] water (bulk shipment) transporters if:

(a) The hazardous waste is delivered by rail or water (bulk shipment) to the designated facility; and

(b) A shipping paper containing all the information required on the manifest (excluding the EPA identification numbers, generator certification, and signatures) accompanies the hazardous waste; and

(c) The delivering transporter obtains the date of delivery and handwritten signature of the owner/operator of the designated facility on either the manifest or the shipping paper; and

(d) The person delivering the hazardous waste to the initial rail or water (bulk shipment) transporter obtains the date of delivery and signature of the rail or water (bulk shipment) transporter on the manifest and forwards it to the designated facility; and

(e) A copy of the shipping paper or manifest is retained by each rail or water (bulk shipment) transporter in accordance with Section 2 of this regulation.

(6) For shipments involving only rail transportation, the requirements of subsections (3), (4) and (5) of this section do not apply and the following requirements do apply:

(a) When accepting hazardous waste from a non-rail transporter, the initial rail transporter must:

1. Sign and date the manifest accknowledging acceptance of the hazardous waste;

2. Return a signed copy of the manifest to the non-rail transporter;

3. Forward at least three (3) copies of the manifest to:

a. The next non-rail transporter, if any; or

b. The designated facility, if the shipment is delivered to that facility by rail; or

c. The last rail transporter designated to handle the waste in the United States;

4. Retain one (1) copy of the manifest and rail shipping paper in accordance with Section 2 of this regulation.

(b) Rail transporters must ensure that a shipping paper containing all the information required on the manifest (excluding the EPA identification numbers, generator certification, and signatures) accompanies the hazardous waste at all times. (Note: Intermediate rail transporters are not required to sign either the manifest or shipping paper.)

(c) When delivering hazardous waste to the designated facility, a rail transporter must:

1. Obtain the date of delivery and handwritten signature of the owner or operator of the designated facility on the manifest or the shipping paper (if the manifest has not been received by the facility); and

2. Retain a copy of the manifest or signed shipping

paper in accordance with Section 2 of this regulation.

(d) When delivering hazardous waste to a non-rail transporter, a rail transporter must:

1. Obtain the date of delivery and the handwritten signature of the next non-rail transporter on the manifest; and

2. Retain a copy of the manifest in accordance with Section 2 of this regulation.

(e) Before accepting hazardous waste from a rail transporter, a non-rail transporter must sign and date the manifest and provide a copy to the rail transporter.

(7) [(6)] Transporters who transport hazardous waste out of the United States must:

(a) Indicate on the manifest the date the hazardous waste left the United States; and

(b) Sign the manifest and retain one (1) copy in accordance with Section 2(3) of this regulation; and

(c) Return a signed copy of the manifest to the generator.

(8) [(7)] The transporter must deliver the entire quantity of hazardous waste which he has accepted from a generator or a transporter to:

(a) The designated facility listed on the manifest; or

(b) The alternate designated facility; or

(c) The next designated transporter; or

(d) The place outside the United States designated by the generator.

(9) [(8)] If the hazardous waste cannot be delivered in accordance with subsection (7) of this section, the transporter must contact the generator for further directions and must revise the manifest and transport the waste according to the generator's lawful instructions.

Section 2. Recordkeeping. (1) A transporter of hazardous waste must keep a copy of the manifest signed by the generator, himself, and the next designated transporter or the owner/operator of the designated facility for a period of three (3) years from the date the hazardous waste was accepted by the initial transporter.

(2) For shipments delivered to the designated facility by rail or water (bulk shipment), each rail or water (bulk shipment) transporter must retain a copy of a shipping paper containing all the information required in Section 1(5)(b) of this regulation for a period of three (3) years from the date the hazardous waste was accepted by the initial transporter.

(3) For shipments of hazardous waste by rail within Kentucky:

(a) The initial rail transporter must keep a copy of the manifest and shipping paper with all the information required in Section 1(6)(b) of this regulation for a period of three (3) years from the date the hazardous waste was accepted by the initial transporter; and

(b) The final rail transporter must keep a copy of the signed manifest (or the shipping paper if signed by the designated facility in lieu of the manifest) for a period of three (3) years from the date the hazardous waste was accepted by the initial transporter.

(4) [(3)] A transporter who transports hazardous waste out of the United States must keep a copy of the manifest indicating that the hazardous waste left the United States, for a period of three (3) years from the date the hazardous waste was accepted by the initial transporter.

(5) [(4)] 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 EPA Administrator or the Secretary of the Natural Resources and Environmental Protection Cabinet.

JACKIE SWIGART, Secretary
ADOPTED: June 10, 1983
RECEIVED BY LRC: June 13, 1983 at 11:30 a.m.
See public hearings scheduled on page 1.

NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION CABINET
Department for Environmental Protection
Division of Waste Management
(Proposed Amendment)

401 KAR 34:020. General facility standards.

RELATES TO: KRS 224.033, 224.071, 224.835, 224.842, 224.855, 224.860, 224.866
PURSUANT TO: KRS 13.082, 224.017, 224.862, 224.866
NECESSITY AND FUNCTION: KRS 224.866 requires that persons engaging in the storage, treatment, and disposal of hazardous waste obtain a permit. KRS 224.866 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 post-closure monitoring and maintenance of hazardous waste disposal facilities. This chapter establishes minimum standards for new hazardous waste sites or facilities. This regulation establishes 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 401 KAR 34:010, Section 1, and subsection (2) of this section.

(2) Section 9(2) of this regulation *applies* [is applicable] only to facilities subject to regulation under 401 KAR 34:180, 34:190, 34:200, 34:210, *34:220, 34:230* and 34:240 of this chapter.

Section 2. Identification Number. Every facility owner or operator must 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 must notify the director 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) must inform the generator in writing that he has the appropriate permit(s) for, and will accept, the waste the generator is shipping. The owner or operator must keep a copy of this written notice as part of the operating record.

(3) Before transfering ownership or operation of a facility during its operating life, or of a disposal facility during the post-closure care period, the owner or operator must 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, he must obtain a detailed chemical and physical analysis of a representative sample of the waste. At a minimum, this analysis must contain all the information which must be known to treat, store, or dispose of the waste in accordance with the requirements of this chapter 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 must be repeated as necessary to ensure that it is accurate and up to date. At a minimum, the analysis must be repeated:

1. When the owner or operator is notified, or has reason to believe, that the process or operation generating the hazardous waste 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 must 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 must develop and follow a written waste analysis plan which describes the procedures which he will carry out to comply with subsection (1) of this section. He must keep this plan at the facility. At a minimum, the plan must specify:

(a) The parameters for which each hazardous waste will be analyzed and the rational for the selection of these parameters (i.e., how analysis for these parameters will provide sufficient information on the waste's properties to comply with subsection (1) of this section);

(b) The test methods which will be used to test for these parameters;

(c) The sampling method which will 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 (see Section 1(3) of 401 KAR 31:040).

(d) The frequency with which the initial analysis of the waste will be reviewed or repeated to ensure that 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 be used to meet the additional waste analysis requirements for specific waste management methods as specified in Section 2 of 401 KAR 34:240 and in Section 8 of this regulation.

(3) For off-site facilities, the waste analysis plan required in subsection (2) of this section must also specify the procedures which will 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 must describe:

(a) The procedures which will be used to determine the identity of each movement of waste managed at the facility; and

(b) The sampling method which will be used to obtain a representative sample of the waste to be idenified, if the identification method includes sampling.

Section 5. Security. (1) The owner or operator must 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 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 not cause a violation of the requirements of this regulation.

(2) Unless the owner or operator has made a successful demonstration under subsection (1) of this section, a facility must have:

(a) A twenty-four (24) hour surveillance system (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," must 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 must be written in English and in any other language predominant in the area surrounding the facility and must 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 must 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 must 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 must 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 must keep this schedule at the facility.

(c) The schedule must identify the types of problems (e.g., malfunctions or deterioration) which are to be looked for during the inspection (e.g., inoperative sump pump, leaking fitting, 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, must be inspected

daily when in use. At a minimum, the inspection schedule must include the terms and frequencies called for in Section 5 of 401 KAR 34:180, Section 4 of 401 KAR 34:190, Section 5 of 401 KAR 34:200, Sections *4 and* 5 of 401 KAR 34:210, *Section 4 of 401 KAR 34:230* and Section 7 of 401 KAR 34:240 of this chapter, where applicable.

(3) The owner or operator must 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 must be taken immediately.

(4) The owner or operator must record inspections in an inspection log or summary. He must keep these records for at least three (3) years from the date of inspection. At a minimum, these records must 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 must 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 must ensure that this program includes all the elements described in the document required under subsection (4)(c) of this section.

(b) This program must be directed by a person trained in hazardous waste management procedures, and must 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 must 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 cut-off 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 must successfully complete the program required in subsection (1) of this section within six (6) months after the effective date of these 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 regulations must not work in unsupervised positions until they have completed the training requirements of subsection (1) of this section.

(3) Facility personnel must take part in an annual review of the initial training required in subsection (1) of this section.

(4) The owner or operator must 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 must 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 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 must be kept until closure of the facility; training records on former employees must 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 must take precautions to prevent accidential ignition or reaction of ignitable or reactive waste. This waste must 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), and radiant heat. While ignitable or reactive waste is being handled, the owner or operator must confine smoking and open flame to specially designated locations. "No Smoking" signs must be conspicuously placed wherever there is a hazard from ignitable or reactive waste.

(2) Where specifically required by other sections of this 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, must 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 must document that compliance. This documentation may be based on references to published scientific or engineering literature, data from trial tests (e.g., bench scale or pilot scale tests), waste analyses (as specified in Section 4 of this 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.

(a) Portions of new facilities where treatment, storage, or disposal of hazardous waste will be conducted must not be located with sixty-one (61) meters (approximately 200 feet) of a fault which had displacement in Holocene time.

(b) As used in paragraph (a) of this subsection:

1. "Fault" means a fracture along which rocks on one

(1) side have been displaced with respect to those on the other side.

2. "Displacement" means the relative movement of any two (2) sides of a fault measured in any direction.

3. "Holocene" means the most recent epoch of the Quarternary period, extending from the end of the Pleistocene to the present.

(2) Floodplains.

(a) *Except as paragraph (c) of this subsection applies, a facility located within the 100-year floodplain 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 floodplain throughout the active life of the facility, closure and for disposal facilities, post-closure. Prevention of washout and protection from inundation shall be accomplished by one (1) of the following:* [A facility located in a 100-year floodplain must be designed, constructed, operated and maintained to prevent washout of any hazardous waste by a 100-year flood unless the owner or operator can demonstrate to the cabinet that procedures are in effect which will cause the waste to be removed safely, before flood waters can reach the facility, to a location where the wastes will not be vulnerable to floodwaters.]

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 will cause the waste to be removed safely, before floodwaters can reach the facility, to a location where the wastes will 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 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 floodplain or a seasonal highwater table.

(d) [(b)] As used in paragraphs (a) *through (c)* of this subsection:

1. "100-year floodplain" means any land area which is subject to a one (1) percent or greater chance of flooding in any given year from any source.

2. "Washout" means the movement of hazardous waste from the active portion of the facility as a result of flooding.

3. "100-year flood" means a flood that has a one (1) percent chance of being equalled or exceeded to any given year.

4. "Floodway" means the channel of the waterway, stream or river and that portion of the adjoining floodplain which provides for passage of the 100-year flood flow without increasing the floodwater depth across the 100-year floodplain by more than one (1) foot.

JACKIE SWIGART, Secretary

ADOPTED: June 10, 1983
RECEIVED BY LRC: June 13, 1983 at 11:30 a.m.
See public hearings scheduled on page 1.

NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION CABINET
Department for Environmental Protection
Division of Waste Management
(Proposed Amendment)

401 KAR 34:050. Manifest system, recordkeeping and reporting.

RELATES TO: KRS 224.033, 224.071, 224.835, 224.842, 224.855, 224.860, 224.866

PURSUANT TO: KRS 13.082, *13.083,* 224.017, 224.862, 224.866

NECESSITY AND FUNCTION: KRS 224.866 requires that persons engaging in the storage, treatment, and disposal of hazardous waste obtain a permit. KRS 224.866 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 post-closure monitoring and maintenance of hazardous waste disposal facilities. This chapter establishes minimum standards for new hazardous waste sites or facilities. This regulation establishes manifest system, recordkeeping and reporting requirements for facilities.

Section 1. Applicability. The regulations in this section apply to owners and operators of both on-site and off-site hazardous waste sites or facilities, except as Section 1 of 401 KAR 34:010 provides otherwise. Sections 2, 3 and 7 of this regulation do not apply to owners and operators of on-site facilities that do not receive any hazardous waste from off-site sources.

Section 2. Use of Manifest System. (1) If a facility receives hazardous waste accompanied by a manifest, the owner or operator, or his *agent* [agency], must:

(a) Sign and date each copy of the manifest to certify that the hazardous waste covered by the manifest was received;

(b) Note any significant discrepancies in the manifest (as defined in Section 3(1) of this regulation) on each copy of the manifest;

(c) Immediately give the transporter at least one (1) copy of the signed manifest;

(d) Within thirty (30) days after the delivery, send a copy of the manifest to the generator; and

(e) Retain at the facility a copy of each manifest for at least three (3) years from the date of delivery.

(2) If a facility receives, from a rail or water (bulk shipment) transporter, hazardous waste which is accompanied by a shipping paper containing all the information required on the manifest (excluding the EPA identification numbers, generator's certification, and signatures), the owner or operator, or his agent, must:

(a) Sign and date each copy of the manifest or shipping paper (if the manifest has not been received) to certify that the hazardous waste covered by the manifest or shipping paper was received;

(b) Note any significant discrepancies (as defined in Section 3(1) of this regulation) in the manifest or shipping paper (if the manifest has not been received) on each copy of the manifest or shipping paper.

(c) Immediately give the rail or water (bulk shipment) transporter at least one (1) copy of the manifest (or shipping paper if the manifest has not been received);

(d) Within thirty (30) days after the delivery, send a copy of the signed and dated manifest to the generator; however, if the manifest has not been received within thirty (30) days after delivery, the owner or operator, or his

agent, must send a copy of the shipping paper signed and dated to the generator; and

(e) Retain at the facility a copy of the manifest and shipping paper (if signed in lieu of the manifest at the time of delivery) for at least three (3) years from the date of delivery.

(3) Whenever a shipment of hazardous waste is initiated from a facility, the owner or operator of that facility must comply with the requirements of 401 KAR Chapter 32.

Section 3. Manifest Discrepancies. (1) Manifest discrepancies are differences between the quantity or type of hazardous waste designated on the manifest or shipping paper, and the quantity or type of hazardous waste a facility actually receives. Significant discrepancies in quantity are:

(a) For bulk waste, variations greater than ten (10) percent in weight; and

(b) For batch waste, any variation in piece count, such as a discrepancy of one (1) drum in a truckload. Significant discrepancies in type are obvious differences which can be discovered by inspection or waste analysis, such as waste solvent substituted for waste acid, or toxic constituents not reported on the manifest or shipping paper.

(2) Upon discovering a significant discrepancy, the owner or operator must attempt to reconcile the discrepancy with the waste generator or transporter (e.g., with telephone conversations). If the discrepancy is not resolved within fifteen (15) days after receiving the waste, the owner or operator must immediately submit to the cabinet a letter describing the discrepancy and attempts to reconcile it, and a copy of the manifest or shipping paper at issue.

Section 4. Operating Record. (1) The owner or operator must keep a written operating record at his facility.

(2) The following information must be recorded, as it becomes available, and maintained in the operating record until closure of the facility:

(a) A description and the quantity of each hazardous waste received, and the method(s) and date(s) of its treatment, storage, or disposal at the facility as described in 401 KAR 34:290;

(b) The location of each hazardous waste within the facility and the quantity at each location. For disposal facilities, the location and quantity of each hazardous waste must be recorded on a map or diagram of each cell or disposal area. For all facilities, this information must include cross-references to specific manifest document numbers, if the waste was accompanied by a manifest;

(c) Records and results of waste analyses performed as specified in Sections 4 and 8 of 401 KAR 34:020 and Section 2 of 401 KAR 34:240;

(d) Summary reports and details of all incidents that require implementing the contingency plan as specified in Section 7(10) of 401 KAR 34:040;

(e) Records and results of inspections as required by Section 6(4) of 401 KAR 34:020 (except these data need be kept only three (3) years);

(f) Monitoring, testing, or analytical data where required by *401 KAR 34:060, Section 5 of 401 KAR 34:200, Sections 4 and 5 of 401 KAR 34:210, Sections 5, 6 and 8 of 401 KAR 34:220, Sections 4 and 5 of 401 KAR 34:230, and* Section 7 of 401 KAR 34:240;

(g) For off-site facilities, notices to generators as specified in Section 3(2) of 401 KAR 34:020; and

(h) All closure cost estimates under Section 1 of 401 KAR 34:090, and for disposal facilities, post-closure cost estimates under Section 1 of 401 KAR 34:100.

(i) For surface impoundments, water balance calculations as required in 401 KAR 34:200, Section 4.

Section 5. Availability, Retention, and Disposition of Records. (1) All records, including plans, required under this chapter must be furnished upon request, and made available at all reasonable times for inspection by any officer, employee, or representative of the cabinet who is duly designated by the secretary of the cabinet.

(2) The retention period for all records required under this chapter is extended automatically during the course of any unresolved enforcement action regarding the facility or as requested by the cabinet.

(3) A copy of records of waste disposal locations and quantities under Section 4(2)(b) of this regulation must be submitted to the cabinet and local land authority upon closure of the facility.

Section 6. Annual Report. The owner or operator must prepare and submit a single copy of an annual report to the cabinet by March 1 of each year. The report form designated by the cabinet must be used for this report. The annual report must cover facility activities during the previous calendar year and must include the following information:

(1) The EPA identification number, name, and address of the facility;

(2) The calendar year covered by the report;

(3) For off-site facilities, the EPA identification number of each hazardous waste generator from which the facility received a hazardous waste during the year; for imported shipments, the report must give the name and address of the foreign generator;

(4) A description and the quantity of each hazardous waste the facility received during the year. For off-site facilities, this information must be listed by EPA identification number of each generator;

(5) The method of treatment, storage, or disposal for each hazardous waste;

(6) The most recent closure cost estimate under Section 1 of 401 KAR 34:090, and for disposal facilities, the most recent post-closure cost estimate under Section 1 of 401 KAR 34:100; and

(7) The certification signed by the owner or operator of the facility or his authorized representative.

Section 7. Unmanifested Waste Report. If a facility accepts for treatment, storage, or disposal any hazardous waste from an off-site source without an accompanying manifest, or without an accompanying shipping paper as described in 401 KAR 33:020, Section 1*(5)(b)*, and if the waste is not excluded from the manifest requirement by Section 5 of 401 KAR 31:010 then the owner or operator must prepare and submit a single copy of a report to the cabinet within fifteen (15) days after receiving the waste. The report must include the following information:

(1) The EPA identification number, name, and address of the facility;

(2) The date the facility received the waste;

(3) The EPA identification number, name, and address of the generator and the transporter, if available;

(4) A description and the quantity of each unmanifested hazardous waste received;

(5) The method of treatment, storage, or disposal for each hazardous waste;

(6) The certification signed by the owner or operator of the facility or his authorized representative; and

(7) A brief explanation of why the waste was unmanifested, if known.

Section 8. Additional Reports. In addition to submitting the annual report and unmanifested waste reports described in Sections 6 and 7 of this regulation the owner or operator must also report to the cabinet:

(1) Releases, fires, and explosions as specified in Section 7(10) of 401 KAR 34:040; [and]

(2) Facility closure as specified in Section 6 of 401 KAR 34:070*; and*

(3) As otherwise required by 401 KAR 34:060, 34:200, 34:210, 34:220 and 34:230.

JACKIE SWIGART, Secretary

ADOPTED: June 10, 1983

RECEIVED BY LRC: June 13, 1983 at 11:30 a.m.

See public hearings scheduled on page 1.

NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION CABINET
Department for Environmental Protection
Division of Waste Management
(Proposed Amendment)

401 KAR 34:070. Closure and post-closure.

RELATES TO: KRS 224.033, 224.071, 224.835, 224.842, 224.855, 224.860, 224.866

PURSUANT TO: KRS 13.082, *13.083,* 224.017, 224.862, 224.866

NECESSITY AND FUNCTION: KRS 224.866 requires that persons engaging in the storage, treatment, and disposal of hazardous waste obtain a permit. KRS 224.866 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 post-closure 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 post-closure of facilities.

Section 1. Applicability. Except as Section 1 of 401 KAR 34:010 provides otherwise:

(1) Sections 2 through 6 of this regulation (which concern closure) apply to the owners and operators of all hazardous waste management sites or facilities; and

(2) Sections 7 through 10 of this regulation (which concern post-closure care) apply to the owners and operators of:

(a) All hazardous waste disposal facilities*; and*

(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 and Section 8 of 401 KAR 34:210.

Section 2. Closure Performance Standards. The owner or operator must 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 prevent threats to human health and the environment, post-closure escape of hazardous waste, hazardous waste constitutents, leachate, contaminated rainfall, or waste decomposition products to the ground or surface waters or to the atmosphere.

Section 3. Closure Plan. (1) The owner or operator of a hazardous waste site or facility must have a written closure plan. The plan must be submitted with the permit application, in accordance with Section *2(13)* [10] of 401 KAR *38:090* [38:070] and approved by the cabinet as part of the permit issuance proceeding under 401 KAR Chapter 38. In accordance with Section 3 of 401 KAR 38:030, the approved closure plan will become a condition of any hazardous waste site or facility permit. The cabinet's decision must assure that the approved closure plan is consistent with Sections 2, 4, 5 and 6 of this regulation and the applicable requirements of Section 9 of 401 KAR 34:180, Section 5 of 401 KAR 34:190, Section 7 of 401 KAR 34:200, Section 9 of 401 KAR 34:210, *Section 8 of 401 KAR 34:220, Section 6 of 401 KAR 34:230,* and Section 8 of 401 KAR 34:240. A copy of the approved plan and all revisions to the plan must be kept at the facility until closure is completed and certified in accordance with Section 6 of this regulation. The plan must identify steps necessary to completely or partially close the facility at any point during its intended operating life and to completely close the facility at the end of its intended operating life. The closure plan must include at least:

(a) A description of how and when the facility will be partially closed, if applicable, and finally closed. The description must identify the maximum extent of the operation which will be unclosed during the life of the facility and how the requirements of Sections 2, 4, 5 and 6 of this regulation and the applicable closure requirements of Section 9 of 401 KAR 34:180, Section 5 of 401 KAR 34:190, Section 7 of 401 KAR 34:200, Section 9 of 401 KAR 34:210, *Section 8 of 401 KAR 34:220, Section 6 of 401 KAR 34:230,* and Section 8 of 401 KAR 34:240 will be met;

(b) An estimate of the maximum inventory of waste in storage and in treatment at any time during the life of the facility (any change in this estimate is a minor modification under 401 KAR Chapter 38);

(c) A description of the steps needed to decontaminate facility equipment during closure; and

(d) An estimate of the expected year of closure and a schedule for final closure. The schedule must include, at a minimum, the total time required to close the facility and the time required for intervening closure activities which will allow tracking of the progress of closure. (For example, in the case of a landfill, estimates of the time required to treat and dispose of all waste inventory and of the time required to place a final cover must be included.)

(2) The owner or operator may amend his closure plan at any time during the active life of the facility. (The active life of the facility is that period during which wastes are periodically received.) The owner or operator must amend the plan whenever changes in operating plans or facility design affect the closure plan, or whenever there is a change in the expected year of closure. When the owner or operator requests a permit modification to authorize a change in operating plans or facility design, he must request a modification of the closure plan at the same time (see Section 2(1) of 401 KAR *38:050* [38:040]). If a permit modification is not needed to authorize the change in operating plans or facility design, the request for modification of the closure plan must be made within sixty (60) days after the change in plan or design occurs.

(3) The owner or operator must notify the cabinet at least 180 days prior to the date he expects to begin closure.

(4) For existing disposal facilities within the 100-year floodplain, the closure plan and cost estimates must 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.

(5) For new hazardous waste sites or facilities located or

to be located in the 100-year floodplain, the closure plan and cost estimates must reflect that all hazardous waste and hazardous waste residues shall be removed from the site at closure, in accordance with Section 9(2) of 401 KAR 34:020.

Section 4. Time Allowed for Closure. (1) Within ninety (90) days after receiving the final volume of hazardous wastes, the owner or operator must treat, remove from the site, 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 facility has the capacity to receive additional wastes;

b. There is a reasonable likelihood that a person other than the owner or operator will recommence operation of the site; and

c. Closure of the facility would be incompatible with continued operation of the site; and

(b) He has taken and will continue to take all steps to prevent threats to human health and the environment.

(2) The owner or operator must complete closure activities in accordance with the approved closure plan and within 180 days after receiving the final volume of wastes. The cabinet may approve a longer closure period if the owner or operator demonstrates that:

(a) 1. The closure activities will, of necessity, take longer than 180 days to complete; or

2. *a.* The facility has the capacity to receive additional wastes;

b. There is a reasonable likelihood that a person other than the owner or operator will recommence operation of the site; and

c. Closure of the facility would be incompatible with continued operation of the site; and

(b) He has taken and will continue to take all steps to prevent threats to human health and the environment from the unclosed but inactive facility.

Section 5. Disposal or Decontamination of Equipment. When closure is completed, all facility equipment and structures must have been properly disposed of or decontaminated by removing all hazardous waste and residues.

Section 6. Certificate of Closure. When closure is completed, the owner or operator must submit to the cabinet certification both by the owner or operator and by an independent professional engineer registered in Kentucky that the facility has been closed in accordance with the specifications in the approved closure plan.

Section 7. Post-Closure Care and Use of Property. (1)(a) Post-closure care must continue for thirty (30) years after the date of completing closure and must consist of at least the following:

1. *Monitoring and reporting in accordance with the requirements of 401 KAR 34:060, 34:200, 34:210, 34:220 and 34:230* [Groundwater monitoring and reporting as applicable]; and

2. Maintenance *and* [of] monitoring *of* [and] waste containment systems *in accordance with the requirements of 401 KAR 34:060, 34:200, 34:210, 34:220, and 34:230* [as applicable].

(b) 1. Prior to the time that the post-closure care period is due to expire, the cabinet may extend the post-closure care period if the cabinet 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 waste at levels which may be harmful to human health and the environment).

2. During the 180 day period preceding closure or any time thereafter (see Section 3(3) of this regulation), the secretary may reduce an extended post-closure care period to not less than thirty (30) years if 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 waste, application of advanced technology, or alternative disposal, treatment, or reuse techniques indicate that the facility is secure). The secretary shall not reduce the post-closure period to be less than thirty (30) years.

(2) The cabinet may require, at closure, continuation of any of the security requirements of Section 5 of 401 KAR 34:020 during part or all of the post-closure period after the date of completing closure when:

(a) Wastes may remain exposed after completion of closure; or

(b) Access by the public or domestic livestock may pose a hazard to human health.

(3) Post-closure use of property on or in which hazardous wastes remain after closure must 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 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 post-closure care activities must be in accordance with the provisions of the approved post-closure plan as specified in Section (8) of this regulation.

Section 8. Post-Closure Plan and Amendment of Post-Closure Plan. (1) The owner or operator of a disposal facility must have a written post-closure plan. *In addition, certain waste piles and certain surface impoundments from which the owner or operator intends to remove the waste at closure are required by Section 6 of 401 KAR 34:200, and Section 8 of 401 KAR 34:210 to have post-closure plans.* The plan must be submitted with the permit application, in accordance with *Section 2(13) of 401 KAR 38:090* [Sections 9 and 10 of 401 KAR 38:070 and Sections 1 through 6 of 401 KAR 38:080] and approved by the cabinet as part of the permit issuance proceeding under 401 KAR Chapter 38. In accordance with Section 3 of 401 KAR 38:030, the approved post-closure plan will become a condition of any permit issued. A copy of the approved plan and all revisions to the plan must be kept at the facility until the post-closure care period begins. This plan must identify the activities which will be carried on after closure and the frequency of these activities, and include at least:

(a) A description of the planned [groundwater] monitoring activities and frequencies at which they will be performed *to comply with 401 KAR 34:060, 34:200, 34:210, 34:220, and 34:230 during the post-closure care period*;

(b) A description of the planned maintenance activities, and 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 34:060, 34:200, 34:210, 34:220, and 34:230* [structures where applicable]; and

2. The function of the facility monitoring equipment *in*

accordance with the requirements of 401 KAR 34:060, 34:200, 34:210, 34:220, and 34:230;

(c) The name, address and phone number of the person or office to contact about the disposal facility during the post-closure period. This person or office must keep an updated post-closure plan during the post-closure period.

(2) The owner or operator may amend his post-closure plan at any time during the active life of the disposal facility or during the post-closure care period. The owner or operator must amend his plan whenever changes in operating plans or facility design, or events which occur during the active life of the facility or during the post-closure period, affect his post-closure plan. He must also amend his plan whenever there is a change in the expected year of closure.

(3) When a permit modification is requested during the active life of the facility to authorize a change in operating plans or facility design, modification of the post-closure plan must be requested at the same time (see *Section 2(1) of 401 KAR 38:050* [Sections 2 through 4 of 401 KAR 38:040]). In all other cases, the request for modification of the post-closure plan must be made within sixty (60) days after the change in operating plans or facility design or the events which affect the post-closure plan occur.

(4) For existing disposal facilities within the 100-year floodplain, the post-closure plan and cost estimates must 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 9. Notice to Local Land Authority. Within ninety (90) days after closure is completed, the owner or operator of a disposal facility must 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 disposal areas with respect to permanently surveyed benchmarks. This plat must be prepared and certified by a professional land surveyor. The plat filed with the local zoning authority or the authority with jurisdiction over local land use must contain a note, prominently displayed, which states the owner's or operator's obligation to restrict disturbance of the site as specified in Section 7(3) of this regulation. In addition, the owner or operator must 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 area of the facility. For wastes disposed of before these regulations were promulgated, the owner or operator must identify the type, location and quantity of the wastes to the best of his knowledge and in accordance with any records he has kept. Any changes in the type, location, or quantity of hazardous wastes disposed of within each cell or area of the facility that occur after the survey plat and record of wastes have been filed must be reported to the local zoning authority or the authority with jurisdiction over local land use and to the cabinet.

Section 10. Notice in Deed to Property. (1) The owner of the property on which a disposal facility is located must 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 in perpetuity notify any potential purchaser of the property that:

(a) The land has been used to manage hazardous wastes;

(b) Its use is restricted under Section 7(3) of this regulation; and

(c) The survey plat and record of the type, location, and quantity of hazardous wastes disposed of within each cell or area of the facility required in Section *9 of 401 KAR 35:070* [7 of 401 KAR 35:010] have been filed with the local zoning authority or the authority with jurisdiction over local land use and with the the cabinet.

(2) If at any time the owner or operator or any subsequent owner of the land upon which a hazardous waste site or facility was located removes the waste and waste residues, the liner, if any, and all contaminated underlying and surrounding soil, he may remove the notation on the deed to the facility property or other instrument normally examined during title search, or he may add a notation to the deed or instrument indicating the removal of the waste.

JACKIE SWIGART, Secretary
ADOPTED: June 10, 1983
RECEIVED BY LRC: June 13, 1983 at 11:30 a.m.
See public hearings scheduled on page 1.

NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION CABINET
Department for Environmental Protection
Division of Waste Management
(Proposed Amendment)

401 KAR 34:080. General financial requirements.

RELATES TO: KRS 224.033, 224.071, 224.835, 224.842, 224.855, 224.860, 224.866
PURSUANT TO: KRS 13.082, *13.083,* 224.017, 224.862, 224.866
NECESSITY AND FUNCTION: KRS 224.866 requires that persons engaging in the storage, treatment, and disposal of hazardous waste obtain a permit. KRS 224.866 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 post-closure monitoring and maintenance of hazardous waste disposal facilities. This chapter establishes minimum standards for new hazardous waste sites or facilities. This regulation establishes the general financial requirements.

Section 1. General. (1) [Sections 2 and 3 of] This regulation and 401 KAR 34:090 through 34:176 inclusively contain the financial requirements to establish adequate financial responsibility as required by KRS 224.866(3) for hazardous waste sites or facilities. A reference to this section is a citation of [Sections 2 and 3 of] this regulation and 401 KAR 34:090 through 34:176.

(2) Except as specifically provided in [Sections 2 and 3 of] this regulation and 401 KAR 34:090 through 34:176, no variance (Section 2 of 401 KAR 30:025) or other waivers of these financial requirements shall be granted by the secretary or the director.

Section 2. Applicability. (1) The requirements of 401 KAR 34:090 and 34:120 through 34:176 apply to owners and operators of all hazardous waste sites or facilities, except as provided otherwise in this section or in Section 1 of 401 KAR 34:010.

(2) *The requirements of 401 KAR 34:100 and 34:110 apply only to owners and operators of:* [The requirements of 401 KAR 34:190 and 34:110 apply only to owners and operators of disposal facilities.]

(a) Disposal facilities; and

(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(1)(b), (2) and (3) of 401 KAR 34:200 and Section 8(2) and (3) of 34:210.

(3) States and the federal government are exempt from the requirements of Section 1 of this regulation.

Section 3. Financial Requirement Definitions. (1) When used in Section 1 of this regulation the following terms shall have the meanings given below:

(a) "Closure plan" means the plan for closure prepared in accordance with the requirements of Section 3 of 401 KAR 34:070.

(b) "Current closure cost estimate" means the most recent of the estimates prepared in accordance with Section 1(1), (2) and (3) of 401 KAR 34:090.

(c) "Current post-closure cost estimate" means the most recent of the estimates prepared in accordance with Section 1(1), (2) and (3) of 401 KAR 34:100.

(d) "Parent corporation" means a corporation which directly owns at least fifty (50) percent of the voting stock of the corporation which is the facility owner or operator; the latter corporation is deemed a "subsidiary" of the parent corporation.

(e) "Post-closure plan" means the plan for post-closure care prepared in accordance with the requirements of Sections 7 through 10 of 401 KAR 34:070.

(2) The following terms are used in the specifications for the financial tests for closure, post-closure care and liability self-insurance. The definitions are intended to assist in the understanding of these regulations and are not intended to limit the meanings of terms in a way that conflicts with generally accepted accounting practices.

(a) "Assets" means all existing and all probable future economic benefits obtained or controlled by a particular entity.

(b) "Current assets" means cash or other assets or resources commonly identified as those which are reasonably expected to be realized in cash or sold or consumed during the normal operating cycle of the business.

(c) "Current liabilities" means obligations whose liquidation is reasonably expected to require the use of existing resources properly classifiable as current assets or the creation of other current liabilities.

(d) "Independently audited" refers to an audit performed by an independent certified public accountant in accordance with generally accepted auditing standards.

(e) "Liabilities" means probable future sacrifices of economic benefits arising from present obligations to transfer assets or provide services to other entities in the future as a result of past transactions or events.

(f) "Net working capital" means current assets minus current liabilities.

(g) "Net worth" means total assets minus total liabilities and is equivalent to owner's equity.

(h) "Tangible net worth" means the tangible assets that remain after deducting liabilities; such assets would not include intangibles such as goodwill and rights to patents or royalties.

(3) In the liability insurance requirements the terms "bodily injury" and "property damage" shall have the meanings given these terms by applicable Kentucky statutes. However, these terms do not include those liabilities which, consistent with standard industry practices, are excluded from coverage in liability policies for bodily injury and property damage. The cabinet intends the meanings of other terms used in the liability insurance requirements to be consistent with their common meanings within the insurance industry. The definitions given below of several of the terms are intended to assist in the understanding of these regulations and are not intended to limit their meanings in a way that conflicts with general insurance industry usage.

(a) "Accidental occurrence" means an accident, including continuous or repeated exposure to conditions, which results in bodily injury or property damage neither expected nor intended from the standpoint of the insured.

(b) "Legal defense costs" means any expenses that an insurer incurs in defending against claims of third parties brought under the terms and conditions of an insurance policy.

(c) "Nonsudden accidental occurrence" means an occurrence which takes place over time and involves continuous or repeated exposure.

(d) "Sudden accidental occurrence" means an occurrence which is not continuous or repeated in nature.

JACKIE SWIGART, Secretary
ADOPTED: June 14, 1983
RECEIVED BY LRC: June 14, 1983 at 11 a.m.
See public hearings scheduled on page 1.

NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION CABINET
Department for Environmental Protection
Division of Waste Management
(Proposed Amendment)

401 KAR 34:090. Closure financial requirements.

RELATES TO: KRS 224.033, 224.071, *224.830 through 224.877, 224.994* [224.835, 224.842, 224.855, 224.860, 224.866]

PURSUANT TO: KRS 13.082, *13.083,* 224.017, 224.862, 224.866

NECESSITY AND FUNCTION: KRS 224.866 requires that persons engaging in the storage, treatment, and disposal of hazardous waste obtain a permit. KRS 224.866 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 post-closure monitoring and maintenance of hazardous waste disposal facilities. This chapter establishes minimum standards for new hazardous waste sites or facilities. This regulation establishes the closure financial requirements.

Section 1. Cost Estimate for Facility Closure. (1) The owner or operator must prepare a written estimate, in current dollars, of the cost of closing the facility in accordance with the closure plan as specified in Section 3 of 401 KAR 34:070 *and applicable closure requirements in Section 9 of 401 KAR 34:180, Section 5 of 401 KAR 34:190, Section 7 of 401 KAR 34:200, Section 9 of 401 KAR 34:210, and Section 8 of 401 KAR 34:240.* The closure cost estimate must equal the cost of closure at the point in the facility's operating life when the extent and manner of its operation would make closure the most expensive, as indicated by its closure plan.

(2) The owner or operator must adjust the closure cost estimate for inflation within thirty (30) days after each anniversary of the date on which the first closure cost estimate was prepared. The adjustment must be made as specified in *paragraphs* [subsection (2)] (a) and (b) of this *sub*section, using an inflation factor derived from the an-

nual Implicit Price Deflator for Gross National Product as published by the U.S. Department of Commerce in its Survey of Current Business. 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 closure cost estimate by the inflation factor. The result is the adjusted closure cost estimate.

(b) Subsequent adjustments are made by multiplying the latest adjusted closure cost estimate by the latest inflation factor.

(3) The owner or operator must revise the closure cost estimate whenever a change in the closure plan increases the cost of closure. The revised closure cost estimate must be adjusted for inflation as specified in subsection (2) of this section.

(4) The owner or operator 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 must establish financial assurance for closure of the facility. He must choose from the options as specified in Sections 3 through 9 of this regulation.

Section 3. Closure Trust Fund. (1) An owner or operator may satisfy the requirements of [Sections 2 through 12 of] this 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 director. An owner or operator of a new facility must 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 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 must be executed on the form provided by the cabinet containing* wording [of the trust agreement must be] identical to the wording specified in Section 1 of 401 KAR 34:140 and the trust agreement must be accompanied by a formal certification of acknowledgement (for an example, see Section 2 of 401 KAR 34:140). Schedule A of the trust agreement 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 must 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 must be made as follows:

(a) For a new facility, as defined in 401 KAR 30:010, the first payment must be made before the initial receipt of hazardous waste for treatment, storage, or disposal. A receipt from the trustee for this payment must be submitted by the owner or operator to the director before this initial receipt of hazardous waste. The first payment must be at least equal to the current closure cost estimate (see Section 1 of this regulation), except as provided in Section 10 of this regulation, divided by the number of years in the pay-in period. Subsequent payments must be made no later than thirty (30) days after each anniversary date of the first payment. The amount of each subsequent payment 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.

(b) If an owner or operator established a trust fund as specified in Section *3* [7(4)] of 401 KAR *35:090* [35:010], 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 must be paid in over the pay-in period as defined in *this* subsection [(3) of this section]. Payments must 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 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 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 [Sections 2 through 12 of] this regulation or in 401 KAR *35:090* [Chapter 35], his first payment 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 this section and Section *3* [7(4)] of 401 KAR *35:090* [35:010], as applicable.

(6) After the pay-in period is completed, whenever the current closure cost estimate changes, the owner or operator 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, 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 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 [Sections 2 through 12 of] this regulation for all or part of the trust fund, he may submit a written request to the 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 director will in-

struct the trustee to release to the owner or operator such funds as the director specifies in writing.

(10) 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 director. Within sixty (60) days after receiving bills for closure activities, the director will determine whether the closure expenditures are in accordance with the closure plan or otherwise justified, and if so, the director will instruct the trustee to make reimbursement in such amounts as the director specifies in writing. If the director has reason to believe that the cost of closure 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 12 of this regulation, that the owner or operator is no longer required to maintain financial assurance for closure.

(11) The 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 director releases the owner or operator from the requirements of [Sections 2 through 12 of] this regulation in accordance with Section 12 of this regulation.

Section 4. Surety Bond Guaranteeing Payment into a Closure Trust Fund. (1) An owner or operator may satisfy the requirements of [Sections 2 through 12 of] this regulation by obtaining a surety bond which conforms to the requirements of this section and submitting the bond to the director. An owner or operator of a new facility must submit the bond to the director at least sixty (60) days before the date on which hazardous waste is first received for treatment, storage, or disposal. The bond must be effective before this initial receipt of hazardous waste. The surety company issuing the bond 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 must be executed on the form provided by the cabinet containing* wording [of the surety bond must be] 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 [Sections 2 through 12 of] this regulation must also establish a standby trust fund. Under the terms of the bond, all payments made thereunder will be deposited by the surety directly into the standby trust fund in accordance with instructions from the director. This standby trust fund must meet the requirements specified in Section 3 of this regulation, except that:

(a) An originally signed duplicate of the trust agreement must be submitted to the director with the surety bond; and

(b) *Unless* [Until] the standby trust fund is funded pursuant to the requirements of [Sections 2 through 12 of] this regulation, the following are not required by these regulations:

1. Payments into the trust fund as specified in Section 3 of this 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 must guarantee that the owner or operator 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 closure is issued by the secretary or by 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 [Sections 2 through 12 of] this regulation and obtain the director's written approval of the assurance provided, within ninety (90) days after receipt by both the owner or operator and the director of a notice of cancellation of the bond from the surety.

(5) Under the terms of the bond, the surety 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 must be in an amount at least equal to the amount of the current closure cost estimate, except as provided in Section 10 of this 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, 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 director, or obtain other financial assurance as specified in this *regulation* [section] 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 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 director. 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 director, as evidenced by return receipt.

(9) The owner or operator may cancel the bond if the director has given prior written consent based on the director's receipt of evidence of alternate financial assurance as specified in [Sections 2 through 12 of] this regulation.

Section 5. Surety Bond Guaranteeing Performance of Closure. (1) An owner or operator may satisfy the requirements of [Sections 2 through 12 of] this regulation by obtaining a surety bond which conforms to the requirements of this subsection and by submitting the bond to the director. An owner or operator of a new facility must submit the bond to the director at least sixty (60) days before the date on which hazardous waste is first received for treatment, storage, or disposal. The bond must be effective before this initial receipt of hazardous waste. The surety company issuing the bond 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 must be executed on the form provided by the cabinet containing* wording [of the surety bond must be] 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 [Sections 2 through 12 of] this regulation must also establish a standby trust fund. Under the terms of the bond, all payments made thereunder will be deposited by the surety directly into the standby trust fund in accordance with the instructions of the director.

This standby trust must meet the requirements specified in Section 3 of this regulation, except that:

(a) An originally signed duplicate of the trust agreement must be submitted to the director with the surety bond; and

(b) Unless the standby trust fund is funded pursuant to the requirements of [Sections 2 through 12 of] this regulation, the following are not required by these regulations:

1. Payments into the trust fund as specified in Section 3 of this regulation;

2. Updating on 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 must guarantee that the owner or operator will:

(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 [Sections 2 through 12 of] this regulation and obtain the director's written approval of the assurance provided, within ninety (90) days after receipt by both the owner or operator and the director of a notice of cancellation of the bond from the surety.

(5) Under the terms of the bond, the surety will become liable on the bond obligation when the owner or operator fails to perform as guaranteed by the bond. Following a determination pursuant to KRS 224.866 that the owner or operator has failed to perform final closure in accordance with the closure plan and other permit requirements when required to do so, under the terms of the bond the surety will perform final closure as guaranteed by the bond or will deposit the amount of the penal sum into the standby trust fund.

(6) The penal sum of the bond must 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, 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 director, or obtain other financial assurance as specified in [Sections 2 through 12 of] this 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 director.

(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 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 director, as evidenced by the return receipts.

(9) The owner or operator may cancel the bond if the director has given prior written consent. The director will provide such written consent when:

(a) An owner or operator substitutes alternate financial assurance as specified in [Sections 2 through 12 of] this regulation; or

(b) The director releases the owner or operator from the requirements of [Sections 2 through 12 of] this regulation in accordance with Section 12 of this regulation.

(10) The surety will not be liable for deficiencies in the performance of closure by the owner or operator after the director releases the owner or operator from the requirements of [Sections 2 through 12 of] this regulation in accordance with Section 12 of this regulation.

Section 6. Closure Letter of Credit. (1) An owner or operator may satisfy the requirements of [Sections 2 through 12 of] this regulation by obtaining an irrevocable standby letter of credit which conforms to the requirements of this section and by submitting the letter to the director. An owner or operator of a new facility must have submitted the letter of credit to the director at least sixty (60) days before the date on which hazardous waste is first received for treatment, storage, or disposal. The letter of credit must be effective before the initial receipt of hazardous waste. The issuing institution 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 must be identical to the wording specified in *Section 1 of* 401 KAR 34:152.

(3) An owner or operator who uses a letter of credit to satisfy the requirements of [Sections 2 through 12 of] this regulation must also establish a standby trust fund. Under the terms of the letter of credit, all amounts paid pursuant to a draft by the director will be deposited by the issuing institution directly into the standby trust fund in accordance with instructions from the director. The standby trust fund must meet the requirements of the trust fund specified in Section 3 of this regulation, except that:

(a) An originally signed duplicate of the trust agreement must be submitted to the director with the letter of credit; and

(b) Unless the standby trust fund is funded pursuant to the requirements of [Sections 2 through 12 of] this regulation, the following are not required by these regulations:

1. Payments into the trust fund as specified in Section *3* [1] of this 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 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 must be irrevocable and issued for a period of at least one (1) year. The letter of credit 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 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 director have received the notice, as evidenced by the return receipts.

(6) The letter of credit must be issued for at least the amount of the current closure cost estimate except as provided in Section 10 of this 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, 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 director, or obtain other financial assurance as specified in [Sections 2 through 12 of] this 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 director.

(8) Following a determination pursuant to KRS 224.866 that the owner or operator has failed to perform final closure in accordance with the closure plan and other permit requirements when required to do so, the director may draw on the letter of credit.

(9) If the owner or operator does not establish alternate financial assurance as specified in [Sections 2 through 12 of] this regulation and obtain written approval of such alternate assurance from the director within ninety (90) days after receipt by both the owner or operator and the 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 director will draw on the letter of credit. The 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 director will draw on the letter of credit if the owner or operator has failed to provide alternate financial assurance as specified in [Sections 2 through 12 of] this regulation and obtain written approval of such assurance from the director.

(10) The 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 [Sections 2 through 12 of] this regulation; or

(b) The director releases the owner or operator from the requirements *of this regulation* in accordance with Section 12 of this regulation.

Section 7. Closure Insurance. (1) An owner or operator may satisfy the requirements of [Sections 2 through 12 of] this regulation by obtaining closure insurance which conforms to the requirements of this section and by submitting a certificate of such insurance to the director. An owner or operator of a new facility must submit the certificate of insurance to the director at least sixty (60) days before the date on which hazardous waste is first received for treatment, storage, or disposal. The insurance must be effective before this initial receipt of hazardous waste. *Each insurance policy providing primary coverage must be issued by an insurer who is licensed to transact the business of insurance in the Commonwealth of Kentucky. Each insurance policy providing excess coverage must be issued by an insurer who is licensed to transact the business of insurance in a state.* [At a minimum, the insurer must be licensed to transact the business of insurance, or eligible to provide insurance as an excess or surplus lines insurer in the Commonwealth of Kentucky.]

(2) The *certificate of insurance must be executed on a form provided by the cabinet containing* wording [of the certificate of insurance must be] identical to the wording specified in 401 KAR 34:156.

(3) The closure insurance policy must be issued for a face amount at least equal to the current closure cost estimate, except as provided in Section 10 of this regulation. The term "face amount" means the total amount the insurer is obligated to pay under the policy. Actual payments by the insurer will not change the face amount, although the insurer's future liability will be lowered by the amount of the payments.

(4) The closure insurance policy must guarantee that funds will be available to close a facility whenever final closure occurs. The policy must also guarantee that once final closure begins, the insurer will be responsible for paying out funds, up to an amount equal to the face amount of the policy, upon the direction of the director to such party or parties as the director specifies.

(5) 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 director. Within sixty (60) days after receiving bills for closure activities, the director will determine whether the closure expenditures are in accordance with the closure plan or otherwise justified, and if so, he will instruct the insurer to make reimbursement in such amounts as the director specifies in writing. If the director has reason to believe that the cost of closure 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 12 of this regulation, that the owner or operator is no longer required to maintain financial assurance for closure of the facility.

(6) The owner or operator must maintain the policy in full force and effect until the 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 [Sections 2 through 12 of] this regulation, will constitute a significant violation of these regulations, warranting such remedy as the director deems necessary. Such violation will be deemed to begin upon receipt by the 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 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 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 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 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 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 director 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 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 in-

crease, 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 director, or obtain other financial assurance as specified in [Sections 2 through 12 of] this 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 director.

(10) The 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 [Sections 2 through 12 of] this regulation; or

(b) The director releases the owner or operator from the requirements *of this regulation* in accordance with Section 12 of this regulation.

Section 8. Financial Test and Corporate Guarantee for Closure. (1) An owner or operator may satisfy the requirements of [Sections 2 through 12 of] this regulation by demonstrating that he passes a financial test as specified in this section. To pass this test the owner or operator must meet the criteria of either *paragraph of this subsection* [of the following]:

(a) The owner or operator 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 post-closure cost estimates; and

3. Tangible net worth of at least $10 million; and

4. Assets in the Commonwealth of Kentucky amounting to either at least ninety (90) percent of his total assets or at least six (6) times the sum of the current closure and post-closure cost estimates.

(b) The owner or operator 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 post-closure cost estimates; and

3. Tangible net worth of at least $10 million; and

4. Assets located in the Commonwealth of Kentucky amounting to either at least ninety (90) percent of his total assets or at least six (6) times the sum of the current closure and post-closure cost estimates.

(2) The phrase "current closure and post-closure cost estimates" as used in subsection (1) of this section refers to the cost estimates required to be shown in paragraphs 1 through *4* [5] of the letter from the owner's or operator's chief financial officer (see 401 KAR 34:159).

(3) To demonstrate that he meets this test, the owner or operator must submit the following three (3) items to the director:

(a) A letter *executed on the form 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 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 must submit the items specified in subsection (3) of this section to the director 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 must send updated information to the director within ninety (90) days after the close of each succeeding fiscal year. This information 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 must send notice to the director of intent to establish alternate financial assurance as specified in [Sections 2 through 12 of] this regulation. The notice 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 must provide alternate financial assurance within 120 days after the end of such fiscal year.

(7) The 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 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 must provide alternate financial assurance as specified in [Sections 2 through 12 of] this regulation within thirty (30) days after notification of such a finding.

(8) The 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 will be cause for disallowance. The director will evaluate other qualifications on an individual basis. The owner or operator must provide alternate financial assurance as specified in [Sections 2 through 12 of] this 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 [Sections 2 through 12 of] this regulation;

(b) The director releases the owner or operator from the requirements of [Sections 2 through 12 of] this regulation by terminating the financial requirements in accordance with Section 12 of this regulation.

(10) An owner or operator may meet the requirements of [Sections 2 through 12 of] this regulation by obtaining a written guarantee, hereafter referred to as the "corporate guarantee." The guarantor must be the parent corporation

of the owner or operator. The guarantor must meet the requirements for owners or operators in subsections (1) through (8) of this section and must comply with the terms of the corporate guarantee. The [wording of the] corporate guarantee must be *executed on a form 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 director as specified in subsection (3) of this section. The terms of the corporate guarantee 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 permit requirements whenever required to do so, the guarantor will do so or establish a trust fund as specified in Section 3 of this regulation in the name of the owner or operator.

(b) The corporate guarantee will remain in force unless the guarantor sends notice of cancellation by certified mail to the owner or operator and to the 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 director, as evidenced by the return receipts.

(c) If the owner or operator fails to provide alternate financial assurance as specified in [Sections 2 through 12 of] this regulation and obtain the written approval of such alternate assurance from the director within ninety (90) days after receipt by both the owner or operator and the director of a notice of cancellation of the corporate guarantee from the guarantor, the guarantor will 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 [Sections 2 through 12 of] this regulation by submitting [evidence of a cash account or certificate of deposit which conforms to the requirements of this section] to the director by certified mail, *a bond guaranteeing compliance with KRS Chapter 224 and 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 must submit the bond to the director 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* must be regulated and examined by a federal or state agency.

(2) The bond must be executed on a form 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 must be executed on a form provided by the cabinet which has wording identical to the wording specified in Section 2 of 401 KAR 34:168.

(3) [(2)] The cabinet must be the beneficiary of the *escrow agreement for the* cash account or certificate of deposit. The director must be empowered to draw upon the funds if the owner or operator fails to perform closure or post-closure care in accordance with the closure plan and other permit requirements.

(4) [(3)] The sum of the cash account or certificate of deposit must be in an amount at least equal to the amount of the current closure cost estimate, except as provided in Section 10 of this regulation.

(5) [(4)] Whenever the current closure cost estimate increases to an amount greater than the amount of the sum of the cash account or certificate of deposit, the owner or operator, within sixty (60) days after the increase, must either cause the sum of the cash account or certificate of deposit to be increased to an amount at least equal to the current closure cost estimate and submit evidence of such increase to the director, or obtain other financial assurance as specified in [Sections 2 through 12 of] this regulation to cover the increase. Whenever the current closure cost estimate decreases, the sum may be reduced to the amount of the current closure cost estimate following written approval by the director.

(6) [(5)] 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 director. 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 director, as evidenced by return receipt.

(7) [(6)] The owner or operator may terminate the cash account or certificate of deposit if the director has given prior written consent based on the director's receipt of evidence of alternate financial assurance as specified in [Sections 2 through 12 of] this regulation.

Section 10. Use of Multiple Financial Mechanisms. An owner or operator may satisfy the requirements of [Sections 2 through 12 of] this 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, certificate of deposit and cash. The mechanisms must be as specified in Sections 3, 4, 6, 7, and 9, respectively, of this regulation, except that it is the combination of mechanisms rather than each single mechanism which 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 director 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 *regulation* [section] to meet the requirements of this *regulation* [section] for more than one (1) facility. Evidence of financial assurance submitted to the 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 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 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 12. Release of the Owner or Operator from the Requirements of [Sections 2 through 12 of] this Regulation. Within sixty (60) days after receiving certifications from the owner or operator and an independent [registered] professional engineer *who is registered in*

Kentucky that closure has been accomplished in accordance with the closure plan (see Section 6 of 401 KAR 34:070 and KRS 224.866(3) and (4)), the director will notify the owner or operator in writing that he is no longer required by [Sections 2 through 12 of] this regulation to maintain financial assurance for closure of the particular facility, unless the director has reason to believe that closure has not been in accordance with the closure plan.

JACKIE SWIGART, Secretary

ADOPTED: June 10, 1983
RECEIVED BY LRC: June 13, 1983 at 11:30 a.m.
See public hearings scheduled on page 1.

NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION CABINET
Department for Environmental Protection
Division of Waste Management
(Proposed Amendment)

401 KAR 34:100. Post-closure financial requirements.

RELATES TO: KRS 224.033, 224.071, *224.830 through 224.877, 224.994* [224.835, 224.842, 224.855, 224.860, 224.866]
PURSUANT TO: KRS 13.082, *13.083,* 224.017, 224.862, 224.866
NECESSITY AND FUNCTION: KRS 224.866 requires that persons engaging in the storage, treatment, and disposal of hazardous waste obtain a permit. KRS 224.866 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 post-closure monitoring and maintenance of hazardous waste disposal facilities. This chapter establishes minimum standards for new hazardous waste sites or facilities. This regulation establishes the post-closure financial requirements.

Section 1. Cost Estimate for Post-Closure Care. (1) *The owner or operator of a facility subject to post-closure monitoring or maintenance requirements must have a written estimate, in current dollars, of the annual cost of post-closure monitoring and maintenance of the facility in accordance with the applicable post-closure regulations in Sections 1 and 7 through 10 of 401 KAR 34:070, Section 6 of 34:200, and Section 8 of 34:210.* [The owner or operator of a disposal facility must prepare a written estimate, in current dollars, of the annual cost of post-closure monitoring and maintenance of the facility in accordance with the applicable post-closure regulations in Sections 7 through 10 of 401 KAR 34:070.] The post-closure cost estimate is calculated by multiplying the annual post-closure cost estimate by the number of years of post-closure care required under 401 KAR 34:070.

(2) During the operating life of the facility, the owner or operator must adjust the post-closure cost estimate for inflation within thirty (30) days after each anniversary of the date on which the first post-closure cost estimate was prepared. The adjustment must be made as specified in paragraphs (a) and (b) of this subsection, using an inflation factor derived from the annual Implicit Price Deflator for Gross National Product as published by the U.S. Department of Commerce in its Survey of Current Business. 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 post-closure cost estimate by the inflation factor. The result is the adjusted post-closure cost estimate.

(b) Subsequent adjustments are made by multiplying the latest adjusted post-closure cost estimate by the latest inflation factor.

(3) The owner or operator must revise the post-closure cost estimate during the operating life of the facility whenever a change in the post-closure plan increases the cost of post-closure care. The revised post-closure cost estimate must be adjusted for inflation as specified in subsection (2) of this section.

(4) The owner or operator must keep the following at the facility during the operating life of the facility: the latest post-closure 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 post-closure cost estimate.

Section 2. Financial Assurance for Post-Closure Care. The owner or operator of each disposal facility must establish financial assurance for post-closure care of the facility. Financial assurance must be established as specified in Sections 3 through 9 of this regulation.

Section 3. Post-Closure Trust Fund. (1) An owner or operator may satisfy the requirements of [Sections 2 through 12 of] this regulation by establishing a post-closure trust fund which conforms to the requirements of this subsection and by submitting an originally signed duplicate of the trust agreement to the director. An owner or operator of a new facility must submit the originally signed duplicate of the trust agreement to the director at least sixty (60) days before the date on which hazardous waste is first received for disposal. The trustee 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 must be executed on the form provided by the cabinet containing* wording [of the trust agreement must be] identical to the wording specified in Section 1 of 401 KAR 34:140, and the trust agreement must be accompanied by a formal certification of acknowledgement (for an example, see Section 2 of 401 KAR 34:140). Schedule A of the trust agreement must be updated within sixty (60) days after a change in the amount of the current post-closure cost estimate covered by the agreement.

(3) Payments into the trust fund must 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 post-closure trust fund must be made as follows:

(a) For a new facility, the first payment must be made before the initial receipt of hazardous waste for disposal. A receipt from the trustee for this payment must be submitted by the owner or operator to the director before this initial receipt of hazardous waste. The first payment must be at least equal to the current post-closure cost estimate, except as provided in Section 10 of this regulation, divided by the number of years in the pay-in period. Subsequent payments must be made no later than thirty (30) days after each anniversary date of the first payment. The amount of each subsequent payment must be determined by this formula:

$$\text{NEXT payment} = \frac{CE - CV}{Y}$$

Where CE is the current post-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 establishes a trust fund as specified in this section, and the value of that trust fund is less than the current post-closure cost estimate when a permit is awarded for the facility, the amount of the current post-closure cost estimate still to be paid into the fund must be paid in over the pay-in period as defined in subsection (3) of this section. Payments must 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 must be determined by this formula:

$$\text{NEXT payment} = \frac{CE - CV}{Y}$$

Where CE is the current post-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 current post-closure cost estimate at the time the fund is established. However, he 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 post-closure trust fund after having used one (1) or more alternate mechanisms specified in [Sections 2 through 12 of] this regulation or in [Section 7(6) of] 401 KAR 35:010, his first payment must be in at least the amount that the fund would contain if the trust fund were established initially and annual payments made according to specifications of this paragraph and Section *3* [7(6)] of 401 KAR 35:010, as applicable.

(6) After the pay-in period is completed, whenever the current post-closure cost estimate changes during the operating life of the facility, the owner or operator 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, must either deposit an amount into the fund so that its value after this deposit at least equals the amount of the current post-closure cost estimate, or obtain other financial assurance as specified in [Sections 2 through 12 of] this 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 post-closure cost estimate, the owner or operator may submit a written request to the director for release of the amount in excess of the current post-closure cost estimate.

(8) If an owner or operator substitutes other financial assurance as specified in [Sections 2 through 12 of] this regulation for all or part of the trust fund, he may submit a written request to the director for release of the amount in excess of the current post-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 director will instruct the trustee to release to the owner or operator such funds as the director specifies in writing.

(10) During the period of post-closure care, the director may approve a release of funds if the owner or operator demonstrates to the director that the value of the trust fund exceeds the remaining cost of post-closure care.

(11) An owner or operator or any other person authorized to perform post-closure care may request reimbursement for post-closure expenditures by submitting itemized bills to the director. Within sixty (60) days after receiving bills for post-closure activities, the director will determine whether the post-closure expenditures are in accordance with the post-closure plan or otherwise justified, and if so, he will instruct the trustee to make reimbursement in such amounts as the director specifies in writing.

(12) The director will agree to termination of the trust when:

(a) An owner or operator substitutes alternate financial assurance as specified in [Sections 2 through 12 of] this regulation; or

(b) The director releases the owner or operator from the requirements of [Sections 2 through 12 of] this regulation in accordance with Section 12 of this regulation.

Section 4. Surety Bond Guaranteeing Payment into a Post-Closure Trust Fund. (1) An owner or operator may satisfy the requirements of [Sections 2 through 12 of] this regulation by obtaining a surety bond which conforms to the requirements of this section and submitting the bond to the director. An owner or operator of a new facility must submit the bond to the director at least sixty (60) days before the date on which hazardous waste is first received for disposal. The bond must be effective before this initial receipt of hazardous waste. The surety company issuing the bond 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 must be executed on the form provided by the cabinet containing* wording [of the surety bond must be] 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 [Sections 2 through 12 of] this regulation must also establish a standby trust fund. Under the terms of the bond, all payments made thereunder will be deposited by the surety directly into the standby trust fund in accordance with instructions from the director. This standby trust fund must meet the requirements specified in Section 3 of this regulation, except that:

(a) An originally signed duplicate of the trust agreement must be submitted to the director with the surety bond; and

(b) Until the standby trust fund is funded pursuant to the requirements of [Sections 2 through 12 of] this regulation, the following are not required by these regulations:

1. Payments into the trust fund as specified in Section 3 of this regulation;

2. Updating of Schedule A of the trust agreement (see 401 KAR 34:140) to show current post-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 must guarantee that the owner or operator 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 closure is issued by the director or circuit court or other court of competent jurisdiction; or

(c) Provide alternate financial assurance as specified in [Sections 2 through 12 of] this regulation, and obtain the director's written approval of the assurance provided, within ninety (90) days after receipt by both the owner or operator and the director of a notice of cancellation of the bond from the surety.

(5) Under the terms of the bond, the surety 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 must be in an amount at least equal to the amount of the current post-closure cost estimate, except as provided in Section 10 of this regulation.

(7) Whenever the current post-closure cost estimate increases to an amount greater than the penal sum, the owner or operator, within sixty (60) days after the increase, must either cause the penal sum to be increased to an amount at least equal to the current post-closure cost estimate and submit evidence of such increase to the director, or obtain other financial assurance as specified in [Sections 2 through 12 of] this regulation to cover the increase. Whenever the current post-closure cost estimate decreases, the penal sum may be reduced to the amount of the current post-closure cost estimate following written approval by the 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 director. 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 director, as evidenced by return receipt.

(9) The owner or operator may cancel the bond if the director has given prior written consent based on his receipt of evidence of alternate financial assurance as specified in [Sections 2 through 12 of] this regulation.

Section 5. Surety Bond Guaranteeing Performance of Post-Closure. (1) An owner or operator may satisfy the requirements of [Sections 2 through 12 of] this regulation by obtaining a surety bond which conforms to the requirements of this section and submitting the bond to the director. An owner or operator of a new facility must submit the bond to the director at least sixty (60) days before the date on which hazardous waste is first received for disposal. The bond must be effective before this initial receipt of hazardous waste. The surety company issuing the bond 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 must be executed on the form provided by the cabinet containing* wording [of the surety bond must be] 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 [Sections 2 through 12 of] this regulation must also establish a standby trust fund. Under the terms of the bond, all payments made thereunder will be deposited by the surety directly into the standby trust fund in accordance with the instructions of the director. This standby trust must meet the requirements specified in Section 3 of this regulation, except that:

(a) An originally signed duplicate of the trust agreement must be submitted to the director with the surety bond; and

(b) Unless the standby trust fund is funded pursuant to the requirements of [Sections 2 through 12 of] this regulation, the following are not required by these regulations:

1. Payments into the trust fund as specified in Section 3 of this regulation;
2. Updating of Schedule A of the trust agreement (see 401 KAR 34:140) to show current post-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 must guarantee that the owner or operator will:

(a) Perform post-closure care in accordance with the post-closure plan and other requirements of the permit for the facility; or

(b) Provide alternate financial assurance as specified in [Sections 2 through 12 of] this regulation and obtain the director's written approval of the assurance provided, within ninety (90) days of receipt by both the owner or operator and the director of a notice of cancellation of the bond from the surety.

(5) Under the terms of the bond, the surety will become liable on the bond obligation when the owner or operator fails to perform as guaranteed by the bond. Following a determination pursuant to KRS 224.866 that the owner or operator has failed to perform post-closure care in accordance with the post-closure plan and other permit requirements, under the terms of the bond the surety will perform post-closure care in accordance with the post-closure plan and other permit requirements or will deposit the amount of the penal sum into the standby trust fund.

(6) The penal sum of the bond must be in an amount at least equal to the amount of the current post-closure cost estimate.

(7) Whenever the current post-closure 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, must either cause the penal sum to be increased to an amount at least equal to the current post-closure cost estimate and submit evidence of such increase to the director, or obtain other financial assurance as specified in [Sections 2 through 12 of] this regulation. Whenever the current post-closure cost estimate decreases during the operating life of the facility, the penal sum may be reduced to the amount of the current post-closure cost estimate following written approval by the director.

(8) During the period of post-closure care, the director may approve a decrease in the penal sum if the owner or operator demonstrates to the director that the amount exceeds the remaining cost of post-closure 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 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 director, as evidenced by the return receipts.

(10) The owner or operator may cancel the bond if the director has given prior written consent. The director will provide such written consent when:

(a) An owner or operator substitutes alternate financial assurance as specified in [Sections 2 through 12 of] this regulation; or

(b) The director releases the owner or operator from the requirements of [Sections 2 through 12 of] this regulation in accordance with Sections 12 of this regulation.

(11) The surety will not be liable for deficiencies in the performance of post-closure care by the owner or operator after the director releases the owner or operator from the requirements of [Sections 2 through 12 of] this regulation in accordance with Section 12 of this regulation.

Section 6. Post-Closure Letter of Credit. (1) An owner or operator may satisfy the requirements of [Sections 2 through 12 of] this regulation by obtaining an irrevocable standby letter of credit which conforms to the requirements of this section and by submitting the letter to the director. An owner or operator of a new facility must submit the letter of credit to the director at least sixty (60) days before the date on which hazardous waste is first received for disposal. The letter of credit must be effective before this initial receipt of hazardous waste. The issuing institution 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 must be 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 [Sections 2 through 12 of] this regulation must also establish a standby trust fund. Under the terms of the letter of credit, all amounts paid pursuant to a draft by the director will be deposited by the issuing institution directly into the standby trust fund in accordance with instructions from the director. The standby trust fund must meet the requirements of the trust fund specified in Section 3 of this regulation, except that:

(a) An originally signed duplicate of the trust agreement must be submitted to the director with the letter of credit; and

(b) Unless the standby trust fund is funded pursuant to the requirements of [Sections 2 through 12 of] this regulation, the following are not required by these regulations:

1. Payments into the trust fund as specified in Section 3 of this regulation;
2. Updating the Schedule A of the trust agreement (see 401 KAR 34:140) to show current post-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 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 post-closure 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 must be irrevocable and issued for a period of at least one (1) year. The letter of credit 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 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 director have received the notice, as evidenced by the return receipts.

(6) The letter of credit must be issued in an amount at least equal to the current post-closure cost estimate, except as provided in Section 10 of this regulation.

(7) Whenever the current post-closure 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, must either cause the amount of the credit to be increased so that it at least equals the current post-closure cost estimate and submit evidence of such increase to the director, or obtain other financial assurance as specified in [Sections 2 through 12 of] this regulation to cover the increase. Whenever the current post-closure cost estimate decreases during the operating life of the facility, the amount of the credit may be reduced to the amount of the current post-closure cost estimate following written approval by the director.

(8) During the period of post-closure care, the director may approve a decrease in the amount of the letter of credit if the owner or operator demonstrates to the director that the amount exceeds the remaining cost of post-closure care.

(9) Following a determination pursuant to KRS 224.866 that the owner or operator has failed to perform post-closure care in accordance with the post-closure plan and other permit requirements, the director may draw on the letter of credit.

(10) If the owner or operator does not establish alternate financial assurance as specified in [Sections 2 through 12 of] this regulation and obtain written approval of such alternate assurance from the director within ninety (90) days after receipt by both the owner or operator and the 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 director will draw on the letter of credit. The director 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 director will draw on the letter of credit if the owner or operator has failed to provide alternate financial assurance as specified in [Sections 2 through 12 of] this regulation and obtain written approval of such financial assurance from the director.

(11) The 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 [Sections 2 through 12 of] this regulation; or

(b) The director releases the owner or operator from the requirements of [Sections 2 through 12 of] this regulation in accordance with Section 12 of this regulation.

Section 7. Post-Closure Insurance. (1) An owner or operator may satisfy the requirements of [Sections 2 through 12 of] this regulation by obtaining post-closure insurance which conforms to the requirements of this section and submitting a certificate of such insurance to the director. An owner or operator of a new facility must submit a certificate of insurance to the director at least sixty (60) days before the date on which hazardous waste is first received for disposal. The insurance must be effective before this initial receipt of hazardous waste. *Each insurance policy providing primary coverage must be issued by an insurer who is licensed to transact the business of insurance in the Commonwealth of Kentucky. Each insurance policy providing excess coverage must be issued by an insurer who is licensed to transact the business of insurance in a state.* [At a minimum, the insurer must be licensed to transact the business of insurance, or eligible to provide insurance as an excess or surplus lines insurer in the Commonwealth of Kentucky.]

(2) The *certificate of insurance must be executed on a form provided by the cabinet containing* wording [of the certificate of insurance must be] identical to the wording specified in 401 KAR 34:156.

(3) The post-closure insurance policy must be issued for a face amount at least equal to the current post-closure cost estimate, except as provided in Section 10 of this regulation. The term "face amount" means the total amount the insurer is obligated to pay under the policy. Actual payments by the insurer will not change the face amount, although the insurer's future liability will be lowered by the amount of the payments.

(4) The post-closure insurance policy must guarantee that funds will be available to provide post-closure care of the facility whenever the post-closure care period begins. The policy must also guarantee that once post-closure care begins, the insurer will be responsible for paying out funds, up to an amount equal to the face amount of the policy, upon the direction of the director to such party or parties as the director specifies.

(5) An owner or operator or any other person authorized to perform post-closure care may request reimbursement for post-closure expenditures by submitting intemized bills to the director. Within sixty (60) days after receiving bills for post-closure activities, the director will determine whether the post-closure expenditures are in accordance with the post-closure plan or otherwise justified, and if so, he will instruct the insurer to make reimbursement in such amounts as the director specifies in writing.

(6) The owner or operator must maintain the policy in full force and effect until the 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 [Sections 2 through 12 of] this regulation, will constitute a significant violation of these regulations, warranting such remedy as the director deems necessary. Such violation will be deemed to begin upon receipt by the 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 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 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 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 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 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 director 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 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 post-closure 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, must either cause the face amount to be increased to an amount at least equal to the current post-closure cost estimate and submit evidence of such increase to the director, or obtain other financial assurance as specified in [Sections 2 through 12 of] this regulation to cover the increase. Whenever the current post-closure cost estimate decreases during the operating life of the facility, the face amount may be reduced to the amount of the current post-closure cost estimate following written approval by the director.

(10) Commencing on the date that liability to make payments pursuant to the policy accrues, the insurer will thereafter annually increase the face amount of the policy. Such increase 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 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 [Sections 2 through 12 of] this regulation; or

(b) The director releases the owner or operator from the requirements *of this regulation* in accordance with Section 12 of this regulation.

Section 8. Financial Test with Corporate Guarantee for Post-Closure Care. (1) An owner or operator may satisfy the requirements of [Sections 2 through 12 of] this regulation by demonstrating that he passes a financial test as specified in this section. To pass this test the owner or operator must meet the criteria of either paragraph (a) or (b) of this subsection:

(a) The owner or operator must 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 post-closure cost estimates; and

3. Tangible net worth of at least $10 million; and

4. Assets in the Commonwealth of Kentucky amounting to either, at least, ninety (90) percent of his total assets or at least six (6) times the sum of the current closure and post-closure cost estimates.

(b) The owner or operator 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 post-closure cost estimates;

3. Tangible net worth of at least $10 million; and

4. Assets located in the Commonwealth of Kentucky amounting to either at least ninety (90) percent of his total assets or at least six (6) times the sum of the current closure and post-closure cost estimates.

(2) The phrase "current closure and post-closure cost estimates" as used in subsection (1) of this section refers to the cost estimates required to be shown in paragraphs 1

through *4* [5] of the letter from the owner's or operator's chief financial officer (see 401 KAR 34:159).

(3) To demonstrate that he meets this test, the owner or operator must submit the following three (3) items to the director:

(a) A letter *executed on the form 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) An owner or operator of a new facility must submit the items specified in subsection (3) of this section to the director 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 must send updated information to the director within ninety (90) days after the close of each succeeding fiscal year. This information 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 must send notice to the director of intent to establish alternate financial assurance as specified in [Sections 2 through 12 of] this regulation. The notice 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 must provide alternate financial assurance within 120 days after the end of such fiscal year.

(7) The 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 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 must provide alternate financial assurance as specified in [Sections 2 through 12 of] this regulation within thirty (30) days after notification of such a finding.

(8) The 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 will be cause for disallowance. The director will evaluate other qualifications on an individual basis. The owner or operator must provide alternate financial assurance as specified in [Sections 2 through 12 of] this regulation within thirty (30) days after notification of the disallowance.

(9) During the period of post-closure care, the director may approve a decrease in the current post-closure cost estimate for which this test demonstrates financial assurance if the owner or operator demonstrates to the director that the amount of the cost estimate exceeds the remaining cost of post-closure 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 [Sections 2 through 12 of] this regulation;

(b) The director releases the owner or operator from the requirements of [Sections 2 through 12 of] this regulation by terminating the financial requirements in accordance with Section 12 of this regulation.

(11) An owner or operator may meet the requirements of [Sections 2 through 12 of] this regulation by obtaining a written guarantee hereafter referred to as "corporate guarantee." The guarantor must be the parent corporation of the owner or operator. The guarantor must meet the requirements for owners or operators in subsections (1) through (9) of this section and must comply with the terms of the corporate guarantee. The [wording of the] corporate guarantee must be *executed on a form 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 director as specified in subsection (3) of this section. The terms of the corporate guarantee must provide that:

(a) If the owner or operator fails to perform post-closure care of a facility covered by the corporate guarantee in accordance with the post-closure plan and other permit requirements whenever required to do so, the guarantor will do so or establish a trust fund as specified in Section of this regulation in the name of the owner or operator.

(b) The corporate guarantee will remain in force unless the guarantor sends notice of cancellation by certified mail to the owner or operator and to the 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 director, as evidenced by the return receipts.

(c) If the owner or operator fails to provide alternate financial assurance as specified in [Sections 2 through 12 of] this regulation and obtain the written approval of such alternate assurance from the director within ninety (90) days after receipt by both the owner or operator and the director of a notice of cancellation of the corporate guarantee from the guarantor, the guarantor will 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 must satisfy the requirements of [Sections 2 through 12 of] this regulation by submitting [evidence of a cash account or a certificate of deposit] to the director *a bond guaranteeing compliance with KRS Chapter 224 and 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* [which conforms to the requirements of Sections 2 through 12 of this regulation]. An owner or operator of a new facility must submit the *bond* [cash account or certificate of deposit] to the director 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 must be regulated and examined by a federal or state agency.

(2) The bond must be executed on a form 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 must be executed on a form provided by the cabinet which has wording identical to the wording specified in Section 2 of 401 KAR 34:168.

(3) [(2)] The cabinet must be the beneficiary of the *escrow agreement for the* cash account or certificate of deposit. The director must be empowered to draw upon the funds if the owner or operator fails to perform post-closure care in accordance with the post-closure care plan and other permit requirements.

(4) [(3)] The sum of the cash account or certificate of deposit must be in an amount at least equal to the amount of the current post-closure cost estimate, except as provided in Section 10 of this regulation.

(5) [(4)] Whenever the current post-closure cost estimate increases to an amount greater than the sum of the cash account or certificate of deposit, the owner or operator, within sixty (60) days after the increase, must either cause the sum of the deposit to be increased to an amount at least equal to the current post-closure cost estimate and submit evidence of such increase to the director or obtain other financial assurance as specified in [Sections 2 through 12 of] this regulation to cover the increase. Whenever the current post-closure cost estimate decreases, the sum of the deposit may be reduced to the amount of the current post-closure cost estimate following written approval by the director.

(6) [(5)] 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 director. 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 director, as evidenced by return receipt.

(7) [(6)] The owner or operator may terminate the cash account or certificate of deposit *in accordance with Section 12 of this regulation* if the director has given prior written consent on his receipt of evidence of alternate financial assurance as specified in [Sections 2 through 12 of] this regulation.

(8) [(7)] An owner or operator or any other person authorized to conduct post-closure may request reimbursement for post-closure expenditures by submitting itemized bills to the director. Within sixty (60) days after receiving bills for post-closure activities, the director may instruct the bank or financial institution to make reimbursements in those amounts as the director specifies in writing if the director determines that the post-closure expenditures are in accordance with the post-closure plan or otherwise justified.

Section 10. Use of Multiple Financial Mechanisms. An owner or operator may satisfy the requirements of [Sections 2 through 12 of] this 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 must be as specified in Sections 3, 4, 6, 7, and 9 of this regulation, respectively, except that it is the combination of mechanisms rather than the single mechanism which must provide financial assurance for an amount at least equal to the current post-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 the other mechanisms. A single standby trust fund may be established for two (2) or more mechanisms. The director may use any or all of the mechanisms to provide for post-closure 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 [Sections 2 through 12 of] this regulation to meet the requirements of [Sections 2 through 12 of] this 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 director must include a list showing for each facility the EPA Identification Number, name, address, and the amount of funds for post-closure care assured by the mechanism. The amount of funds available through the mechanism 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 post-closure care of any of the facilities covered by the mechanism, the 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 12. Release of the Owner or Operator from the Requirements of [Sections 2 through 12 of] this Regulation. When an owner or operator has completed to the satisfaction of the director all post-closure care requirements in accordance with the post-closure plan, the director will, at the request of the owner or operator, notify him in writing that he is no longer required by [Sections 2 through 12 of] this regulation to maintain financial assurance for post-closure care of the particular facility.

JACKIE SWIGART, Secretary
ADOPTED: June 10, 1983
RECEIVED BY LRC: June 13, 1983 at 11:30 a.m.
See public hearings scheduled on page 1.

NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION CABINET
Department for Environmental Protection
Division of Waste Management
(Proposed Amendment)

401 KAR 34:110. Use of a mechanism for closure and post-closure.

RELATES TO: KRS 224.033, 224.071, 224.835, 224.842, 224.855, 224.860, 224.866
PURSUANT TO: KRS 13.082, 224.017, 224.862, 224.866
NECESSITY AND FUNCTION: KRS 224.866 requires that persons engaging in the storage, treatment, and disposal of hazardous waste obtain a permit. KRS 224.866 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 post-closure monitoring and maintenance of hazardous waste disposal facilities. This chapter establishes minimum standards for new hazardous waste sites or facilities. This regulation establishes the standards for use of one (1) financial mechanism for both closure and post-closure.

Section 1. Use of a Mechanism for Financial Assurance of Both Closure and Post-Closure Care. An owner or operator may satisfy the requirements for financial assurance for both closure and post-closure care for one (1) or more facilities by using a trust fund, surety bond, letter of credit, insurance, *financial test, corporate guarantee,* or cash or certificate of deposit that meets the specifications for the mechanism in both 401 KAR 34:090 [, Sections 2 through 12,] and 401 KAR 34:100 [, Sections 2 through 12]. The amount of funds available through this mechanism must be no less than the sum of funds that would be available if a separate mechanism had been established and maintained for financial assurance of closure and of post-closure care.

JACKIE SWIGART, Secretary
ADOPTED: June 10, 1983
RECEIVED BY LRC: June 13, 1983 at 11:30 a.m.
See public hearings scheduled on page 1.

NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION CABINET
Department for Environmental Protection
Division of Waste Management
(Proposed Amendment)

401 KAR 34:120. Liability requirements.

RELATES TO: KRS 224.033, 224.071, *224.830 through 224.877, 224.994* [224.835, 224.842, 224.855, 224.860, 224.866]
PURSUANT TO: KRS 13.082, *13.083,* 224.017, 224.862, 224.866
NECESSITY AND FUNCTION: KRS 224.866 requires that persons engaging in the storage, treatment, and disposal of hazardous waste obtain a permit. KRS 224.866 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 post-closure monitoring and maintenance of hazardous waste disposal facilities. This chapter establishes minimum standards for new hazardous waste sites or facilities. This regulation establishes the liability requirements [for both new and existing facilities].

Section 1. Coverage for Sudden Accidental Occurrences. [The liability requirements of this regulation apply to both new facilities and existing facilities.] An owner or operator of a hazardous waste treatment, storage, or disposal facility, or a group of such facilities, must 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 must 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. A hazardous waste disposal site or facility shall maintain additional excess liability coverage in the amount of at least $10,000,000. This liability coverage may be demonstrated in one (1) of three (3) ways, as specified in subsections (1), (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 must be amended by attachment of the hazardous waste facility liability endorsement or evidenced by a certificate of liability insurance. The *liability endorsement must be executed on a form provided by the cabinet containing* wording [of the endorsement must be] identical to the wording specified in 401 KAR 34:172. The *certificate of liability insurance must be on a form provided by the cabinet containing* wording [of the certificate of insurance must be] identical to the wording specified in 401 KAR 34:176. The owner or operator must submit an originally signed duplicate of the endorsement or the certificate of insurance to the director. If requested by the director, the owner or operator must provide an originally signed duplicate of the insurance policy. An owner or operator of a new facility must submit the originally signed duplicate of the hazardous waste facility liability endorsement or the certificate of liability insurance to the director at least sixty (60) days before the date on which hazardous waste is first received for treatment, storage or disposal. The insurance must be effective before this initial receipt of hazardous waste.

(b) Each *primary* insurance policy must be issued by an insurer which, at a minimum, is licensed to transact the business of *primary* insurance *in Kentucky.* [, or] *Each excess insurance policy must be issued by an insurer which, at a minimum, is licensed* [eligible] to provide insurance as an excess or surplus lines insurer in *one (1) state* [the Commonwealth of Kentucky].

(2) An owner or operator may meet the requirements of this regulation by passing a financial test for liability self-insurance coverage as specified in Section 6 of this regulation.

(3) An owner or operator may demonstrate the required liability coverage through use of both the financial test and insurance as these mechanisms are specified in this regulation. The amounts of coverage demonstrated must total at least the minimum amounts required by this section.

Section 2. Coverage for Nonsudden Accidental Occurrences. An owner or operator of a surface impoundment, landfill, or land treatment facility which is used to manage hazardous waste, or a group of such facilities, must 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 must have and maintain additional liability coverage for nonsudden *accidental* occurrences in the amount of at least $5,000,000 per occurrence with an annual aggregate of at least $10,000,000, exclusive of legal defense costs. This liability coverage may be demonstrated in one (1) of three (3) ways, as specified in subsections (1), (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 must be amended by attachment of the Hazardous Waste Facility Liability Endorsement or evidenced by a Certificate of Liability Insurance. The *liability endorsement must be on a form provided by the cabinet containing* wording [of the endorsement must be] identical to the wording specified in 401 KAR 34:172. The *certificate of liability insurance must be on a form provided by the cabinet containing* wording [of the certificate of insurance must be] identical to the wording specified in 401 KAR 34:176. The owner or operator must submit an originally signed duplicate of the endorsement or the certificate of insurance to the director. If requested by the director, the owner or operator must provide an originally

signed duplicate of the insurance policy. An owner or operator of a new facility must submit the originally signed duplicate of the Hazardous Waste Facility Liability Endorsement or the Certificate of Liability Insurance to the director at least sixty (60) days before the date on which hazardous waste is first received for treatment, storage or disposal. The insurance must be effective before this initial receipt of hazardous waste.

(b) Each *primary* insurance policy must be issued by an insurer which, at a minimum, is licensed to transact the business of *primary* insurance *in Kentucky.* [, or] *Each excess insurance policy must be issued by an insurer which, at a minimum, is licensed* [eligible] to provide insurance as an excess or surplus lines insurer in *one (1) state* [the Commonwealth of Kentucky].

(2) An owner or operator may meet the requirements of this regulation by passing a financial test for liability self-insurance coverage as specified in Section 6 of this regulation.

(3) An owner or operator may demonstrate the required liability coverage through use of both the financial test and insurance as these mechanisms are specified in this regulation. The amounts of coverage demonstrated must total at least the minimum amounts required by this section.

(4) For existing facilities, the required liability coverage for nonsudden accidental occurrences must 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 regulations, will 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 will determine the date by which the coverage must 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* [six (6) months after the effective date of this regulation].

(b) For an owner or operator with sales or revenues greater than $5,000,000 but less than $10,000,000, *February 24, 1984* [eighteen (18) months after the effective date of this regulation].

(c) All other owners or operators, *February 24, 1985* [thirty (30) months after the effective date of this regulation].

Section 3. Adjustments by the Director. If the director determines that the levels of financial responsibility required by Sections 1 and 2 of this 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 director may increase the level of financial responsibility required under Sections 1 and 2 of this regulation as may be necessary to protect human health and the environment. This adjusted level will be based on the director'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 director 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 director may require that the owner or operator of the facility comply with Section 2 of this regulation. An owner or operator must furnish to the director, within a reasonable time, any information which the director 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 [and 3] (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 director that the increased level of financial responsibility required by Section 3 of this regulation is not consistent with the degree and duration of tasks associated with the treatment, storage, or disposal at each facility or group of facilities, the owner or operator may obtain a variance from the director. The director shall not grant any requests for a variance which seek to decrease the level of financial responsibility below the minimums required by KRS 224.866(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 director's assessment of the degree and duration of risks associated with the ownership or operation of each facility or group of facilities. The director may require an owner or operator who requests a variance to provide such technical and engineering information as is deemed necessary by the director to determine a level of financial responsibility other than that required by Sections 1 and 2 of this regulation. Any request for a variance for a permitted facility shall be treated as a request for a permit modification under Section 2 [and 3] (1)(e) of 401 KAR 38:040 *and Section 2 of 401 KAR 38:050.*

Section 5. Period of Coverage. An owner or operator must continuously provide liability coverage for a facility as required by this regulation until certification of termination pursuant to the requirements of KRS 224.866.

Section 6. Liability Self-Insurance. (1) An owner or operator may satisfy the requirements of this regulation by demonstrating that he passes a financial test as specified in this section. To pass this test the owner or operator must demonstrate that the level of self-insurance does not exceed ten (10) percent of equity and must meet the criteria of either paragraph (a) or (b) of this subsection:

(a) The owner or operator must 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;
2. Tangible net worth of at least $10 million; and
3. Assets in the Commonwealth of Kentucky 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 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 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 Commonwealth of Kentucky 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 regulation.

(3) To demonstrate that he meets this test, the owner or

operator must submit the following three (3) items to the director:

(a) A letter signed by the owner's or operator's chief financial officer and *executed on 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.

(4) An owner or operator of a new facility must submit the items specified in subsection (3) of this section to the director 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 must send updated information to the director within ninety (90) days after the close of each succeeding fiscal year. This information 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 must obtain insurance for the entire amount of required liability coverage as specified in this regulation. Evidence of insurance must be submitted to the director 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 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 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 must provide liability insurance as specified in [Section 3 of] this regulation within thirty (30) days after notification of such a finding.

(8) The 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)(c) of this section). An adverse opinion or a disclaimer of opinion will be cause for disallowance. The director will evaluate other qualifications on an individual basis. The owner or operator must provide liability insurance for the entire amount of liability coverage as specified in this section within thirty (30) days after notification of the disallowance.

JACKIE SWIGART, Secretary
ADOPTED: June 14, 1983
RECEIVED BY LRC: June 14, 1983 at 11 a.m.
See public hearings scheduled on page 1.

NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION CABINET
Department for Environmental Protection
Division of Waste Management
(Proposed Amendment)

401 KAR 34:130. Incapacity of owners or operators, guarantors financial institutions.

RELATES TO: KRS 224.033, 224.071, *224.830 through 224.877, 224.994* [224.835, 224.842, 224.855, 224.860, 224.866]

PURSUANT TO: KRS 13.082, *13.083,* 224.017, 224.862, 224.866

NECESSITY AND FUNCTION: KRS 224.866 requires that persons engaging in the storage, treatment, and disposal of hazardous waste obtain a permit. KRS 224.866 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 post-closure monitoring and maintenance of hazardous waste disposal facilities. This chapter establishes minimum standards for new hazardous waste sites or facilities. This regulation establishes the requirements regarding incapacity of owners or operators, guarantors, or financial institutions.

Section 1. Notification. An owner or operator must notify the director by certified mail of the commencement of a voluntary or involuntary proceeding under Title 11 (Bankruptcy), U.S. Code, naming the owner or operator as debtor, within ten (10) days after commencement of the proceeding. A guarantor of a corporate guarantee *as specified in Section 8 of 401 KAR 34:090 and Section 8 of 401 KAR 34:100* must make such a notification if he is named as debtor *as specified under the terms of the corporate guarantee (see 401 KAR 34:165).*

Section 2. Establishment of Other Assurance or Liability Coverage. An owner or operator who fulfills the requirements of Sections 2 through 12 of 401 KAR 34:090, Sections 2 through 12 of 401 KAR 34:100, or 401 KAR 34:120 by obtaining a trust fund, letter of credit, surety bond, [or] insurance policy *or escrow agreement* will be deemed to be without the required financial assurance or liability coverage in the event of bankruptcy *of the trustee or escrow agent or issuing institution,* insolvency, or a suspension or revocation of the license or charter of the issuing institution. The owner or operator must establish other financial assurance or liability coverage within sixty (60) days of such events.

JACKIE SWIGART, Secretary
ADOPTED: June 14, 1983
RECEIVED BY LRC: June 14, 1983 at 11 a.m.
See public hearings scheduled on page 1.

NATURAL RESOURCES AND
ENVIRONMENTAL PROTECTION CABINET
Department for Environmental Protection
Division of Waste Management
(Proposed Amendment)

401 KAR 34:140. Wording of the instruments for trust funds.

RELATES TO: KRS 224.033, 224.071, *224.830 through 224.877, 224.994* [224.835, 224.842, 224.855, 224.860, 224.866]
PURSUANT TO: KRS 13.082, 224.017, 224.862, 224.866
NECESSITY AND FUNCTION: KRS 224.866 requires that persons engaging in the storage, treatment, and disposal of hazardous waste obtain a permit. KRS 224.866 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 post-closure monitoring and maintenance of hazardous waste disposal facilities. This chapter establishes minimum standards for new hazardous waste sites or facilities. This regulation establishes the wording of the instruments for a trust fund.

Section 1. Trust Agreement Instrument. (1) A trust agreement for a trust fund as specified in Section 3 of 401 KAR 34:090 *or* [and] Section 3 of 401 KAR 34:100 or in Section *3 of 401 KAR 35:090 or Section 3 of 401 KAR 35:100* [7(4) or (6) of 401 KAR 35:010] must be *executed on a form provided by the cabinet which is* worded as follows, except that instructions in parentheses are to be replaced with the relevant information and the parentheses deleted:

Trust Agreement

Trust agreement, the "Agreement," entered into as of (date) by and between (name of the owner or operator), a (name of state) ("corporation," "partnership," "association," or "proprietorship"), the "Grantor," and (name of corporate trustee), (insert "incorporated in the state of _____" or national bank), the "Trustee."

Whereas, the Kentucky Natural Resources and Environmental Protection Cabinet, "the cabinet," an agency of the Commonwealth, has established certain regulations applicable to the grantor, requiring that the owner or operator of a hazardous waste site or facility shall provide assurance that funds will be available when needed for closure and/or post-closure care of the facility.

Whereas, the Grantor has elected to establish a trust to provide all or part of such financial assurance for the facilities identified herein.

Whereas, the Grantor, acting through its duly authorized officers, has selected the Trustee to be the Trustee under this agreement, and the Trustee is willing to act as Trustee.

Now, therefore, the Grantor and the Trustee agree as follows:

Article 1. Definitions. As used in this Agreement:

(a) The term "Grantor" means the owner or operator who enters into this Agreement and any successors or assigns of the Grantor.

(b) The term "Trustee" means the Trustee who enters into this agreement and any successor Trustee.

Article 2. Identification of Facilities and Cost Estimates. This Agreement pertains to the facilities and cost estimates identified on attached Schedule A (on Schedule A, for each facility list the EPA Identification Number, name, address, and the current closure and/or post-closure cost estimates, or portions thereof, for which financial assurance is demonstrated by this Agreement.)

Article 3. Establishment of Fund. The Grantor and the Trustee hereby establish a trust fund, the "fund" for the benefit of the Cabinet. The Grantor and the Trustee intend that no third party have access to the Fund except as herein provided. The Fund is established initially as consisting of the property, which is acceptable to the Trustee, described in Schedule B attached hereto. Such property and any other property subsequently transferred to the Trustee is referred to as the Fund, together with all earnings and profits thereon, less any payments or distributions made by the Trustee pursuant to this Agreement. The Fund will be held by the Trustee, IN TRUST, as hereinafter provided. The Trustee shall not be responsible nor shall it undertake any responsibility for the amount or adequacy of, nor any duty to collect from the Grantor, any payments necessary to discharge any liabilities of the Grantor established by the Cabinet.

Article 4. Payment for Closure and Post-Closure Care. The Trustee shall make such payments from the Fund as the Director of the Division of Waste Management in the Kentucky Natural Resources and Environmental Protection Cabinet, hereinafter the Director of the Division, shall direct, in writing, to provide for the payment of the costs of closure and/or post-closure care of the facilities covered by this Agreement. The Trustee shall reimburse the Grantor or other persons as specified by the Director of the Division from the Fund for closure and post-closure expenditures in such amounts as the Director of the Division shall direct, in writing. In addition, the Trustee shall refund to the Grantor such amounts as the Director of the Division specifies in writing. Upon refund, such funds shall no longer constitute part of the Fund as defined herein.

Article 5. Payments Comprising the Fund. Payments made to the Trustee for the Fund shall consist of cash or securities acceptable to the Trustee.

Article 6. Trustee Management. The Trustee shall invest and reinvest the principal and income of the Fund and keep the Fund invested as a single fund, without distinction between principal and income, in accordance with general investment policies and guidelines which the Grantor may communicate in writing to the Trustee from time to time subject, however, to the provisions of this Article. In investing, reinvesting, exchanging, selling and managing the Fund, the Trustee shall discharge his duties with respect to the Trust Fund solely in the interest of the beneficiary and with the care, skill, prudence, and diligence under the circumstances then prevailing which persons of prudence, acting in a like capacity and familiar with such matters, would use in the conduct of an enterprise of a like character and with like aims, except that:

(a) Securities or other obligations of the Grantor, or any other owner or operator of the facilities, or any of their affiliates as defined in the Investment Company Act of 1940, as amended, 15 USC Section 80a-21.(a), will not be acquired or held, unless they are securities or other obligations of the federal or a state government;

(b) The Trustee is authorized to invest the Fund in time or demand deposits of the trustee, to the extent insured by an agency of the federal or state government; and

(c) The Trustee is authorized to hold cash awaiting investment or distribution uninvested for a reasonable time and without liability for the payment of interest thereon.

Article 7. Commingling and Investment. The Trustee is expressly authorized in its discretion:

(a) To transfer from time to time any or all of the assets of the Fund to any common, commingled or collective trust fund created by the Trustee in which the Fund is eligible to participate, subject to all of the provisions thereof, to be commingled with the assets of other trusts participating therein; and

(b) To purchase shares in any investment company registered under the Investment Company Act of 1940, 15 USC Section 80a-1 et seq., including one which may be created, managed, underwritten, or to which investment advice is rendered or the shares of which are sold by the Trustee. The Trustee may vote such shares in its discretion.

Article 8. Express Powers of Trustee. Without in any way limiting the powers and discretions conferred upon the Trustee by the other provisions of this Agreement or by law, the Trustee is expressly authorized and empowered:

(a) To sell, exchange, convey, transfer or otherwise dispose of any property held by it, by public or private sale. No person dealing with the Trustee shall be bound to see to the application of the purchase money or to inquire into the validity or expediency of any such sale or other disposition;

(b) To make, execute, acknowledge and deliver any and all documents of transfer and conveyance and any and all other instruments that may be necessary or appropriate to carry out the powers herein granted;

(c) To register any securities held in the Fund in its own name or in the name of a nominee and to hold any security in bearer form or in book entry or to combine certificates representing such securities with certificates of the same issue held by the Trustee in other fiduciary capacities, or to deposit or arrange for the deposit of such securities in a qualified central depositary even though, when so deposited, such securities may be merged and held in bulk in the name of the nominee of such depositary with other securities deposited therein by another person, or to deposit or arrange for the deposit of any securities issued by the United States Government, or any agency or instrumentality thereof, with a Federal Reserve bank, but the books and records of the Trustee shall at all times show that all such securities are part of the Fund;

(d) To deposit any cash in the Fund in interest-bearing accounts maintained or savings certificates issued by the Trustee, in its separate corporate capacity, or in any other banking institution affiliated with the Trustee, to the extent insured by an agency of the federal or state government; and

(e) To compromise or otherwise adjust all claims in favor of or against the fund.

Article 9. Taxes and Expenses. All taxes of any kind that may be assessed or levied against or in respect of the Fund and all brokerage commissions incurred by the Fund shall be paid from the Fund. All other expenses incurred by the Trustee in connection with the administration of this Trust, including fees for legal services rendered to the Trustee, the compensation of the Trustee to the extent not paid directly by the Grantor, and all other proper charges and disbursements of the Trustee shall be paid from the Fund.

Article 10. Annual Valuation. The Trustee shall annually, at least thirty (30) days prior to the anniversary date of establishment of the Fund, furnish to the Grantor and to the Director of the Division a statement confirming the value of the Trust. Any securities in the Fund shall be valued at market value as of no more than sixty (60) days prior to the anniversary date of establishment of the Fund. The failure of the Grantor to object in writing to the trustee within ninety (90) days after the statement has been furnished to the Grantor and the Director of the Division shall constitute a conclusively binding assent by the Grantor, barring the Grantor from asserting any claim or liability against the Trustee with respect to matters disclosed in the statement.

Article 11. Advice of Counsel. The Trustee may from time to time consult with counsel, who may be counsel to the Grantor, with respect to any question arising as to the construction of this Agreement or any action to be taken hereunder. The Trustee will be fully protected, to the extend permitted by law, in acting upon the advice of counsel.

Article 12. Trustee Compensation. The Trustee will be entitled to reasonable compensation for its services as agreed upon in writing from time to time with the Grantor.

Article 13. Successor Trustee. The Trustee may resign or the Grantor may replace the Trustee, but such resignation or replacement shall not be effective until the Grantor has appointed a successor Trustee and this successor accepts the appointment. The successor Trustee shall have the same powers and duties as those conferred upon the Trustee hereunder. Upon the successor Trustee's acceptance of the appointment, the Trustee shall assign, transfer, and pay over to the successor Trustee the funds and properties then constituting the Fund. If for any reason the Grantor cannot or does not act in the event of the resignation of the Trustee, the Trustee may apply to a court of competent jurisdiction for the appointment of a successor Trustee or for instructions. The successor Trustee shall specify the date on which it assumes administration of the Trust in a writing sent to the Grantor, the Director of the Division, and the present Trustee by certified mail ten (10) days before such change becomes effective. Any expenses incurred by the Trustee as a result of any of the acts contemplated by this section will be paid as provided in Article 9.

Article 14. Instructions to the Trustee. All orders, requests and instructions by the Grantor to the Trustee shall be in writing, signed by such persons as are designated in the attached Exhibit A or such other designees as the Grantor may designate by amendment to Exhibit A. The Trustee shall be fully protected in acting without inquiry in accordance with the Grantor's orders, requests and instructions. All orders, requests and instructions by the Secretary of the Cabinet and the Director of the Division to the Trustee shall be in writing, signed by the Secretary of the Cabinet or the Director of the Division and the Trustee shall act and shall be fully protected in acting in accordance with such orders, requests and instructions. The Trustee shall have the right to assume, in the absence of written notice to the contrary, that no event constituting a change or a termination of the authority of any person to act on behalf of the Grantor or the Cabinet hereunder has occurred. The Trustee shall have no duty to act in the absence of such orders, requests and instructions from the Grantor and/or the Cabinet, except as provided for herein.

Article 15. Notice of Nonpayment. The Trustee shall notify the Grantor and the Director of the Division by certified mail within ten (10) days following the expiration of the thirty (30) day period after the anniversary of the establishment of the Trust if no payment is received from the Grantor during that period. After the pay-in period is completed, the Trustee shall not be required to send a notice of nonpayment.

Article 16. Amendment of Agreement. This Agreement may be amended by an instrument in writing executed by the Grantor, the Trustee, and the Director of the Division or by the Trustee and the Director of the Division if the

Grantor ceases to exist.

Article 17. Irrevocability and Termination. Subject to the right of the parties to amend this Agreement as provided in Article 16, this Trust shall be irrevocable and shall continue until terminated at the written agreement of the Grantor, the Trustee, and the Director of the Division, or by the Trustee and the Director of the Division, if the Grantor ceases to exist. Upon termination of the Trust, all remaining Trust property, less final trust administration expenses, will be delivered to the Grantor.

Article 18. Immunity and Indemnification. The Trustee shall not incur personal liability of any nature in connection with any act or omission, made in good faith, in the administration of this Trust, or in carrying out any directions by the Grantor or the Director of the Division issued in accordance with this Agreement. The Trustee shall be indemnified and saved harmless by the Grantor or from the Trust Fund, or both, from and against any personal liability to which the Trustee may be subjected by reason of any act or conduct in its official capacity, including all expenses reasonably incurred in its defense in the event the Grantor fails to provide such defense.

Article 19. Choice of Law. This Agreement shall be administered, construed and enforced according to the laws of the Commonwealth of Kentucky.

Article 20. Interpretation. As used in this Agreement, words in the singular include the plural and words in the plural include the singular. The descriptive headings for each Article of this Agreement shall not affect the interpretation or the legal efficacy of this Agreement.

In witness whereof the parties have caused this Agreement to be executed by their respective officers duly authorized and their corporate seals to be hereunto affixed and attested as of the date first above written. The parties below certify that the wording of this Agreement is identical to the wording as specified in Section 1 of 401 KAR 34:140 as such regulation was constituted on the date first above written.

(Signature of Grantor) _____
By (Title) _____
Attest: _____
(Title) _____
(Seal) _____
(Signature of Trustee) _____
By _____
Attest: _____
(Title) _____
(Seal) _____

Section 2. Certification of Acknowledgement. This is an example of the certification of acknowledgment which must accompany the trust agreement for a trust fund as specified in Section 3 of 401 KAR 34:090 or Section 3 of 401 KAR 34:100 *or Section 3 of 401 KAR 35:090 or Section 3 of 401 KAR 35:100* [and Section 7(4) or (6) of 401 KAR 35:010].

Commonwealth of Kentucky
County of (insert name of county)

On this (date), before me personally came (owner or operator) to me known, who, being by me duly sworn, did depose and say that she/he resides at (address), that she/he is (title) of (corporation), the corporation described in and which executed the above instrument; that she/he knows the seal of said corporation; that the seal affixed to such instrument is such corporate seal; that it was so affixed by order of the Board of Directors of said corporation, and that she/he signed her/his name thereto by like order.

(Signature of Notary Public)
(Date Notary Public Commission expires)
(Seal of Notary Public)

Section 3. Trust Fund Schedules. The following are examples of Schedules "A" and "B" which must accompany the trust agreement for a trust fund.

Schedule A:
(EPA Identification Number) _____
(Facility Name) _____
(Street Name) _____
(City, State, Zip) _____
(Closure Cost Estimate) _____
(Post-Closure Cost Estimate) _____

Schedule B:
*The fund consists of $*_____

JACKIE SWIGART, Secretary
ADOPTED: June 10, 1983
RECEIVED BY LRC: June 14, 1983 at 11 a.m.
See public hearings scheduled on page 1.

NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION CABINET
Department for Environmental Protection
Division of Waste Management
(Proposed Amendment)

401 KAR 34:144. Wording of the instrument for a surety bond guaranteeing payment into a trust fund.

RELATES TO: KRS 224.033, 224.071, *224.830 through 224.877, 224.994* [224.835, 224.842, 224.855, 224.860, 224.866]

PURSUANT TO: KRS 13.082, *13.083,* 224.017, 224.862, 224.866

NECESSITY AND FUNCTION: KRS 224.866 requires that persons engaging in the storage, treatment, and disposal of hazardous waste obtain a permit. KRS 224.866 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 post-closure monitoring and maintenance of hazardous waste disposal facilities. This chapter establishes minimum standards for new hazardous waste sites or facilities. This regulation establishes the wording of the instrument for a surety bond guaranteeing payment into a trust funds.

Section 1. Financial Guarantee Bond Instrument. A surety bond guaranteeing payment into a trust fund, as specified in Section 4 of 401 KAR 34:090 or Section 4 of 401 KAR 34:100 or Section *4 of 401 KAR 35:090 or Section 4 of 401 KAR 35:100* [7(4) or (6) of 401 KAR 35:010] must be *executed on a form provided by the cabinet which is* worded as follows, except that instructions in parentheses are to be replaced with the relevant information and the parentheses deleted:

Financial Guarantee Bond
Date bond executed: *(insert date executed)*
[_____]
Effective date: *(insert effective date)*
[_____]
Principal: (*insert* legal name and business address of owner or operator)

Type of organization: (insert "individual," "joint venture," "partnership," or "corporation")
Commonwealth/State of incorporation: _____
Surety(ies): (Name(s) and business address(es))

EPA Identification Number, name, address, and closure and/or post-closure amount(s) for each facility guaranteed by this bond (indicate closure and post-closure amounts separately): *(insert EPA identification number, name, address, and closure and/or post-closure amount(s) for each facility guaranteed by this bond and indicate the closure and post-closure amounts separately)*

[_____]

Total penal sum of bond: *(insert total penal sum of bond)*

[$ _____]

Surety's Bond Number: *(insert bond number)*

[_____]

Know all persons by these presents, That We, the Principal and Surety(ies) hereto are firmly bound to the Natural Resources and Environmental Protection Cabinet (hereinafter called Cabinet) in the above penal sum for the payment of which we bind ourselves, our heirs, executors, administrators, successors, and assigns, jointly and severally; provided that, where the Surety(ies) are corporations acting as co-sureties, we, the Sureties, bind ourselves in such sum "jointly and severally" only for the purpose of allowing a joint action or actions against any or all of us, and for all other purposes each Surety binds itself, jointly and severally with the Principal, for the payment of such sum only as it sets forth opposite the name of such Surety, but if no limit of liability is indicated, the limit of liability shall be the full amount of the penal sum.

Whereas, said Principal is required under Kentucky Revised Statutes Chapter 224 to have a permit or permits, or interim status, in order to own or operate each hazardous waste site or facility(ies) identified above, and

Whereas, said Principal is required to provide financial assurance for closure, or closure and post-closure care, as a condition of the permit or interim status, and

Whereas, said Principal shall establish a standby trust fund as is required when a surety bond is used to provide such financial assurance;

Now, Therefore, the conditions of the obligation are such that if the Principal shall faithfully, before the beginning of final closure of each facility identified above, fund the standby trust fund in the amount(s) identified above for the facility,

Or, if the Principal shall fund the standby trust fund in such amount(s) within fifteen (15) days after an order to begin closure is issued by the Secretary of the Cabinet or by a circuit court or other court of competent jurisdiction.

Or, if the Principal shall provide alternate financial assurance, as specified in [Section 1 of] 401 KAR 34:080 *through 34:176* or [Section 7 of] 401 KAR *35:080 through 35:130* [35:010], as applicable, and obtain the Director's written approval of such assurance, within ninety (90) days after the date notice of cancellation is received by both the Principal and the Director of the Division of Waste Management in the Kentucky Natural Resources and Environmental Cabinet, hereinafter the Director of the Division, from the Surety(ies), then this obligation shall be null and void, otherwise it is to remain in full force and effect.

The Surety(ies) shall become liable on this bond obligation only when the Principal has failed to fulfill the conditions described above. Upon notification by the Director of the Division that the Principal has failed to perform as guaranteed by this bond, the Surety(ies) shall place funds in the amount guaranteed for the facility(ies) into the standby trust fund as directed by the Director of the Division.

The liability of the Surety(ies) shall not be discharged by any payment or succession of payments hereunder, unless and until such payment or payments shall amount in the aggregate to the penal sum of the bond, but in no event shall the obligation of the Surety(ies) hereunder exceed the amount of said penal sum.

The Surety(ies) may cancel the bond by sending written notice of cancellation by certified mail to the Principal and to the Director of the Division, provided, however, that cancellation shall not occur during the 120 days beginning on the date of receipt of the notice of cancellation by both the Principal and Director of the Division, as evidenced by the return receipts.

The Principal may terminate this bond by sending written notice to the Surety(ies), provided, however, that no such notice shall become effective until the Surety(ies) receive(s) written authorization for termination of the bond by the Director of the Division. (The following paragraph is an optional rider that may be included but is not required.)

Principal and Surety(ies) hereby agree to adjust the penal sum of the bond yearly so that it guarantees a new closure and/or post-closure amount, provided that the penal sum does not increase by more than twenty (20) percent in any one (1) year, and no decrease in the penal sum takes place without the written permission of the Director of the Division.

In Witness Thereof, the Principal and Surety(ies) have executed this Financial Guarantee Bond and have affixed their seals on the date set forth above.

The persons whose signatures appear below hereby certify that they are authorized to execute this surety bond on behalf of the Principal and Surety(ies) and that the wording of this surety bond is identical to the wording specified in 401 KAR 34:144 as such regulation was constituted on the date this bond was executed.

Principal

(Signature(s)): _____
Name(s) and title(s) (typed): _____
(Corporate seal):

Corporate Surety(ies)

(Name and address): _____
Commonwealth/State of incorporation: _____
Liability limit: $ _____
(Signature(s)): _____
Name(s) and title(s) (typed): _____
(Corporate seal):

(For every co-surety, provide signature(s), corporate seal, and other information in the same manner as for Surety above.)

Bond premium: $_____

JACKIE SWIGART, Secretary

ADOPTED: June 10, 1983
RECEIVED BY LRC: June 14, 1983 at 11 a.m.
See public hearings scheduled on page 1.

NATURAL RESOURCES AND
ENVIRONMENTAL PROTECTION CABINET
Department for Environmental Protection
Division of Waste Management
(Proposed Amendment)

401 KAR 34:148. Wording of the instrument for a surety bond guaranteeing performance.

RELATES TO: KRS 224.033, 224.071, *224.830 through 224.877, 224.994* [224.835, 224.842, 224.855, 224.860, 224.866]
PURSUANT TO: KRS 13.082, *13.083,* 224.017, 224.862, 224.866
NECESSITY AND FUNCTION: KRS 224.866 requires that persons engaging in the storage, treatment, and disposal of hazardous waste obtain a permit. KRS 224.866 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 post-closure monitoring and maintenance of hazardous waste disposal facilities. This chapter establishes minimum standards for new hazardous waste sites or facilities. This regulation establishes the wording of the instrument for a surety bond guaranteeing performance.

Section 1. Performance Bond Instrument. A surety bond guaranteeing performance of closure, and/or post-closure care, as specified in Section 5 of 401 KAR 34:090 or Section 5 of 401 KAR 34:100 must be *executed on a form provided by the cabinet which is* worded as follows, except that the instructions in parentheses are to be replaced with the relevant information and the parentheses deleted:

Performance Bond
Date bond executed: *(insert date executed)*
[_____]
Effective Date: *(insert date effective)*
[_____]
Principal: (*insert* legal name and business address of owner or operator)
Type of organization: (Insert "individual," "joint venture," "partnership," or "corporation")
*Commonwealth/*state of incorporation: *(insert appropriate state name)*
[_____]
Surety(ies): (*insert* name(s) and business address(es) *of surety(ies)*)
EPA Identification Number, name, address, and closure and/or post-closure amount(s) for each facility guaranteed by this bond *and* [(]indicate closure and post-closure amounts separately[)]: *(insert EPA identification number, name, address, and closure and/or post-closure amount(s) for each facility guaranteed by this bond and indicate closure and post-closure amounts separately)*
[_____]
Total penal sum of bond: *(insert total penal sum of bond)*
[$_____]
Surety's bond number: *(insert bond number)*
[_____]

Know All Persons By These Presents, That We the Principal and Surety(ies) hereto are firmly bound to the Natural Resources and Environmental Protection Cabinet, hereinafter called the Cabinet, in the above penal sum for the payment of which we bind ourselves, our heirs, executors, administrators, successors and assigns jointly and severally; provided that, where the Surety(ies) are corporations acting as co-sureties, we, the Sureties, bind ourselves in such sum "jointly and severally" only for the purpose of allowing a joint action or actions against any or all of us, and for all other purposes each Surety binds itself, jointly and severally, with the Principal, for the payment of such sum only as it is set forth opposite the name of such Surety, but if no limit of liability is indicated, the limit of liability shall be the full amount of the penal sum.

Whereas, said Principal is required, under Kentucky Revised Statutes Chapter 224, to have a permit in order to own or operate each hazardous waste site or facility, identified above, and

Whereas, said Principal is required to provide financial assurance for closure, or closure and post-closure care, as a condition of the permit(s), and

Whereas, said Principal shall establish a standby trust fund as is required when a surety bond is used to provide such financial assurance;

Now, Therefore, the conditions of this obligation are such that if the Principal shall faithfully perform closure, whenever required to do so, of each facility for which this bond guarantees closure, in accordance with the closure plan and other requirements of the permit as such plan and permit may be amended, pursuant to all applicable laws, statutes, rules and regulations, as such laws, statutes, rules and regulations may be amended,

And, if the Principal shall faithfully perform post-closure care of each facility for which this bond guarantees post-closure care, in accordance with the post-closure plan and other requirements of the permit, as such plan and permit may be amended, pursuant to all applicable laws, statutes, rules and regulations, as such laws, statutes, rules and regulations may be amended.

Or, if the Principal shall provide alternate financial assurance as specified in 401 KAR 34:080 *through 401 KAR 34:176* [, Section 1], and obtain from the Director of the Division written approval of such assurance, within ninety (90) days after the date notice of cancellation is received by both the Principal and the Director of the Division of Waste Management in the Kentucky Natural Resources and Environmental Protection Cabinet, from the Surety(ies), then this obligation shall be null and void, otherwise it is to remain in full force and effect.

The Surety(ies) shall become liable on this bond obligation only when the Principal has failed to fulfill the conditions described above.

Upon notification by the Director of the Division that the Principal has been found in violation of the closure requirements of 401 KAR Chapter 34 for a facility for which this bond guarantees performance of closure, the Surety(ies) shall either perform closure in accordance with the closure plan and other permit requirements or place the closure amount guaranteed for the facility into the standby trust fund as directed by the Director of the Division.

Upon notification by the Director of the Division that the Principal has been found in violation of the post-closure requirements of 401 KAR Chapter 34 for a facility for which this bond guarantees performance of post-closure care, the Surety(ies) shall either perform post-closure care in accordance with the post-closure plan and other permit requirements or place the post-closure amount guaranteed for the facility into the standby trust fund as directed by the Director of the Division.

Upon notification by the Director of the Division that the Principal has failed to provide alternate financial assurance as specified in [Section 1 of] 401 KAR 34:080 *through 401 KAR 34:176,* and obtain written approval of

such assurance from the Director of the Division during the ninety (90) days following receipt by both the Principal and the Director of the Division of a notice of cancellation of the bond, the Surety(ies) shall place funds in the amount guaranteed for the facility(ies) into the standby trust fund as directed by the Director.

The Surety(ies) hereby waive(s) notification of amendments to the closure plans, permits, applicable laws, statutes, rules and regulations and agrees that no such amendment shall in any way alleviate its/their obligation on this bond.

The liability of the Surety(ies) shall not be discharged by any payment or succession of payments hereunder, unless and until such payment or payments shall amount in the aggregate to the penal sum of the bond, but in no event shall the obligation of the Surety(ies) hereunder exceed the amount of said penal sum.

The Surety(ies) may cancel the bond by sending notice of cancellation by certified mail to the owner or operator and to the Director of the Division, provided, however, that cancellation shall not occur during the 120 days beginning on the date of receipt of the notice of cancellation by both the Principal and the Director of the Division as evidenced by the return receipts.

The Principal may terminate the bond by sending written notice to the Surety(ies), provided, however, that no such notice shall become effective until the Surety(ies) receive(s) written authorization for termination of the bond by the Director of the Division. (The following paragraph is an optional rider that may be included but is not required.)

Principal and Surety(ies) hereby agree to adjust the penal sum of the bond yearly so that it guarantees a new closure and/or post-closure amount, provided that the penal sum does not increase by more than twenty (20) percent in any one (1) year, and no decrease in the penal sum takes place without the written permission of the Director of the Division of Waste Management.

In Witness Whereof, the Principal and Surety(ies) have executed this Performance Bond and have affixed their seals on the date set forth above.

The persons whose signatures appear below hereby certify that they are authorized to execute this surety bond on behalf of the Principal and Surety(ies) and that the wording of this surety bond is identical to the wording specified 401 KAR 34:148 as such regulation was constituted on the date this bond was executed.

Principal
(Signature(s)): _____
Name(s): _____
Title(s) (typed): _____
(Corporate seal): _____

Corporate Surety(ies)
(Name and address): _____
Commonwealth/State of incorporation: _____
Liability limit: $_____
(Signature(s)): _____
Name(s) and title(s) (typed): _____
(Corporate seal):
(For every co-surety, provide signature(s), corporate seal, and other information in the same manner as for Surety above.)
Bond premium: $_____

JACKIE SWIGART, Secretary
ADOPTED: June 10, 1983

RECEIVED BY LRC: June 14, 1983 at 11 a.m.
See public hearings scheduled on page 1.

NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION CABINET
Department for Environmental Protection
Division of Waste Management
(Proposed Amendment)

401 KAR 34:152. Wording of the instrument for a letter of credit.

RELATES TO: KRS 224.033, 224.071, *224.830 through 224.877, 224.994* [224.835, 224.842, 224.855, 224.860, 224.866]
PURSUANT TO: KRS 13.082, *13.083,* 224.017, 224.862, 224.866
NECESSITY AND FUNCTION: KRS 224.866 requires that persons engaging in the storage, treatment, and disposal of hazardous waste obtain a permit. KRS 224.866 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 post-closure monitoring and maintenance of hazardous waste disposal facilities. This chapter establishes minimum standards for new hazardous waste sites or facilities. This regulation establishes the wording of the instrument for a letter of credit.

Section 1. Cover Letter. This is an example of the cover letter which must accompany the letter of credit as specified in Section 6(4) of 401 KAR 34:090 or Section 6(4) of 401 KAR 34:100 or Section 5(4) of 401 KAR 35:090 or Section 5(4) of 401 KAR 35:100 as follows, except that the instructions in parentheses are to be replaced with the relevant information and the parentheses deleted:

Director
Division of Waste Management
Department for Environmental Protection
Natural Resources and Environmental Protection Cabinet
Frankfort, Kentucky 40601

Dear Director:

The owner or operator has obtained Letter of Credit number (insert number) issued by (insert name of issuing institution) on (insert date of letter of credit) to provide financial assurance following (insert as appropriate either facility or facilities):
(insert EPA identification number)
(insert name of the facility)
(insert street address of the facility)
(insert town, state and ZIP code of the facility)
(insert current closure cost estimate)
(insert current post-closure cost estimate)

The owner or operator of the above facility is:
(insert company name)
(insert headquarters street, address, town, state and ZIP code)

Sincerely,
(insert signature)
(insert typed name and title of signator)
(insert date this cover letter is signed)

Section 2. [1.] Irrevocable Standby Letter of Credit Instrument. A letter of credit, as specified in Section 6 of 401 KAR 34:090 or Section 6 of 401 KAR 34:100 or Section *5 of 401 KAR 35:090 or Section 5 of 401 KAR 35:100* [7(4) or (6) of 401 KAR 35:010], must be worded as follows, except that instructions in parentheses are to be replaced with the relevant information and the parentheses deleted:

Irrevocable Standby Letter of Credit
Director [of the]
Division of Waste Management
Department for Environmental Protection
Natural Resources and Environmental Protection Cabinet
Frankfort, Kentucky *40601*

Dear *Director* [Sir or Madam]:

We hereby establish our Irrevocable Standby Letter of Credit No. _____ in favor of the Director of the Division of Waste Management in the Natural Resources and Environmental Protection Cabinet, hereinafter the Director, at the request and for the account of (owner's or operator's name and address) up to the aggregate amount of (in words) U.S. dollars, $_____, available upon presentation of:

(a) Your sight draft, bearing reference to this Letter of Credit No. _____ , and

(b) Your signed statement reading as follows: "I certify that the amount of the draft is payable pursuant to the regulations issued under the authority of the Kentucky Revised Statutes Chapter 224."

This Letter of Credit is effective as of (date) and shall expire on (date at least one (1) year later), but such expiration date will be automatically extended for a period of (at least one (1) year) on (date) and on each successive expiration date, unless at least 120 days before the current expiration date, we notify both you and (owner's or operator's name) by certified mail that we have decided not to extend the Letter of Credit beyond the current expiration date. In the event you are so notified, any unused portion of the credit shall be available upon presentation of your sight draft for 120 days after the date of receipt by both you and (owner's or operator's name), as shown on the signed return receipt.

Whenever this Letter of Credit is drawn on under and in compliance with the terms of this credit, we will duly honor such draft upon presentation to us, and we shall deposit the amount of the draft directly into the standby trust fund of (owner's or operator's name) in accordance with your instructions.

We certify that the wording of this Letter of Credit is identical to the wording specified in Section 2 of 401 KAR 34:152 as such regulations were constituted on the date shown immediately below.

(Signature(s) and title(s) of official(s) of issuing institution)
(Date)

This credit is subject to (insert "the most recent edition of the Uniform Customs and Practice for Documentary Credits, published by the International Chamber of Commerce," or the "Uniform Commercial Code").

JACKIE SWIGART, Secretary
ADOPTED: June 10, 1983
RECEIVED BY LRC: June 14, 1983 at 11 a.m.
See public hearings scheduled on page 1.

NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION CABINET
Department for Environmental Protection
Division of Waste Management
(Proposed Amendment)

401 KAR 34:156. Wording of the instrument for a certificate of insurance.

RELATES TO: KRS 224.033, 224.071, *224.830 through 224.877, 224.994* [224.835, 224.842, 224.855, 224.860, 224.866]
PURSUANT TO: KRS 13.082, *13.083,* 224.017, 224.862, 224.866
NECESSITY AND FUNCTION: KRS 224.866 requires that persons engaging in the storage, treatment, and disposal of hazardous waste obtain a permit. KRS 224.866 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 post-closure monitoring and maintenance of hazardous waste disposal facilities. This chapter establishes minimum standards for new hazardous waste sites or facilities. This regulation establishes the wording of the instrument for a certificate of insurance.

Section 1. Certificate of Insurance for Closure or Post-Closure Care Insturment. A certificate of insurance, as specified in Section 7 of 401 KAR 34:090 or Section 7 of 401 KAR 34:100 or in Section *6 of 401 KAR 35:090 or Section 6 of 401 KAR 35:100* [7(4) or (6) of 401 KAR 35:010], must be *executed on a form provided by the cabinet which is* worded as follows, except the instructions in parentheses are to be replaced with relevant information and the parentheses deleted:

Certificate of Insurance for Closure or Post-Closure Care
Name and Address of Insurer, herein called the "Insurer": _____
Name and Address of Insured, herein called the "Insured": _____
Facilities Covered: (List for each facility: The EPA Identification Number, name, address, and the amount of insurance for closure and/or the amount for post-closure care (these amounts for all facilities covered must total the face amount shown below)).
Face Amount: _____
Policy Number: _____
Effective Date: _____

The Insurer hereby certifies that it has issued to the Insured the policy of insurance identified above to provide financial assurance for (insert "closure" or "closure and post-closure care" or "post-closure care") for the facilities identified above. The Insurer further warrants that such policy conforms in all respects with the requirements of Section 7 of 401 KAR 34:090, Section 7 of 401 KAR 34:100, *Section 6 of 401 KAR 35:090* and Section *6* [7] of 401 KAR *35:100* [35:010], as applicable and as such regulations were constituted on the date shown immediately below. It is agreed that any provisions of the policy inconsistent with such regulations are hereby amended to eliminate such inconsistency.

Whenever requested by the Director of the Division of Waste Management in the Natural Resources and Environmental Protection Cabinet, hereinafter the Director of the Division, the Insurer agrees to furnish to the Director of the Division a duplicate original of the policy listed above, including all endorsements thereon.

I hereby certify that the wording of this certificate is identical to the wording specified in 401 KAR 34:156 as such regulations were constituted on the date shown immediately below.
(Authorized signature for Insurer) _____
(Name of person signing, typed) _____
(Title of person signing, typed) _____
(Signature of witness or notary public) _____
(Date Notary Public Commission Expires) _____
(Seal of Notary Public) _____
(Date) _____

JACKIE SWIGART, Secretary
ADOPTED: June 10, 1983
RECEIVED BY LRC: June 14, 1983 at 11 a.m.
See public hearings scheduled on page 1.

NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION CABINET
Department for Environmental Protection
Division of Waste Management
(Proposed Amendment)

401 KAR 34:159. Wording of the instrument for financial test on closure or post-closure care.

RELATES TO: KRS 224.033, 224.071, *224.830 through 224.877, 224.994* [224.835, 224.842, 224.855, 224.860, 224.866]
PURSUANT TO: KRS 13.082, *13.083,* 224.017, 224.862, 224.866
NECESSITY AND FUNCTION: KRS 224.866 requires that persons engaging in the storage, treatment, and disposal of hazardous waste obtain a permit. KRS 224.866 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 post-closure monitoring and maintenance of hazardous waste disposal facilities. This chapter establishes minimum standards for new hazardous waste sites or facilities. This regulation establishes the wording of the instrument for a letter from the chief financial officer to demonstrate assurance of closure or post-closure care.

Section 1. Financial Test for Closure or Post-Closure Care Instrument. A letter from the chief financial officer, as specified in Section 8 of 401 KAR 34:090 or Section 8 of 401 KAR 34:100 or Section 7 *of 401 KAR 35:090 or Section 7 of 401 KAR 35:100* [(4) or (6) of 401 KAR 35:010, which incorporate 40 CFR 265.143(e) and 265.145(e) respectively], must be *executed on a form provided by the cabinet which is* worded as follows, except that the instructions in parentheses are to be replaced with the relevant information and the parentheses deleted:

Letter from Chief Financial Officer
(To Demonstrate Assurance of
Closure or Post-Closure Care)

Director
Division of Waste Management
Natural Resources and Environmental Protection Cabinet
Department for Environmental Protection
Frankfort, Kentucky 40601

Dear Director:

[(Address to the Director of the Division of Waste Management)]

I am the chief financial officer of (name and address of firm). This letter is in support of this firm's use of the financial test to demonstrate financial assurance, as specified in [Section 1 of] 401 KAR 34:080 *through 401 KAR 34:176* and [Section 7 of] 401 KAR *35:080 through 401 KAR 35:130* [35:010]: _____

(Fill out the following *four (4)* [five] paragraphs *and schedules* regarding facilities and associated cost estimates. If your firm has no facilities that belong in a particular paragraph, write "None" *on the appropriate schedule* [in the space indicated]. For each facility, include its EPA Identification Number, name, address and current closure and/or post-closure cost estimates. Identify each cost estimate as to whether it is for closure or post-closure care.)

1. This firm is the owner or operator of the following facilities in Kentucky for which financial assurance for closure or post-closure care is demonstrated through the financial test specified in [Section 1 of] 401 KAR 34:080 *through 401 KAR 34:176* and [Section 7 of] 401 KAR *35:080 through 401 KAR 35:130* [35:010]. The current closure and/or post-closure cost estimates covered by this test are shown for each facility *in Schedule 1 which is attached.* [:

_____]

2. This firm guarantees, through the corporate guarantee specified in [Section 1 of] 401 KAR 34:080 *through 401 KAR 34:176* and [Section 7 of] 401 KAR *35:080 through 401 KAR 35:130* [35:010], the closure or post-closure care of the following facilities owned or operated by subsidiaries of this firm. The current cost estimates for the closure or post-closure care so guaranteed are shown for each facility *in Schedule 2 which is attached.* [:

_____]

3. In states other than Kentucky [where EPA is not administering the financial requirements which are substantially equivalent to Section 1 of 401 KAR 34:080 and Section 7 of 401 KAR 35:010], this firm, as owner or operator or guarantor, is demonstrating financial assurance for the closure or post-closure care of the following facilities through the use of a test equivalent or substantially equivalent to the financial test specified in [Section 1 of] 401 KAR 34:080 *through 401 KAR 34:176* and [Section 7 of] 401 KAR *35:080 through 401 KAR 35:130* [35:010]. The current closure and/or post-closure cost estimates covered by such a test are shown for each facility *in Schedule 3 which is attached.* [:

_____]

[4. In states other than Kentucky where EPA is administering the financial requirements which are substantially equivalent to Section 1 of 401 KAR 34:080 and Section 7 of 401 KAR 35:010, this firm, as owner or operator or guarantor, is demonstrating financial assurance for the closure or post-closure care of the following facilities through the use of a test equivalent or substantially equivalent to the financial test specified in Section 1 of 401 KAR 34:080 and Section 7 of 401 KAR 35:010. The current closure and/or post-closure cost estimates covered by such a test are shown for each facility:

_____]

4. [5.] This firm is the owner or operator of the following hazardous waste sites or facilities for which financial assurance for closure or, if a disposal facility, post-closure care, is not demonstrated either to EPA, [or] Kentucky *or any state* through the financial test or any other financial assurance mechanism specified in [Section 1 of] 401 KAR 34:080 *through 401 KAR 34:176* or [Section 7 of] 401 KAR *35:080 through 401 KAR 35:130* [35:010] or equivalent or

substantially equivalent state or EPA mechanisms. The current closure and/or post-closure cost estimates not covered by such financial assurance are shown for each facility *in Schedule 4 which is attached.*
[:
_____]
This firm (insert "is required" or "is not required") to file a form 10K with the Securities and Exchange Commission (SEC) for the latest fiscal year.
The fiscal year of this firm ends on (month, day). The figures for the following items marked with an asterisk are derived from this firm's independently audited, year-end financial statements for the latest completed fiscal year, ended (date).
(Fill in Alternative I if the criteria of Section 8(1)(a) of 401 KAR 34:090 or Section 8(1)(a) of 401 KAR 34:100 or Section 7*(1)(a)* [(4) or (6)] of 401 KAR *35:090 or Section 7(1)(a) of 401 KAR 35:100* [35:010 which incorporate 40 CFR 265.143(e)(1)(i) and 265.145(e)(1)(i) respectively] are used. Fill in Alternative II if the criteria of Section 8(1)(b) of 401 KAR 34:090 or Section 8(1)(b) of 401 KAR 34:100 or Section 7*(1)(b)* [[(4) or (6)] of 401 KAR *35:090 or Section 7(1)(b) of 401 KAR 35:100* [35:010 which incorporate 40 CFR 265.143(e)(1)(ii) and 265.145(e)(1)(ii)] are used.)

Alternative I

1. Sum of current closure and post-closure cost estimates (total of all cost estimates shown in the *four (4)* [five] paragraphs above) $ _____
*2. Total liabilities (if any portion of the closure or post-closure cost estimates is included in your total liabilities, you may deduct the amount of that portion from this line and add that amount to lines 3 and 4) $ _____
*3. Tangible net worth $ _____
*4. Net worth $ _____
*5. Current assets $ _____
*6. Current liabilities $ _____
7. Net working capital (line 5 minus line 6) $ _____
*8. The sum of net income plus depreciation, depletion, and amortization $ _____
*9. Total assets in Kentucky (required only if less than 90 percent of assets are located in Kentucky). $ _____
(Answer yes or no to the following questions.)
10. Is line 3 at least $10 million? _____
11. Is line 3 at least six (6) times line 1? _____
12. Is line 7 at least six (6) times line 1? _____
*13. Are at least 90 percent of assets located in Kentucky? If not, complete line 14. _____
14. Is line 9 at least six (6) times line 1? _____
15. Is line 2 divided by line 4 less than 2.0? _____
16. Is line 8 divided by line 2 greater than 0.1? _____
17. Is line 5 divided by line 6 greater than 1.5? _____

Alternative II

1. Sum of current closure and post-closure cost estimates (total of all cost estimates shown in the *four (4)* [five] paragraphs above) $ _____
2. Current bond rating of most recent issuance of this firm and name of rating service. _____
3. Date of issuance of bond _____
4. Date of maturity of bond _____
*5. Tangible net worth (if any portion of the closure and post-closure cost estimates is included in "total liabilities" on your firm's financial statements, you may add the amount of that portion to this line) $ _____
*6. Total assets in Kentucky (required only if less than 90 percent of firm's assets are located in Kentucky.) $ _____
(Answer yes or no to the following questions.)
7. Is line 5 at least $10 million? _____
8. Is line 5 at least six (6) times line 1? _____
*9. Are at least ninety (90) percent of firm's assets located in Kentucky? If not, complete line 10. _____
10. Is line 6 at least six (6) times line 1? _____
I hereby certify that the wording of this letter is identical to the wording specified in 401 KAR 34:159 as such regulations were constituted on the date shown immediately below.
(Signature) _____
(Name, typed) _____
(Title, typed) _____
(Date) _____

JACKIE SWIGART, Secretary
ADOPTED: June 10, 1983
RECEIVED BY LRC: June 14, 1983 at 11 a.m.
See public hearings scheduled on page 1.

NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION CABINET
Department for Environmental Protection
Division of Waste Management
(Proposed Amendment)

401 KAR 34:162. Wording of the instrument for financial test on liability coverage and closure or post-closure care.

RELATES TO: KRS 224.033, 224.071, *224.830 through 224.877, 224.994* [224.835, 224.842, 224.855, 224.860, 224.866]
PURSUANT TO: KRS 13.082, *13.083,* 224.017, 224.862, 224.866
NECESSITY AND FUNCTION: KRS 224.866 requires that persons engaging in the storage, treatment, and disposal of hazardous waste obtain a permit. KRS 224.866 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 post-closure monitoring and maintenance of hazardous waste disposal facilities. This chapter establishes minimum standards for new hazardous waste sites or facilities. This regulation establishes the wording of the instrument for financial test on liability and closure or post-closure care.

Section 1. Financial Test for Liability and Closure or Post-Closure Insturment. A letter from the chief financial officer, as specified in Section 6 of 401 KAR 34:120 *or Section 6 of 401 KAR 35:120* must be *executed on a form provided by the cabinet which is* worded as follows, except that instructions in parentheses are to be replaced with the relevant information and the parentheses deleted:

Letter from Chief Financial Officer
(to Demonstrate Liability Coverage or to
Demonstrate Both Liability Coverage and
Assurance of Closure or Post-Closure Care)

Director
Division of Waste Management
Natural Resources and Environmental Protection Cabinet
Department for Environmental Protection
Frankfort, Kentucky 40601

Dear Director:

[(Address to the Director of the Division of Waste Management)]

I am the chief financial officer of (owner's or operator's name and address. This letter is in support of the use of the financial test to demonstrate financial responsibility for liability coverage, (insert "and closure and/or post-closure care" if applicable) as specified in [Section 1 of] 401 KAR 34:080 *through 401 KAR 34:176* and [Section 7 of] 401 KAR *35:080 through 401 KAR 35:130* [35:010].

(Fill out the following five paragraphs regarding facilities and liability coverage. For each facility, include its EPA Identification Number, name, and address.)

The owner or operator identified above is the owner or operator of the following facilities for which liability coverage is being demonstrated through the financial test as specified in 401 KAR 34:120 and [Section 7(8) of] 401 KAR *35:120* [35:010]: _____

(If you are using the financial test to demonstrate coverage of both liability and closure and post-closure care, fill in the following *four (4)* [five] paragraphs *and schedules* regarding facilities and associated closure and post-closure estimates. If there are no facilities that belong in a particular paragraph, write "None" in the space indicated. For each facility, include its EPA Identification Number, name, address, and current closure and/or post-closure cost estimates. Identify each cost estimate as to whether it is for closure or post-closure care.)

1. The owner or operator identified above owns or operates the following facilities in Kentucky for which financial assurance for closure or post-closure care is demonstrated through the financial test specified in [Section 1 of] 401 KAR 34:080 *through 401 KAR 34:176* and [Section 7 of] 401 KAR *35:080 through 401 KAR 35:130* [35:010]. The current closure and/or post-closure cost estimates covered by this test are shown for each facility *in Schedule 1 which is attached.* [:

_____]

2. The owner or operator identified above guarantees, through the corporate guarantee specified in [Section 1 of] 401 KAR 34:080 *through 401 KAR 34:176* and [Section 7 of] 401 KAR *35:080 through 401 KAR 35:130* [35:010], the closure and post-closure care of the following facilities owned or operated by its subsidiaries. The current cost estimates for the closure or post-closure care so guaranteed are shown for each facility *in Schedule 2 which is attached.* [:

_____]

3. In states other than Kentucky [where EPA is not administering the federal financial requirements which are substantially equivalent to Section 1 of 401 KAR 34:080 and Section 7 of 401 KAR 35:010], this owner or operator is demonstrating financial assurance for the closure or post-closure care of the following facilities through the use of a test equivalent or substantially equivalent to the financial test specified in [Section 1 of] 401 KAR 34:080 *through 401 KAR 34:176* and [Section 7 of] 401 KAR *35:080 through 401 KAR 35:130* [35:010]. The current closure and/or post-closure cost estimates covered by such a test as shown for each facility *in Schedule 3 which is attached.* [:

_____]

[4. In states other than Kentucky where EPA is administering the federal financial requirements which are substantially equivalent to Section 1 of 401 KAR 34:080 and Section 7 of 401 KAR 35:010, this owner or operator is demonstrating financial assurance for the closure or post-closure care of the following facilities through the use of a test equivalent or substantially equivalent to the financial test specified in Section 1 of 401 KAR 34:080 and Section 7 of 401 KAR 35:010. The current closure and/or post-closure cost estimates covered by such a test are shown for each facility:

_____]

4. [5.] The owner or operator identified above owns or operates the following hazardous waste sites or facilities for which financial assurance for closure or, if a disposal facility, post-closure care, is not demonstrated [either] to *Kentucky,* EPA or any state through the financial test or any other financial assurance mechanism specified in [Section 1 of] 401 KAR 34:080 *through 401 KAR 34:176* and [Section 7 of] 401 KAR *35:080 through 401 KAR 35:130* [35:010] or equivalent or substantially equivalent state mechanisms. The current closure and/or post-closure cost estimates not covered by such financial assurance are shown for each facility *in Schedule 4 which is attached.* [:

_____]

This owner or operator (insert "is required" or "is not required") to file a form 10K with the Securities and Exchange Commission (SEC) for the latest fiscal year.

The fiscal year of this owner or operator ends on (month, day). The figures for the following items marked with an asterisk are derived from this owner's or operator's independently audited, year-end financial statements for the latest completed fiscal year, ended (date).

(Fill in Part A if you are using the financial test to demonstrate coverage only for the liability requirements.)

Part A. Liability Coverage for Accidental Occurrences

(Fill in Alternative I if the criteria of Section 6(1)(a) of 401 KAR 34:120 *or Section 6(1)(a) of 401 KAR 35:120* are used. Fill in Alternative II if the criteria of Section 6(1)(b) of 401 KAR 34:120 *or Section 6(1)(b) of 401 KAR 35:120* are used.)

Alternative I

1. Amount of annual aggregate liability coverage to be demonstrated: $_____

*2. Current assets $_____

*3. Current liabilities $_____

*4. Net working capital (line 2 minus line 3) $_____

*5. Tangible net worth $_____

*6. If less than 90 percent of assets are located in Kentucky, give total Kentucky assets $_____

*7. Ten (10) percent of equity: $_____

(Answer yes or no to questions 8 through 12.)

8. Is line 5 at least $10 million? _____

9. Is line 4 at least six (6) times line 1? _____

10. Is line 5 at least six (6) times line 1? _____

*11. Are at least ninety (90) percent of assets located in Kentucky? If not, complete line 12. _____

12. Is line 6 at least six (6) times line 1? _____

Alternative II

1. Amount of annual aggregate liability coverage to be demonstrated: $_____

2. Current bond rating of most recent issuance and name of rating service _____

3. Date of issuance of bond _____

4. Date of maturity of bond _____

*5. Tangible net worth $_____

*6. Total assets in Kentucky (required only if less than ninety (90) percent of assets are located in Kentucky) $_____

*7. Ten (10) percent of equity: $_____

(Answer yes or no to the questions 8 through 11.)
8. Is line 5 at least $10 million? _____
9. Is line 5 at least six (6) times line 1? _____
*10. Are at least ninety (90) percent of assets located in Kentucky? If not, complete line 11. _____
11. Is line 6 at least six (6) times line 1? _____
(Fill in Part B if you are using the financial test to demonstrate assurance of both liability coverage and closure or post-closure care.)
Part B. Closure or Post-Closure Care and Liability Coverage
(Fill in Alternative I if the criteria of Section 8(1)(a) of 401 KAR 34:090 or Section 8(1)(a) of 401 KAR 34:100 and Section 6(1)(a) of 401 KAR 34:120 are used or if the criteria of Section 7*(1)(a)* [(4) or (6)] of 401 KAR *35:090 or Section 7(1)(a) of 401 KAR 35:100* [35:010 which incorporate 40 CFR 265.143(e)(1)(i) and 265.145(e)(1)(i) respectively] and Section 6(1)(a) of 401 KAR *35:120* [34:120] are used. Fill in Alternative II if the criteria of Section 8(1)(b) of 401 KAR 34:090 or Section 8(1)(b) of 401 KAR 34:100 and Section 6(1)(b) of 401 KAR 34:120 are used or if the criteria of Section 7*(1)(b) of 401 KAR 35:090 or Section 7(1)(b) of 401 KAR 35:100* [(4) or (6) of 401 KAR 35:010 which incorporate 265.143(e)(1)(ii) and 265.145(e)(1)(ii) respectively] and Section 6(1)(b) of 401 KAR *35:120* [34:120] are used.

Alternative I
1. Sum of current closure and post-closure cost estimates (total of all cost estimates listed above) $ _____
2. Amount of annual aggregate liability coverage to be demonstrated $ _____
3. Sum of lines 1 and 2 $ _____
*4. Total liabilities (if any portion of your closure or post-closure cost estimates is included in your total liabilities, you may deduct that portion from this line and add that amount to lines 5 and 6) $ _____
*5. Tangible net worth $ _____
*6. Net worth $ _____
*7. Current assets $ _____
*8. Current liabilities $ _____
9. Net working capital (line 7 minus line 8) $ _____
*10. The sum of net income plus depreciation, depletion, and amortization $ _____
*11. Total assets in Kentucky (required only if less than ninety (90) percent of assets are located in Kentucky.) $ ___
*12. Ten (10) percent of equity $ _____
(Answer yes or no to questions 13 through 20.)
13. Is line 5 at least $10 million? _____
14. Is line 5 at least six (6) times line 3? _____
15. Is line 9 at least six (6) times line 3? _____
*16. Are at least 90 percent of assets located in Kentucky? If not, complete line 17. _____
17. Is line 11 at least six (6) times line 3? _____
18. Is line 4 divided by line 6 less than 2.0? _____
19. Is line 10 divided by line 4 greater than 0.1? _____
20. Is line 7 divided by line 8 greater than 1.5? _____

Alternative II
1. Sum of current closure and post-closure cost estimates (total of all cost estimates listed above) $ _____
2. Amount of annual aggregate liability coverage to be demonstrated $ _____
3. Sum of lines 1 and 2 $ _____
4. Current bond rating of most recent issuance and name of rating service _____
5. Date of issuance of bond _____
6. Date of maturity of bond _____
*7. Tangible net worth (if any portion of the closure or post-closure cost estimates is included in "total liabilities" on your financial statements you may add that portion to this line) $ _____
*8. Total assets in Kentucky (required only if less than 90 percent of assets are located in Kentucky.) $_____
*9. Ten (10) percent of equity $ _____
(Answer yes or no to questions 10 through 13.)
10. Is line 7 at least $10 million? _____
11. Is line 7 at least six (6) times line 3? _____
12. Are at least 90 percent of assets located in Kentucky? If not, complete line 13. _____
13. Is line 8 at least six (6) times line 3? _____
I hereby certify that the wording of this letter is identical to the wording specified in 401 KAR 34:162 as such regulations were constituted on the date shown immediately below.
Signature: _____
Name (typed): _____
Title (typed): _____
Date (typed): _____

JACKIE SWIGART, Secretary
ADOPTED: June 10, 1983
RECEIVED BY LRC: June 14, 1983 at 11 a.m.
See public hearings scheduled on page 1.

NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION CABINET
Department for Environmental Protection
Division of Waste Management
(Proposed Amendment)

401 KAR 34:165. Wording of the instrument for a corporate guarantee.

RELATES TO: KRS 224.033, 224.071, *224.830 through 224.877, 224.994* [224.835, 224.842, 224.855, 224.860, 224.866]
PURSUANT TO: KRS 13.082, *13.083,* 224.017, 224.862, 224.866
NECESSITY AND FUNCTION: KRS 224.866 requires that persons engaging in the storage, treatment, and disposal of hazardous waste obtain a permit. KRS 224.866 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 post-closure monitoring and maintenance of hazardous waste disposal facilities. This chapter establishes minimum standards for new hazardous waste sites or facilities. This regulation establishes the wording of the instrument for a corporate guarantee.

Section 1. Corporate Guarantee Instrument. A corporate guarantee, as specified in Section 8 of 401 KAR 34:090, or Section 8 of 401 KAR 34:100 Section 7 *of 401 KAR 35:090 or Section 7 of 401 KAR 35:100* [(4) or (6) of 401 KAR 35:010 which incorporate 40 CFR 265.143(e) and 265.145(e) respectively], must be *executed on a form provided by the cabinet which is* worded as follows, except that instructions in parentheses are to be replaced with the relevant information and the parentheses deleted:

Corporate Guarantee for
Closure or Post-Closure Care
Guarantee made this (date) by (name of guaranteeing entity), a business corporation organized under the laws of

the state of (insert name of state), herein referred to as guarantor, to the Division of Waste Management in the Kentucky Natural Resources and Environmental Protection Cabinet, obligee, on behalf of our subsidiary (owner or operator) of (business address).

Recitals

1. Guarantor meets or exceeds the financial test criteria and agrees to comply with the reporting requirements for guarantors as specified in Section 8 of 401 KAR 34:090, or Section 8 of 401 KAR 34:100 and Section 7 [(4) or (6)] of 401 KAR *35:090 or Section 7 of 401 KAR 35:100* [35:010].

2. (Owner or operator) owns or operates the following hazardous waste site(s) or facility(ies) covered by this guarantee: (List for each facility: EPA Identification Number, name, and address. Indicate for each whether guarantee is for closure, post-closure care, or both.)

3. "Closure plans" and "post-closure plans" as used below refer to the plans maintained as required by 401 KAR 34:070 and [Section 6 of] 401 KAR *35:070* [35:010] for the closure and post-closure care of facilities as identified above.

4. For value received from (owner or operator), guarantor guarantees to the Division of Waste Management that in the event that (owner or operator) fails to perform (insert "closure," "post-closure care" or "closure and post-closure care") of the above facility(ies) in accordance with the closure or post-closure plans and other permit or interim status requirements whenever required to do so, the guarantor shall do so or establish a trust fund as specified in [Section 1 of] 401 KAR 34:080 *through 401 KAR 34:176* or [Section 7 of] 401 KAR *35:080 through 401 KAR 35:130* [35:010], as applicable, in the name of (owner or operator) in the amount of the current closure or post-closure cost estimates as specified in [Section 1 of] 401 KAR 34:080 *through 401 KAR 34:176* or [Section 7 of] 401 KAR *35:080 through 401 KAR 35:130* [35:010].

5. Guarantor agrees that if, at the end of any fiscal year before termination of this guarantee, the guarantor fails to meet the financial test criteria, guarantor shall send within ninety (90) days, by certified mail, notice to the Director of the Division of Waste Management and to (owner or operator) that he intends to provide alternate financial assurance as specified in [Section 1 of] 401 KAR 34:080 *through 401 KAR 34:176* or [Section 7 of] 401 KAR *35:080 through 401 KAR 35:130* [35:010], as applicable, in the name of (owner or operator). Within 120 days after the end of such fiscal year, the guarantor shall establish such financial assurance unless (owner or operator) has done so.

6. The guarantor agrees to notify the Director of the Division of Waste Management by certified mail of a voluntary or involuntary proceeding under Title 11 (Bankruptcy), U.S. Code, naming guarantor as debtor, within ten (10) days after commencement of the proceeding.

7. Guarantor agrees that within thirty (30) days after being notified by the Director of the Division of the Waste Management of a determination that guarantor no longer meets the financial test criteria or that he is disallowed from continuing as a guarantor of closure or post-closure care, he shall establish alternate financial assurance as specified in [Section 1 of] 401 KAR 34:080 *through 401 KAR 34:176* or [Section 7 of] 401 KAR *35:080 through 401 KAR 35:130* [35:010], as applicable, in the name of (owner or operator) unless (owner or operator) has done so.

8. Guarantor agrees to remain bound under this guarantee notwithstanding any or all of the following: amendment or modification of the closure or post-closure plan, amendment or modification of the permit, the extension or reduction of the time of performance of closure or post-closure, or any other modification or alteration of an obligation of the owner or operator pursuant to 401 KAR Chapter 34 or 35.

9. Guarantor agrees to remain bound under this guarantee for so long as (owner or operator) must comply with the applicable financial assurance requirements of [Section 1 of] 401 KAR 34:080 *through 401 KAR 34:176* and [Section 7 of] 401 KAR *35:080 through 401 KAR 35:130* [35:010] for the above-listed facilities, except that guarantor may cancel this guarantee by sending notice by certified mail to the Director of the Division of Waste Management and to (owner or operator), such cancellation to become effective no earlier than 120 days after receipt of such notice by both the Director of the Division of Waste Management and (owner or operator), as evidenced by the return receipts.

10. Guarantor agrees that if (owner or operator) fails to provide alternate financial assurance as specified in [Section 1 of] 401 KAR 34:080 *through 401 KAR 34:176* or [Section 7 of] 401 KAR *35:080 through 401 KAR 35:130* [35:010], as applicable, and obtain written approval of such assurance from the Director of the Division of Waste Management within ninety (90) days after a notice of cancellation by the guarantor is received by the Director of the Division of Waste Management from guarantor, guarantor shall provide such alternate financial assurance in the name of (owner or operator).

11. Guarantor expressly waives notice of acceptance of this guarantee by the Director of the Division of Waste Management or by (owner or operator). Guarantor also expressly waives notice of amendments or modifications of the closure and/or post-closure plan and of amendments or modifications of the facility permit(s).

I hereby certify that the wording of this guarantee is identical to the wording specified in 401 KAR 34:165 as such regulations were constituted on the date first above written.

Effective date: _____
(Name of guarantor, typed) _____
(Authorized signature for guarantor) _____
(Name of person signing, typed) _____
(Title of person signing, typed) _____
(Signature of Witness or Notary Public) _____
(Date Notary Public's Commission Expires) _____
(Seal of Notary Public) _____

JACKIE SWIGART, Secretary
ADOPTED: June 10, 1983
RECEIVED BY LRC: June 14, 1983 at 11 a.m.
See public hearings scheduled on page 1.

NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION CABINET
Department for Environmental Protection
Division of Waste Management
(Proposed Amendment)

401 KAR 34:172. Wording of the instrument for a liability endorsement.

RELATES TO: KRS 224.033, 224.071, *224.830 through 224.877, 224.994* [224.835, 224.842, 224.855, 224.860, 224.866]

PURSUANT TO: KRS 13.082, *13.083,* 224.017, 224.862, 224.866

NECESSITY AND FUNCTION: KRS 224.866 requires that persons engaging in the storage, treatment, and

disposal of hazardous waste obtain a permit. KRS 224.866 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 post-closure monitoring and maintenance of hazardous waste disposal facilities. This chapter establishes minimum standards for new hazardous waste sites or facilities. This regulation establishes the wording of the instrument for a hazardous waste facility liability endorsement.

Section 1. Liability Endorsement Instrument. A hazardous waste facility liability endorsement as required by 401 KAR 34:120 *or 401 KAR 35:120* must be *executed on a form provided by the cabinet which is* worded as follows, except that instructions in parentheses are to be replaced with the relevant information and the parentheses deleted.

Hazardous Waste Facility Liability Endorsement

1. This endorsement certifies that the policy to which the endorsement is attached provides liability insurance covering bodily injury and property damage in connection with the insured's obligation to demonstrate financial responsibility under 401 KAR 34:120 *or under 401 KAR 35:120.* The coverage applies at (list EPA Identification Number, name, and address for each facility) for (insert "sudden accidental occurrences," "nonsudden accidental occurrences," or "sudden and nonsudden accidental occurrences;" if coverage is for multiple facilities and the coverage is different for different facilities, indicate which facilities are insured for sudden accidental occurrences, which are insured for nonsudden accidental occurrences, and which are insured for both).

(Fill in Alternative A for primary liability coverage. Fill in Alternative B for excess liability coverage.)

Alternative A

The limits of liability are (insert the dollar amount of the *primary policy for* "each occurrence") *each occurrence* and *(insert the dollar amount of the primary policy for* "annual aggregate" [limits of the Insurer's liability]) *annual aggregate,* exclusive of legal defense costs.

Alternative B

The limits of liability are (insert the dollar amount of the excess policy for "each occurrence") each occurrence and (insert the dollar amount of the excess policy for "annual aggregate") annual aggregate, which is exclusive of legal defense costs, in excess of the primary policy limits of (insert dollar amount of the primary policy for "each occurrence") each occurrence and (insert the dollar amount of the primary policy for "annual aggregate") annual aggregate, exclusive of legal defense costs.

2. The insurance afforded with respect to such occurrences is subject to all of the terms and conditions of the policy; provided, however, that any provisions of the policy inconsistent with subparagraphs (a) through (e) of this paragraph are hereby amended to conform with subparagraphs (a) through (e):

(a) Bankruptcy or insolvency of the insured shall not relieve the Insurer of its obligations under the policy to which this endoresement is attached.

(b) The insurer is liable for the payment of amounts within any deductible applicable to the policy, with a right of reimbursement by the insured for any such payment made by the Insurer. This provision does not apply with respect to that amount of any deductible for which coverage is demonstrated as specified in Section 6 of 401 KAR 34:120 *or Section 6 of 401 KAR 35:120.*

(c) Whenever requested by the Director of the Division of Waste Management in the Natural Resources and Environmental Protection Cabinet, hereinafter the Director of the Division, the Insurer agrees to furnish to the Director of the Division a signed duplicate original of the policy and all endorsements.

(d) Cancellation of this endorsement, whether by the Insurer or the Insured, will be effective only upon written notice and only after the expiration of sixty (60) days after a copy of such written notice is received by the Director of the Division.

(e) Any other termination of this endorsement will be effective only upon written notice and only after the expiration of thirty (30) days after a copy of such written notice is received by the Director of the Division.

Attached to and forming part of Policy No. _____ issued by (name of Insurer), herein called the Insurer, of (address of Insurer), to (name of insured) of (address) this _____ day of _____, 19 _____. The effective date of said policy is _____ day of _____, 19____.

I hereby certify that the wording of this endorsement is identical to the wording specified in 401 KAR 34:172 as such regulation was constituted on the date first above written, and that the Insurer is licensed to transact the business of insurance *in the Commonwealth of Kentucky,* or *is licensed* [eligible] to provide insurance as an excess or surplus lines insurer *in one (1) state* [, in the Commonwealth of Kentucky].

(Signature of Authorized Representative of Insurer)

(Name, typed)

(Title, typed), Authorized Representative of (name of insurer)

(Address of Representative, typed)

(Recodified from 401 KAR 2:063, Section 16(7), eff. 3-1-83.)

JACKIE SWIGART, Secretary

ADOPTED: June 10, 1983

RECEIVED BY LRC: June 14, 1983 at 11 a.m.

See public hearings scheduled on page 1.

NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION CABINET
Department for Environmental Protection
Division of Waste Management
(Proposed Amendment)

401 KAR 34:176. Wording of the instrument for a certificate of liability insurance.

RELATES TO: KRS 224.033, 224.071, 224.835, 224.842, 224.855, 224.860, 224.866

PURSUANT TO: KRS 13.082, *13.083,* 224.017, 224.862, 224.866

NECESSITY AND FUNCTION: KRS 224.866 requires that persons engaging in the storage, treatment, and disposal of hazardous waste obtain a permit. KRS 224.866 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 post-closure monitoring and maintenance of hazardous waste disposal facilities. This chapter establishes minimum standards for new hazardous waste sites or facilities. This regulation establishes the wording of the instrument for a hazardous waste facility certificate of liability insurance.

Section 1. Certificate of Liability Insurance Instrument. A certificate of liability insurance as required in 401 KAR 34:120 *or 401 KAR 35:120* must be *executed on a form pro-*

vided by the cabinet which is worded as follows, except that the instructions in parentheses are to be replaced with the relevant information and the parentheses deleted:

Hazardous Waste Facility
Certificate of Liability Insurance

1. (*insert* name of Insurer), the "Insurer," of (*insert* address of Insurer) hereby certifies that it has issued liability insurance covering bodily injury and property damage to (*insert* name of Insured), the "Insured," of (*insert* address of Insured) in connection with the Insured's obligation to demonstrate financial responsibility under 401 KAR 34:120 or [Section 7 of] 401 KAR *35:120* [35:010]. The coverage applies at (list EPA Identification Number, name, and address for each facility) for (insert "sudden accidental occurrences," "nonsudden accidental occurrences," or "sudden and nonsudden accidental occurrences"); if coverage is for multiple facilities and the coverage is different for different facilities, indicate which facilities are insured for sudden accidental occurrences, which are insured for nonsudden accidental occurrences, and which are insured for both.

(Fill in Alternative A for primary liability coverage. Fill in Alternative B for excess liability coverage.)

Alternative A

The limits of liability are (insert the dollar amount of the *primary policy for* "each occurrence") *each occurrence* and *(insert the dollar amount of the primary policy for* "annual aggregate" [limits of the Insurer's liability]) *annual aggregate*, exclusive of legal defense costs.

Alternative B

The limits of liability are (insert the dollar amount of the excess policy for "each occurrence") each occurrence and (insert the dollar amount of the excess policy for "annual aggregate") annual aggregate, which is exclusive of legal defense costs, in excess of the primary policy limits of (insert dollar amount of the primary policy for "each occurrence") each occurrence and (insert the dollar amount of the primary policy for "annual aggregate") annual aggregate, exclusive of legal defense costs.

The coverage is provided under policy number *(insert the policy number)* [_____], issued on (date). The effective date of said policy is (date).

2. The Insurer further certifies the following with respect to the insurance described in paragraph 1:

(a) Bankruptcy or insolvency of the insured shall not relieve the Insurer of its obligations under the policy.

(b) The Insurer is liable for the payment of amounts within any deductible applicable to the policy, with a right of reimbursement by the insured for any such payment made by the Insurer. This provision does not apply with respect to that amount of any deductible for which coverage is demonstrated as specified in Section 6 of 401 KAR 34:120 *or Section 6 of 401 KAR 35:120.*

(c) Whenever requested by the Director of the Division of Waste Management in the Natural Resources and Environmental Protection Cabinet, hereinafter the Director of the Division, the Insurer agrees to furnish to the Director of the Division an originally signed duplicate of the policy and all endorsements.

(d) Cancellation of the insurance, whether by the Insurer or the Insured, will be effective only upon written notice and only after the expiration of sixty (60) days after a copy of such written notice is received by the Director of the Division.

(e) Any other termination of the insurance will be effective only upon written notice and only after the expiration of thirty (30) days after a copy of such written notice is received by the Director of the Division.

I hereby certify that the wording of this instrument is identical to the wording specified in 401 KAR 34:176 as such regulation was constituted on the date first above written, and that the Insurer is licensed to transact the business of *primary* insurance *in the Commonwealth of Kentucky*, or *is licensed* [eligible] to provide insurance as an excess or surplus lines insurer *in one (1) state* [, in the Commonwealth of Kentucky].

(Signature of authorized representative of Insurer)
(Name, typed)
(Title, typed) Authorized Representative of (name of Insurer)
(Address of Representative, typed)

JACKIE SWIGART, Secretary
ADOPTED: June 10, 1983
RECEIVED BY LRC: June 14, 1983 at 11 a.m.
See public hearings scheduled on page 1.

NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION CABINET
Department for Environmental Protection
Division of Waste Management
(Proposed Amendment)

401 KAR 34:200. Surface impoundments.

RELATES TO: KRS 224.033, 224.071, 224.835, 224.842, 224.855, 224.860, 224.866
PURSUANT TO: KRS 13.082, *13.083,* 224.017, 224.862, 224.866
NECESSITY AND FUNCTION: KRS 224.866 requires that persons engaging in the storage, treatment, and disposal of hazardous waste obtain a permit. KRS 224.866 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 post-closure 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 regulation applies to owners and operators of hazardous waste sites or facilities that use surface impoundments to treat, [or] store *or dispose of* hazardous waste, except as Section 1 of 401 KAR 34:010 provides otherwise.

Section 2. [General] Design *and Operating* Requirements. (1)*(a)* A surface impoundment *(except for an existing portion of a surface impoundment which meet the requirements of paragraph (b) of this subsection) must have a liner that is designed, constructed, and installed to prevent any migration of wastes out of the impoundment to the adjacent subsurface soil or groundwater 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 groundwater 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 regulation. For impoundments that will be closed in accordance with Section 6(1)(b) of this regulation, the liner must be constructed of materials that will prevent wastes from migrating into the liner during the active life of the facility. The liner 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, geological conditions including, where applicable, karst features, 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 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} cm permeability; and

3. Installed to cover all surrounding earth likely to be in contact with the waste or leachate.

(b) Existing unlined surface impoundments must have flow measuring devices at the inlet and outlet points of the impoundments. These devices must measure and continuously record the inflow and outflow for continuous flow conditions. However manual measurement and recording can be done for intermittent and manually operated inlet and outlet conditions.

(2) The owner or operator 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 groundwater or surface water at any future time. In deciding whether to grant an exemption, the cabinet 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 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) A surface impoundment 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.

(4) A surface impoundment 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 must not be presumed that the liner system will function without leakage during the active life of the unit.

(5) A new surface impoundment shall not be constructed in a floodway in accordance with 401 KAR 34:020, Section 9(2).

(6) A surface impoundment (including its underlying liners), for the treatment or storage of hazardous waste must be protected from inundation by waters of the 100-year flood in accordance with 401 KAR 34:020, Section 9(2).

(7) New surface impoundments for the disposal of hazardous waste must be located entirely above the seasonal highwater table, in accordance with 401 KAR 34:020, Section 9(2).

(8) 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. [must be designed to provide:]

[(a) At least sixty (60) centimeters (approximately two (2) feet) of freeboard; or]

[(b) An amount of freeboard other than sixty (60) centimeters based on documentation, acceptable to the cabinet that the specified amount of freeboard will prevent overtopping.]

[(2) A surface impoundment must be designed so that any flow of waste into or onto the impoundment can be immediately shut off in the event of overtopping or liner failure.]

[(3) A surface impoundment must be designed to prevent discharge into the land and groundwater and to surface water (except discharges authorized by an NPDES permit or state equivalent permit) during the life of the impoundment by use of a containment system which complies with Section 4 of this regulation.]

[(4) Dikes must be designed with sufficient structural integrity to prevent massive failure without dependence on any liner system included in the surface impoundment design.]

[(5) A leachate detection, collection, and removal system must be designed so that liquid will flow freely from the collection system to prevent the creation of pressure head within the collection system in excess of that necessary to cause the liquid to flow freely.]

Section 3. *Double-lined Surface Impoundments: Exemption from 401 KAR 34:060 Groundwater Protection Requirements. (1) The owner or operator of a double-lined surface impoundment is not subject to regulation under 401 KAR 34:060 of this chapter if the following conditions are met:*

(a) The impoundment (including is underlying liners) must be located entirely above the seasonal high water table.

(b) The impoundment must be underlain by two (2) liners which are designed and constructed in a manner that prevents the migration of liquids into or out of the space between the liners. Both liners must meet all the specifications of Section 2 of this regulation.

(c) A leak detection system must be designed, constructed, maintained, and operated between the lines to detect any migration of liquids into the space between the liners.

(2) If liquid leaks into the leak detection system, the owner or operator must:

(a) Notify the cabinet of the leak in writing within seven (7) days after detecting the leak; and

(b) Within a period of time specified in the permit:

1. Remove accumulated liquid, repair or replace the liner which is leaking to prevent the migration of liquids through the liner, and obtain a certification from a qualified engineer registered in Kentucky that, to the best of his knowledge and opinion, the leak has been stopped; or

2. If a detection monitoring program pursuant to Section 9 of 401 KAR 34:060 has already been established in the permit (to be complied with only if a leak occurs), begin to comply with that program and any other applicable requirements of 401 KAR 34:060 within the period of time specified in the permit.

(3) 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. [General Operating Requirements. (1) A surface impoundment must be operated to prevent any overtopping due to wind and wave action, overfilling precipitation, or any combination thereof.]

[(2) A surface impoundment must be operated to maintain at least the amount of freeboard specified by the

cabinet in the permit.]

[(3) A leachate detection, collection, and removal system installed to comply with Section 4(2) of this regulation must be operated so that leachate flows freely from the collection system and is removed as it accumulates or with sufficient frequency to prevent backwater within the collection system.]

[(4) Earthen dikes must be kept free of:]

[(a) Perennial woody plants with root systems which could displace the earthen materials upon which the structural integrity of the dike is dependent; and]

[(b) Burrowing mammals which could remove earthen materials upon which the structural integrity of the dike is dependent or create leaks through burrows in the dike.]

[(5) Run-on must be diverted away from a surface impoundment.]

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 regulation and cover systems (e.g., membranes, sheets, or coatings) 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 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 must be inspected for imperfections including lenses, cracks, channels, root holes, or other structural non-uniformities that may cause an increase in the permeability of the liner or cover.

(2) While a surface impoundment is in operation, it 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) The presence of liquids in leak detection systems, where installed to comply with Section 3 of this regulation; and

(d) 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 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 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 or any liner system included in the surface impoundment construction. [Containment Systems. (1) Earthen dikes must have a protective cover, such as grass, shale or rock, to minimize wind and water erosion and to preserve the structural integrity of the dike.]

[(2) A liner system designed to prevent discharge into the land during the life of the surface impoundment must:]

[(a) Be constructed with a highly impermeable liner system in contact with the waste which will prevent discharge of the waste or leachate through the liner(s) during the life of the surface impoundment based on the liner(s) thickness, the saturated permeability of the liner(s) and the pressure head or waste or leachate to which the liner(s) will be exposed; and a leachate detection, collection, and removal system beneath the liner(s) in contact with the waste to detect, contain, collect, and remove any discharge from the liner system in contact with the waste; and]

[(b) Be constructed above the water table to ensure the detection of any discharge of waste or leachate through the liner system in contact with the waste; prevent the discharge of groundwater to the leachate detection, collection and removal system; and to protect the structural integrity of the liner(s).]

[(3) A containment system must have a containment life equal to or greater than the life of the surface impoundment.]

[(4) Liner systems must be constructed:]

[(a) Of materials which have appropriate chemical properties and strength and of sufficient thickness to prevent failure due to pressure head, physical contact with the waste or leachate to which they are exposed, climatic conditions, and the stress of installation; and]

[(b) On a foundation capable of providing support to the liner(s) and resistance to pressure head above the liner(s) to prevent failure of the liner(s) due to settlement or compression.]

Section 5. *Emergency Repairs; Contingency Plans. (1) A surface impoundment 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 must be removed from service as required by subsection (1) of this section, the owner or operator 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 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 must be recertified in accordance with Section 4(3) of this 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 must be installed in compliance with Sections 2 or 3 of this regulation; and

2. For any other portion of the impoundment, the

repaired liner system 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, must be closed in accordance with the provisions of Section 6 of this regulation. [Inspections and Testing. (1)(a) During construction or installation, liner systems must be inspected for uniformity, damage, and imperfections (e.g., holes, cracks, thin spots, and foreign materials).]

[(b) Earth material liner systems must be tested for compaction density, moisture content, and permeability after placement.]

[(c) Manufactured liner materials (e.g., membranes, sheets, and coatings) must be inspected to ensure tight seams and joints and the absence of tears or blisters.]

[(2) The owner or operator must inspect:]

[(a) The surface impoundment which contains free liquids at least once each operating day to ensure compliance with Sections 3(1), (2) and (3) of this regulation and to detect any leaks or other failure of the impoundment.]

[(b) Each surface impoundment, including dikes, berms, and vegetation surrounding the dike, at least once a week and after storms to detect any evidence of or potential for leaks from the impoundment, erosion of dikes, and to ensure compliance with Section 3(4) of this regulation.]

[(3) The structural integrity of any dike, including that portion of any dike which provides freeboard, must be certified against massive failure by a qualified engineer prior to the issuance or reissuance of a permit; or if the impoundment is not in service, prior to being placed in service and after construction or prior to being returned to service. In certifying the structural integrity of the dike, it must be established that the dike will withstand:]

[(a) The stress of the pressure head of liquids placed into the impoundment;]

[(b) The weakening effect of earth materials being scoured due to leakage from the impoundment through and under the dike without relying on any liner system; and]

[(c) The weakening effect of earth materials being scoured due to leakage from the impoundment through and under the dike assuming leaks develop in the liner system.]

Section 6. *Closure and Post-Closure Care. (1) At closure, the owner or operator 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 solidfying 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 must comply with all post-closure requirements contained in Sections 7 through 10 of 401 KAR 34:070, including maintenance and monitoring throughout the post-closure care period (specified in the permit under Section 8 of 401 KAR 34:070). The owner or operator 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 Section 3 of this regulation, where such a system is present between double liner systems;

(c) Maintain and monitor the groundwater monitoring system and comply with all other applicable requirements of 401 KAR 34:060; and

(d) 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 1 and is not exempt from them in accordance with Section 2(2) of this regulation, then:

1. The closure plan for the impoundment under Section 3 of 401 KAR 34:070 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 38:200 and KRS 224.855(3), in case not all contaminated subsoils can be practicably removed at closure; and

2. The owner or operator must prepare a contingent post-closure plan under Section 8 of 401 KAR 34:070 for complying with subsection (2) of this section, which is also in compliance with 401 KAR 38:200 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 post-closure care of an impoundment subject to this paragraph must include separate analyses of the cost of complying with the contingent closure plan and the contingent post-closure plan in addition to the cost of expected closure under subsection (1)(a) of this section.

(4) During the post-closure care period, if liquids leak into a leak detection system installed under Section 3 of this regulation, the owner or operator must notify the cabinet of the leak in writing within seven (7) days after detecting the leak. The cabinet will modify the permit to require compliance with the requirements of 401 KAR 34:060. [Containment System Repairs; Contingency Plans. (1) Whenever there is any indication of a possible failure of the containment system, that system must be inspected in accordance with the provisions of the containment system evaluation and repair plan required by subsection (4) of this section. Indications of possible failure of the containment system include at least an unplanned and non-sudden drop in liquid level in the impoundment, liquid detected in the leachate detection system, evidence of leakage or the potential for leakage in the dike, erosion of the dike, ap-

parent or potential deterioration of the liner(s) based on observation or test samples of the liner materials, any mishandling of wastes placed in the impoundment, and foreign objects in the impoundment.]

[(2) Whenever there is a positive indication of a failure of the containment system, the impoundment must be removed from service. Indications of positive failure of the containment system include an unplanned sudden drop in liquid level in the impoundment, waste detected in the leachate detection system, active leakage through the dike, or a breach (e.g., a hole, tear, crack, or separation) in the liner system.]

[(3) If the surface impoundment must be removed from service as required by subsection (2) of this section, the owner or operator must:]

[(a) Immediately shut off the flow of or stop the addition of wastes into the impoundment;]

[(b) Immediately contain any leakage which has occurred or is occurring;]

[(c) Immediately cause the leak to be stopped; and]

[(d) If the leak cannot be stopped by any other means, empty the impoundment.]

[(4) As part of the contingency plan required in 401 KAR 34:040, the owner or operator must specify:]

[(a) A procedure for complying with the requirements of subsection (3) of this section; and]

[(b) A containment system evaluation and repair plan describing testing and monitoring techniques; procedures to be followed to evaluate the integrity of the containment system in the event of a possible failure; a schedule of actions to be taken in the event of a possible failure; and a description of the repair techniques to be used in the event of leakage due to containment system failure or deterioration which does not require the impoundment to be removed from service.]

[(5) No surface impoundment that has been removed from service in accordance with subsection (2) of this section may be restored to service unless:]

[(a) The containment system has been repaired; and]

[(b) The containment system has been certified by a qualified engineer as meeting the design specifications approved in the permit.]

[(6) A surface impoundment that has been removed from service in accordance with subsection (2) of this section and that is not being repaired must be closed in accordance with Section 7 of this regulation.]

[Section 7. Closure. At closure, all hazardous waste and hazardous waste residues must be removed from the impoundment. Any component of the containment system or any appurtenant structures or equipment (e.g., discharge platforms and pipes, and baffles, skimmers, aerators, or other equipment) containing or contaminated with hazardous waste or hazardous waste residues must be decontaminated or removed.]

Section *7.* [8.] Special Requirements for Ignitable or Reactive Waste. Ignitable or reactive waste must not be placed in a surface impoundment, unless:

(1) The waste is treated, rendered, or mixed before [or immediately after] placement in the impoundment so that:

(a) The resulting waste *or* mixture [, or dissolution of material] no longer meets the definition of ignitable or reactive waste under 401 KAR Chapter 31;and

(b) Section 8 [(2)] of 401 KAR 34:020 is complied with; or

[(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; or]

(2) [(3)] The surface impoundment is used solely for emergencies.

Section *8.* [9.] Special Requirements for Incompatible Wastes. Incompatible wastes, or incompatible wastes and materials (see 401 KAR 34:330 for examples), must not be placed in the same surface impoundment [except as Section 8(2) of 401 KAR 34:020 is complied with].

JACKIE SWIGART, Secretary
ADOPTED: June 10, 1983
RECEIVED BY LRC: June 14, 1983 at 11 a.m.
See public hearings scheduled on page 1.

NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION CABINET
Department for Environmental Protection
Division of Waste Management
(Proposed Amendment)

401 KAR 34:210. Waste piles.

RELATES TO: KRS 224.033, 224.071, 224.835, 224.842, 224.855, 224.860, 224.866
PURSUANT TO: KRS 13.082, *13.083,* 224.017, 224.862, 224.866
NECESSITY AND FUNCTION: KRS 224.866 requires that persons engaging in the storage, treatment, and disposal of hazardous waste obtain a permit. KRS 224.866 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 post-closure 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 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 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 regulation under 401 KAR 34:230 (Landfills).* [Owners and operators of waste piles used to store or treat only hazardous wastes that do not contain free liquids are not subject to regulation under Sections 2, 3, 4, 5 and 6 of this regulation with respect to those piles, provided that:]

(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 regulation under Section 2 of this 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 inside or under a structure that provides protection from precipitation so that neither run-off nor leachate is generated;]

(b) [(c)] The pile is protected from surface water run-on by the structure or in some other manner;

(c) [(d)] The pile is designed and operated to control dispersal of the waste by wind, where necessary, by means other than wetting; and

(d) [(e)] 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) 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 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;

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 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 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 must be:

1. Constructed of material 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 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 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.

(4) The owner or operator 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) associated with run-on and run-off control systems must be emptied or otherwise managed expeditiously after storms to maintain design capacity of the system.

(6) If the pile contains any particulate matter which may be subject to wind dispersal, the owner or operator must cover or otherwise manage the pile to control wind dispersal.

(7) A new waste pile shall not be constructed in a floodway in accordance with Section 9(2) of 401 KAR 34:020.

(8) Any waste pile (including its underlying liners) for the treatment or storage of hazardous waste must be protected from inundation by waters of the 100-year flood in accordance with Section 9(2) of 401 KAR 34:020.

(9) 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.

[General Design Requirements. (1) A waste pile must be designed to control dispersal of the waste by wind, where necessary, or by water erosion.]

[(2) A waste pile must be designed to prevent discharge into the land, surface water or groundwater during the life of the pile by use of a containment system which complies with Section 4 of this regulation.]

Section 3. *Double-lined Piles: Exemption from Groundwater Protection Requirements of 401 KAR 34:060. (1) The owner or operator of a double-lined waste pile is not subject to regulation under 401 KAR 34:060 if the following conditions are met:*

(a) The pile (including its underlying liners) must be located entirely above the seasonal high water table.

(b) The pile must be underlain by two (2) liners which are designed and constructed in a manner that prevents the migration of liquids into or out of the space between the liners. Both liners must meet all the specifications of Section 2(1)(a) of this regulation.

(c) A leak detection system must be designed, constructed, maintained, and operated between the liners to detect any migration of liquids into the space between the liners.

(d) The pile must have a leachate collection and removal system above the top liner that is designed, constructed, maintained, and operated in accordance with Section 2(1)(b) of this regulation.

(2) If liquid leaks into the leak detection system, the owner or operator must:

(a) Notify the cabinet of the leak in writing within seven (7) days after detecting the leak; and

(b) 1. Within a period of time specified in the permit, remove accumulated liquid, repair or replace the liner which is leaking to prevent the migration of liquids through the liner, and obtain a certification from a qualified engineer registered in Kentucky that, to the best of his knowledge and opinion, the leak has been stopped; or

2. If a detection monitoring program pursuant to Section 9 of 401 KAR 34:060 has already been established in the permit (to be complied with only if a leak occurs), begin to comply with that program and any other applicable requirements of 401 KAR 34:060 within a period of time specified in the permit.

(3) 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.

[General Operating Requirements. (1) The cabinet shall specify control practices (e.g., cover or frequent wetting)

where necessary to ensure that wind dispersal of hazardous waste from piles is controlled.]

[(2) Run-on must be diverted away from a waste pile.]

[(3) Leachate and run-off from a waste pile must be collected and controlled.]

Section 4. *Inspection of Liners: Exemption from Groundwater Protection Requirements of 401 KAR 34:060. (1) The owner or operator of a pile is not subject to regulation under 401 KAR 34:060 if the following conditions are met:*

(a) The pile (including its underlying liner) must be located entirely above the seasonal high water table.

(b) The pile must be underlain by a liner (base) that meets all the specifications of Section 2(1)(a) of this regulation.

(c) The wastes in the pile must be removed periodically, and the liner must be inspected for deterioration, cracks, or other conditions that may result in leaks. The frequency of inspection will be specified in the inspection plan required in Section 6 of 401 KAR 34:020 and must be based on the potential for the liner (base) to crack or otherwise deteriorate under the conditions of operation (e.g., waste type, rainfall, loading rates, and subsurface stability).

(d) The liner must be of sufficient strength and thickness to prevent failure due to puncture, cracking, tearing, or other physical damage from equipment used to place waste in or on the pile or to clean and expose the liner surface for inspection.

(e) The pile must have a leachate collection and removal system above the liner that is designed, constructed, maintained, and operated in accordance with Section 2(1)(b) of this regulation.

(2) If 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) 1. 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; or

2. If a detection monitoring program pursuant to Section 9 of 401 KAR 34:060 has already been established in the permit (to be complied with only if a leak occurs), begin to comply with that program and any other appicable requirements of 401 KAR 34:060 within a period of time specified in the permit.

(3) 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.

[Containment Systems. (1) A containment system must be designed, constructed, maintained and operated to prevent discharge into the land, surface water, or groundwater during the life of the waste pile. The system must consist of:]

[(a) A leachate and run-off collection and control system; and either]

[(b) A base underlying and in contact with the waste pile that is made of liner (or liners) which will prevent discharge into the land, surface water, or groundwater during the life of the pile based on the liner(s) thickness, the permeability of the liner(s), and the characteristics of the waste or leachate to which the liner(s) will be exposed. The liner(s) must be of sufficient strength and thickness to prevent failure due to puncture, cracking, tearing, or other physical damage from equipment used to place waste in or on the pile, or to clean and expose the liner surface for inspection; or]

[(c) A base as in paragraph (a) of this subsection except that the liner(s) need not be of sufficient strength and thickness to prevent failure due to physical damage from equipment used to clean and expose the liner surface for inspection, and a leachate detection, collection, and removal system beneath the base to detect, contain, collect, and remove any discharge from the base. The leachate detection, collection, and removal system must be placed above the water table to ensure the detection of any discharge through the base; to prevent the discharge of groundwater into the leachate detection, collection, and removal system; and to protect the structural integrity of the base.]

[(2) A waste pile must be constructed:]

[(a) Of materials that have appropriate chemical properties and strength and of sufficient thickness to prevent failure due to pressure of and physical contact with the waste to which they are exposed, climatic conditions, and the stress of installation; and]

[(b) On a foundation capable of providing support to the liner(s) and to loads placed or moving above the liner(s) to prevent failure of the liner(s) due to settlement or compression.]

[(3) A containment system must be protected from plant growth which could puncture any component of the system.]

[(4) A containment system must have a containment life equal to or greater than the life of the pile.]

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 regulation) and cover systems (e.g., membranes, sheets, or coatings) 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 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 must be inspected for imperfections including lenses, cracks, channels, root holes, or other structural non-uniformities that may cause an increase in the permeability of the liner or cover.

(2) While a waste pile is in operation, it 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) The presence of liquids in leak detection systems, where installed to comply with Section 3 of this regulation;

(c) Proper functioning of wind dispersal control systems, where present; and

(d) The presence of leachate in and proper functioning of leachate collection and removal systems, where present.

[Inspections and Testing. During construction or installation of the waste pile base:]

[(1) Liner systems must be inspected for uniformity, damage, and imperfections (e.g., holes, cracks, thin spots, and foreign materials); and]

[(2) Manufactured liner materials (e.g., membranes, sheets, and coatings) must be inspected to ensure tight seams and joints and the absence of tears or blisters.]

[Section 6. Containment System Repairs; Contingency Plans. (1) Whenever there is any indication of a possible failure of the containment system, that system must be inspected in accordance with the provisions of the containment system evaluation and repair plan required by subsection (4) of this section. Indications of possible failure of

the containment system include liquid detected in the leachate detection system (where applicable), evidence of leakage or the potential for leakage in the base, erosion of the base, or apparent or potential deterioration of the liner(s) based on observation or test samples of the liner materials.]

[(2) Whenever there is a positive indication of a failure of the containment system, the waste pile must be removed from service. Indications of positive failure of the containment system include waste detected in the leachate detection system (where applicable), or a breach (e.g., a hole, tear, crack, or separation) in the base.]

[(3) If the waste pile must be removed from service as required by subsection (2) of this section, the owner or operator must:]

[(a) Immediately stop adding wastes to the pile;]

[(b) Immediately contain any leakage which has or is occurring;]

[(c) Immediately cause the leak to be stopped; and]

[(d) If the leak cannot be stopped by any other means, remove the waste from the base.]

[(4) As part of the contingency plan required in 401 KAR 34:040, the owner or operator must specify:]

[(a) A procedure for complying with the requirements of subsection (3) of this section; and]

[(b) A containment system evaluation and repair plan describing testing and monitoring techniques; procedures to be followed to evaluate the integrity of the containment system in the event of a possible failure; a schedule of actions to be taken in the event of a possible failure; and a description of the repair techniques to be used in the event of leakage due to containment system failure or deterioration which does not require the waste pile to be removed from service.]

[(5) No waste pile that has been removed from service in accordance with subsection (2) of this section may be restored to service unless:]

[(a) The containment system has been repaired; and]

[(b) The containment system has been certified by a qualified engineer as meeting the design specifications approved in the permit.]

[(6) A waste pile that has been removed from service in accordance with subsection (2) of this section and that is not being repaired must be closed in accordance with Section 9 of this regulation.]

Section *6.* [7.] Special Requirements for Ignitable or Reactive Waste. Ignitable or reactive waste must not be placed in a pile unless *the waste is treated, rendered or mixed before placement in the pile so that*:

(1) *The resulting waste or mixture no longer meets the definition of ignitable or reactive waste under Section 2 or 4 of 401 KAR 31:030; and* [Addition of the waste to an existing pile results in the waste or mixture no longer meeting the definition of ignitable or reactive waste under 401 KAR Chapter 31 and complies with Section 8(2) of 401 KAR 34:020; or]

(2) *Section 8(2) of 401 KAR 34:020 is complied with.* [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 *7.* [8.] Special Requirements for Incompatible Wastes. (1) Incompatible wastes, or incompatible wastes and materials (see 401 KAR 34:330 for examples), must not be placed in the same pile [unless Section 8(2) of 401 KAR 34:020 is complied with].

(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 must be separated from the other materials, or protected from them by means of a dike, berm, wall, or other device.

(3) Hazardous waste 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.* [9.] Closure *and Post-Closure Care. (1) At closure, the owner or operator 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 must close the facility and perform post-closure care in accordance with the closure and post-closure 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 regulation and is not exempt from them in accordance with Section 1(3) or 2(2) of this regulation 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 post-closure plan under Section 8 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 post-closure care of a pile subject to this section must include both a cost estimate for complying with the contingent closure plan and the cost estimate for complying with the contingent post-closure plan and the cost of expected closure under subsection (1) of this section.

[At closure, all hazardous waste and hazardous waste residues must be removed from the pile. Any component of the containment system containing or contaminated with hazardous waste or hazardous waste residues must be decontaminated or removed.]

JACKIE SWIGART, Secretary

ADOPTED: June 10, 1983

RECEIVED BY LRC: June 14, 1983 at 11 a.m.

See public hearings scheduled on page 1.

NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION CABINET
Department for Environmental Protection
Division of Waste Management
(Proposed Amendment)

401 KAR 34:240. Incinerators.

RELATES TO: KRS 224.033, 224.071, 224.835, 224.842, 224.855, 224.860, 224.866
PURSUANT TO: KRS 13.082, *13.083,* 224.017, 224.862, 224.866
NECESSITY AND FUNCTION: KRS 224.866 requires that persons engaging in the storage, treatment, and disposal of hazardous waste obtain a permit. KRS 224.866 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 post-closure monitoring and maintenance of hazardous waste disposal facilities. This chapter establishes minimum standards for [new] hazardous waste sites or facilities *except as 401 KAR Chapter 35 applies.* This regulation establishes minimum standards for incinerators.

Section 1. Applicability. (1) This regulation applies to owners and operators of hazardous waste sites or facilities that incinerate hazardous waste, except as Section 1 of 401 KAR 34:010 provides otherwise.

(2) If the cabinet finds, after an examination of the waste analysis included with Part B of the applicant's permit application, that the waste to be burned:

(a) Is either: listed as hazardous waste in 401 KAR 34:040, Section *2* [9], only because it is ignitable (Hazardous Code I) or that the waste has been tested against the characteristics of hazardous waste under 401 KAR 31:030, Section 8, and that it meets only the ignitability characteristic; and

(b) That the waste analysis included with Part B of the permit application includes none 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 regulation except Section 2 and 8 of this regulation.

(3) The owner or operator of an incinerator may conduct trial burns, subject only to the requirements of *Section 3 of* 401 KAR *38:060* [38:080, Section 7].

Section 2. Waste Analysis. (1) As a portion of a trial burn plan required by Section *3* [2] of 401 KAR *38:060* [34:040] or with Part B of his permit application, the owner or operator 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* [38:080, Sections 5 or 7]. *Owners or operators of new hazardous waste incinerators 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 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 regulation.

Section 3. Principal Organic Hazardous Constituents (POHCs). (1) Principal organic hazardous constituents (POHCs) in the waste feed must be treated to the extent required by the performance standards of Section 4 of this regulation.

(2) (a) One (1) or more POHCs will be specified in the facility's permit from among those constituents listed in *401 KAR 31:170* [40 CFR Part 261, Appendix VIII], for each waste feed to be burned. This specification will be based on the degree of difficulty of incineration of the organic constitutents 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 constitutents which represent the greatest degree of difficulty of incineration 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 will be designated for performance of trial burns in accordance with the procedures specified in 401 KAR *38:060* [38:080], Section *3* [7], for obtaining trial burn permits.

Section 4. Performance Standards. An incinerator burning hazardous waste must be designed, constructed, and maintained so that, when operated in accordance with operating requirements specified under Section 6 of this regulation, it will meet the following performance standards:

(1) An incinerator burning hazardous waste must achieve a destruction and removal efficiency (DRE) of ninety-nine and ninety-nine hundredths (99.99) percent for each principal organic hazardous constitutent (POHC) designated (under Section 3 of this 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.

(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) 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 percent (1%) of the HCl in the stack gas prior to entering any pollution control equipment.* [containing more than five tenths (0.5) percent chlorine must remove ninety-nine (99) percent of the hydrogen chloride from the exhaust gas.]

(3) An incinerator burning hazardous waste 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:* [twelve (12) percent CO_2 using the procedures presented in 401 KAR 59:020.]

$$P_c = P_m \times \frac{14}{21-Y}$$

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 of oxygen analysis of dry flue gas, presented in 401 KAR 59:020. 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 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 regulation) 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 subsection may be "information" justifying modification, revocation, or reissuance of a permit under Section *2* [3] of 401 KAR 38:040.

Section 5. *Hazardous Waste Incinerator Permits* [New Wastes: Trial Burns or Permit Modifications]. (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 regulation except:

(a) In approved trial burns under 401 KAR *38:060* [38:080], Section *3* [7]; or

(b) Under exemptions created by Section 1 of this 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* [38:080, Section 5].

(3) The permit for a new hazardous waste incinerator must establish appropriate conditions for each of the applicable requirements of this regulation, including but not limited to allowable waste feeds and operating conditions necessary to meet the requirements of Section 6 of this 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 must be those most likely to ensure compliance with the performance standards of Section 4 of this 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 must be sufficient to demonstrate compliance with the performance standards of Section 4 of this regulation and 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 must be those most likely to ensure compliance with the performance standards of Section 4 of this regulation based on the cabinet's engineering judgment.

(d) For the remaining duration of the permit, the operating requirements must be those demonstrated, in a trial burn or by alternative data specified in Section 2(3) of 401 KAR 38:090, as sufficient to ensure compliance with the performance standards of Section 4 of this regulation.

Section 6. Operating Requirements. (1) An incinerator must be operated in accordance with operating requirements specified in the permit. These 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 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 regulation.

(2) Each set of operating requirements will specify the composition of the waste feed (including acceptable variations in the physical or chemical properties of the waste feed) which will not affect compliance with the performance requirement of Section 4 of this regulation to which the operating requirements apply. For each such waste feed, the permit 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* [Air feed rate to the combustion system];

(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 regulation are met.

(3) During start-up and shut-down of an incinerator, hazardous waste (except ignitable waste exempted in accordance with Section 1 of this regulation) must not be fed into the incinerator unless the incinerator is operating within the conditions of operation (temperature, air feed rate, etc.) specified in the permit.

(4) Fugitive emissions from the combustion zone 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 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 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 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* [air feed rate] must be monitored on a continuous basis.

(b) CO 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 must be conducted to verify that the operating requirements established in the permit achieve the performance standards of Section 4 of this regulation.

(2) The incinerator and associated equipment (pumps, valves, conveyors, pipes, etc.) must be *subjected to thorough visual inspection* [completely inspected] at least daily, for leaks, spills, and fugitive emissions, *and signs of tampering.* [All emergency waste feed cut-off controls and system alarms must be checked daily to verify proper operation.]

(3) The emergency waste feed cutoff system and associated alarms must be tested at least weekly to verify operability, unless the applicant demonstrates to the cabinet that weekly inspections will unduly restrict or upset operations and that less frequent inspection will be adequate. At a minimum, operational testing must be conducted at least monthly.

(4) [(3)] This monitoring and inspection data must be recorded and the records 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 must remove all hazardous waste and hazardous waste residues (including, but not limited to, ash, scrubber waters, and scrubber sludges) from the incinerator site.

JACKIE SWIGART, Secretary
ADOPTED: June 10, 1983
RECEIVED BY LRC: June 14, 1983 at 11 a.m.
See public hearings scheduled on page 1.

NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION CABINET
Department for Environmental Protection
Division of Waste Management
(Proposed Amendment)

401 KAR 35:010. General provisions for facilities (IS).

RELATES TO: KRS *224.830 through 224.877, 224.994* [224.033, 224.835, 224.842, 224.855, 224.860, 224.866]
PURSUANT TO: KRS 13.082, *13.083,* 224.017, 224.033, 224.866
NECESSITY AND FUNCTION: KRS 224.866 requires that persons engaging in the storage, treatment, and disposal of hazardous waste obtain a permit. KRS 224.866 requires the Natural Resources and Environmental Protection Cabinet to establish standards for these permits, to require adequate financial responsibility, *and* to establish minimum standards for closure for all facilities and the post-closure monitoring and maintenance of hazardous waste disposal facilities. This *chapter* [regulation] establishes minimum standards for hazardous waste sites or facilities qualifying for interim status. *This regulation establishes the general provisions for these facilities.*

Section 1. *Purpose, Scope and Applicability. (1) The purpose of this chapter is to establish minimum standards which define the acceptable management of hazardous waste during the period of interim status.* [General. In the federal regulations incorporated by reference in this regulation, read director when Regional Administrator appears; read cabinet when EPA or Agency appears; read KRS Chapter 224 when RCRA appears; read Kentucky when United States appears; and read circuit court when U.S. district court appears. The general provisions concerning interim status standards for hazardous waste treatment, storage and disposal facilities contained in 40 CFR 265, Subpart A, are adopted and filed herein by reference.]

(2) The standards in this chapter apply to owners and operators of sites or facilities which treat, store, or dispose of hazardous waste who have fully complied with the requirements for interim status under Section 1 of 401 KAR 38:070, until final adminstrative dispostion of their permit application is made. These standards apply to all treatment, storage, or disposal of hazardous waste at these sites or facilities, except as specifically provided otherwise in this chapter or 401 KAR Chapter 31.

(3) The requirements of this chapter do not apply to:

(a) A person disposing of hazardous waste by means of ocean disposal subject to a permit issued under the Marine Protection, Research, and Sancturaries Act;

(b) A person disposing of hazardous waste by means of underground injection subject to a permit issued under an Underground Injection Control (UIC) program approved or promulgated under the Safe Drinking Water Act;

(c) The owner or operator of a POTW which treats, stores or disposes of hazardous waste;

(d) The owner or operator of a site or facility permitted, licensed, or registered by the cabinet to manage municipal or industrial solid waste, if the only hazardous waste that the site or facility treats, stores, or disposes of is excluded from regulation under this chapter by Section 5 of 401 KAR 31:010;

(e) The owner or operator of a site or facility which treats or stores hazardous waste, which treatment or storage meets the criteria in Section 6(1) of 401 KAR 31:010, except to the extent that Section 6(2) of 401 KAR 31:010 provides otherwise;

(f) A generator accumulating waste on-site in compliance with Section 5 of 401 KAR 32:030, except to the extent the requirements are included in Section 5 of 401 KAR 32:030;

(g) A farmer disposing of waste pesticides from his own use in compliance with Section 2 of 401 KAR 32:050; or

(h) The owner or operator of a totally enclosed treatment facility, as defined in Section 1 of 401 KAR 30:010;

(i) The owner or operator of an elementary neutralization unit or a wastewater treatment unit as defined in Section 1 of 401 KAR 30:010;

(j) Persons with respect to those activities which are carried out to immediately contain or treat a spill of hazardous waste or material which, when spilled, becomes a hazardous waste, except that, with respect to such activities, the appropriate requirements of 401 KAR 35:030 and 35:040 are applicable to owners and operators of treatment, storage and disposal facilities otherwise subject to this chapter;

(k) A transporter storing manifested shipments of hazardous waste in containers meeting the requirements of Section 1 of 401 KAR 32:030 at a transfer facility for a period of ten (10) days or less;

(l) The addition of absorbent material to waste in a container (as defined in Section 1 of 401 KAR 30:010) or the addition of waste to the absorbant material in a container provided that these actions occur at the time waste is first placed in the containers; and Section 8(b) of 401 KAR 35:020 and Sections 2 and 3 of 401 KAR 35:180 are complied with.

(4) This chapter contains dates based on previous incorporation of the provisions of this chapter. The provisions of this chapter were originally incorporated in Section 6 of 401 KAR 2:070 on January 7, 1981. On August 24, 1982 the provisions of this chapter were moved to 401 KAR 2:073.

Section 2. *Imminent Hazard Action. Notwithstanding any other provisions of these regulations, enforcement actions may be brought pursuant to KRS 224.071.* [General Facility Standards. The general facility standards contained in 40 CFR 265, Subpart B, are adopted and filed herein by reference.]

[Section 3. Preparedness and Planning. (1) Preparedness and prevention. The provisions concerning preparedness and prevention contained in 40 CFR 265, Subpart C, are adopted and filed herein by reference.]

[(2) Contingency plan and emergency procedures. The provisions concerning contingency plans and emergency procedures contained in 40 CFR 265, Subpart D, are adopted and filed herein by reference.]

[Section 4. Manifest System, Recordkeeping and Reporting. The provisions for the manifest system, recordkeeping and reporting contained in 40 CFR 265, Subpart E, are adopted and filed herein by reference.]

[Section 5. Groundwater Monitoring. The provisions for groundwater monitoring contained in 40 CFR 265, Subpart F, are adopted and filed herein by reference.]

[Section 6. Closure and Post-Closure. The provisions for closure and post-closure contained in 40 CFR 265, Subpart G, are adopted and filed herein by reference.]

[Section 7. Financial Requirements. (1) Applicability. The provisions of 40 CFR 265.140 are adopted and herein filed by reference.]

[(2) Financial requirements definition. The definitions contained in 40 CFR 265.141 are adopted and filed herein by reference.]

[(3) Cost estimate for facility closure.]

[(a) The provisions of 40 CFR 265.142 are adopted and herein filed by reference.]

[(b) The director shall evaluate this cost estimate and either accept the estimate as made or shall revise it in accordance with acceptable guidelines, using, where available, actual data on closure costs associated with similar existing facilities.]

[(4) Financial assurance for closure.]

[(a) The provisions of 40 CFR 265.143 are adopted and herein filed by reference. The cash account or certificate of deposit provisions as found in Section 9 of 401 KAR 34:090 may also be used to satisfy the requirements of the section.]

[(b) When the owner or operator has ceased operations at the hazardous waste site or facility and has completed closure of the site, he may apply to the director for return of the principle and interest in the closure fund. Upon determination that closure has been satisfactorily accomplished, the director shall release to the owner or operator all remaining funds accumulated in the closure fund.]

[(5) Cost estimate for post-closure monitoring and maintenance. The provisions for cost estimate for post-closure monitoring and maintenance which are contained in 40 CFR 265.144 are adopted and filed herein by reference.]

[(6) Financial assurance for post-closure monitoring and maintenance. The provisions of 40 CFR 265.145 are adopted and herein filed by reference. The cash account or certificate of deposit provisions as found in Section 9 of 401 KAR 34:100 may also be used to satisfy the requirements of this section.]

[(7) Use of a mechanism for financial assurance for both closure and post-closure care. The provisions of 40 CFR 265.146 are adopted and herein filed by reference.]

[(8) Liability. The provisions for liability requirements are as contained in 401 KAR 34:120. The owner or operator shall maintain liability requirements of this subsection during the entire operation of the hazardous waste site or facility and until termination.]

[(9) Incapacity of owners or operators, guarantors, or financial institutions. The provisions of 40 CFR 265.148 are adopted and herein filed by reference.]

[(10) The wording of the instruments required by this section shall be identical to the wording specified in 401 KAR 34:140 through 34:176.]

[(11) Owners and operators of interim status facilities shall submit the financial assurance mechanisms for closure, post-closure and sudden liability within forty-five (45) days of the effective date of this regulation unless otherwise specified in this section.]

[Section 8. Use and Management of Containers. The provisions concerning containers in 40 CFR 265, Subpart I, are adopted and filed herein by reference.]

[Section 9. Tanks. The provisions concerning tanks contained in 40 CFR 265, Subpart J, are adopted and filed herein by reference.]

[Section 10. Surface Impoundments. The provisions concerning surface impoundments contained in 40 CFR 265, Subpart K, are adopted and filed herein by reference.]

[Section 11. Waste Piles. The provisions concerning waste piles contained in 40 CFR 265, Subpart L, are adopted and filed herein by reference.]

[Section 12. Land Treatment. The provisions concerning land treatment contained in 40 CFR 265, Subpart M, are adopted and filed herein by reference.]

[Section 13. Landfills. The provisions concerning landfills contained in 40 CFR 265, Subpart N, are adopted and filed herein by reference. However, before permitting the disposal of free liquids in small amounts in overpacked drums (40 CFR 265.316), the liquids must be treated or stabilized chemically or physically so as to meet all specifications in KRS 224.866(2).]

[Section 14. Incinerators. The provisions concerning incinerators contained in 40 CFR 265, Subpart O, are adopted and filed herein by reference.]

[Section 15. Thermal Treatment. The provisions concerning thermal treatment contained in 40 CFR 265, Subpart P, are adopted and filed herein by reference.]

[Section 16. Chemical, Physical, and Biological Treatment. The provisions concerning chemical, physical and biological treatment contained in 40 CFR 265, Subpart Q, are adopted and filed herein by reference.]

[Section 17. Underground Injection. The provisions concerning underground injection contained in 40 CFR 265, Subpart R, are adopted and filed herein by reference.]

[APPENDIX A TO 401 KAR 35:010
READER'S AID]

[40 CFR 265 in this regulation is incorporated by reference from the following Federal Registers:]

[45 FR 33232, May 19, 1980, Effective November 19,

1980; Amended by 45 FR 72040, October 30, 1980; 45 FR 76075, November 17, 1980; 45 FR 76630, November 19, 1980; 45 FR 78529, November 25, 1980; 45 FR 86968, 86970, 86973, December 31, 1980; 46 FR 2847, January 12, 1981, Effective July 13, 1981; 46 FR 7678, January 23, 1981, Effective July 22, 1981; 46 FR 8395, January 26, 1981; 46 FR 13494, February 20, 1981; 46 FR 18025, March 23, 1981; 46 FR 27476, May 20, 1981; 46 FR 33507, June 29, 1981; 46 FR 35247, July 7, 1981; 46 FR 56596, November 17, 1981; 47 FR 1255, January 11, 1982; 47 FR 2316, January 15, 1982; 47 FR 15064, April 7, 1982; 47 FR 16558, April 16, 1982. The Code of Federal Regulations is available for sale from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402. A copy has been filed with the Regulations Compiler of the Legislative Research Commission.]

JACKIE SWIGART, Secretary
ADOPTED: June 10, 1983
RECEIVED BY LRC: June 14, 1983 at 11 a.m.
See public hearings scheduled on page 1.

NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION CABINET
Department for Environmental Protection
Division of Waste Management
(Proposed Amendment)

401 KAR 38:010. General provisions for permitting.

RELATES TO: KRS 224.033, 224.036, 224.071, 224.087, *224.830 through* [224.835, 224.842, 224.855, 224.860, 224.862, 224.864, 224.866, 224.868, 224.871, 224.873, 224.874, 224.876,] 224.877, *224.994*
PURSUANT TO: KRS 13.082, *13.083,* 224.017, 224.866
NECESSITY AND FUNCTION: KRS 224.842 and 224.866 require any person who treats, stores, recycles or disposes of hazardous waste to first obtain a hazardous waste site or facility permit from the Natural Resources and Environmental Protection Cabinet.

Coverage. The permit regulations of this chapter establish provisions for the hazardous waste permit program under KRS Chapter 224. The regulations of this chapter cover the basic permitting requirements, including application requirements, standard permit conditions, and monitoring and reporting. The regulations of this chapter are part of a regulatory scheme implementing the hazardous waste provisions of KRS Chapter 224. Additional requirements are in different Chapters of the Kentucky Administrative Regulations. The following table indicates where the regulations implementing the hazardous waste provisions of KRS Chapter 224 appear in the Kentucky Administrative Regulations:

Section of KRS Chapter 224	*Coverage*	*Final Regulation*
KRS Chapter 224	*Overview, definitions and general provisions*	*401 KAR Chapter 30*
KRS 224.864	*Identification and listing of hazardous waste*	*401 KAR Chapter 31*
KRS 224.864	*Generators of hazardous waste*	*401 KAR Chapter 32*
KRS 224.873	*Transporters of hazardous waste*	*401 KAR Chapter 33*
KRS 224.830-224.877	*Standards for hazardous waste sites or facilities*	*401 KAR Chapters 34 and 35; 401 KAR 30:030*
KRS Chapter 224	*Permit requirements for hazardous waste sites or facilities*	*401 KAR Chapter 38*
KRS 224.871	*Fees for registration and permits*	*401 KAR Chapter 39*
KRS Chapter 224	*Enforcement and compliance monitoring*	*401 KAR Chapter 40*

The hazardous waste permit program relies upon technical requirements which are contained in 401 KAR Chapters 34 and 35. The technical regulations are used by the cabinet to determine what conditions are applicable to each permit and to determine compliance with KRS Chapter 224.

Overview of the hazardous waste site or facility permit program. Not later than ninety (90) days after the original promulgation or revision of regulations in 401 KAR Chapter 31 (identifying and listing hazardous wastes) all generators and transporters of hazardous waste and all owners or operators of hazardous waste treatment, storage, or disposal facilities must file a notification of that activity under KRS Chapter 224. Six (6) months after the initial promulgation of the 401 KAR Chapter 31 regulations, treatment, storage, or disposal of hazardous waste by any person who has not applied for or received a permit is prohibited. A permit application consists of two (2) parts, Part A (see [Section 8 of] 401 KAR *38:080* [38:070]) and Part B (see [Sections 9 and 10 of] 401 KAR *38:090 through 38:210* [38:070 and Sections 1 through 6 of 401 KAR 38:080]). For "existing hazardous waste sites or facilities," the requirement to submit an application is satisfied by submitting only Part A of the permit application to the U.S. EPA and submitting either Part A of the application or its Kentucky equivalent (Registration of Intent to Apply for a Permit) to the cabinet until the cabinet sets the date for submitting Part B of the application. [(Part A consists of Forms 1 and 3 of the Federal Consolidated Permit Application Forms.)] Timely submission of both notification under KRS Chapter 224 and the Part A application form or its equivalent qualifies owners and operators of existing hazardous waste sites or facilities for interim status. Facility owners and operators with interim status are treated as having been issued a permit until the cabinet makes a final determination on the permit application. Facility owners and operators with interim status must comply with interim status standards set forth in 401 KAR *Chapter 35* [35:010]. Facility owners and operators with interim status are not relieved from complying with other state requirements. For existing hazardous waste sites or facilities, the cabinet shall set a date, giving at least six (6) months notice, for submission of Part B of the application. There is no form for Part B of the application; rather, Part B must be submitted in narrative form and contain the information set forth in [Sections 9 and 10 of] 401 KAR *38:090, 38:100, and the applicable requirements in 401 KAR 38:150 through 38:210* [38:070] and *the applicable requirements in* [Sections 1 through 6 of] 401 KAR *38:150 through 38:210* [38:080]. Owners or operators of new hazardous waste sites or facilities must submit Part A, or its equivalent, and Part B of the permit application at least 180 days before physical construction is expected to commence. This chapter establishes the permitting process for hazardous waste sites or facilities. This regulation establishes the general provisions for permitting.

Section 1. *Scope of the Permit Requirements. (1) The permit program has separate additional regulations that contain technical requirements. These separate regulations are used by permit issuing authorities to determine what requirements must be placed in permits if they are issued.*

These separate regulations are located in 401 KAR 30:020 and Chapters 34 and 35.

(2) This section sets forth the specific requirements for the hazardous waste site or facility permitting program. KRS 224.866 requires a permit for the "treatment," "storage," or "disposal" of any "hazardous waste" as identified or listed in 401 KAR Chapter 31. The terms "treatment facility," "storage facility," and "disposal facility," are defined in 401 KAR 30:010. Owners and operators of hazardous waste management units must have permits during the active life (including the closure period) of the unit, and, for any unit which closes, during any post-closure care period required under Section 8 of 401 KAR 34:070 and during any compliance period specified under Section 7 of 401 KAR 34:060, including any extension of that compliance period under Section 7(3) of 401 KAR 34:060.

(a) Specific inclusions. Owners and operators of certain facilities require hazardous waste site or facility permits as well as permits under other programs for certain aspects of the facility operation. Hazardous waste site or facility permits are required for:

1. Injection wells that dispose of hazardous waste, and associated surface facilities that treat, store, or dispose of hazardous waste (see Section 5 of 401 KAR 38:060). However, the owner and operator with a UIC permit issued by the cabinet under an approved or promulgated UIC program, or by EPA, will be deemed to have a permit for the injection well itself if they comply with the requirements of Section 1(2) of 401 KAR 38:060 (permit by rule for injection wells).

2. Treatment, storage, or disposal of hazardous waste at facilities requiring an NPDES permit or KPDES permit when the cabinet program is approved by EPA. However, the owner and operator of a publicly owned treatment works receiving hazardous waste will be deemed to have a permit for that waste if they comply with the applicable requirements of Section 1(3) of 401 KAR 38:060 (permit by rule for POTW's).

3. Barges or vessels that dispose of hazardous waste by ocean disposal and onshore hazardous waste treatment, or storage facilities associated with an ocean disposal operation. However, the owner and operator will be deemed to have a permit for ocean disposal for the barge or vessel itself if they comply with the requirements of Section 1(1) of 401 KAR 38:060 (permit by rule for ocean disposal barges and vessels).

(b) Specific exclusions. The following persons are among those who are not required to obtain a hazardous waste site or facility permit:

1. Generators who accumulate hazardous waste on-site for less than ninety (90) days, as provided in Section 5 of 401 KAR 32:030.

2. Farmers who dispose of hazardous waste pesticides from their own use as provided in Section 2 of 401 KAR 32:050.

3. Persons who own or operate facilities solely for the treatment, storage, or disposal of hazardous waste excluded from regulations under this chapter by Section 4 of 401 KAR 31:010 or Section 5 of 401 KAR 31:010 (small generator exemption).

4. Owners or operators of totally enclosed treatment facilities as defined in 401 KAR 30:010.

5. Owners and operators of elementary neutralization units or of waste water treatment units as provided in Section 1(5) of 401 KAR 38:010.

6. Transporters storing manifested shipments of hazardous waste in containers meeting the requirements of Section 1 of 401 KAR 32:030, at a transfer facility for a period of ten (10) days or less.

7. Persons adding absorbent material to waste in a container (as defined in Section 1 of 401 KAR 30:010) and persons adding waste to absorbent material in a container provided that these actions occur at the time waste is first placed in the container; and Section 8(2) of 401 KAR 34:020, and Sections 2 and 3 of 401 KAR 34:180 of this chapter are complied with.

(c) Further exclusions.

1. A person is not required to obtain a hazardous waste permit for treatment or containment activities taken during immediate response to any of the following situations:

a. A discharge of a hazardous waste;

b. An imminent and substantial threat of a discharge of hazardous waste;

c. A discharge of a material which, when discharged, becomes a hazardous waste.

2. Any person who continues or initiates hazardous waste treatment or containment activities after the immediate response is over is subject to all applicable requirements of this chapter for those activities.

(d) Permits for less than an entire facility. The cabinet may issue or deny a permit for one (1) or more units at a facility without simultaneously issuing or denying a permit to all of the units at the facility. The interim status of any unit for which a permit has not been issued or denied is not affected by the issuance or denial of a permit to any other unit at the facility.

[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 regulations:]

[1. 401 KAR 34:020, Section 2, Identification number;]

[2. 401 KAR 34:050, Use of manifest system;]

[3. 401 KAR 34:050, Section 3, Manifest discrepancies;]

[4. 401 KAR 34:050, Section 4, Operating record;]

[5. 401 KAR 34:050, Section 6, Annual report; and]

[6. 401 KAR 34:050, Section 7, 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, and]

[(b) Complies with the conditions of that permit and the requirements of 40 CFR 122.45 (wells managing hazardous waste).]

[(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;]

[(b) Complies with the conditions of that permit; and]

[(c) Complies with the following regulations:]

[1. 401 KAR 34:020, Section 2, Identification number;]

[2. 401 KAR 34:050, Use of manifest system;]

[3. 401 KAR 34:050, Section 3, Manifest discrepancies;]

[4. 401 KAR 34:050, Section 4, Operating record;]

[5. 401 KAR 34:050, Section 6, Annual report;]

[6. 401 KAR 34:050, Section 7, Unmanifested waste report; and]

[(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.]

Section 2. Considerations of Federal Law. Permits shall be issued in a manner and shall contain conditions consistent with requirements of applicable federal laws. These laws may include:

(1) The Wild and Scenic Rivers Act. 16 USC 1273, et seq. Section 7 of the Act prohibits the assisting by license or otherwise the construction of any water resources project that would have a direct, adverse effect on the values for which a national wild and scenic river was established.

(2) The National Historic Preservation Act of 1966. 16 USC 470, et seq. Section 106 of the Act and implementing regulations (36 CFR Part 800) require the adoption measures before issuing a license, when feasible to mitigate potential adverse effects of the licensed activity and properties listed or eligible for listing in the National Register of Historic Places. The Act's requirements are to be implemented in cooperation with state historic preservation officers and upon notice to, and when appropriate, in consultation with the Advisory Council on Historic Preservation.

(3) The Endangered Species Act. 16 USC 1531, et seq. Section 7 of the Act and implementing regulations (50 CFR Part 402) require that in consultation with the Secretary of the Interior or Commerce, any action authorized is not likely to jeopardize the continued existence of any endangered or threatened species or adversely affect its critical habitat.

(4) The Fish and Wildlife Coordination Act. 16 USC 661, et seq. requires that, before issuing a permit proposing or authorizing the impoundment (with certain exemptions), diversion or other control or modification of any body of water, consult with the appropriate state agency exercising jurisdiction over wildlife resources to conserve those resources.

Section *3.* [2.] Effect of a Permit. (1) Compliance with a *hazardous waste* permit during its term constitutes compliance with KRS Chapter 224 for purposes of enforcement. However, a permit may be modified, revoked and reissued, or terminated during its term for cause as set forth in Sections 3 and 4 of 401 KAR 38:040 *and in 401 KAR Chapter 40.*

(2) The issuance of a permit does not convey any property rights of any sort, or any exclusive privilege.

(3) The issuance of a permit does not authorize any injury to persons or property or invasion of other private rights, or any infringement of state or local laws or regulations.

[Section 3. Transfer of Permits. Except as provided in Section 2 of this regulation, 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 Section 3 of 401 KAR 38:040) or a minor modification made (to allow for a change in ownership or operational control of a facility where the cabinet determines that no other change in the permit is necessary, provided that a written agreement containing a specific date for transfer of permit responsibility, coverage, and liability between the current and new permittees has been submitted to the cabinet) to identify the new permittee and incorporate such other requirements as may be necessary under KRS Chapter 224 and the waste management regulations.]

[Section 4. Emergency Permits. Notwithstanding any other provision of this regulation, 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 non-permitted facility, thus granting the non-permitted facility an effective temporary hazardous waste site or facility permit. An emergency permit shall be granted only when the secretary has issued an emergency order to discontinue, abate or alleviate pursuant to KRS 224.071. This emergency permit:]

[(1) May be oral or written. If oral, it shall be followed in five (5) days by a written emergency permit.]

[(2) Shall not exceed ninety (90) days in duration.]

[(3) Shall clearly specify the hazardous wastes to be received, and the manner and location of their treatment, storage, or disposal.]

[(4) 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.]

[(5) Shall be accompanied by a public notice published under Section 2 of 401 KAR 38:050 including:]

[(a) Name and address of the office granting the emergency authorization;]

[(b) Name and location of the permitted hazardous waste site or facility;]

[(c) A brief description of the wastes involved;]

[(d) A brief description of the action authorized and reasons for authorizing it; and]

[(e) Duration of the emergency permit.]

[(6) 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 Section 1 of 401 KAR 30:030.]

[(7) Shall specify that all remaining hazardous waste and residues are removed at the end of the term of the emergency permit in 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.]

[(8) Shall specify that failure to comply with the conditions of the emergency permit 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 5. Scope of the Permit Requirements. This section sets forth the specific requirements for the hazardous waste site or facility permitting program. KRS 224.866 requires a permit for the "treatment," "storage," or "disposal" of any "hazardous waste" as identified or listed in 401 KAR Chapter 31. The terms "treatment facility," "storage facility," and "disposal facility" are defined in 401 KAR 30:010.]

[(1) Specific inclusions. Owners and operators of certain facilities require hazardous waste site or facility permits as well as permits under other programs for certain aspects of the facility operation. Hazardous waste site or facility permits are required for:]

[(a) Injection wells that dispose of hazardous waste, and associated surface facilities that treat, store, or dispose of hazardous waste (see Section 6 of this regulation). However, the owner or operator with a UIC permit issued by the cabinet under an approved or promulgated UIC

program, or by EPA, will be deemed to have a permit for the injection well itself if they comply with the requirements of Section 7 of 401 KAR 38:070 (permit by rule for injection wells).]

[(b) Treatment, storage, or disposal of hazardous waste at facilities requiring an NPDES permit. However, the owner and operator of a publicly owned treatment works receiving hazardous waste will be deemed to have a permit for that waste if they comply with the applicable requirements of Section 1(3) of this regulation (permit by rule for POTWs).]

[(c) Barges or vessels that dispose of hazardous waste by ocean disposal and onshore hazardous waste treatment, or storage facilities associated with an ocean disposal operation. However, the owner and operator will be deemed to have a permit for ocean disposal for the barge or vessel itself if they comply with the requirements of Section 1(1) of this regulation (permit by rule for ocean disposal barges and vessels).]

[(2) Specific exclusions. A person is not required to obtain a permit for those activities he carries out to immediately contain or treat a spill of hazardous waste or material which, when spilled, becomes a hazardous waste. In addition, the following persons are among those who are not required to obtain a hazardous waste site or facility permit:]

[(a) Generators who accumulate hazardous waste onsite for less than ninety (90) days, as provided in 401 KAR 32:030.]

[(b) Farmers who dispose of hazardous waste pesticides from their own use as provided in 401 KAR 32:050, Section 2.]

[(c) Persons who own or operate facilities solely for the treatment, storage, or disposal of hazardous waste excluded from regulations under 401 KAR 31:010 (small generator exemption).]

[(d) Owners or operators of totally enclosed treatment facilities as defined in 401 KAR 30:010.]

[(e) Transporters storing manifested shipments of hazardous waste in containers meeting the requirements of 401 KAR 32:030, at a transfer facility for a period of ten (10) days or less.]

[(3) Permit by rule. The following persons are deemed to have a permit by rule and are not required to obtain a hazardous waste site or facility permit:]

[(a) Owners and operators of elementary neutralization units as defined in 401 KAR 30:010.]

[(b) Owners and operators of wastewater treatment units as defined in 401 KAR 30:010.]

[Section 6. Interim Permits for UIC Wells. The cabinet may issue a permit under this section to any Class I UIC well (defined in 40 CFR 122.32) 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 Section 17 of 401 KAR 35:010 and shall be for a term not to exceed two (2) years. No such permit shall be issued after approval or promulgaiton of a UIC program in Kentucky. Any permit under this section shall contain a condition providing that it will terminate upon final action by the cabinet under a UIC program to issue or deny a UIC permit for the facility.]

Section *4.* [7.] Prohibition of Use of Unpermitted Facility. (1) Restrictions. No person shall deliver hazardous waste to a facility for treatment, storage, or disposal unless the owner/operator has:

(a) Registered with the cabinet as an existing hazardous waste facility in operation on or before November 19, 1980; or

(b) Been granted a hazardous waste site or facility permit by the cabinet.

(2) Permit required. No person shall engage in the storage, treatment, or disposal of hazardous waste without first obtaining construction or operation permits from the cabinet as specified in KRS 224.866(1).

(3) Issuance of a federal permit to own or operate a hazardous waste site or facility will not relieve the owner or operator of the responsibility to comply with the requirements of this chapter.

JACKIE SWIGART, Secretary
ADOPTED: June 10, 1983
RECEIVED BY LRC: June 14, 1983 at 11 a.m.
See public hearings scheduled on page 1.

NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION CABINET
Department for Environmental Protection
Division of Waste Management
(Proposed Amendment)

401 KAR 38:020. Interim status provisions.

RELATES TO: KRS 224.033, 224.036, 224.071, 224.087, *224.830 through* [224.835, 224.842, 224.855, 224.860, 224.862, 224.864, 224.866, 224.868, 224.871, 224.873, 224.874, 224.876,] 224.877, *224.994*
PURSUANT TO: KRS 13.082, *13.083,* 224.017, 224.866
NECESSITY AND FUNCTION: KRS 224.842 and 224.866 require any person who treats, stores, recycles or disposes of hazardous waste to first obtain a hazardous waste site or facility permit from the Natural Resources and Environmental Protection 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 site or facility" shall have interim status and shall be treated as having been issued a permit to the extent he or she has:

(a) [(1)] Complied with the requirements of KRS *224.866* [Chapter 224] pertaining to notification of *an existing* hazardous waste activity; *and*

(b) [(2)] Complied with the requirements of [Section 5 of] 401 KAR *38:070* [38:040] governing submission of Part A applications.

(2) [(3)] When the cabinet determines on examination or re-examination of a Part A application [as specified in Section 8 of 401 KAR 38:070] (or its equivalent, Registration of Intent to Apply for a Permit) that it fails to meet the standards of these 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 will then be subject to enforcement procedures for operating without a permit.

Section 2. *Operation During Interim Status* [Coverage]. *(1)* During the interim status period the facility, *except as provided in Section 3 of the regulation,* shall not:

(a) [(1)] 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) [(2)] Employ processes not specified in Part A of the

permit application (or its equivalent, Registration of Intent to Apply for a Permit); or

(c) [(3)] Exceed the design capacities specified in Part A of the permit application (or its equivalent, Registration of Intent to Apply for a Permit).

(2) [Section 4. Interim Status Standards.] During interim status, owners or operators shall comply with the interim status standards in 401 KAR *Chapter 35* [35:010].

Section 3. Changes During Interim Status. (1) New hazardous wastes not previously identified in Part A of the permit application (or its equivalent, Registration of Intent to Apply for a Permit) may be treated, stored, or disposed [of] at a facility if the owner or operator submits a revised Part A permit application *(*or its equivalent*)* prior to such a change.

(2) Increases in the design capacity of processes used at a facility may be made if the owner or operator submits a revised Part A permit application *(*or its equivalent*)* prior to such a change (along with a justification explaining the need for the change) and the cabinet approves the change because of a lack of available treatment, storage, or disposal capacity at other hazardous waste sites or facilities.

(3) Changes in the processes for the treatment, storage, or disposal of hazardous waste may be made at a facility or additional processes may be added if the owner or operator submits a revised Part A permit application *(*or its equivalent*)* prior to such a change (along with a justification explaining the need for the change) and the cabinet approves the change because:

(a) It is necessary to prevent a threat to human health or the environment to avert an emergency situation; or

(b) It is necessary to comply with cabinet regulations (including 401 KAR *Chapter 35* [35:010]) *or federal or* [and] local laws.

(4) Changes in the ownership or operational control of a facility may be made if the new owner or operator submits a revised Part A permit application *(*or its equivalent*)* no later than ninety (90) days prior to the scheduled change. When a transfer of ownership or operational control of a facility occurs, the old owner or operator shall comply with the requirements [in Section 7] of 401 KAR *35:080 through 401 KAR 35:130* [35:010], (financial requirements), until the new owner or operator has demonstrated to the cabinet that he is complying with *401 KAR 35:080 through 401 KAR 35:130* [that regulation]. All other interim status duties are transferred effective immediately upon 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 35:080 through 401 KAR 35:130* [that regulation], the cabinet shall notify the old owner or operator in writing that he no longer needs to comply with *401 KAR 35:080 through 401 KAR 35:130* [that regulation] as of the date of demonstration.

(5) In no event shall changes be made to a hazardous waste site or facility during interim status which amount to reconstruction of the facility. Reconstruction occurs when the capital investment in the changes to the facility exceeds fifty percent (50%) of the capital cost of a comparable entirely new hazardous waste site or facility.

Section *4.* [5. Grounds for] 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 5 of 401 KAR 38:040.

Section *5.* [6.] 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 will be required to submit Part B of the application within six (6) months of the cabinet's decision to require such submittal, according to Section 5(1)(d) of 401 KAR 38:040. The cabinet may base its decision to require Part B of the application upon receiving Phase II or final authorization from the U.S. EPA. However, in accordance with KRS 224.866(1), the cabinet may require submission of Part B of the application at any time.

JACKIE SWIGART, Secretary
ADOPTED: June 10, 1983
RECEIVED BY LRC: June 14, 1983 at 11 a.m.
See public hearings scheduled on page 1.

NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION CABINET
Department for Environmental Protection
Division of Waste Management
(Proposed Amendment)

401 KAR 38:030. Conditions applicable to all permits.

RELATES TO: KRS 224.033, 224.036, 224.071, 224.087, 224.835, 224.842, 224.855, 224.860, 224.862, 224.864, 224.866, 224.868, 224.871, 224.873, 224.874, 224.876, 224.877

PURSUANT TO: KRS 13.082, *13.083,* 224.017, 224.866

NECESSITY AND FUNCTION: KRS 224.842 and 224.866 require any person who treats, stores, recycles or disposes of hazardous waste to first obtain a hazardous waste site or facility permit from the Natural Resources and Environmental Protection 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 conditions applicable to all permits.

[Section 1. Requirements for Recordkeeping and Reporting of Monitoring Results. All permits shall specify:]

[(1) Requirements concerning the proper use, maintenance, and installation, when appropriate, of monitoring equipment or methods (including biological monitoring methods when appropriate);]

[(2) Required monitoring including type, intervals, and frequency sufficient to yield data which are representative of the monitored activity including, when appropriate, continuous monitoring;]

[(3) Applicable reporting requirements based upon the impact of the regulated activity and as specified in KRS Chapter 224 and the Kentucky Hazardous Waste Management regulations. Reporting shall be no less frequent than specified in the above regulations.]

Section *1.* [2.] Conditions Applicable to All Permits. All conditions applicable to all permits shall be incorporated into the permits either expressly or by reference. If incorporated by reference, a specific citation to these regulations must be given in the permit.

(1) Duty to comply. The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the appropriate Kentucky Revised

Statute and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application. *However,* [In addition,] the permittee need not comply with the conditions of this permit to the extent and for the duration such noncompliance is authorized in an emergency permit (see Section 4 of 401 KAR 38:010).

(2) Duty to reapply. If the permittee wishes to continue an activity regulated by this permit after the expiration date of this permit, the permittee must apply for and obtain a new permit.

(3) Duty to halt or reduce activity. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

(4) Duty to mitigate. The permittee shall take all reasonable steps to minimize or correct any adverse impact on the environment resulting from noncompliance with this permit.

(5) Proper operation and maintenance. The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance includes effective performance, adequate funding, adequate operator staffing and training, and adequate laboratory and process controls, including appropriate quality assurance procedures. This provision requires the operation of back-up or auxillary facilities or similar systems only when necessary to achieve compliance with the conditions of the permit.

(6) Permit actions. This permit may be modified, revoked and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or a modification of planned changes or anticipated noncompliance, does not stay any permit condition.

(7) Property rights. This permit does not convey any property rights of any sort, or any exclusive privilege.

(8) Duty to provide information. The permittee shall furnish the cabinet, within a reasonable time, any information which the cabinet may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The permittee shall also furnish to the cabinet upon request copies of records required to be kept by this permit.

(9) Inspection and entry. The permittee shall allow the cabinet or an authorized representative, upon the presentation of credentials and other documents as may be required by law, to:

(a) Enter upon the permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this permit;

(b) Have access to and copy at reasonable times any records that must be kept under the conditions of this permit;

(c) Inspect at reasonable times any facility's equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit; and

(d) Sample or monitor at reasonable times, for the purposes of assuring permit compliance or as otherwise authorized by the appropriate Kentucky Revised Statutes, any substances or parameters at any location.

(10) Monitoring and records.

(a) Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity.

(b) The permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this permit, and records of all data used to complete the application for this permit, for a period of at least three (3) years from the date of the sample, measurement, report or application. This period may be extended by request of the cabinet at any time. In addition, the permittee shall maintain records from all groundwater monitoring wells and associated groundwater surface elevations, for the active life of the facility, and for disposal facilities for the post-closure care period as well.

(c) Records of monitoring information shall include:

1. The date, exact place, and time of sampling or measurements;
2. The individual(s) who performed the sampling or measurements;
3. The date(s) analyses were performed;
4. The individual(s) who performed the analyses;
5. The analytical techniques or methods used; and
6. The results of such analyses.

(11) Signatory requirement. All applications, reports, or information submitted to the cabinet shall be signed and certified (see Section 7 of 401 KAR 38:070).

(12) Reporting requirements.

(a) Planned changes. The permittee shall give notice to the cabinet as soon as possible of any planned physical alterations or additions to the permitted facility. [In addition, for a new hazardous waste site or facility, the permittee may not commence treatment, storage, or disposal of hazardous waste; and for a facility being modified the permittee may not treat, store, or dispose of hazardous waste in the modified portion of the facility until:]

[1. The permittee has submitted to the cabinet, by certified mail or hand delivery, a letter signed by the permittee and a registered professional engineer stating that the facility has been constructed or modified in compliance with the permit; and]

[2. The cabinet has inspected the modified or newly constructed facility and finds it is in compliance with the conditions of the permit; or within fifteen (15) days of the date of submission of the letter in suparagraph 1 of this paragraph, the permittee has not received notice from the cabinet of its intent to inspect, prior inspection is waived and the permittee may commence treatment, storage or disposal of hazardous waste.]

(b) Anticipated noncompliance. The permittee shall give advance notice to the cabinet of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements. *In addition, for a new hazardous waste site or facility, the permittee may not commence treatment, storage, or disposal of hazardous waste; and for a facility being modified the permittee may not treat, store, or dispose of hazardous waste in the modified portion of the facility until:*

1. The permittee has submitted to the cabinet, by certified mail or hand delivery, a letter signed by the permittee and a professional engineer registered in Kentucky stating that the facility has been constructed or modified in compliance with the permit; and

2. The cabinet has inspected the modified or newly constructed facility and finds it is in compliance with the conditions of the permit; or within fifteen (15) days of the date of submission of the letter in subparagraph 1 of this paragraph, the permittee has not received notice from the

cabinet of its intent to inspect, prior inspection is waived and the permittee may commence treatment, storage, or disposal of hazardous waste.

(c) Transfers. This permit is not transferable to any person except after notice to the cabinet. The cabinet may require modification or revocation and reissuance of the permit to change the name of the permittee and incorporate such other requirements as may be necessary under the appropriate statute (see Section 3 of this regulation; in some cases, modification or revocation and reissuance is mandatory).

(d) Monitoring reports. Monitoring results shall be reported at the intervals specified in this permit.

(e) Compliance schedules. Reports of compliance or noncompliance with or any progress reports on interim and final requirements contained in any compliance schedule of this permit shall be submitted no later than fourteen (14) days following each scheduled date.

(f) Immediate reporting. The permittee shall report any noncompliance which may endanger health or the environment. Any information shall be provided orally within two (2) hours from the time the permittee becomes aware of the circumstances. A written submission shall also be provided within five (5) days of the time the permittee becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurence of the noncompliance. The following shall be included as information which must be reported orally within two (2) hours:

1. Information concerning release of any hazardous waste that may cause an endangerment to public drinking water supplies, including both surface water and groundwater used for public drinking water supplies.

2. Any information of a release or discharge of hazardous waste, or of a fire or explosion from a hazardous waste site or facility, which could threaten the environment or human health outside the facility. The description of the occurrence and its cause shall include:

a. Name, address, and telephone number of the owner or operator;

b. Name, address, and telephone number of the facility;

c. Date, time and type of incident;

d. Name and quantity of material(s) involved;

e. The extent of injuries, if any;

f. An assessment of actual or potential hazards to the environment and human health outside the facility, where this is applicable; and

g. Estimated quantity and disposition of recovered material that resulted from the incident. The cabinet may waive the five (5) day written notice requirement in favor of a written report within fifteen (15) days.

(g) Other noncompliance. The permittee shall report all instances of noncompliance not reported under paragraphs (a), (d), (e) and (f) of this subsection at the time monitoring reports are submitted. The reports shall contain the information listed in paragraph (f) of this subsection.

(h) The following reports required by 401 KAR Chapter 34 shall be submitted:

1. Manifest discrepancy report. If a significant discrepancy in a manifest is discovered, the permittee must attempt to reconcile the discrepancy. If not resolved within fifteen (15) days, the permittee must submit a letter or report including a copy of the manifest to the cabinet (see Section 3 of 401 KAR 34:050).

2. Unmanifested waste report. Must be submitted to the cabinet within fifteen (15) days of receipt of unmanifested waste (see Section 7 of 401 KAR 34:050).

3. Annual report. An annual report must be submitted covering facility activities during the previous calendar year (see Section 6 of 401 KAR 34:050).

(i) Other information. Where the permittee becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application or in any report to the cabinet, he shall promptly submit such facts or information.

(j) All permits issued by the cabinet will be subject to any future statutory or regulatory changes whose purpose is the protection of the health and welfare of the citizens of the Commonwealth or their environment.

Section 2. Requirements for Recordkeeping and Reporting of Monitoring Results. All permits shall specify:

(1) Requirements concerning the proper use, maintenance, and installation, when appropriate, of monitoring equipment or methods (including biological monitoring methods when appropriate);

(2) Required monitoring including type, intervals, and frequency sufficient to yield data which are representative of the monitored activity including, when appropriate, continuous monitoring:

(3) Applicable reporting requirements based upon the impact of the regulated activity and as specified in KRS Chapter 224 and the Kentucky Hazardous Waste Management Regulations. Reporting shall be no less frequent than specified in the above regulations.

Section 3. Establishing Permit Conditions. (1) In addition to conditions required in Section 1 of this regulation, the cabinet shall establish conditions as required on a case-by-case basis in permits under Section 1 of 401 KAR 38:040 (duration of permit), 401 KAR 38:060 (schedule of compliance), and Section 2 of 401 KAR 38:060 (alternate schedules of compliance). In addition, each hazardous waste site or facility permit shall include permit conditions necessary to achieve compliance with each of the applicable requirements specified in the Kentucky Hazardous Waste Management regulations. In satisfying this provision, the cabinet may incorporate applicable requirements of the Kentucky Hazardous Waste Management regulations directly into the permit or establish other permit conditions that are based on these regulations.

(2) Individual programs.

(a) In addition to conditions required in all permits for a particular program, the cabinet shall establish conditions in permits for the individual programs as required on a case-by-case basis to provide for and assure compliance with all applicable requirements of the appropriate statute and regulations.

(b) An "applicable requirement" is a statutory or regulatory requirement which takes effect prior to final administrative disposition of a permit. An "applicable requirement" is also any requirement which takes effect prior to the modification or revocation and reissuance of a permit, to the extent allowed in Section 3 of 401 KAR 38:040.

(c) New or reissued permits, and to the extent allowed under Section 3 of 401 KAR 38:040 (modified and revoked and reissued permits), shall incorporate each of the applicable requirements referenced in Section 4 of 401 KAR 38:030.

Section 4. *General. (1) The permit may, when appropriate, specify a schedule of compliance leading to*

compliance with the appropriate statute and regulations. [Past Performance Considered in Review. Past performance in related areas will be considered in the review and in the determination for any requirement for specialized conditions.]

(a) Time for compliance. Any schedules of compliance under this regulation shall require compliance as soon as possible.

(b) Interim dates. Except as provided in subsection (2)(a)2 of this regulation, if a permit establishes a schedule of compliance which exceeds one (1) year from the date of permit issuance, the schedule shall set forth interm requirements and the dates for their achievement.

1. The time between interim dates shall not exceed one (1) year.

2. If the time necessary for completion of any interim requirement (such as the construction of a control facility) is more than one (1) year and is not readily divisible into stages for completion, the permit shall specify interim dates for the submission of reports of progress toward completion of the interim requirements and indicate a projected completion date.

(c) Reporting. The permit shall be written to require that no later than fourteen (14) days following each interim date and the final date of compliance, the permittee shall notify the cabinet in writing of its compliance or noncompliance with the interim or final requirements.

(2) Alternative schedules of compliance. A permit applicant or permittee may cease conducting regulated activities (by receiving a terminal volume of hazardous waste at a hazardous waste site or facility; and for treatment and storage hazardous waste sites or facilities, closing pursuant to the applicable requirements, and, for disposal hazardous waste sites or facilities, closing and conducting post-closure care pursuant to the applicable requirements), rather than continue to operate and meet permit requirements as follows:

(a) If the permittee decides to cease conducting regulated activities at a given time within the term of a permit which has already been issued:

1. The permit may be modified to contain a new or additional schedule leading to timely cessation of activities; or

2. The permittee shall cease conducting permitted activities before noncompliance with any interim or final compliance schedule requirement already specified in the permit.

(b) If the decision to cease conducting regulated activities is made before issuance of a permit whose term will include the termination date, the permit shall contain a schedule leading to termination which will ensure timely compliance with applicable requirements.

(c) If the permittee is undecided whether to cease conducting regulated activities, the cabinet may issue or modify a permit to contain two (2) schedules as follows:

1. Both schedules shall contain an identical interim deadline requiring a final decision on whether to cease conducting regulated activities no later than a date which ensures sufficient time to comply with applicable requirements in a timely manner if the permittee's decision is to continue conducting regulated activities;

2. One (1) schedule shall lead to timely compliance with applicable requirements;

3. The second schedule shall lead to cessation of regulated activities by a date which will ensure timely compliance with applicable requirements;

4. Each permit containing two (2) schedules shall include a requirement that after the permittee has made a final decision under paragraph (a) of this subsection he shall follow the schedule leading to compliance if the decision is to continue conducting regulated activities, and follow the schedule leading to termination if the decision is to cease conducting regulated activities.

(d) The applicant's or permittee's decision to cease conducting regulated activities shall be evidenced by a firm public commitment satisfactory to the cabinet, such as a resolution of the board of directors of a corporation.

JACKIE SWIGART, Secretary
ADOPTED: June 10, 1983
RECEIVED BY LRC: June 14, 1983 at 11 a.m.
See public hearings scheduled on page 1.

NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION CABINET
Department for Environmental Protection
Division of Waste Management
(Proposed Amendment)

401 KAR 38:040. *Changes to permits; expiration of permits.* [Duration, termination, renewal and deadlines.]

RELATES TO: KRS 224.033, 224.036, 224.071, 224.087, *224.830 through* [224.835, 224.842, 224.855, 224.860, 224.862, 224.864, 224.866, 224.868, 224.871, 224.873, 224.874, 224.876,] 224.877, *224.994*

PURSUANT TO: KRS 13.082, *13.083,* 224.017, 224.866

NECESSITY AND FUNCTION: KRS 224.842 and 224.866 require any person who treats, stores, recycles or disposes of hazardous waste to first obtain a hazardous waste site or facility permit from the Natural Resources and Environmental Protection 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. 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 Section 2(2)(b) of this regulation) or a minor modification made (under Section 3(4) of this reguation) to identify the new permittee and incorporate such other requirements as may be necessary under KRS Chapter 224 and the waste management regulations.

Section *2.* [3.] *Major* [Justification for] 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* [2] of 401 KAR 38:030, receives a request for modifiction or revocation and reissuance under Section 2 of *401 KAR 38:050* [this regulation], 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* [this regulation]). If cause does not exist under this section or Section *3* [2(3)] of this regulation, the cabinet shall not modify or revoke and reissue the permit. If a permit modification satisfies the criteria in Section *3* [2(5)] of this regulation for "minor modifications," the permit may be modified without a draft permit or public review. Otherwise, a draft permit must be prepared and other procedures in *401 KAR 38:050 and, if applicable, 401 KAR 38:500* [this regulation] followed.

(1) Causes for modification. *Paragraphs (a) through (e) of this subsection* [The following] are causes for modification but not revocation and reissuance of permits. *Paragraphs (a) 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 for wells 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 regulations, guidance, or test methods) and would have justified the application of different permit conditions at the time of issuance.

(c) New regulations. The standards or regulations on which the permit was based have been changed by promulgation of *new or* amended standards or 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 [only] as follows:

1. For promulgation of *new or* amended standards or regulations, when:

a. The permit condition requested to be modified was based on an effective hazardous waste management regulation; and

b. The cabinet has revised, withdrawn, or modified that portion of the regulation on which the permit condition was based; and

c. A permittee requests modification in accordance with Section 2 of *401 KAR 38:050* [this regulation] within ninety (90) days after notice of the action on which the request is based.

2. For judicial decisions, a court of competent jurisdiction has remanded and stayed cabinet promulgated regulations, if the remand and stay concern that portion of the regulations or guidelines on which the permit condition was based and a request is filed by the permittee in accordance with Section 2 of *401 KAR 38:050* [this regulation] 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* [2(5)] of this regulation on minor modifications).

(e) The cabinet may modify a permit:

1. When modification of a closure plan is required under 401 KAR 34:070, Section 3(2) or 4(2).

2. When the cabinet receives notification of expected closure under 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 401 KAR 34:070, Section 4;

b. Modification of an extended post-closure care period under 401 KAR 34:070, Section 7;

c. Continuation of security requirements under 401 KAR 34:070, Section 7(2); or

d. Permission to disturb the integrity of the containment system under 401 KAR 34:070, Section 7(3).

3. When the permittee has filed a request under 401 KAR 34:120, Section 4 for a variance to the level of financial responsibility or when the secretary demonstrates under 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 post-closure 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 regulations.

10. When modification is necessary to protect the public health or the environment.

11. To include conditions applicable as result of a hearing or enforcement action as specified in 401 KAR Chapter 40.

(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 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* [2(3) of this regulation]) of a proposed transfer of the permit. [A permit also may be modified to reflect a transfer after the effective date of an automatic transfer (Section 3 of 401 KAR 38:010) but will not be revoked and reissued after the effective date of the transfer except upon the request of the new permittee.]

(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.

[Section 2. Requests for Modification, Revocation and Reissuance, or Termination. (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 3 and 4 of this regulation 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 request for modification, revocation and reissuance, or termination are not subject to public notice, comment, or hearings.]

[(3) If the cabinet tentatively decides to modify or revoke and reissue a permit under Section 3 of this regulation, the cabinet shall prepare a draft permit under Section 1 of 401 KAR 38:050 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.]

[(4) 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 Sections 2 through 4 of this regulation, 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.]

[(5) "Minor modifications" are not subject to the requirements of this section. Minor modifications may only:]

[(a) Correct typographical errors;]

[(b) Require more frequent monitoring or reporting by the permittee;]

[(c) Change an interim compliance date in a schedule of compliance, provided the new date is not more than 120 days after the date specified in the existing permit and does not interfere with attainment of the final compliance date requirement;]

[(d) Allow for a change in ownership or operational control of a facility as referenced in Section 3 of 401 KAR 38:010.]

[(e) Change the lists of facility emergency coordinators or equipment in the permit's contingency plan; or]

[(f) Change estimates of maximum inventory under Section 3(1)(b) of 401 KAR 34:070; change estimates of expected year of closure or schedules for final closure under Section 3(1)(d) of 401 KAR 34:070; or approve periods longer than ninety (90) days or 180 days under Section 4(1) and (2) of 401 KAR 34:070.]

[(6) If the cabinet tentatively decides to terminate a permit under Section 4 of this regulation, 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 1 of 401 KAR 38:050.]

[(7) All draft permits (including notices of intent to terminate) prepared under Sections 2 through 4 of this regulation shall be based on the administrative record.]

Section 3. Minor Modifications of Permits. 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 must be made for cause and with a 401 KAR 38:050 draft permit, public notice as required in Section 2 of this regulation and, if applicable, compliance with 401 KAR 38:500 must be demonstrated. Minor modifications may only:

(1) Correct typographical errors;

(2) Require more frequent monitoring or reporting by the permittee;

(3) Change an interim compliance date in a schedule of compliance, provided the new date is not more than 120 days after the date specified in the existing permit and does not interfere with attainment of the final compliance date requirement; or

(4) Allow for a change in ownership or operational control of a site or facility where the cabinet determines that no other change in the permit is necessary, provided that a written agreement containing a specific date for transfer of permit responsibility, financial coverage and liability between the current and new permittees has been submitted to the cabinet.

(5) Change the lists of facility emergency coordinators or equipment in the permit's contingency plan;

(6) Change estimates of maximum inventory under Section 3(1)(b) of 401 KAR 34:070; or

(7) Change estimates of expected year of closure or schedules for final closure under Section 3(1)(d) of 401 KAR 34:070;

(8) Approve periods longer than ninety (90) days or 180 days under Section 4(1) and (2) of 401 KAR 34:070.

(9) Change the ranges of the operating requirements set in the permit to reflect the results of the trial burn, provided that the change is minor.

(10) Change the operating requirements set in the permit for conducting a trial burn, provided that the change is minor.

(11) Grant one (1) extension of the time period for determining operational readiness following completion of construction, for up to 720 hours operating time for treatment of hazardous waste.

(12) Change the treatment program requirements for land treatment units under Section 2 of 401 KAR 34:220 to improve treatment of hazardous constituents, provided that the change is minor.

(13) Change any conditions specified in the permit for land treatment units to reflect the results of field tests or laboratory analyses used in making a treatment demonstration in accordance with Section 8 of 401 KAR 38:080, provided that the change is minor.

(14) Allow a second treatment demonstration for land treatment to be conducted when the results of the first demonstration have not shown the conditions under which the waste or wastes can be treated completely as required by Section 3(1) of 401 KAR 34:220, provided the conditions of the second demonstration are substantially the same as the conditions for the first demonstration.

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; [or]

(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 regulations promulgated pursuant thereto (including 401 KAR 40:040).

(2) The cabinet shall follow the applicable procedures in this regulation and in 401 KAR *38:050* [Chapter 38] and *401 KAR Chapter* 40 in terminating any permit under this section.

Section *5.* [1.] 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* [6] of 401 KAR *38:060* [38:010], Interim permits for UIC wells.)

(2) Modification of term of permit. Except as provided in Section *6* [2] of this 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.

[Section 5. Deadlines for Applying. (1) Existing hazardous waste sites or facilities.]

[(a) Owners and operators of existing hazardous waste sites or facilities must submit Part A of their permit application or its equivalent (Registration of Intent to Apply for a Permit) to the cabinet no later than November 19, 1980. Where other existing facilities must begin complying with 401 KAR 35:010 at a later date because of revisions to the waste management regulations, the cabinet by regulation will specify when those facilities must submit a permit application. The cabinet may require submission of Part A of the application with Part B, when Part B of the application is requested, if the facility only submitted the Registration of Intent to Apply for a Permit to the cabinet.]

[(b) The cabinet may extend the date by which owners and operators of specified classes of existing hazardous waste management facilities must submit Part A of their permit application if the cabinet finds that:]

[1. There has been substantial confusion as to whether the owners and operators of such facilities were required to file a permit application; and]

[2. Such confusion is attributable to ambiguities in the waste management regulations.]

[(c) The cabinet may by compliance order extend the date by which the owner and operator of an existing hazardous waste site or facility must submit Part A of their permit application or its equivalent.]

[(d) Any time after promulgation of 401 KAR Chapter 38 the owner and operator of an existing hazardous waste site or facility may be required to submit Part B of their permit application. Any owner or operator shall be allowed at least six (6) months from the date of request to submit Part B of the application. Any owner or operator of an existing hazardous waste site or facility may voluntarily submit Part B of the application at any time.]

[(e) Failure to furnish a requested Part B application on time, or to furnish in full the information required by the Part B application, is grounds for termination of interim status under 401 KAR Chapter 38.]

[(2) New hazardous waste sites or facilities.]

[(a) Except as provided in subsection (2)(c) of this section, no person shall begin physical construction of a new hazardous waste site or facility without having submitted Part A or its equivalant and Part B of the permit application and received a finally effective hazardous waste site or facility permit.]

[(b) An application for a permit for a new hazardous waste site or facility (including both Part A or its equivalent and Part B) may be filed any time after promulgation of the standards in 401 KAR 34:180 et seq., applicable to such facility. Except as provided in subsection (2)(c) of this section, all applications must be submitted at least 180 days before physical construction is expected to commence.]

[(c) After November 19, 1980, but prior to the effective date of those standards in 401 KAR 34:180 et seq., which are applicable to his facility, a person may begin physical construction of a new hazardous waste site or facility, except for landfills, injection wells, land treatment facilities or surface impoundments (as defined in 401 KAR 30:010) without having received a finally effective hazardous waste site or facility permit, if prior to beginning physical construction, such person has:]

[1. Obtained the federal, state and local approvals or permits necessary to begin physical construction;]

[2. Submitted Part A of the permit application or its equivalent; and]

[3. Made a commitment to complete physical construction of the facility within a reasonable time. Such person may continue physical construction of the new hazardous waste site or facility after the effective date of the permitting standards in 401 KAR 34:180 et seq., applicable to his facility if he submits Part B of the permit application on or before the effective date of such standards (or on some later date specified by the cabinet. Such person must not operate the new hazardous waste site or facility without having received a finally effective hazardous waste site or facility permit.]

[(3) Updating permit applications.]

[(a) If any owner or operator of a hazardous waste site or facility has filed Part A of a permit application or its equivalent and has not yet filed Part B, the owner or operator shall file an amended Part A application or its equivalent with the cabinet, as necessary to comply with the provisions of 401 KAR 38:020.]

[(b) The owner or operator of a facility who fails to comply with the updating requirements of paragraph (a) of this subsection does not receive interim status as to the wastes not covered by duly filed Part A applications or its equivalent.]

[(4) Reapplications. Any hazardous waste site or facility with an effective permit shall submit a new application at least 180 days before the expiration date of the effective permit, unless permission for a later date has been granted by the cabinet. (The cabinet shall not grant permission for applications to be submitted later than the expiration date of the existing permit).]

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 38:100 and the applicable requirements in 401 KAR 38:150 through 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 the 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 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.

JACKIE SWIGART, Secretary
ADOPTED: June 10, 1983
RECEIVED BY LRC: June 14, 1983 at 11 a.m.
See public hearings scheduled on page 1.

NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION CABINET
Department for Environmental Protection
Division of Waste Management
(Proposed Amendment)

401 KAR 38:050. Public information procedures and confidentiality.

RELATES TO: KRS 224.033, 224.036, 224.071, 224.087, *224.830 through* [224.835, 224.842, 224.855, 224.860, 224.862, 224.864, 224.866, 224.868, 224.871, 224.873, 224.874, 224.876,] 224.877, *224.994*
PURSUANT TO: KRS 13.082, *13.083,* 224.017, 224.866
NECESSITY AND FUNCTION: KRS 224.842 and 224.866 require any person who treats, stores, recycles or disposes of hazardous waste to first obtain a hazardous waste site or facility permit from the Natural Resources and Environmental Protection 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 on public information procedures and confidentiality.

Section 1. Application for a Pemrit. (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 two (2) applications for each permit required under Section 1 of 401 KAR 38:010. If the application for a permit includes an incinerator or a facility which requires groundwater monitoring, three (3) applications must be submitted to the cabinet. Additional copies may be required prior to permit issuance. 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.

(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).

(c) Permit applications must 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.

(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 request 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 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 reopended 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 ot 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 regulation.

(5) All draft permits (including notices of intent to terminate) prepared under Sections 3 through 5 of this regulation shall be based on the administrative record as defined in Section 6 of this regulation.

Section *3.* [1.] 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 regulations and in KRS 224.866.

(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* [2] and 3 of 401 KAR 38:030;

(b) All compliance schedules under *Section 4 of* 401 KAR *38:030* [38:060]; [and]

(c) All monitoring requirements under Section *2* [1] 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 regulation) or* fact sheet *(see Section 5 of this regulation) and shall be based on the administrative record (see Section 6 of this regulation) and publicly noticed (see Section 7 of this regulation),* and shall be made available for public comment *(see Section 8 of this regulation).* The cabinet shall give notice of the opportunity for a public hearing as required by KRS 224.855 *(see Section 9 of this regulation), issue a final decision* and respond to comments *(see Section 11 of this regulation). An appeal may be taken under KRS 224.081. 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 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 major hazardous waste site or 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 regulation*;

(d) Reasons why any requested variances or alternatives to required standards do or do not appear justified;

(e) A description of the procedure for reaching a final decision on the draft permit including:

1. The beginning and ending dates of the comment period under Section *7* [6] of this regulation and the address where comments will 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 regulation shall be based on the administrative record defined in this section.

(2) For preparing a draft permit under Section 3 of this 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 regulation) or fact sheet (see Section 5 of this 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 regulations.

Section 7. [6.] Public Notice of Permit Application and Public Comment Period. (1) Scope.

(a) The cabinet shall give public notice under KRS 224.855(4) and (5) that the following actions have occurred:

1. A permit application has been tentatively denied under Section *3(2)* [1] of this regulation;

2. A draft permit has been prepared under Section *3(3)* [1] of this regulation;

3. A hearing has been scheduled under Section *9* [3] of this 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 regulation* [401

KAR 38:040]. 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.) [; and]

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 224.855(2) 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 [or draft general permit, as the case may be], statement of basis or fact sheet, and the application;

5. A brief description of the comment procedures required by Sections *8 and 9* [2 and 3] of this regulation and the time and place of any hearing that will 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 regulation,* the times at which the record will 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 224.855(3)(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* [3] of this 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 7. Confidentiality of Information. (1) Claims of confidentiality. In accordance with KRS 224.036, any information submitted to the cabinet pursuant to these regulations may be claimed as confidential by the submitter. Any such claim must be asserted at the time of submission in the manner prescribed on the application form or instructions or, in the case of other submissions, by stamping the words "confidential business information" on each page containing such information. If no claim is made at the time of submission, the cabinet may make the information available to the public without further notice. If a claim is asserted, the information will be treated in accordance with the procedures in KRS 224.036 (Public Information) and any other provision of the waste management regulations relating to confidentiality of information.]

[(2) Denial of claims of confidentiality. Claims that the name and address of any permit applicant or permittee is confidential will be denied.]

Section *8.* [2.] Public Comments and Requests for Public Hearings. During the public comment period provided under Section *7* [6] of this 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* [4] of this regulation.

Section *9.* [3.] 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)* [6] of this 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 224.855.

(d) Public notice of the hearing shall be given as specified in Section *7* [6] of this regulation.

(2) Whenever a public hearing will be held, the secretary 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* [6] of this regulation shall automatically be extended to the close of any public hearing under this 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 regulation;

(b) Prepare a revised statement of basis under Section 4 of this regulation and reopen the comment period under this section; or

(c) Reopen or extend the comment period under Section 7 of this 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 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 regulation.

Section *11.* [4.] 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* [notification] specified in KRS 224.855(5) and (6). *401 KAR 38:500 details the procedures that the applicant must use in obtaining local government approval or for land disposal facilities 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 regulation on a draft permit, the cabinet shall issue a final permit decision. 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 will be considered in the review and in the determination of any requirement for specialized conditions.

JACKIE SWIGART, Secretary
ADOPTED: June 10, 1983
RECEIVED BY LRC: June 14, 1983 at 11 a.m.
See public hearings scheduled on page 1.

NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION CABINET
Department for Environmental Protection
Division of Waste Management
(Proposed Amendment)

401 KAR 38:060. Special types of permits. [Compliance schedules.]

RELATES TO: KRS 224.033, 224.036, 224.071, 224.087, *224.830 through* [224.835, 224.842, 224.855, 224.860, 224.862, 224.864, 224.866, 224.868, 224.871, 224.873, 224.874, 224.876,] 224.877, *224.994*

PURSUANT TO: KRS 13.082, *13.083,* 224.017, 224.866

NECESSITY AND FUNCTION: KRS 224.842 and 224.866 require any person who treats, stores, recycles or disposes of hazardous waste to first obtain a hazardous waste site or facility permit from the Natural Resources and Environmental Protection 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 *for special types of permits* [on compliance standards].

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: [General. The permit may, when appropriate, specify a schedule of compliance leading to compliance with the apporpriate statute and regulations.]

(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 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. [Time for compliance. Any schedules of compliance under this regulation shall require compliance as soon as possible.]

(2) *Injection wells. The owner or operator of an injection well disposing of hazardous waste, if the owner or operator:* [Interim dates. Except as provided in Section 2(1)(b) of this regulation, if a permit establishes a schedule of compliance which exceeds one (1) year from the date of permit issuance, the schedule shall set forth interim requirements and the dates for their achievement.]

(a) *Has a permit for underground injection issued by the U.S. EPA; and* [The time between interim dates shall not exceed one (1) year.]

(b) *Complies with the conditions of that permit and the requirements of 40 CFR 144.14 (wells managing hazardous waste).* [If the time necessary for completion of any interim requirement (such as the construction of a control facility) is more than one (1) year and is not readily divisible into stages for completion, the permit shall specify interim dates for the submission of reports of progress toward completion of the interim requirements and indicate a projected completion date.]

(3) *Publicly owned treatment works (POTW). The owner or operator of a POTW which accepts hazardous waste for treatment, if the owner or operator:* [Reporting. The permit shall be written to require that no later than fourteen (14) days following each interim date and the final date of compliance, the permittee shall notify the cabinet in writing of its compliance or noncompliance with the interim or final requirements.]

(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 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; and

6. Section 7 of 401 KAR 34:050, Unmanifested Waste Report.

(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 (after the state program receives authorization from EPA); and

(b) Complies with the conditions of the permit.

Section 2. *Emergency Permits.* [Alternative Schedules of Compliance. A permit applicant or permittee may cease conducting regulated activities (by receiving a terminal volume of hazardous waste at a hazardous waste site or facility), rather than continue to operate and meet permit requirements as follows:]

(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 only when the secretary has issued an emergency order to discontinue, abate or alleviate pursuant to KRS 224.071.* [If the permittee decides to cease conducting regulated activities at a given time within the term of a permit which has already been issued:]

[(a) The permit may be modified to contain a new or additional schedule leading to timely cessation of activities; or]

[(b) The permittee shall cease conducting permitted activities before noncompliance with any interim or final compliance schedule requirement already specified in the permit.]

(2) *This emergency permit:* [If the decision to cease conducting regulated activities is made before issuance of a permit whose term will include the termination date, the permit shall contain a schedule leading to termination which will ensure timely compliance with applicable requirements.]

(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 ot 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 re-

quirements 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 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).

[(3) If the permittee is undecided whether to cease conducting regulated activities, the cabinet may issue or modify a permit to contain two (2) schedules as follows:]

[(a) Both schedules shall contain an identical interim deadline requiring a final decision on whether to cease conducting regulated activities no later than a date which ensures sufficient time to comply with applicable requirements in a timely manner if the permittee's decision is to continue conducting regulated activities.]

[(b) One (1) schedule shall lead to timely compliance with applicable requirements.]

[(c) The second schedule shall lead to cessation of regulated activities by a date which will ensure timely compliance with applicable requirements.]

[(d) Each permit containing two (2) schedules shall include a requirement that after the permittee has made a final decision under paragraph (a) of this subsection he shall follow the schedule leading to compliance if the decision is to continue conducting regulated activities, and follow the schedule leading to termination if the decision is to cease conducting regulated activities.]

[(4) The applicant's or permittee's decision to cease conducting regulated activities shall be evidenced by a firm public commitment satisfactory to the cabinet, such as a resolution of the board of directors of a corporation.]

Section 3. Hazardous Waste Incinerator Permits. (1) For the purposes of determining operational readiness following completion of physical construction, the cabinet must 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 will 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 must 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 will 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 34:340 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 must establish conditions in the permit to a new hazardous waste incinerator to be effective during the trial burn.

(a) Applicants must 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 must 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 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 must be identified and the basis for their exclusion stated. The waste analysis must 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 cut-off 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 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 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 will specify as trial Principal Organic Hazardous Constituents (trial POHC's), those constituents for which destruction and removal efficiencies must be calculated during the trial burn. These trial POHC's will 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 will not present an imminent hazard to human health or the enviroment;

3. The trial burn will 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 must 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 detemine 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 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 must be submitted to the cabinet following the completion of the trial burn. The results of the trial burn must be included with Part B of the permit application as specified in Sections 9 and 10 of 401 KAR 38:070 and this 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 will 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 must 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 will review this statement and any other relevant information submitted with Part B of the permit applcation 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 to an existing hazardous waste incinerator may prepare and submit a trial burn plan and perform a trial burn in accordance with subsections (2)(b) through (i) of this regulation. Applicants who submit trial burn plans and receive approval before submission of a permit application must complete the trial burn and submit the results, specified in subsection (2)(f) of this regulation, with Part B of the permit application. If completion of this process conflicts with the date set for submission of the Part B application, the applicant must 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 must be conducted and the results submitted within a time period to be specified by the cabinet.

(5) In accordance with Section 1 of 401 KAR 34:080, prior to issuance of a trial burn permit, the applicant must 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 must 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 a 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 will establish, as requirements in the first phase of the facility permit, conditions for conducting the field test or laboratory analyses. These permit conditions will 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, post-demonstration clean-up activities, and any other conditions which the cabinet finds may be necessary under Section 3(3) of 401 KAR 34:220. The cabinet will 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 will 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 will be effective as specified by the cabinet in the permit.

(b) The second phase of the permit will 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 must 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 must 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 will 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 will 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 will 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 will 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 will 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 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 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 will terminate upon final action by the cabinet under a UIC program to issue or deny a UIC permit for the facility.

JACKIE SWIGART, Secretary
ADOPTED: June 10, 1983
RECEIVED BY LRC: June 14, 1983 at 11 a.m.
See public hearings scheduled on page 1.

NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION CABINET
Department for Environmental Protection
Division of Waste Management
(Proposed Amendment)

401 KAR 38:070. Application procedures.

RELATES TO: KRS 224.033, 224.036, 224.071, 224.087, *224.830 through* [224.835, 224.842, 224.855, 224.860, 224.862, 224.864, 224.866, 224.868, 224.871, 224.873, 224.874, 224.876,] 224.877, *224.994*

PURSUANT TO: KRS 13.082, *13.083, 224.033,* [224.017,] 224.866

NECESSITY AND FUNCTION: KRS 224.842 and 224.866 require any person who treats, stores, recycles or disposes of hazardous waste to first obtain a hazardous waste site or facility permit from the Natural Resources and Environmental Protection 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* [standards on] application procedures.

Section 1. *General Application Requirements. (1)* Permit application. Any person who is required to have a permit (including new applicants and permittees with expiring permits) shall complete, sign, and submit an application to the cabinet as described in Sections 1 through 6 of this regulation and 401 KAR 38:020. Persons currently

authorized with interim status under 401 KAR 38:020 shall apply for permits when required by the cabinet. Persons covered by permits by rule, Section 1[(1)] of 401 KAR *38:060* [38:010], need not apply. Procedures for applications, issuance and administration of emergency permits are found exclusively in Section *2* [4] of 401 KAR *38:060* [38:010].

(2) [Section 2.] Applicant; who applies? When a facility or activity is owned by one (1) person but is operated by another person, it is the operator's duty to obtain a permit, and the owner must also sign the permit application.

(3) [Section 3.] Completeness. The cabinet shall not issue a permit before receiving a complete application for a permit. An application for a permit is complete when the cabinet receives an application form and any supplemental information which is *required* [completed] to *determine the merits of the application* [its satisfaction]. The completeness of any application for a permit shall be judged independently of the status of any other permit application or permit for the same facility [or activity].

(4) [Section 4.] Information requirements. All applicants for permits shall provide the *applicable* [following] information *in compliance with 401 KAR 38:080 through 401 KAR 38:210* to the cabinet, using the application form provided by the cabinet [(additional information required of applicants is set forth in Sections 8 through 10 of this regulation and Sections 1 through 6 of 401 KAR 38:080)].

[(1) The activities conducted by the applicant which require him to obtain permits.]

[(2) Name, mailing address, and location of the facility for which the application is submitted.]

[(3) Up to four (4) SIC codes which best reflect the principal products or services provided by the facility.]

[(4) The operator's name, address, telephone number, ownership status, and status as federal, state, private, public, or other entity.]

[(5) Whether the facility is located in Indian lands.]

[(6) A listing of all permits or construction approvals received or applied for under any of the following programs:]

[(a) Hazardous waste management program under the Resource Conservation and Recovery Act (RCRA);]

[(b) UIC program under the Safe Drinking Water Act (SDWA);]

[(c) NPDES program under the Clean Water Act (CWA);]

[(d) Prevention of significant deterioration (PSD) program under the Clean Air Act (CAA);]

[(e) Nonattainment program under the Clean Air Act;]

[(f) National emission standards for hazardous pollutants (NESHAPS) preconstruction approval under the Clean Air Act;]

[(g) Ocean disposal permits under the Marine Protection Research and Sanctuaries Act;]

[(h) Dredge or fill permits under Section 404 of CWA; and]

[(i) Other relevant environmental permits, including air pollution, water quality and solid waste permits issued by the cabinet.]

[(7) A topographic map (or other map if a topographic map is unavailable) extending one (1) mile beyond the property boundaries of the source, depicting the facility and each of its intake and discharge structures; each of its hazardous waste treatment, storage, or disposal facilities; each well where fluids from the facility are injected underground; and those wells, springs, other surface water bodies, and drinking water wells listed in public records or otherwise known to the applicant within one-fourth (¼) mile of the facility property boundary.]

[(8) A brief description of the nature of the business.]

Section 2. Existing Hazardous Waste Sites or Facilities. (1) Owners and operators of existing hazardous waste sites or facilities must submit Part A of their permit application or its equivalent (Registration of Intent to Apply for a Permit) to the cabinet no later than November 19, 1980 or thirty (30) days after the date they first become subject to the standards set forth in 401 KAR Chapter 35, whichever first occurs.

(2) The cabinet may extend the date by which owners and operators of specified classes of existing hazardous waste management facilities must submit Part A of their permit application or its equivalent if the cabinet finds that:

(a) There has been substantial confusion as to whether the owners and operators of such facilities were required to file a permit application; and

(b) Such confusion is attributable to ambiguities in the waste management regulations.

(3) The cabinet may by compliance order extend the date by which the owner and operator of an existing hazardous waste site or facility must submit Part A of their permit application or its equivalent.

(4) Any time after promulgation of the appropriate regulatory requirement the owner and operator of an existing hazardous waste site or facility may be required to submit Part B of their permit application. Any owner or operator shall be allowed at least six (6) months from the date of request to submit Part B of the application. Any owner or operator of an existing hazardous waste site or facility may voluntarily submit Part B of the application at any time.

(5) Failure to furnish a requested Part B application on time, or to furnish in full the information required by the Part B application, is grounds for termination of interim status under 401 KAR 38:050.

Section 3. New Hazardous Waste Sites or Facilities. (1) Except as provided in subsection (3) of this section, no person shall begin physical construction of a new hazardous waste site or facility without having submitted Part A or its equivalent and Part B of the permit application and received an effective hazardous waste site or facility permit (see Section 12 of 401 KAR 38:050).

(2) An application for a permit for a new hazardous waste site or facility (including both Part A or its equivalent, and Part B) may be filed at any time after promulgation of the standards in 401 KAR 34:180, et seq., applicable to such facility. The application shall be filed with the cabinet. Except as provided in subsection (3) of this section, all applications must be submitted at least 180 days before physical construction is expected to commence.

(3) After November 19, 1980, but prior to the effective date of those standards in 401 KAR 34:180, et seq., which are applicable to his facility, a person may begin physical construction of a new hazardous waste site or facility, except for landfills, injection wells, land treatment facilities or surface impoundments (as defined in 401 KAR 30:010) without having received an effective hazardous waste site or facility permit, if prior to beginning physical construction, such person has:

(a) Obtained the federal, state and local approvals, permits, or certificates necessary to begin physical construction;

(b) Submitted Part A of the permit application or its equivalent; and

(c) Made a commitment to complete physical construction of the facility within a reasonable time. Such person may continue physical construction of the new hazardous waste site or facility after the effective date of the permitting standards in 401 KAR 34:180, et seq., applicable to his facility if he submits Part B of the permit application on or before the effective date of such standards (or on some later date specified by the cabinet). Such person must not operate the new hazardous waste site or facility without having receivd an effective hazardous waste site or facility permit.

Section 4. Updating Permit Applications. (1) If any owner or operator of a hazardous waste site or facility has filed Part A of a permit application or its equivalent and has not yet filed Part B, the owner or operator shall file an amended Part A application or its equivalent with the cabinet:

(a) No later than the effective date of regulatory provisions listing or designating wastes as hazardous in addition to those listed or designated previously in 401 KAR Chapter 31, if the facility is treating, storing or disposing of any of the newly listed or designated waste; or

(b) As necessary to comply with Section 3 of 401 KAR 38:020 for changes during interim status.

(2) The owner or operator of a facility who fails to comply with the updating requirements of subsection (1) of this section does not receive interim status as to the wastes not covered by a duly filed Part A application or its equivalent.

Section 5. Reapplications. Any hazardous waste site or facility with an effective permit shall submit a new application at least 180 days before the expiration date of the effective permit, unless permission for a later date has been granted by the cabinet. (The cabinet shall not grant permission for applications to be submitted later than the expiration date of the existing permit.)

Section *6.* [5.] Recordkeeping. Applicants shall keep records of all data used to complete permit applications and any supplemental information submitted under Section 1*(4)* [through 6 and 8 through 10] of this regulation and [Sections 1 through 6 of] 401 KAR 38:080 *through 38:210*, for a period of at least three (3) years from the date the application is signed.

[Section 6. Permit Requirements. (1) 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. Applications are not required for hazardous waste site or facility permits by rule (Section 1 of 401 KAR 38:010) or underground injections authorized by rule.]

[(2) The cabinet shall not begin the processing of a permit until the applicant has fully complied with the application requirements for that permit.]

[(3) Permit applications must comply with the signature and certification requirements of Section 7 of this regulation.]

Section 7. Signatures to Permit Applications and Reports. (1) Applications. All permit applications shall be signed as follows:

(a) For a corporation: by a principal executive officer of at least the level of vice-president;

(b) For a partnership or sole proprietorship: by a general partner or the proprietor, respectively; or

(c) For a municipality, state, federal, or other public agency: by either a principal executive officer or ranking elected official.

(2) Reports. All reports required by permits, and other information requested by the cabinet, shall be signed by a person described in subsection (1) of this section, or by a duly authorized representative of that person. A person is a duly authorized representative only if:

(a) The authorization is made in writing by a person described in subsection (1) of this section.

(b) The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity, such as the position of plant manager, operator of a well or a well field, superintendent, or position of equivalent responsibility (a duly authorized representative may thus be either a named individual or any individual occupying a named position); and

(c) The written authorization is submitted to the cabinet.

(3) Changes to authorization. If an authorization under subsection (2) of this section is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of subsection (2) of this section must be submitted to the cabinet prior to or together with any reports, information, or applications to be signed by an authorized representative.

(4) Certification. Any person signing a document under subsections (1) or (2) 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."

Section 8. *Confidentiality of Information.* [Contents of Part A Application or its equivalent. In addition to the information in Sections 1 through 6 of this regulation, Sections 5 and 7 of 401 KAR 38:010, and Section 5 of 401 KAR 38:040, Part A of the hazardous waste site or facility permit application or its equivalent (Registration of Intent to Apply for Permit) shall include the following information:]

(1) *Claims of confidentiality. In accordance with KRS 224.036, any information submitted to the cabinet pursuant to these regulations may be claimed as confidential by the submitter. Any such claim must be asserted at the time of submission in the manner prescribed on the application form or instructions or, in the case of other submissions, by stamping the words "confidential business information" on each page containing such information. If no claim is made at the time of submission, the cabinet may make the information available to the public without further notice. If a claim is asserted, the information will be treated in accordance with the procedures in KRS 224.036 (Public Information) and any other provision of the waste management regulations relating to confidentiality of information.* [Location. The latitude and longitude of the facility.]

(2) *Denial of claims of confidentiality. Claims that the name and address of any permit applicant or permittee is confidential will be denied.* [Owner information. The

name, address, and telephone number of the owner of the facility.]

[(3) Status of the facility and application. An indication of whether the facility is new or existing and whether it is a first or revised application.]

[(4) Scale drawing. For existing facilities, a scale drawing of the facility showing the location of all past, present, and future treatment, storage, and disposal areas.]

[(5) Photographs. For existing facilities, photographs of the facility clearly delineating all existing structures: existing treatment, storage, and disposal areas; and sites of future treatment, storage and disposal areas.]

[(6) Process description. A description of the processes to be used for treating, storing and disposing of hazardous waste, and the design capacity of these items.]

[(7) Information on wastes. A specification of the hazardous wastess listed or designated under 401 KAR Chapter 31 to be treated, stored, or disposed at the facility, an estimate of the quantity of such wastes to be treated, stored, or disposed annually, and a general description of the processes to be used for such wastes.]

[Section 9. Contents of Part B Application. Part B information requirements presented below 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. Certain technical data, such as design drawings and specifications, and engineering studies, shall be certified by a registered professional engineer. Part B of the hazardous waste site or facility application must include the information requirements in Section 10 of this regulation and Sections 1 through 6 of 401 KAR 38:080.]

[Section 10. General Information Requirements. The following information is required for all hazardous waste sites or facilities, except as 401 KAR 34:010, Section 1 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 401 KAR 34:020, Section 4(2) and, if applicable, Section 4(3) of 401 KAR 34:020.]

[(4) A description of the security procedures and equipment required by 401 KAR 34:020, Section 5, or a justification demonstrating the reasons for requesting a waiver of this requirement.]

[(5) A copy of the general inspection schedule required by 401 KAR 34:020, Section 6(2) including, where applicable, as part of the inspection schedule, specific requirements in Section 5 of 401 KAR 34:180, Section 4 of 401 KAR 34:190, Section 5 of 401 KAR 34:200, and Section 5 of 401 KAR 34:210.]

[(6) A justification of any request for a waiver(s) of the preparedness and prevention requirements of 401 KAR 34:030.]

[(7) A copy of the contingency plan required by 401 KAR 34:040, including, where applicable, as part of the contingency plan, specific requirements in 401 KAR 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 forklifts);]

[(b) Prevent runoff 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).]

[(9) A description of precautions to prevent accidental ignition or reaction of ignitable, reactive, or incompatible wastes as required to demonstrate compliance with 401 KAR 34:020, Section 8, including documentation demonstrating compliance with 401 KAR 34:020, Section 8(3).]

[(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, 401 KAR 34:020, Section 9(1), the owner or operator of a new facility must 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 must be of such quality to be acceptable to geologists experienced in identifying and evaluating seismic activity. The information submitted must show that either: No faults which have had displacement in Holocene time are present, or no lineations which suggest the presence of a fault (which have displacment in Holocene time) within 3,000 feet of a facility are present, based on data from: published geologic studies, aerial reconnaissance of the area within a five (5) mile radius from the facility; an analysis of aerial photographs covering a 3,000 foot radius of the facility, and if needed to clarify the above data, a reconnaissance based on walking portions of the area within 3,000 feet of the facility, or 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 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 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 will 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 floodplain. This identification must 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) which must be considered in designing, constructing, operating, or maintaining the facility to withstand washout from a 100-year flood.]

[(d) Owners and operators of facilities located in the 100-year floodplain must provide the following information: Engineering analysis to indicate the various hydrodynamic and hydrostatic forces expected to result at the site as a consequence of a 100-year flood; structural or other engineering studies showing the design of operational units (e.g., tanks, incinerators) and flood protection devices (e.g., floodwalls, dikes) at the facility and how these will prevent washout; if applicable, and in lieu of paragraph (c) of this subsection, a detailed description of procedures to be followed to remove hazardous waste to safety before the facility is flooded, including: 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; a description of the location(s) to which the waste will be moved and demonstration that those facilities will be eligible to receive hazardous waste in accordance with the regulations under 401 KAR Chapters 34, 35 and 38; the planned procedures, equipment, and personnel to be used and the means to ensure that such resources will be available in time for use; the potential for accidental discharges of the waste during movement.]

[(e) Existing facilities NOT in compliance with 401 KAR 34:020, Section 9(2) shall provide a plan showing how the facility will be brought into compliance and a schedule for compliance.]

[(f) The owner or operator of a facility shall demonstrate compliance with Section 5 of 401 KAR 35:010 and with 401 KAR 30:030. This compliance shall be demonstrated by submitting a groundwater monitoring plan to the cabinet including, but not limited to, data and reports required by Section 5 of 401 KAR 35:010.]

[(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 401 KAR 34:020, Section 7. A brief description of how training will be designed to meet actual job tasks in accordance with requirements in 401 KAR 34:020, Section 7(1)(c).]

[(13) A copy of the closure plan and, where applicable, the post-closure plan required by Sections 3 and 8 of this regulation.]

[(14) For existing facilities, documentation that a notice has been placed in the deed or appropriate alternate instrument as required by Section 10 of 401 KAR 34:070.]

[(15) The most recent closure cost estimate for the facility prepared in accordance with Section 1 of 401 KAR 34:090 plus a copy of the financial assurance mechanism adopted in compliance with 401 KAR 34:090, Sections 2 through 12.]

[(16) Where applicable, the most recent post-closure cost estimate for the facility prepared in accordance with Section 1 of 401 KAR 34:100 plus a copy of the financial assurance mechanism adopted in compliance with 401 KAR 34:100, Sections 2 through 12.]

[(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 401 KAR 34:120, Section 1, and if applicable, 401 KAR 34:120, Section 2, that the owner or operator plans to have in effect before initial receipt of hazardous waste for 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 must be shown on the map. The contour interval must 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 should 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 floodplain area;]

[(c) Surface waters including intermittent streams;]

[(d) Surrounding land uses (residential, commercial, agricultural, recreational);]

[(e) A wind rose (i.e., prevailing windspeed 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, runoff control systems, access and internal roads, storm, sanitary, and process sewerage systems, loading and unloading areas, fire control facilities, 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 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 must submit to the cabinet a plan in accordance with KRS 224.866(1). The plan must address each of the following issues specifically, must document the applicant's decisions with respect to the proposal, must 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 must include:]

[(a) An evaluation of alternatives including other site locations and treatment, storage and disposal approaches

(see KRS 224.866(1)(a));]

[(b) An evaluation of the public health, safety and environmental aspects of the proposal (see KRS 224.866(1)(b));]

[(c) An evaluation of the social and economic impacts of the proposal on the affected community (see KRS 224.866(1)(c));]

[(d) An evaluation of mitigation procedures to alleviate problems identified in paragraphs (a), (b), and (c) of this subsection (see KRS 224.866(1)(d)); and]

[(e) An evaluation of the relationship of the proposal to local planning and existing development (see KRS 224.866(1)(e)).]

[(20) Applicants may be required to submit such information as may be necessary to enable the cabinet to carry out its duties under other state laws as required in this chapter.]

[Section 11. Specific Information Requirements. Sections 1 through 6 of 401 KAR 38:080 contains additional information required from owners or operators of specific types of hazardous waste sites or facilities that are used or to be used for storage or treatment.]

JACKIE SWIGART, Secretary
ADOPTED: June 10, 1983
RECEIVED BY LRC: June 14, 1983 at 11 a.m.
See public hearings scheduled on page 1.

NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION CABINET
Department for Environmental Protection
Division of Waste Management
(Proposed Amendment)

401 KAR 38:080. *Contents of Part A application.* [Specific permitting requirements.]

RELATES TO: KRS 224.033, 224.036, 224.071, 224.087, *224.830 through* [224.835, 224.842, 224.855, 224.860, 224.862, 224.864, 224.866, 224.868, 224.871, 224.873, 224.874, 224.876,] 224.877, *224.994*
PURSUANT TO: KRS 13.082, 224.017, 224.866
NECESSITY AND FUNCTION: KRS 224.842 and 224.866 require any person who treats, stores, recycles or disposes of hazardous waste to first obtain a hazardous waste site or facility permit from the Natural Resources and Environmental Protection 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 content of the Part A application* [specific facility permitting requirements].

Section 1. *Part A Application. Part A of the hazardous waste site or facility permit application or its equivalent (Registration of Intent to Apply for a Permit) shall include the following information:* [Permit Requirements for Containers. For facilities that store containers of hazardous waste, except as otherwise provided in 401 KAR 34:180, the following information is required:]

(1) *The activities conducted by the applicant which require him to obtain a hazardous waste site or facility permit under KRS Chapter 224.* [A description of the containment system to demonstrate compliance with 401 KAR 34:180. The description must show at least the following:]

[(a) Basic design parameters, dimensions, and materials of construction;]

[(b) How the design promotes drainage or how containers are kept from contact with standing liquids in the containment system;]

[(c) Capacity of the containment system relative to the number and volume of containers to be stored;]

[(d) Provisions for preventing or managing run-on; and]

[(e) How accumulated liquids can be analyzed and removed to prevent overflow.]

(2) *Name, mailing address, and location, including latitude and longitude of the facility for which the application is submitted.* [For storage areas that store containers holding wastes that do not contain free liquids, a demonstration of compliance with 401 KAR 34:180, Section 6, including:]

[(a) Test procedures and results or other documentation or information to show that the wastes do not contain free liquids; and]

[(b) A description of how the storage area is designed or operated to drain and remove liquids or how containers are kept from contact with standing liquids.]

(3) *Up to four (4) SIC codes which best reflect the principal products or services provided by the facility.* [Sketches, drawings, or data demonstrating compliance with 401 KAR 34:180, Section 7 (location of buffer zone and containers holding ignitable or reactive wastes) and 401 KAR 34:180, Section 8 (location of incompatible wastes), where applicable.]

(4) *The operator's name, address, telephone number, ownership status, and status as federal, state, private, public or other entity.* [Where incompatible wastes are stored or otherwise managed in containers, a description of the procedures used to ensure compliance with 401 KAR 34:180, Section 8(1) and (2), and 401 KAR 34:020, Section 8(2) and (3).]

(5) The name, address, and phone number of the owner of the facility.

(6) If the U.S. government identifies any Indian lands in Kentucky, whether the facility is located on such Indian lands.

(7) An indication of whether the facility is new or existing and whether it is a first or revised application.

(8) For existing facilities:

(a) A scale drawing of the facility showing the location of all past, present, and future treatment, storage, and disposal areas; and

(b) Photographs of the facility clearly delineating all existing structures; existing treatment, storage, and disposal areas; and sites of future treatment, storage, and disposal areas.

(9) A description of the process to be used for treating, storing and disposing of hazardous waste, and the design capacity of these items.

(10) A specification of the hazardous wastes listed or designated under 401 KAR Chapter 31 to be treated, stored, or disposed at the facility, an estimate of the quantity of such wastes to be treated, stored, or disposed annually, and a general description of the processes to be used for such wastes.

(11) A listing of all permits or construction approvals received or applied for under any of the following programs:

(a) Hazardous waste management program under RCRA.

(b) UIC program under the SWDA.

(c) NPDES program under the CWA, or the KPDES program under KRS Chapter 224 and as specified in 401 KAR 5:050 through 5:085.

(d) Prevention of Significant Deterioration (PSD) program under KRS Chapter 224 and as specified in 401 KAR 51:017.

(e) Nonattainment program under KRS Chapter 224 and as specified in 401 KAR 51:052.

(f) National Emission Standards for Hazardous Pollutants (NESHAPS) preconstruction approval under KRS Chapter 224 and as specified in 401 KAR Chapter 57.

(g) Dredge or fill permits under Section 404 of the CWA.

(h) Other relevant environmental permits, including state permits.

(12) A topographic map (or other map if a topographic map is unavailable) extending one (1) mile beyond the property boundaries of this source, depicting the facility and each of its intake and discharge structures; each of its hazardous waste treatment, storage, or disposal facilities; each well where fluids from the facilty are injected underground; and those wells, springs, other surface water bodies, and drinking water wells listed in public records or otherwise known to be applicant within one-quarter (¼) mile of the facility property boundary.

(13) A brief description of the nature of the business.

[Section 2. Permit Requirements for Tanks. For facilities that use tanks to store, or treat hazardous waste, except as otherwise provided in 401 KAR 34:190, Section 1, description of design and operation procedures which demonstrate compliance with the requirements of 401 KAR 34:190, Sections 2, 3, 6, and 7, including:]

[(1) References to design standards or other available information used (or to be used) in design and construction of the tank;]

[(2) A description of design specifications including identification of construction materials and lining materials (include pertinent characteristics such as corrosion or erosion resistance);]

[(3) Tank dimensions, capacity, and shell thickness;]

[(4) A diagram of piping, instrumentation, and process flow;]

[(5) Description of feed systems, safety cutoff, bypass systems, and pressure controls (e.g., vents); and]

[(6) Description of procedures for handling incompatible, ignitable, or reactive wastes, including the use of buffer zones.]

[Section 3. Permit Requirements for Surface Impoundments. For facilities that store, or treat hazardous waste in surface impoundments, except as otherwise provided in 401 KAR 34:200, Section 1, the owner or operator must submit detailed plans and specifications accompanied by an engineering report which must collectively include the information itemized in subsections (1) through (10). For new facilities, the plans and specifications must be in sufficient detail to provide complete information to a contractor hired to build the facility even if the owner or operator intends to construct the facility without hiring a contractor. For existing facilities, comparable detail must be provided, but the form of presentation need not assume contractor construction except to the extent that the facility will be modified.]

[(1) A statement of the minimum freeboard to be maintained at the facility and the basis of the design to demonstrate compliance with freeboard requirements of 401 KAR 34:200, Section 2(1) and (2). For flow through facilities include a hydraulic profile;]

[(2) Detailed drawings of the structure which is or will be provided to immediately stop flow into the impoundment to comply with 401 KAR 34:200, Section 2(2) or, if no structure is needed to comply with 401 KAR 34:200, Section 2(3), a description of the means by which waste additions will be stopped;]

[(3) Detailed drawings of any dikes which exist or will be constructed;]

[(4) A basis of design and design analysis of any dikes to comply with 401 KAR 34:200, Section 2(4) and Section 4(1). The design analysis must show that any dike will meet the requirements of 401 KAR 34:200, Section 5(3)(a);]

[(5) Detailed design drawings and specifications of the liner(s) and the leachate detection, collection, and removal system and the basis of design and design analysis to comply with 401 KAR 34:200, Sections 2(3), 2(5), 4(3), and 4(4);]

[(6) Liner installation instructions to comply with the requirements of 401 KAR 34:200, Section 5(1). For existing facilities, when the owner or operator proposes to rely on existing liners, a description of the installation procedures used;]

[(7) Design details of the leachate removal system, the basis of design, and a description of the operating procedures to be used to ensure free flow from the collection system in accordance with 401 KAR 34:200, Section 3(3);]

[(8) Design plans and specifications and basis of design of any structures needed to comply with 401 KAR 34:200, Section 3(5);]

[(9) A description of the maintenance and repair procedures proposed to comply with 401 KAR 34:200, Section 3(4) and 401 KAR 34:020, Section 6(3);]

[(10) A description of the operating procedures that will ensure compliance with 401 KAR 34:200, Sections 8 and 9; and]

[(11) A certification by a qualified engineer which complies with 401 KAR 34:200, Section 5(3). The owner or operator of a new facility must submit a statement by a qualified engineer that he will provide such a certification upon completion of construction in accordance with the plans and specifications.]

[Section 4. Permit Requirements for Waste Piles. For facilities that store, or treat hazardous waste in waste piles, except as otherwise provided in 401 KAR 34:210, Section 1 or in Section 5 of this regulation:]

[(1) A description of practices to control wind dispersal (e.g., cover or frequent wetting) of hazardous waste in piles so that the cabinet where necessary can specify appropriate control measures.]

[(2) A detailed engineering description of the facility design including:]

[(a) A description of measures to divert run-on away from the pile;]

[(b) A description of the leachate and run-off collection and control system;]

[(c) A description of the foundation supporting the base;]

[(d) Design specifications of the pile base and liner (or liners) including the estimated containment life of the base and the permeability of the liner(s);]

[(e) Estimated life of the hazardous waste pile; and]

[(f) If applicable under 401 KAR 34:210, Section 4(1)(c), a description of the leachate detection, collection, and removal system including the system's relation to the water table and a description of any efforts to control the water table.]

[(3) A detailed description of the facility operating procedures which demonstrate compliance with 401 KAR 34:210, Sections 3, 4, and 7 (ignitable or reactive waste)

and 401 KAR 34:210, Section 8 (incompatible waste) including:]

[(a) A description of efforts to protect the containment system from plant growth which could puncture any component of the system;]

[(b) A description of design and operating procedures to properly manage and dispose of any leachate that is a hazardous waste;]

[(c) A description and listing of all equipment and procedures used to place the waste in or on the pile or to clean and expose the liner surface; and]

[(d) A description of efforts to separate hazardous waste that is incompatible with any waste or material stored nearby including the design specifications of any dike, berm, wall, or other device used to separate the materials.]

[Section 5. Permit Requirements for Waste Piles Which Do Not Contain Free Liquids. For waste piles used to store or treat only hazardous wastes that do not contain free liquids under the special requirements of 401 KAR 34:210, Section 1, a demonstration of compliance with those special requirements including:]

[(1) Test procedures and results or other documentation or information to show that the wastes do not contain free liquids and that the wastes will not generate leachate during the time the waste is managed in the pile by decomposition or other reactions;]

[(2) A description of how the pile is protected from precipitation by a structure so that neither run-off nor leachate is generated including a detailed description of the structure;]

[(3) A description of how the pile is protected from dispersal of the waste by wind, where necessary, and from surface water run-on; and]

[(4) A detailed engineering description of the facility design and a detailed description of the facility operating procedures which demonstrate compliance with 401 KAR 34:210, Section 7 (ignitable and reactive wastes), and 401 KAR 34:210, Section 8 (incompatible waste), including information required by Section 6 of this regulation and demonstrate that liquids or materials containing free liquids are not placed in the pile.]

[Section 6. Permit Requirements for Incinerators. For facilities that incinerate hazardous waste, except as 401 KAR 34:240, Section 1 provides otherwise, the applicant must fulfill the requirements of subsections (1), (2), or (3) of this section.]

[(1) When seeking exemption under 401 KAR 34:240, Section 1(2) (ignitable waste only) that the waste is either:]

[(a) Listed as a hazardous waste in 401 KAR 31:040, only because it is ignitable (Hazard Code I); or]

[(b) That the waste has been tested against the characteristics of hazardous waste under 401 KAR 31:030, and that it meets only the ignitability characteristic, and includes none of the hazardous constituents listed in 401 KAR 31:170; or]

[(2) Submit results of a trial burn conducted in accordance with and including all the determinations required by 401 KAR 38:010 and 401 KAR 38:080; or]

[(3) In lieu of a trial burn, the applicant may submit the following information:]

[(a) An analysis of each waste or mixture of wastes to be burned including:]

[1. Heat value of the waste in the form and composition in which it will be burned;]

[2. Viscosity (if applicable), or description of physical form of the waste;]

[3. An identification of any hazardous organic constituents listed in 401 KAR 31:170, which are present in the 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 must be identified and the basis for their exclusion stated. The waste analysis must rely on analytical techniques specified in "Test Methods for the Evaluation of Solid Waste, Physical/Chemical Methods," 401 KAR 31:120 or their equivalent;]

[4. An approximate quantification of the hazardous constituents identified in the waste, within the precision produced by the analytical methods specified in "Test Methods for the Evaluation of Solid Waste, Physical/Chemical Methods;"]

[5. A quantification of those hazardous constituents in the waste which may be designated as POHC's based on data submitted from other trial or operational burns which demonstrate compliance with the performance standard in 401 KAR 34:240, Section 4.]

[(b) A detailed engineering description of the incinerator, including:]

[1. Manufacturer's name and model number of incinerator;]

[2. Type of incinerator;]

[3. Linear dimension of incinerator unit including cross sectional area of combustion chamber;]

[4. Description of auxiliary fuel system (type/feed);]

[5. Capacity of prime mover;]

[6. Description of automatic waste feed cutoff system(s);]

[7. Stack gas monitoring and pollution control monitoring system;]

[8. Nozzle and burner design;]

[9. Construction materials;]

[10. Location; and]

[11. Description of temperature, pressure, and flow indicating devices and control devices.]

[(c) A description and analysis of the waste to be burned compared with the waste for which data from operational or trial burns are provided to support the contention that a trial burn is not needed. The data should include those items listed in subsection (3) of this section. This analysis should specify the POHC's which the applicant has identified in the waste for which a permit is sought, and any differences from the POHC's in the waste for which burn data are provided.]

[(d) The design and operating conditions of the incinerator unit to be used, compared with that for which comparative burn data are available.]

[(e) A description of the results submitted from any previously conducted trial burn(s) including:]

[1. Sampling and analysis techniques used to calculate performance standards in 401 KAR 34:240, Section 4;]

[2. Methods and results of monitoring temperatures, waste feed rates, air feed rates, and carbon monoxide;]

[3. Identification of any hazardous combustion byproducts detected;]

[4. The certification and results required by Section 7.]

[(f) The expected incinerator operation information to demonstrate compliance with 401 KAR 34:240, Sections 4 and 6 including:]

[1. Expected carbon monoxide (CO) level in the stack exhaust gas;]

[2. Waste feed rate;]

[3. Combustion zone temperature;]

[4. Air feed rate;]

[5. Expected stack gas volume, flow rate, and temperature;]

[6. Computed residence time for waste in the combustion zone;]

[7. Expected hydrochloric acid removal efficiency;]

[8. Expected fugitive emissions and their control procedures; and]

[9. Proposed waste feed cut-off limits based on the identified significant operating parameters.]

[(g) Such supplemental information as the cabinet finds necessary to achieve the purposes of this subsection;]

[(h) Waste analysis data, including that submitted in subsection (2) of this section, sufficient to allow the cabinet to specify as permit Principal Organic Hazardous Constituents (permit POHC's) those constituents for which destruction and removal efficiencies will be required.]

[(4) The cabinet shall approve a permit application without a trial burn if it finds that:]

[(a) The wastes are sufficiently similar; and]

[(b) The incinerator units are sufficiently similar, and the data from other trial burns are adequate to specify (under 401 KAR 34:240, Section 6) operating conditions that will ensure that the performance standards in 401 KAR 34:240, Section 6 will be met by the incinerator.]

[Section 7. Trial Burn Permits. For the purposes of determining feasibility of compliance with the incinerator performance standards in Section 5 of 401 KAR 34:240, and of determining adequate incinerator operating conditions under Section 6 of 401 KAR 34:240, the cabinet may issue a trial burn permit to a facility to allow short term operation of a hazardous waste incinerator subject to subsections (1) through (5) of this section.]

[(1) The trial burn must be conducted in accordance with a trial burn plan prepared by the applicant and approved by the cabinet. The trial burn plan will then become a condition of the permit. The trial burn plan will include the following information:]

[(a) An analysis of each waste or mixture of wastes to be burned which includes:]

[1. Heat value of the waste in the form and composition in which it will be burned.]

[2. Viscosity (if applicable) or description of physical form of the waste.]

[3. An identification of any hazardous organic constituents listed in 401 KAR Chapter 31, which are present in the waste to be burned, except that the applicant need not analyze for constituents listed in 401 KAR Chapter 31, which would reasonably not be expected to be found in the waste. The constituents excluded from analysis must be identified and the basis for their exclusion stated. The waste analysis must rely on analytical techniques specified in "Test Methods for the Evaluation of Solid Waste, Physical/Chemical Methods" referenced in 401 KAR 31:100 to 31:170, or their equivalent.]

[4. An approximate quantification of the hazardous constituents identified in the waste, within the precision produced by the analytical methods specified in "Test Methods for the Evaluation of Solid Waste, Physical/Chemical Methods."]

[5. A quantification of those hazardous constituents in the waste which may be designated as Principal Organic Hazardous Constituents (POHC's) based on data submitted from other trial or operational burns which demonstrate compliance with the performance standards in Section 5 of 401 KAR 34:240.]

[(b) A detailed engineering description of the incinerator for which the trial burn permit is sought including:]

[1. Manufacturer's name and model number of incinerator (if available);]

[2. Type of incinerator;]

[3. Linear dimensions of the incinerator unit including the cross sectional area of the combustion chamber;]

[4. Description of the auxiliary fuel system (type/feed);]

[5. Capacity of prime mover;]

[6. Description of automatic waste feed cut-off system(s);]

[7. Stack gas monitoring and pollution control equipment;]

[8. Nozzle and burner design;]

[9. Construction materials; and]

[10. Location and description of temperature, pressure, and flow indicating and control devices.]

[(c) 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) 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 subsection (4) of this section.]

[(e) A detailed test protocol, including, for each waste identified, the ranges of temperature, waste feed rate, air feed rate, use of auxiliary fuel, and any other relevant parameters that will be varied to affect the destruction and removal efficiency of the incinerator.]

[(f) A description of, and planned operating conditions for, any emission control equipment which will be used.]

[(g) Procedures for rapidly stopping waste feed, shutting down the incinerator, and controlling emissions in the event of an equipment malfunction.]

[(h) Such other information as the cabinet reasonably finds necessary to determine whether to approve the trial burn in light of the purposes of this section and the criteria in subsection (4) of this section.]

[(2) 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 section.]

[(3) Based on the waste analysis data in the trial burn plan, the cabinet will specify as trial Principal Organic Hazardous Constituents (trial POHC's) those constituents for which destruction and removal efficiencies must be calculated during the trial burn. These trial POHC's will 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 Chapter 31, the hazardous waste constituent or constituents identified in 401 KAR Chapter 31 as the basis for listing.]

[(4) The cabinet shall approve a trial burn plan if it finds that:]

[(a) The trial burn is likely to determine whether the incinerator performance standards required by Section 5 of 401 KAR 34:240 can be met;]

[(b) The trial burn itself will not present an imminent hazard to human health or the environment;]

[(c) The trial burn will help the cabinet to determine operating requirements to be specified under Section 6 of 401 KAR 34:240; and]

[(d) The information sought in subsection (4)(a) and (c) of this section cannot reasonably be developed through

other means.]

[(5) During each approved trial burn (or as soon after the burn as is practicable), the applicant must make the following determinations:]

[(a) A quantitative analysis of the trial POHC's in the waste feed to the incinerator;]

[(b) A quantitative analysis of the exhaust gas to determine the concentration and mass emissions of the trial POHC's, CO_2, O_2, and hazardous combustion by-products;]

[(c) A quantitative analysis of the scrubber water (if any), ash residues, and other residues, for the trial POHC's;]

[(d) A total mass balance of the trial POHC's in the waste;]

[(e) A computation of destruction and removal efficiency (DRE), in accordance with the DRE formula specified in Section 5 of 401 KAR 34:240;]

[(f) If the waste feed contains more than 0.5 percent chlorine, a computation of chlorine removal efficiency, in accordance with Section 5 of 401 KAR 34:240;]

[(g) A computation of particulate emissions, in accordance with 401 KAR 34:240, Section 5;]

[(h) An identification of sources of fugitive emissions and their means of control;]

[(i) A measurement of average, maximum, and minimum temperature, and air feed rates;]

[(j) A continuous measurement of CO in the exhaust gas; and]

[(k) Such other information as the cabinet may specify as necessary to ensure that the trial burn will determine compliance with the performance standard in Section 5 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.]

[(6) 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 the results of all the determinations required in subsection (5) of this section. To the extent possible, this submission shall be made within thirty (30) days of the completion of the trial burn, or sooner if the cabinet so requests.]

[(7) All data collected during any trial burn must be submitted to the cabinet following the completion of the trial burn. The results of the trial burn must be included with Part B of the permit application as specified in Sections 9 and 10 of 401 KAR 38:070 and Section 1 through 6 of this regulation, if a permit application is submitted.]

[(8) 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.]

JACKIE SWIGART, Secretary
ADOPTED: June 10, 1983
RECEIVED BY LRC: June 14, 1983 at 11 a.m.
See public hearings scheduled on page 1.

NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION CABINET
Department for Environmental Protection
Division of Waste Management
(Proposed Amendment)

401 KAR 39:010. *Generator registration* [General provisions on] fees.

RELATES TO: KRS 224.033, 224.864, 224.866, 224,871
PURSUANT TO: KRS 13.082, *13.083,* 224.017, 224.033, 224.871
NECESSITY AND FUNCTION: KRS 224.033(20) states that the Natural Resources and Environmental Protection Cabinet may provide by regulation for a reasonable schedule of fees for the cost of processing applications for permits, exemptions, and partial exemptions. KRS 224.871 requires the cabinet to promulgate regulations requiring the payment of reasonable fees for hazardous waste registration certificates and permits. The purpose of this chapter [and regulation] is to establish a fee schedule for hazardous waste *management* [permits]. *This regulation establishes the fees for the registration of hazardous waste generators.*

Section 1. Applicability. This regulation *applies to all generators of hazardous waste in Kentucky who are required by Section 3 of 401 KAR 32:010 to register with the cabinet* [relating to fees applies to all applicants, registrants, and permittees of hazardous waste, except publicly-owned facilities].

Section 2. Schedule of Fees for Application for Registration [and Annual Registration Renewal]. All applications for registration as a hazardous waste generator [, recycler, or annual renewal of either,] shall be accompanied by the appropriate fee set forth below:

(1) The fee for registration [or renewal] as a hazardous waste generator [, or recycler,] shall be based on the *number of* [quantity of] hazardous waste*streams* generated [or recycled] according to the following schedule:

Number of Wastestreams	*Registration Fee*
1-5	*$200*
6-10	*250*
11-15	*300*
16-20	*350*
21-25	*400*
26-30	*450*
30 or more	*500*

[Quantity in Tons	Registration Fee
13.3—100	$200
101—300	300
301—500	400
501 or more	500]

(2) Modification fee. If a registrant desires to increase by an additional hazardous waste the number of hazardous wastes he generates, [or recycles,] the fee for the processing of such modification shall be fifty dollars ($50) [for a minor modification and $100 for a major modification].

Section 3. *Submittal of Fee. The appropriate fee shall be submitted to the cabinet with the application for*

registration. The check should be made payable to the Kentucky State Treasurer. [Computation of Annual Tonnage. For the purpose of this regulation, the annual tonnage of hazardous waste generated by a person will be based on the amount of hazardous waste generated by that person during the previous year in the form shipped for disposal or storage including water or other non-hazardous substance co-disposed. If the person did not generate any hazardous waste in the previous year, then the initial tonnage will be estimated by the cabinet based upon reports furnished to the cabinet by the person. On-site recycling or treatment processes by a generator may be considered to be a part of the generation process at the discretion of the cabinet and annual tonnage may be assessed on the quantity of hazardous residue from such on-site recycling or treatment.]

[Section 4. Schedule of Fees for Application for Permits and Annual Permit Renewal. (1) All applications for permits for the treatment, storage, and disposal of hazardous waste or annual renewals thereof, shall be accompanied by the appropriate fee set forth below:]

[(a) For a disposal facility, the permit fee shall be $5,000.]

[(b) For the treatment, incineration, or storage of hazardous waste, the permit fee shall be $1,000.]

[(2) A separate hazardous waste permit is required for treatment, storage, recycling, or disposal of hazardous waste.]

[Section 5. Permit Modification Fee. If a permittee desires to increase, by an additional hazardous waste, the number of hazardous wastes he treats, stores, recycles, or disposes, the fee for the processing of such permit modification shall be $150.]

[Section 6. Exemption from Fees. Publicly-owned facilities shall be exempt from the payment of fees as set forth in this regulation, but shall comply with the other applicable provisions of these regulations. (Recodified from 401 KAR 2:080, eff. 3-1-83.)]

JACKIE SWIGART, Secretary
ADOPTED: June 14, 1983
RECEIVED BY LRC: June 14, 1983 at 11 a.m.
See public hearings scheduled on page 1.

NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION CABINET
Department for Environmental Protection
Division of Waste Management
(Proposed Amendment)

401 KAR 40:010. General enforcement provisions.

RELATES TO: KRS 224.032, 224.033, 224.071, 224.081, 224.083, *224.830 through 224.877,* [224.866,] 224.994

PURSUANT TO: KRS 13.082, *13.083, 224.033* [224.017, 224.866]

NECESSITY AND FUNCTION: KRS 224.033 requires the Natural Resources and Environmental Protection Cabinet to inspect any property or premises for the purpose of investigating either actual or suspected sources of pollution or contamination or for the purpose of ascertaining compliance or noncompliance with KRS Chapter 224 or the regulations promulgated pursuant thereto. KRS 224.994 permits the Natural Resources and Environmental Protection Cabinet to assess civil and criminal penalties against any person who fails to perform any duties imposed by KRS Chapter 224, the regulations promulgated pursuant to KRS Chapter 224 or any determination or order of the cabinet. This chapter establishes standards for enforcement and compliance monitoring of hazardous waste *and solid waste management and practices.* The enforcement and compliance monitoring standards of this chapter are for those activities and hazardous waste *and solid waste* sites or facilities regulated pursuant to 401 KAR Chapters 30 through *47* [40]. This regulation establishes general enforcement provisions for the hazardous waste management regulations.

Section 1. Enforcement. The requirements of *401 KAR Chapters 30 through 47* [this chapter] shall be enforced by the secretary or any duly authorized representative of the cabinet. *Enforcement of these requirements shall be in accordance with the provisions of this chapter and KRS Chapter 224 to the extent such provisions provide fair and orderly fulfillment of the duties and powers of the secretary and the Natural Resources and Environmental Protection Cabinet. This chapter, however, shall in no way limit or prevent the secretary or the Natural Resources and Environmental Protection Cabinet from exercising any power or authority granted or vested it by the laws of the Commonwealth.*

Section 2. Inspection. In accordance with the provisions of this chapter, the cabinet shall conduct or cause to be conducted such inspections, studies, investigations or other determinations as it deems reasonable and necessary to obtain information and evidence with which to ensure that waste management and disposal practices are conducted in accordance with the provisions of KRS Chapter 224, 401 KAR Chapters 30 through 40, all terms and conditions of a permit, and any order of the secretary.

Section 3. Compliance. It shall be the duty of any person affected by the provisions of KRS Chapter 224, 401 KAR Chapters 30 through 47, any condition of a permit or order of the secretary pertaining to hazardous or solid waste management or disposal activities to demonstrate compliance with any such provision, condition or order. Failure or inability to demonstrate compliance may be presumed by the secretary or any duly authorized representative of the cabinet to mean such person has not complied with that provision, condition or order for the purpose of proceeding with any action contemplated by this chapter.

JACKIE SWIGART, Secretary
ADOPTED: June 10, 1983
RECEIVED BY LRC: June 14, 1983 at 11 a.m.
See public hearings scheduled on page 1.

NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION CABINET
Department for Environmental Protection
Division of Waste Management
(Proposed Amendment)

401 KAR 40:020. Inspections.

RELATES TO: KRS 224.032, 224.033, 224.071, 224.081, 224.083, *224.830 through 224.877,* [224.866,] 224.994

PURSUANT TO: KRS 13.082, *13.083, 224.033* [224.017, 224.866]

NECESSITY AND FUNCTION: KRS 224.033 requires the Natural Resources and Environmental Protection Cabinet to inspect any property or premises for the purpose of investigating either actual or suspected sources of pollution or contamination or for the purpose of ascertaining compliance or noncompliance with KRS Chapter 224 or the regulations promulgated pursuant thereto. This chapter establishes standards for enforcement and compliance monitoring of hazardous waste *and solid waste management and practices* . The enforcement and compliance monitoring standards of this chapter are for those activities and hazardous waste *and solid waste* sites or facilities regulated pursuant to 401 KAR Chapters 30 through *47* [40]. This regulation establishes standards for inspections and notification of deficiencies.

Section 1. Inspections. *In accordance with the provisions of this chapter, the cabinet shall conduct or cause to be conducted such inspections, studies, investigations or other determinations as it deems reasonable and necessary to obtain information and evidence with which to ensure that solid waste and hazardous waste sites or facilities are conducted in accordance with the provisions of KRS Chapter 224, 401 KAR Chapters 30 through 47, and all terms and conditions of any permit.*

(1) The secretary or any duly authorized representative of the cabinet upon presentation of proper identification and authority may:

(a) Enter any premises registered to generate hazardous waste, any permitted hazardous waste facility, *any permitted solid waste facility* or any premises or facility that the cabinet has reasonable cause to believe is generating hazardous waste or constitutes an unpermitted *solid or* hazardous waste facility, inspect the premises, and gather evidence on existing conditions and procedures;

(b) Obtain from any permittee, or from any permitted *or unpermitted* premises, representative samples of waste *or any material believed to be polluting or contaminating the environment*;

(c) Conduct tests, analyses and evaluations to determine whether the requirements of the [hazardous] waste *management* regulations and KRS Chapter 224 are being met;

(d) Obtain samples of any containers and photographs or facsimiles of container labels;

(e) In the event that any samples are obtained prior to leaving the premises, a receipt describing the samples obtained shall be given to the owner, operator, or agency in charge and if requested, a portion of each such sample equal in volume or weight to the portion retained. A copy of the results shall be furnished to the owner, operator or agency in charge if an analysis is made.

(f) Inspect and copy any pertinent records, reports, information or test results relating to the requirements of *401 KAR Chapters 30 through 47* [this chapter]; and

(g) Question any person found on the premises, including employees or agents of the owner, operator or agency in charge of the premises, concerning their duties, responsibilities, past activities or any other matter relating to the requirements of 401 KAR Chapters 30 through 47.

(h) [(g)] Enter and inspect any other premises in accordance with the requirements of KRS 224.033(10).

(2) *(a)* A report listing any deficiencies found during the inspection shall be prepared by the inspector and shall be kept on file in the cabinet. A copy of the report shall be provided to the owner or operator or his agent *immediately* upon completion of the inspection *when the owner or operator is present during the inspection. Otherwise a copy of the report shall be mailed to the owner or operator, or his agent, at the address specified on the registration, permit application or other document supplied to the cabinet by the owner or operator, or, when applicable, to the address of the unauthorized owner or operator when his identity and address is discovered.*

(b) Authorized representatives of the cabinet shall make and maintain written records of inspections and other activities including observations made and factual matters discovered. A copy of such record shall be made available to the owner or operator and shall be available for public inspection at the main office of the Division of Waste Management in accordance with the Kentucky Open Records Law, KRS 61.870 through KRS 61.884.

(c) Upon inspection of a facility, authorized representatives of the cabinet shall collect evidence of every observed violation of a permit condition or requirement of KRS Chapter 224 or regulations promulgated pursuant thereto.

(d) The cabinet shall preserve collected evidence, where appropriate, in order that such evidence may be presented at hearings held pursuant to 401 KAR 40:030.

Section 2. Timing and Conduct of Inspections. (1) Right of entry and access. Authorized representatiaves of the cabinet shall have unrestricted right of entry and access to all parts of the permit area for any purpose associated with their proper duties pursuant to KRS Chapter 224 and 401 KAR Chapters 30 through 47, including but not limited to the purpose of making inspections.

(2) Presentation of credentials. Authorized representatives of the cabinet shall present credentials for identification purposes upon request by a representative of the owner or operator.

(3) Prior notice. The cabinet shall have no obligation to give prior notice that an inspection will be conducted.

(4) Timing. Inspections shall ordinarily be conducted at irregular and unscheduled times during normal workdays, but may be conducted at night or on weekends or holidays when the department deems such inspections necessary to properly monitor compliance with KRS Chapter 224, 401 KAR Chapters 30 through 47, and conditions of the permit. It shall be the responsibility of the owner or operator to notify the cabinet at least five (5) working days prior to crucial phases of the facility construction. Crucial phases of facility construction include, but are not necessarily limited to, liner installation, well drilling leachate collection system installation, and any other phase of construction identified in the conditions of the permit.

Section *3.* [2.] Deficiencies. [(1)] The cabinet shall notify the owner or operator of any noncompliance with the requirements of *KRS Chapter 224,* 401 KAR Chapters 30 through *47* [40], with guidelines adopted pursuant thereto, or with conditions of the permit *by utilizing one (1) of the means described in this section.*

(1) The inspection report shall serve as notice to the owner or operator that a deficiency has occurred. The inspection report may list a date on which the owner or operator (or his agent) can reasonably be expected to correct the deficiency.

(2) *The secretary or any duly authorized representative of the cabinet, upon determining that a violation of any requirement of 401 KAR Chapters 30 through 47; KRS Chapter 224, a permit condition or order of the secretary has occurred or is occurring may require* the owner or operator *to* [shall] submit to the cabinet a plan of correction to be implemented within a time acceptable to the cabinet.

(3) If the owner or operator fails to accomplish an

agreed upon step in the plan of correction within the time period specified, *or correct a deficiency by a reasonable correction date set by the inspector as provided in subsection (1) of this section,* the secretary may take action to modify, suspend, discontinue, or revoke the owner or operator's permit(s), *or seek any other remedy provided in 401 KAR 40:040.*

(4) The supervisor of any regional field office maintained by the Division of Waste Management may hold field office conferences with the owner or operator (or his agent) of a site or facility affected by the requirements of 401 KAR Chapters 30 through 47 or the provisions of KRS Chapter 224 dealing with waste management or disposal practices, for the purpose of determining a reasonable date for correcting a deficiency discovered by inspection and handled according to subsection (1)(b) of this section. The exact nature of the violations discussed during the conference and the dates for correcting those violations shall be set out in writing and signed by the inspector, the field office supervisor and the owner, operator or agent attending the conference if the parties attending the conference reach an agreement as to correction dates. This document shall then become a permit condition of the owner or operator's permit or permit-by-rule.

JACKIE SWIGART, Secretary
ADOPTED: June 14, 1983
RECEIVED BY LRC: June 14, 1983 at 11 a.m.
See public hearings scheduled on page 1.

NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION CABINET
Department for Environmental Protection
Division of Waste Management
(Proposed Amendment)

401 KAR 40:030. Hearings.

RELATES TO: KRS 224.032, 224.033, 224.071, 224.081, 224.083, *224.830 through 224.877,* [224.866,] 224.994
PURSUANT TO: KRS 13.082, *13.083, 224.033* [224.017, 224.866]
NECESSITY AND FUNCTION: KRS 224.033 requires the Natural Resources and Environmental Protection Cabinet to inspect any property or premises for the purpose of investigating either actual or suspected sources of pollution or contamination or for the purpose of ascertaining compliance or noncompliance with KRS Chapter 224 or the regulations promulgated pursuant thereto. This chapter establishes standards for enforcement and compliance monitoring of hazardous waste *and solid waste management and practices.* The enforcement and compliance monitoring standards of this chapter are for those activities and hazardous waste *and solid waste* sites or facilities regulated pursuant to 401 KAR Chapters 30 through *47* [40]. This regulation establishes the hearing procedures.

Section 1. Request for Hearings. Except for special hearings pursuant to KRS 224.071, any person or state or federal agency aggrieved by the actions of the cabinet may by written notice request that a hearing be conducted by the cabinet. The right to demand such a hearing shall be limited to a period of thirty (30) days after the applicant has had actual notice of the action, or could reasonably have had such notice. Unless the request is frivolous, the cabinet shall schedule a hearing before the cabinet not less than twenty-one (21) days after notice of demand for such a hearing, unless the person complained against waives in writing the twenty-one (21) day period. The notice of hearing shall include a statement of the time, place, and nature of the hearing; the legal authority for the hearing; reference to the statutes and regulations involved; and a short statement of the reason for the granting of the hearing.

Section 2. Pre-Hearing Conference. Prior to the formal hearing, and upon seven (7) days written notice to all parties, delivered personally or by certified mail with return receipt requested, the hearing officer may hold a pre-hearing conference to consider simplification of the issues, admissions of fact and documents which will avoid unnecessary proof, limitations of the number of witnesses and such other matters as will aid in the disposition of the matter. Disposition of the matter may be made at the pre-hearing conference by stipulation, agreed settlement, consent order, or default for non-appearance.

Section 3. Administrative Hearing Procedure. (1) Any party to a hearing may be represented by counsel, may make oral or written argument, offer testimony, cross-examine witnesses, or take any combination of such actions. A hearing officer shall preside at the hearing in accordance with reasonable administrative practice.

(2) Irrelevant, immaterial, or unduly repetitious evidence shall be excluded. When necessary to ascertain facts not reasonably susceptible of proof under judicial rules of evidence, evidence not admissable thereunder may be admitted (except where precluded by statute) if it is of a type commonly relied upon by reasonably prudent men in the conduct of their affairs. Hearing officers shall give effect to the rules of privilege recognized by law. Objections to evidentiary offers may be made and shall be noted in the record. Subject to these requirements, when a hearing will be expedited and the interests of the parties will not be prejudiced substantially, any part of the evidence may be received in written form. Documentary evidence may be received in the form of copies or excerpts if the original is not readily available. Upon request, parties shall be given an opportunity to compare the copy with the original. A party may conduct cross-examinations required for a full and true disclosure of the facts. Notice may be taken of generally recognized technical or scientific facts within the cabinet's specialized knowledge. Parties shall be notified either before or during the hearing, or by reference in preliminary reports or otherwise, of the material noticed, including any staff memoranda or data and they shall be afforded an opportunity to contest the material so noticed. The cabinet's experience, technical competence, and specialized knowledge may be utilized in the evaluation of the evidence.

(3) It will be within the hearing officer's discretion to require official transcripts or to set up other procedures of taking evidence, including but not limited to the use of mechanical recording devices for recording the testimony. The record of such hearing, consisting of all pleadings, motions, rulings, documentary and physical evidence received or considered, a statement of matters officially noticed, questions and offers of proof, objections and rulings thereon, proposed findings and recommended order, and legal briefs, shall be open to public inspection and copies thereof shall be made available to any person upon completion of the hearing process upon payment of the actual cost of reproducing the original except as provided in

KRS 224.035 *or 224.036.* The cabinet may cause the mechanical recording of the testimony to be transcribed. When certified as a true and correct copy of the testimony by the hearing officer, the transcript shall constitute the official transcript of the evidence.

(4) The hearing officer shall within thirty (30) days of the closing of the hearing record, make a report and a recommended order to the secretary. The order shall contain the appropriate findings of fact and conclusions of law. If the secretary finds upon written request of the hearing officer that additional time is needed, then the secretary may grant a reasonable extension. The hearing officer shall serve a copy of his report and recommended order upon all parties. The parties may file within seven (7) days of service of the hearing officer's report and recommended order exceptions to the recommended order. The secretary shall consider the report and recommended order and exceptions. The secretary may remand to the hearing officer the matter for further deliberation, adopt the opinion of the hearing officer and the cabinet or issue his own written order based on the report and recommended order.

(5) After completion of the hearing and filing of exceptions, the cabinet shall notify the applicant in writing, certified mail with return receipt requested, of the final decision of the cabinet. If any extension of time is granted by the secretary for a hearing officer to complete his report, the cabinet shall notify all parties at the time of the granting of the extension.

(6) The secretary shall not grant extensions of time to the hearing officer for more than thirty (30) days for any one (1) extension, and no more than two (2) such extensions shall be granted.

(7) A final order of the cabinet shall be based on substantial evidence appearing in the record as a whole and shall set forth the decision of the cabinet and the facts and law upon which the decision is based.

(8) There shall be no ex-parte communications between a hearing officer and parties to the action.

(9) Any person aggrieved by a final order of the cabinet may have recourse to the courts as set forth in KRS 224.085.

JACKIE SWIGART, Secretary

ADOPTED: June 10, 1983
RECEIVED BY LRC: June 14, 1983 at 11 a.m.
See public hearings scheduled on page 1.

NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION CABINET
Department for Environmental Protection
Division of Waste Management
(Proposed Amendment)

401 KAR 40:040. Remedies.

RELATES TO: KRS 224.032, 224.033, 224.071, 224.081, 224.083, *224.830 through 224.877,* [224.866,] 224.994

PURSUANT TO: KRS 13.082, *13.083, 224.033* [224.017, 224.866]

NECESSITY AND FUNCTION: KRS 224.033 requires the Natural Resources and Environmental Protection Cabinet to inspect any property or premises for the purpose of investigating either actual or suspected sources of pollution or contamination or for the purpose of ascertaining compliance or noncompliance with KRS Chapter 224 or the regulations promulgated pursuant thereto. KRS 224.994 permits the cabinet to assess civil and criminal penalties against any person who fails to perform any duties imposed by KRS Chapter 224, the regulations promulgated pursuant to KRS Chapter 224, or any determination or order of the cabinet. This chapter establishes standards for enforcement and compliance monitoring of hazardous waste *and solid waste management and practices.* The enforcement and compliance monitoring standards of this chapter are for those activities and hazardous waste *and solid waste* sites or facilities regulated pursuant to 401 KAR Chapters 30 through *47* [40]. This regulation establishes remedies for *solid waste and* hazardous waste violations.

Section 1. Modification, Suspension and Revocation of a Permit. The cabinet may modify, suspend or revoke a permit issued *under 401 KAR Chapters 30 through 47* [pursuant to this chapter] for:

(1) Violation of any requirement of KRS Chapter 224 or the respective regulations promulgated pursuant thereto.

(2) Aiding, abetting or permitting the violation of any provisions of *401 KAR Chapters 30 through 47* [these regulations].

(3) Any action or omission associated with maintenance and operation of the facility that could *or does* create a threat to public health or the environment.

(4) Violations of a condition or a variance of the hazardous waste *site or facility* permit *or a solid waste site or facility permit.*

(5) Misrepresentation or omission of a significant fact by the operator either in the application for the permit or in information subsequently reported to the cabinet.

(6) Failure to comply with an order issued by the cabinet.

Section 2. Order for Discontinuance, Abatement, or Alleviation. The secretary may, when he finds after investigation that it would be prejudicial to the interests of the people of the state to delay action, issue an order for discontinuance, abatement, or alleviation of a condition or activity without prior hearing as provided in KRS 224.071.

Section 3. Discontinuance of a Permit. (1) The secretary may order the discontinuance of a permit prior to any hearing when he determines such action is necessary to protect public health and safety and the environment from imminent danger.

(2) The secretary, or his authorized designee, shall notify the owner or operator of the hazardous waste *site or* facility *or of the solid waste site or facility* of the discontinuance and the effective date thereof and, at the same time, shall provide the owner or operator with an explanation *for* [of] the basis of the discontinuance.

(3) The owner or operator shall take prompt action to correct the deficiencies cited by the cabinet.

(4) The suspension shall remain in effect until the deficiencies are corrected to the satisfaction of the cabinet or until the cabinet makes a final determination based on the outcome of a hearing held in accordance with the requirements of KRS 224.071. The determination may result in termination of the order, suspension, or modification of the permit, or revocation of the permit.

Section 4. Petition for Reinstatement. An owner or operator whose permit has been suspended or revoked may petition the cabinet for reinstatement after thirty (30) days or more have elapsed from the effective date of the suspension or revocation or from the date of the denial of a

similar petition or immediately after the conditions of Section 3(4) of this regulation have been met.

JACKIE SWIGART, Secretary
ADOPTED: June 10, 1983
RECEIVED BY LRC: June 13, 1983 at 11:30 a.m.
See public hearings scheduled on page 1.

NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION CABINET
Department for Environmental Protection
Division of Waste Management
(Proposed Amendment)

401 KAR 40:050. Penalties.

RELATES TO: KRS 224.032, 224.033, 224.071, 224.081, 224.083, *224.830 through 224.877* [224.866], 224.994
PURSUANT TO: KRS 13.082, *13,083, 224.033* [224.017, 224.866]
NECESSITY AND FUNCTION: KRS 224.994 permits the Natural Resources and Environmental Protection Cabinet to assess civil and criminal penalties against any person who fails to perform any duties imposed by KRS Chapter 224, the regulations promulgated pursuant to KRS Chapter 224 or any determination or order of the cabinet. This chapter establishes standards for enforcement and compliance monitoring of hazardous waste *and solid waste management and practices.* The enforcement and compliance monitoring standards of this chapter are for those activities and hazardous waste *and solid waste* sites or facilities regulated pursuant to 401 KAR Chapters 30 through *47* [40]. This regulation establishes the policy for determining penalties.

Section 1. Penalties. Any person or state or federal agency who violates any of the applicable provisions of KRS *Chapter 224* [224.866] or who violates any determination, order, or regulation adopted pursuant thereto, shall be subject to civil or criminal penalties as set forth in KRS 224.994 [(5) and (6)].

JACKIE SWIGART, Secretary
ADOPTED: June 10, 1983
RECEIVED BY LRC: June 14, 1983 at 11 a.m.
See public hearings scheduled on page 1.

NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION CABINET
Department for Environmental Protection
Division of Waste Management
(Proposed Amendment)

401 KAR 47:020. Solid waste permit process.

RELATES TO: KRS 224.835, 224.842, 224.846, 224.855
PURSUANT TO: KRS 13.082, *13.083,* 224.017, 224.033(24)
NECESSITY AND FUNCTION: KRS 224.855 specifies minimum requisites for issuance of waste disposal permits, and KRS 224.835 and 224.842 prohibit use or operation of a waste disposal site or facility without first obtaining a permit from the Natural Resources and Environmental Protection Cabinet. This chapter establishes standards for solid waste sites or facilities. This regulation specifies the general requirements for all solid waste disposal permits.

Section 1. General Requirements for Permitting. (1) No person or state or federal agency shall engage in the disposal of solid waste without having first obtained a permit, permit by rule or a variance from the cabinet.
(2) A permit shall authorize the owner/operator to engage in the disposal of solid waste in a manner prescribed by the cabinet for a period of not more than five (5) years from the date of issuance or renewal.
(3) The permit shall confer upon the owner/operator a qualified right to dispose of solid waste, but shall not relieve the owner/operator of responsibility to comply with all applicable federal, state and local laws and regulations, including but not limited to the Clean Water Act (33 U.S.C. 1251), the Safe Drinking Water Act (42 U.S.C. 7041), the Occupational Safety and Health Act (29 U.S.C. 651) and the Endangered Species Act (16 U.S.C. 1530), as amended.
(4) The permit shall be issued in the name of the applicant, and shall be non-transferable without written approval by the cabinet. Any successor operator prior to the final closure of the facility whether by sale, assignment, lease or otherwise may be required to submit an application or independently provide financial responsibility for closure or both.
(5) Disposers of certain industrial waste by a practice common to the industry are presumed to hold a permit and can operate pursuant to this permit by rule provided the operation is not in violation of the applicable "Environmental performance standards" of 401 KAR 30:030 [, Section 1(1)], or does not present a threat of imminent hazard to the public health or substantial environmental impact.
(a) A permit by rule is hereby granted for the following disposal facilities or practices:
1. Sawdust piles.
2. Disposal of asphalt residue.
3. Oil production brine pits, and gas and oil drilling mud pits.
4. Disposal of septic tank pumpings by a properly registered septic tank pumping hauler.
5. Disposal of waste from the mining, processing or primary benefication of ores and minerals.
6. Operation of a solid waste incinerator excluding the disposal of the residue from the incinerator.
7. Junkyards.
8. Pits, ponds and lagoons permitted by other environmental programs in the cabinet for the disposal of residual waste from pollution control devices.
9. One (1) time construction material fills at the place of generation.
10. Beneficial reuse or recycling of solid waste except for sludges regulated by 401 KAR 47:050.
11. Inert disposal site of less than one (1) acre.
12. Disposal of demolition waste on the property where demolition occurred.
13. Disposal of land clearing debris on the property where clearing occurred.
(b) A permit by rule can be granted by the cabinet for the disposal of insignificant amounts of a specific industrial waste. Any request for a permit by rule may be granted after evaluation by the cabinet of the following criteria:
1. Size of the disposal site or facility.
2. Potential for adverse effects on health and the environment as identified in the "Environmental performance standards," 401 KAR 30:030 [, Section 1].
3. Quantity of waste generated.

4. Chemical and physical characterics of the waste including reactivity and explosivity.
5. Hydrogeological and geologic characterics of the facility including the topography of the area and the proximity to surface waters.
6. Method of disposal.

Section 2. Issuance of Permit. (1) The cabinet shall issue a construction permit, *if after completing a technical review of the administratively complete application, it finds* [upon finding] that the person or state or federal agency desiring the permit has met all the requirements for application and the requirements of KRS 224.855, and has the ability to meet the operational and closure requirements of the solid waste regulations. An application for a permit may be denied or an active permit revoked for failure to comply with applicable state statutes or regulations, including but not limited to any failure to provide or maintain adequate financial responsibility.

(2) No construction permit shall be issued until at least thirty (30) days have expired following publication of a notice of application as required under KRS 224.855. A verified affidavit from the publisher of the notice, establishing the date of publication, shall be received by the cabinet before a construction permit is issued. This publication shall be made after the owner/operator receives written notice that the cabinet has *completed the technical review of the* [received a complete] application.

(3) An operational permit shall be issued by the cabinet when:

(a) The applicant notifies the cabinet, in writing, that construction has been completed;

(b) A representative of the cabinet inspects the site and verifies in writing that the site has been developed according to plans and that necessary equipment is available to the site; and

(c) The required financial responsibility for closure has been established, by posting a bond or establishing an escrow account as required by KRS 224.846 in an amount of $10,000 or greater if so determined by an approved closure plan and cost estimate. The approved cost estimate for closure and corresponding bond shall be reviewed and adjusted at least once every five (5) years.

(4) The cabinet shall make a determination whether an application is complete within thirty (30) days of receipt. The cabinet shall act on the complete permit application within ninety (90) days of receipt or shall, within that time period, inform the applicant of a projected schedule for review.

(5) The cabinet may issue a permit subject to special conditions which include but are not limited to types of wastes which may be accepted or disposed, special operating conditions, schedules for compliance for corrective actions, and the issuance of other applicable permits of the cabinet.

Section 3. Copies and Display of Permits and Application. (1) The applicant shall submit one (1) copy of all information required for review of the permit application to the cabinet.

(2) When review is complete the applicant shall provide the cabinet with at least three (3) copies of the final application for formal certification and issuance of the permit document.

(3) One (1) copy shall be returned to the permittee and the permit with all applicable conditions shall be conspicuously displayed at the solid waste site or facility for the duration of the permit. A copy of the approved application including plans shall be reasonably available at the site.

Section 4. Termination and Renewal of Permit. (1) A permit shall automatically terminate at the end of five (5) years. A shorter period may be specified. Permit by rule shall be perpetual until modified, revoked, or suspended by the cabinet.

(2) A permit may be renewed. Renewal requests shall be made in writing to the cabinet not less than sixty (60) days prior to the permit expiration date and shall include any changes or modifications in the approved plan of operation for the facility.

(3) The cabinet, in issuing a renewal, shall consider whether all conditions of the original permit and modifications of permit conditions by agreed order or otherwise are being met. The cabinet may request updated information necessary for re-evaluating the permit's suitability for reissuance and impose additional or modified permit conditions if deemed appropriate.

Section 5. Modification of Operating Methods or Proposed Closure by Owner/Operator. (1) The owner/operator shall submit in writing to the cabinet for preliminary review any proposed change in the approved closure and other plans or any proposed change in the operating methods. "Any change" includes but is not limited to any additional wastes not listed at the time of the original permit issuance or any other request for a variance from existing permit requirements.

(2) Permit modifications for specific waste streams may be granted upon proper request made by either the disposal facility or the waste generator.

(3) The cabinet shall notify the owner within thirty (30) days if the modification will require prior administrative analysis and review and the payment of a fee, or if further information is required before the modification, change, or variance can be approved or denied. The cabinet will respond to the request within thirty (30) days of receipt of all applicable fees and information with a letter of acknowledgement, issuance of a variance or issuance of a permit modification as appropriate.

(4) The owner/operator shall not proceed with the proposed closure or change in operating methods without written approval of the cabinet.

Section 6. Repealer and Effective Dates. (1) *The regulations in 401 KAR Chapter 47* [401 KAR 47:020 through 401 KAR 47:111] supersede solid waste regulation 401 KAR 2:010.

(2) Existing permitted solid waste disposal sites classified as landfills under 401 KAR 2:010 will be classified as inert landfills upon the effective date of this regulation. Existing permitted solid waste disposal sites classified as sanitary landfills under 401 KAR 2:010 will be classified as residential landfills upon the effective date of this regulation. Existing facilities thus classified will not be required to meet the design, location and construction standards of 401 KAR 47:040 provided that they are in compliance with the "Environmental performance standards" of 401 KAR 30:030 [, Section 1(1)]. Those existing facilities desiring to request a different classification will be required to meet the changed requirements for location, design or construction before the modification in classification is approved by the cabinet.

(3) All persons subject to the solid waste regulations shall meet the changed solid waste facility operating stan-

dards within 180 days of the effective date of the regulations.

JACKIE SWIGART, Secretary
ADOPTED: June 10, 1983
RECEIVED BY LRC: June 13, 1983 at 11:30 a.m.
See public hearings scheduled on page 1.

NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION CABINET
Department for Environmental Protection
Division of Waste Management
(Proposed Amendment)

401 KAR 47:040. Sanitary landfills.

RELATES TO: KRS 224.835, 224.842, 224.855
PURSUANT TO: KRS 13.082, *13.083,* 224.017, 224.033(24)
NECESSITY AND FUNCTION: KRS 224.033 and the waste management provisions of KRS Chapter 224 require the Natural and Environment Protection Cabinet to adopt regulations for the management of solid waste. This chapter establishes standards for solid waste sites or facilities. This regulation sets forth the permit application requirements and general design and operating requirements for *solid waste sites or facilities which are* sanitary landfills *as defined in 401 KAR 30:010.* Sections 1, 2, and 3 apply to inert landfills. Sections 1 through 6 apply to residential landfills. Sections 1 through 9 apply to contained landfills. Sections 10 through 12 apply to residual landfills.

Section 1. Contents of Permit Applications for Inert Landfills. A person or state or federal agency desiring a landfill permit shall submit a complete application to the cabinet. The application shall be on a form and presented in a manner as prescribed by the cabinet, and shall include, but not be limited to, the following:

(1) Name, address, and phone number of the applicant. If the applicant is a government agency, corporation, company or partnership, include the name and address and phone number of the process agent or other contact individual.

(2) Written certification from the county judge/executive or chairman of the local planning and zoning board that the site meets all local planning and zoning requirements.

(3) Approval of the local KRS Chapter 109 District Board (if one exists for the county in which the site is proposed).

(4) Name, address and phone number of the landowner.

(5) A copy of the deed to the property and a copy of a lease showing a two (2) year right of re-entry following final closure of the facility if the landowner is not the applicant.

(6) A geological report of the site including but not limited to:

(a) A description of all soils at the site, in detail, including their suitability for the proposed site;

(b) A description of the surface and subsurface geology of the site, including an assessment of such geologic hazards as seismic activity, stability, and karstic weathering; and

(c) A description of the hydrologic characteristics of the site, including surface and groundwater current use, potential use and flow.

(7) An original current U.S.G.S. topographic map that has the boundaries of the site clearly and accurately marked thereon.

(8) Plans drawn to scale for the site which shall bear the seal of a professional engineer registered in Kentucky, and shall include the following:

(a) Initial and proposed final contour intervals sufficient to reveal the character of the site.

(b) Existing roads, surface drainage, buildings and other man-made features, on-site fire protection equipment, and property lines.

(c) A buffer zone between the property line and the outer limits of the fill area, and a buffer zone between the fill and any existing residence or blue-line streams.

(d) The location of all-weather on-site roads sufficient to handle anticipated traffic.

(e) Site access controls including lockable entrance ways.

(f) Appropriate cross-sections and baseline profiles which shall include: existing surface, bedrock, seasonal high water table, limits of excavation, final waste cells, final surface elevations, and other subsurface and surface features including but not limited to shafts, roads and drainage.

(g) A typical lift cross-section showing details of the final cover, length and depth of cells, width of cell walls, and depth of waste.

(h) A diagram illustrating the sequence of the areas to be filled (with methods to be used).

(i) A typical section detail of site roadways, showing base, wearing surface, side slopes, drainage, width, and other information relevant to roadway design.

(9) The complete application narrative which shall include:

(a) A written description of the location of the site using roads or highways.

(b) A description of the sequence of operation.

(c) A list of all types of wastes which will be disposed at the landfill, the sources which generate the waste, the chemical and physical characteristics of industrial or special wastes, and the anticipated volume of each category of waste.

(d) The source and availability of equipment including back-up equipment and fire protection equipment.

(e) An engineering statement of the site flood frequency exposure.

(f) The number of acres to be filled and the total number of acres to be permitted, including buffer zone.

(g) A brief safety and communication plan, including certification of fire protection from the appropriate fire marshal or local official and method of emergency communication.

(h) A description of the access controls.

(i) A description of the covering program including frequency of cover, total volume and source of borrow material available, and total estimated volume and source of cover required (final, daily and interim).

(j) The proposed revegetation program, including provisions for liming, fertilization, seed types and seeding schedule, erosion control during early growth period, and interim cover vegetation program.

(k) A final cover maintenance program covering the entire site and lasting two (2) years beyond closure, to include erosion control, reseeding, refertilization and growth control.

(l) A detailed plan for closure of the landfill in accordance with KRS 224.846 along with an estimate of closure costs.

(m) The estimated life of the site in volume and number of years.

(n) A description of the method to be used for compaction of waste and cover material including the placement of waste and direction of compaction, the placement of cover material and direction of compaction, and the ground pressure developed by the equipment used for compaction.

(o) Such additional information as the cabinet deems necessary for a determination regarding issuance of the permit.

Section 2. General Design Requirements for Inert Landfills. (1) Landfills in the 100-year floodplain shall be designed and operated to prevent the washout of wastes. Further, they shall not restrict the flow of the 100-year flood or significantly reduce the temporary water storage capacity of the floodplain. Where available, empirical data shall be used to determine the frequency of flood exposure. Where data is not available, the frequency of flood exposure shall be established by the unit hydrograph technique.

(2) Landfills subject to a high seasonal water table shall be restricted to sites which provide greater than two (2) feet of compacted earth between deposited waste and the maximum water table, and include measures to prevent contamination of groundwater.

(3) The bottom of the waste in the landfill shall be at least two (2) feet above bedrock, sand or gravel, excluding any sand or gravel used in a leachate collection system.

(4) Landfill locations shall conform to applicable local zoning laws pursuant to KRS Chapter 100.

(5) Surface contours shall minimize surface water running onto or through the operational or completed fill area. Surface storm water features shall be designed for the maximum flows occurring up to a 100-year, twenty-four (24) hour storm flows. Surface water sediment basins shall be designed to detain ten (10) year, twenty-four (24) hour storms with emergency spillway flows of 100-year, twenty-four (24) hour storms.

(6) Disposal of wastes presenting special handling problems shall be separately considered in design of the landfill.

(7) A 100-foot minimum buffer zone between the fill area and the property line, a 200-foot minimum buffer zone between the fill and a blue-line stream, and a 250-foot minimum buffer zone between the fill and existing residences shall be provided.

(8) Adequate cover material shall be available to cover solid wastes at intervals sufficient to prevent fire hazards, unsightly appearance, disease vectors and for interim and final cover.

(9) Sufficient equipment shall be available to comply with the requirements of this regulation. This equipment is not required on-site at all times.

(10) Other requirements may be stipulated by the cabinet.

Section 3. General Operating Requirements for Inert Landfills. (1) The owner/operator of a landfill shall operate the facility in accordance with the requirements of KRS Chapter 224 and the regulations promulgated pursuant thereto, the conditions of the solid waste facility permit issued by the cabinet, and the approved operational plan filed with the cabinet.

(2) Landfill operators shall not permit or engage in open burning of waste. Any open burning shall be immediately extinguished. Wastes which are burning or smoldering shall not be deposited in the fill. Such materials shall be deposited at a location safely removed from the normal fill area.

(3) No liquids or hazardous wastes shall be discharged to or placed in a landfill without obtaining a permit modification or a written variance from the cabinet. In considering such requests the cabinet shall use the standards specified in KRS 224.866.

(4) The grounds in and about a landfill shall not be allowed to become a nuisance. When necessary, interior fences may be required to prevent litter from blowing from the landfill. The permitted area shall be policed on a routine basis to collect all scattered material.

(5) Scavenging is prohibited. Salvage and recycling operations shall not be allowed in conjunction with a landfill unless conducted in a sanitary manner.

(6) Landfill operators shall not allow uncontrolled public access which would expose the public to potential health and safety hazards. Days and time of operation shall be clearly posted.

(7) *(a)* Landfill operators shall not allow a discharge of fill material, erosion sediment, leachate or other pollutants into waters of the Commonwealth that is in violation of the requirements of the National Pollutant Discharge Elimination System (NPDES) under Section 402 of the Clean Water Act *or the Kentucky Pollutant Discharge Elimination System program approved by the U.S. EPA* or that exceeds the water quality standards for surface waters established in 401 KAR 5:031.

(b) Landfill operators shall not allow a discharge of pollutants into the air in violation of the Clean Air Act or the Kentucky Air Pollution Control Regulations.

(8) Final cover and closure.

(a) Those areas of a landfill that will receive no additional deposits of solid waste *within 365 days of the last placement of waste* shall receive final cover [within a time period specified by the cabinet not to exceed one (1) year]. A minimum final cover of two (2) feet shall be required in addition to any daily and interim cover required.

(b) Before earth-moving equipment is removed from the site, an inspection of the entire site shall be made by an authorized representative of the cabinet to determine compliance with approved plans and specifications. The owner/operator shall submit a closure schedule based on the approved closure plan thirty (30) days prior to the last intended use of a solid waste facility.

(c) Final cover shall be graded as provided in the approved closure plan in a manner to prevent ponding. For a period of two (2) years, the surface of final cover shall be maintained at the proper elevation.

(d) Final cover shall be revegetated. After grading, final cover shall be fertilized, as necessary, seeded, and/or planted with legumes, perennial grasses or other vegetation according to the approved closure plan. The owner/operator may be required to repeat this process until adequate vegetation is obtained to insure soil stabilization.

(e) Other necessary corrective work required by the cabinet, if any, shall be performed before the landfill is accepted as closed and financial responsibility funds released.

Section 4. Additional Contents of Permit Application for a Residential Landfill. In addition to the requirements in Contents of Permit Application for Inert Landfills, Section 1 of this regulation, the complete application for residential landfills shall include but not be limited to the following additional information:

(1) A leachate contingency plan and specifications for collecting and treating or other control of leachate generated at the site.

(2) A methane gas contingency control plan and

specifications shall be given for all sites within 500 feet of a residential, farm, commercial or industrial building.

(3) The plans shall include grades for proper drainage of each lift and a typical cross-section of each lift. Identical lift plans need not be repeated.

(4) The site plan shall show locations of personnel structures, toilet facilities, equipment maintenance areas, emergency communication devices, and all other structures within 1000 feet of the site.

(5) A groundwater monitoring plan to include location and specifications of wells, and monitoring parameters and schedules may be required by the cabinet upon examination of geological aspects and other relevant factors. The monitoring system shall be capable of detecting any contamination of the uppermost aquifer beneath the site.

Section 5. Residential Landfill Design Requirements. In addition to the requirements in General Design Requirements for Inert Landfills, Section 2 of this regulation, residential landfills shall meet the following design requirements:

(1) Residential landfills shall not be located in the ten (10) year floodplain.

(2) A personnel shelter shall be designed to provide all-weather protection for site operating personnel.

(3) Leachate and methane gas contingency plans shall contain long-term plans for post-closure maintenance if not self-maintaining by design. If long-term maintenance is necessary, a performance bond may be required by the cabinet before the release of financial responsibility closure funds can be approved.

(4) Groundwater monitoring, if required, shall contain a minimum of one (1) upgradient monitoring well and two (2) downgradient wells designed to detect the influence of the site on underground drinking water sources.

(5) The concentration of methane generated by a residential landfill shall not exceed twenty-five percent (25%) of the lower explosive limit for methane in facility structures (excluding gas control or recovery system components), and shall not exceed the lower explosive limit for methane at the property boundary.

(6) *The* [Residential] landfill[s] shall be designed to keep surface water flows and leachate separate.

(7) A minimum of four (4) soil boring holes for the first ten (10) acres, and one (1) for each five (5) additional acres shall be required. The "K" test results from a falling head permeability test or other approved permeability test shall be shown on the boring records. There shall be available sufficient material to provide a layer of at least twelve (12) inches of 1×10^{-7} cm/sec. permeability or its equivalent under the waste and to provide a cap above the completed waste cells of six (6) inches of 1×10^{-7} cm/sec. permeability or its equivalent during final closure. An artificial liner or a greater thickness of more permeable material may be judged "equivalent" to twelve (12) inches of 1×10^{-7} cm/sec.

Section 6. Residential Landfill Operating Requirements. In addition to the requirements in General Operating Requirements for Inert Landfills, Section 3 of this regulation, residential landfills shall meet the following operating requirements:

(1) The following improvements shall be made before a residential landfill site is placed in operation.

(a) All-weather roads shall be provided within the site for vehicular movement. Separate areas within the site may be provided to allow for wet or dry weather operation and access. When necessary to prevent a dust nuisance, roads within the site shall be surfaced or treated.

(b) A shelter shall be provided which is accessible to operating personnel. The shelter shall be screened and provided with heating facilities and adequate lighting. Safe drinking water, sanitary handwashing and toilet facilities shall be available at or near the site.

(c) Arrangements shall be made for fire protection services. A fire protection district or other public fire protection service is acceptable. When such a service is not available, alternate arrangements shall be made.

(d) Adequate communication facilities shall be provided for emergency purposes.

(e) Operating equipment shall be on-site, capable of spreading and compacting the volume of waste received at the site, and capable of handling the daily and interim earthwork requirements. Backup equipment shall be available within twenty-four (24) hours of primary equipment breakdown.

(2) Residential landfill operations shall be in accordance with approved plans and the following additional requirements:

(a) Access to the site shall be permitted only when operating personnel are on the site.

(b) Dumping of solid waste on the site shall be confined to the smallest practical area.

(c) Unloading shall be supervised.

(d) Disease vector control measures in addition to daily cover shall be required by the cabinet when necessary.

(e) Solid waste shall be spread within two (2) hours of depositing at the site, in shallow layers not to exceed two (2) feet in depth and compacted with appropriate equipment to the maximum practical density. The completed cell shall consist of the solid waste admitted and compacted during one (1) working day, regardless of overall height and volume. Unless excluded from the site, large bulky items shall be deposited in a manner approved by the cabinet.

(f) A compacted layer of at least six (6) inches of soil shall be used to cover all exposed solid waste at the end of each working day. Surfaces that will not receive an additional depth of refuse or final cover within sixty (60) days shall receive, *in addition to daily cover,* an interim layer of compacted cover of at least one (1) foot total. All daily and interim cover depths shall be maintained until the landfill is closed.

(g) The entire site including the area of the landfill being actively worked shall be maintained as necessary to prevent erosion or washing of the fill, and graded as necessary to drain rain water from the fill area and to prevent standing water. No surface water shall drain to the fill area.

(3) The owner/operator of a residential landfill must record a notice that will in perpetuity notify any potential purchaser of the property of the location and time of operation of the facility, and a statement that future disturbance of this area should only occur after an examination of potential gas or leachate migration problems. Such notice shall be recorded in accordance with state property law prior to acceptance of final closure of the landfill.

Section 7. Additional Contents of Permit Applications for Contained Landfills. In addition to the requirements in Contents of Permit Application for Inert Landfills, Section 1 of this regulation, and Additional Contents of Permit Applications for a Residential Landfill, Section 4 of this regulation, the complete application for a contained landfill shall include but not be limited to the following:

(1) A description and specifications of an in-place groundwater monitoring system shall be given in the site plan and the narrative.

(2) A description and details of an in-place leachate collection and treatment system shall be given in the site plan and the narrative.

Section 8. Contained Landfill Design Requirements. In addition to the requirements in General Design Requirements for Inert Landfills, Section 2 of this regulation, and Residential Landfill Design Requirements, Section 5 of this regulation, contained landfills shall meet the following requirements:

(1) A groundwater monitoring system approved by the cabinet shall be in place. The monitoring plan shall consist of a minimum of one (1) upgradient and three (3) downgradient wells, and a monitoring schedule.

(2) A leachate collection and treatment or other control system approved by the cabinet shall be in place.

(3) The design and specifications for special areas, if any, which will receive exempt hazardous waste, spill residues and other sludges and residual solid waste shall be approved by the cabinet.

Section 9. Contained Landfill Operating Requirements. In addition to the requirements in General Operating Requirements for Inert Landfills, Section 3 of this regulation, and Residential Landfill Operating Requirements, Section 6 of this regulation, contained landfills shall meet the following operation standards:

(1) The owner/operator of a contained landfill shall keep permanent records of the source, amount, characteristics and disposal location of any spill residues or small generator exclusion waste, and records as to the source and quantity of all other wastes disposed of at the contained landfill. This record shall be available for cabinet inspection and shall be summarized in a report and submitted to the cabinet with the request for permit renewal.

(2) Receipt of exempt hazardous waste shall be limited to those wastes which meet the characteristics for hazardous waste but are not regulated by the state hazardous waste program because they are generated in small quantities (or otherwise exempted) having been determined as not harmful to public health or the environment consistent with the federal Resource Conservation and Recovery Act, as amended.

Section 10. Contents of Permit Application for Residual Landfills. This section applies to owners and operators of residual landfills that require solid waste site or facility permits. A person or state or federal agency desiring a residual landfill permit shall submit a complete application to the cabinet. The application shall be on a form and presented in a manner as prescribed by the cabinet, and shall include but not be limited to the following:

(1) Name, address, and phone number of applicant. If applicant is a government agency, corporation, company or partnership, include the name and address and phone number of process agent or other contact individual.

(2) Written certification from the County Judge/Executive or chairman of the local planning and zoning board that the site meets all local planning and zoning requirements.

(3) Approval of the local KRS Chapter 109 District Board (if one exists for the county in which the site is proposed).

(4) Name, address and phone number of the land owner.

(5) A copy of the deed to the property or copy of a lease showing a two (2) year right of re-entry following final closure of the facility if the landowner is not the applicant.

(6) A geological report of the site including but not limited to:

(a) A description of all soils at the site, in detail, including their suitability for the proposed site;

(b) A description of the surface and subsurface geology of the site, including an assessment of such geologic hazards as: seismic activity, stability, and karstic weathering; and

(c) A description of the hydrologic characteristics of the site, including surface and groundwater current use, potential use and flow.

(7) An original current U.S.G.S. topographic map that has the boundaries of the site clearly and accurately marked.

(8) The plans drawn to scale including a closure plan for the site which shall bear the seal of a professional engineer registered in Kentucky.

(9) The complete application narrative which shall include:

(a) A written description of the location of the site.

(b) A description of the sequence of operation.

(c) A list of all types of wastes which will be disposed at the landfill, the sources which generate the waste, the chemical and physical characteristics of industrial or special wastes, and the anticipated volume of each category of waste.

(d) The number of acres to be filled and the total number of acres to be permitted.

(e) A closure plan.

(10) Draft permit conditions for the duration of the facility to assurance compliance with the *applicable* environmental performance standards in 401 KAR 30:030 [, Section 1(1)].

Section 11. Residual Landfill Design Requirements. Residual landfills shall meet the following design requirements:

(1) The engineering design must demonstrate compliance with the environmental performance standards in 401 KAR 30:030 [, Section 1(1),] and reflect a consideration of:

(a) The physical and chemical characteristics of the waste, including compatability, to be disposed of at the facility;

(b) Volume of waste;

(c) The climatic conditions in the area;

(d) The permeability of the liner material;

(e) The properties of the soil underlying the facility;

(f) Hydrogeological characteristics of the facility including quality, quantity, current use and direction of groundwater flow;

(g) The design of the facility leachate control system, runoff control system, and gas migration control, if required, must consider the physical and chemical characteristics of the waste. The climatic condition of the specific location, the volume of leachate or contaminated runoff that could be produced and available options for managing leachate or contaminated runoff collected at the facility must be considered; and

(h) The proximity to surface water.

(2) Residual landfill locations shall conform to applicable local zoning laws pursuant to KRS Chapter 100.

(3) The closure plan shall specify the function and design of the final cover for the facility. The closure design should assure compliance with the *applicable* environmental performance standards in 401 KAR 30:030 [, Section 1(1),] and must reflect consideration of:

(a) The type and amount of waste in the facility;

(b) The mobility and expected rates of migration of the waste;
(c) The site location, topography and surrounding land use, and final site use;
(d) The climatic conditions in the area;
(e) The characteristics of the cover material including erodability, slope stability, final surface contours, thickness, porosity, permeability, slope, length of run of slope, and type of vegetation on the cover; and
(f) The geological and soil profiles and surface and subsurface hydrology of the site.

Section 12. Residual Landfill Operating Requirements. Residual landfills shall meet the following operational standards:
(1) The owner/operator of a residual landfill shall operate the facility in accordance with the requirements of KRS Chapter 224 and the regulations promulgated pursuant thereto, the conditions of the facility permit issued by the cabinet, and the operational plan filed with and approved by the cabinet.
(2) The owner/operator of a residual landfill shall operate the facility in such a manner as to assure compliance with the *applicable* environmental performance standards in 401 KAR 30:030 [,Section 1(1)].
(3) The owner/operator of the facility must inspect the site and operation at a sufficient frequency to assure compliance with the *applicable* environmental performance standards in 401 KAR 30:030 [, Section 1(1)].
(4) Closure of the residual landfill.
(a) A residual landfill must be closed in a manner that will assure compliance with the *applicable* environmental performance standards in 401 KAR 30:030 [, Section 1(1)]. The closure shall include the placement of a final cover over the facility as specified in the approved design of the site.
(b) Any necessary corrective work required by the cabinet shall be performed before the residual landfill is accepted as closed and financial responsibility funds released.
(c) The owner/operator of a residual landfill must record a notice that will in perpetuity notify any potential purchaser of the property of the location, and time of the operation of the facility and nature of the waste placed in the site and a caution against future disturbance of the area. Such notice shall be recorded in accordance with state property law prior to acceptance of final closure of the landfill.
(5) Post-closure maintenance. A residual landfill shall be maintained for two (2) years following the closure of the site in a manner that complies with the *applicable* environmental performance standards in 401 KAR 30:030 [, Section 1(1),] and in accordance with any approved post-closure monitoring and maintenance plan approved by the cabinet.
(6) The cabinet may place additional requirements on the owner/operator of a residual landfill in addition to those stated where necessary to insure compliance with the *applicable* environmental performance standards in 401 KAR 30:030 [, Section 1(1)].

JACKIE SWIGART, Secretary
ADOPTED: June 10, 1983
RECEIVED BY LRC: June 13, 1983 at 11:30 a.m.
See public hearings scheduled on page 1.

NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION CABINET
Department for Environmental Protection
Division of Waste Management
(Proposed Amendment)

401 KAR 47:070. Operator certification.

RELATES TO: KRS 224.842, 224.844
PURSUANT TO: KRS 13.082, *13.083*, 224.017, 224.033(24)
NECESSITY AND FUNCTION: KRS 224.882 requires the Natural Resources and Environmental Protection Cabinet to promulgate regulations that establish standards and a certification program for operators of waste disposal sites or facilities. This chapter establishes standards for solid waste sites or facilities. This regulation establishes the program for education, testing, and certification of facility operators of sanitary landfills.

Section 1. Definitions. The following are definitions as used in this regulation: (1) "Category of sanitary landfill" means inert, residual, residential or contained landfill and does not include landfarming *facilities.*
(2) "Certificate" means a certificate of competency issued by the cabinet stating that the operator has met all requirements for certification.
(3) "Certified operator" means a landfill operator who holds a valid certificate.
(4) [(3)] "Landfill operator" means the individual or individuals having primary responsibility for the management and operational decisions about the daily operation of a sanitary landfill.

Section 2. General Provisions. (1) Each residential and contained landfill shall have at least one (1) certified landfill operator.
(2) The cabinet may require a certified landfill operator at inert or residual landfills as a permit condition. The decision to require this permit condition will be based on the characteristics of the waste stream, and the experience and qualifications of the landfill operator.
(3) In the event the certified landfill operator is not physically at the facility during operating hours, the operator must leave adequate notice of how contact can be made and be reasonably available.
(4) In carrying out its responsibilities the cabinet will examine the qualifications of applicants for certification and maintain records of certification and a register of certified operators.

Section 3. Application for Certification. (1) An operator desiring to be certified shall file an application on a form provided by the cabinet at least thirty (30) days before beginning training for a scheduled examination.
(2) The cabinet shall assemble all information needed to determine eligibility of the applicant for examination and certification.
(3) The cabinet shall review applications and supporting documents, determine the eligibility of the applicant for examination and notify the applicant of the notification.
(4) No person shall be eligible for examination or certification unless that person completes the appropriate training class or classes provided by the cabinet, unless an alternative training program is accepted by the cabinet.

Section 4. Training Classes and Examinations. (1) The cabinet will provide training classes for the landfill operator.

(2) Training sessions will be held at least annually at places and times set by the cabinet. The last day of each training session will be set aside for the purpose of examinations to determine the knowledge and ability of the applicant.

(3) Certification shall be conditioned on successful passage of a written examination, unless an alternative examination process is accepted by the cabinet.

(4) Separate examinations will be prepared to cover basic differences in the duties and responsibilities for the operation of each category of sanitary landfill.

(5) Applicants who fail to pass an examination may reapply for the examination at a regularly scheduled examination or by appointment with the cabinet.

(6) In the event an applicant fails to meet the requirements for certification, he may petition the cabinet for a one (1) time only "temporary hardship certification." The cabinet will then conduct an informal hearing at which evidence shall be presented by the applicant to support his hardship request. Each temporary hardship certification request shall be considered on a case-by-case basis under the following guidelines:

(a) Failure of the applicant to receive certification would leave a significant area of the state without adequate waste disposal service.

(b) The applicant has shown a good faith effort by attending all required training sessions and met all requirements except the examination requirement.

(c) The applicant has shown, through cabinet inspections, a capability for satisfactory operation of the solid waste site or facility.

Section 5. Issuance of Certificates. (1) Upon passage of the examination the cabinet will issue a certificate to the applicant designating competency. This certificate will indicate the category of sanitary landfill for which the operator is qualified.

(2) Landfill operators shall be recertified every five (5) years.

(3) Certificates will be issued to holders of certificates of another state if the training requirements of the issuing state are deemed comparable and if the operator passes the cabinet examination.

(4) Certificates shall be valid only so long as the holder uses reasonable care and judgment in the performance of an operator's duties. No certificate will be valid if obtained through fraud, deceit, or the submission of inaccurate data on qualifications.

(5) The certificates of operators who terminate their employment at a sanitary landfill will remain valid if recertified.

(6) Certificates will be of such size and nature that they may be carried in a billfold and shall be carried on the person of each certified operator during working hours at the facility.

(7) Certification of all current operators shall be accomplished within twelve (12) months of the effective date of these regulations, and certification of operators who are hired after the effective date of this regulation shall be accomplished within one (1) year of assuming the responsibility of landfill operator.

Section 6. Revocation of Certificate. The cabinet may revoke the certificate of an operator, following a cabinet hearing, when it determines that the operator has practiced fraud or deception, or that the operator is incompetent to perform an operator's duties.

Section 7. Operator Qualifications: Education and Equivalencies. (1) Operators shall be examined by the cabinet as to education and knowledge as related to the appropriate category of sanitary landfill.

(2) Landfill operators shall have completed high school (by graduation or by obtaining an equivalency certificate).

(3) If a landfill operator does not meet the requirements of subsection (2) of this section the cabinet may consider the number of years of experience in managing a category of sanitary landfill in determining eligibility for examination.

Section 8. Permit Condition. Every *residential and contained* [sanitary] landfill requiring a permit shall be operated by operator(s) certified pursuant to this regulation. Pursuant to Section 2 of this regulation, maintaining certified operator(s) shall be considered a permit condition, and the landfill permit may be revoked, or penalties for permit violations sought as appropriate, upon violation of the requirements and duties established by this regulation.

Section 9. Fees. (1) Fees for certification shall be *fifty dollars ($50)* [thirty dollars ($30)].

(2) Fees shall accompany applications and will not be returned to those who do not qualify for a certificate.

JACKIE SWIGART, Secretary
ADOPTED: June 10, 1983
RECEIVED BY LRC: June 13, 1983 at 11:30 a.m.
See public hearings scheduled on page 1.

PUBLIC PROTECTION AND REGULATION CABINET
Department of Insurance
(Proposed Amendment)

806 KAR 9:130. Agent's assumed business name.

RELATES TO: KRS *304.9-130,* 304.9-210, *365.015* [365.010]

PURSUANT TO: KRS 13.082, 304.2-110

NECESSITY AND FUNCTION: KRS 304.2-110 provides that the Commissioner of Insurance may make reasonable rules and regulations necessary for or as an aid to the effectuation of any provision of the Kentucky Insurance Code. This regulation allows agents to use an assumed name under specified conditions.

Section 1. *Individual Agents.* No license shall be issued in an agent's assumed name unless such agent first furnishes the Department of Insurance with a certified copy of the certificate required under KRS *365.015* [365.010] indicating that such certificate has been filed in the office of the county clerk of each county in which such agent intends to conduct or transact business.

Section 2. Corporate or Partnership Agents. No license shall be issued in an agent's assumed name unless such agent first furnishes the Department of Insurance with certified copies of the certificates required by KRS 365.015 indicating that such certificates have been filed with the

Secretary of State and the county clerk of each county in which such agent intends to conduct or transact business.

DANIEL D. BRISCOE, Commissioner
ADOPTED: May 31, 1983
APPROVED: LEONARD B. MARSHALL, JR.
Secretary
RECEIVED BY LRC: June 8, 1983 at 2:30 p.m.
SUBMIT COMMENT TO: Daniel D. Briscoe, Commissioner of Insurance, P.O. Box 517, Frankfort, Kentucky 40602.

PUBLIC PROTECTION AND REGULATION CABINET
Kentucky Harness Racing Commission
(Proposed Amendment)

811 KAR 1:125. Pari-mutuel rules.

RELATES TO: KRS 230.630(1), (3), 230.640, 230.690, 230.710
PURSUANT TO: KRS 13.082, 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 provide and regulate pari-mutuel wagering at race meetings.

Section 1. Equipment. (1) The commission considers it desirable for licensees to use vending machines for the sale of pari-mutuel tickets. All licensees will be required to employ the use of totalizator equipment or its equivalent of a type approved by the commission.

(2) The controls necessary to operate the odds board in the infield, relative to the way the horses finish, (if the finish is being contested, if there is a photo, dead heat, time or race) are to be located in the judge's stand and controlled only by the presiding judge, or one associate judge designated to do so.

Section 2. Definitions for Pari-Mutuel Rules. (1) For the purpose of pari-mutuel betting, every heat or dash shall be a separate and distinct race.

(2) Where the term "race" is used throughout the following rules, it shall not be considered to apply as if the term "heat" had been used. Wagering shall be prohibited on more than ten (10) races, heats excluded, during the course of a single racing program, provided that the commission may extend the number of races authorized.

Section 3. Tax. Each day's tax imposed by KRS Chapter 138 shall be remitted to the Kentucky Department of Revenue by the licensee by check or bank draft within twenty-four (24) hours after the close of the racing program. Such remittance shall be accompanied by a tax return executed by the licensee on a form furnished by the Kentucky Department of Revenue. A copy of said form will be filed daily with the commission.

Section 4. Sale of Pari-Mutuel Tickets. (1) Only one (1) method of selling pari-mutuel tickets shall be used for the sale of tickets on individual races during any racing day.

(2) Unless prior commission approval has been obtained no pari-mutuel tickets shall be sold except through regular ticket windows properly designated by signs showing type of tickets sold at that particular window.

(3) Without prior commission approval no pari-mutuel tickets shall be sold on any race prior to the day of the race.

(4) Book making or betting other than pari-mutuel betting is strictly prohibited.

(5) No minor shall be allowed to bet and no mutuel employee shall sell or pay a wager to a minor.

(6) All wagering shall stop as soon as the word "go" shall be given by record or by voice of the starter. Vending machines for the sale of pari-mutuel tickets shall be electrically locked by the presiding judge from the judge's stand.

(7) When the sale of pari-mutuel tickets has closed, it shall remain closed until after the race has finished and has been declared official, unless an objection imposes a delay in which case the sale of pari-mutuel tickets for the next succeeding race may be begun without waiting for the race to be declared official.

(8) Without approval of the commission, no pari-mutuel ticket shall be sold for less than two dollars ($2). Without approval of the commission, no pari-mutuel ticket combining win and place, win and show, or place and show, shall be sold for less than four dollars ($4). Without approval of the commission, no pari-mutuel ticket combining win, place, and show shall be sold for less than six dollars ($6). Without approval of the commission, no pari-mutuel tickets for perfecta, double perfecta, quinella or double quinella combinations shall be sold for less than two dollars ($2).

(9) The method of selling pari-mutuel tickets shall be approved by the commission.

(10) The manager of the pari-mutuel department shall be properly and timely advised by the presiding judge, prior to the beginning of wagering on each race, of the horses that will compete in the race.

(11) At meetings of more than ten (10) days, if less than six (6) interests qualify to start in a race, the manager of the pari-mutuel department, with the consent of the representative of the commission, shall be permitted to prohibit show wagering on that race.

(12) At meetings of more than ten (10) days, if less than five (5) interests qualify horses to start in a race, the said manager, with the consent of the representative of the Kentucky Harness Racing Commission shall be permitted to prohibit both place and show wagering on that race.

(13) At meetings of more than ten (10) days, if less than three (3) interests qualify horses to start in a race, the said manager, with the consent of the representative of the commission shall be permitted to prohibit wagering on that race.

(14) At meetings of more than ten (10) days, the said manager with the consent of the representative of the commission, may prohibit wagering on any particular horse or entry in any race. Such consent shall be sought by the manager of the pari-mutuel department from the representative of the commission. Such exclusions, if consented to by the representative of the commission, shall be clearly indicated on the program or score card or announced and horses excluded shall be numbered so as to in no way infer that they are coupled in "the field." Horses once excluded from the the betting shall remain excluded during the day or race in which they are scheduled to start.

(15) When more horses representing separate interests are started in a race than the number of post positions on the infield tote board, all horses in excess of a number of interests one (1) less than the total number of post positions on the infield tote board shall be grouped in the betting as the "field."

(16) A refund at cost value shall be made to all holders of a purchased ticket bearing the number of a horse in any race which has been scratched or withdrawn before said horse has become a starter in the race under the rules, unless such horse is part of an entry, and one (1) or more of said entry starts.

Section 5. Payments. (1) Payments due on all wagers shall be made in conformity with well established practice of the pari-mutuel system. The practice is to work in dollars and not in the number of tickets. Money wagered on winning tickets is returned in full plus the profits. In all cases of a winning mutuel pool each licensee must redistribute not less than one dollar and ten cents ($1.10) on each one dollar ($1) wagered. In the event of a minus pool the minimum payoff on each one dollar ($1.00) wagered shall be one dollar and five cents ($1.05).

(2) At the end of each race, the judges shall advise the manager of the pari-mutuel department by the use of the tote equipment or by telephone of the official placement of the horses, and no payoffs shall be made until the receipt of such notice.

(3) If a horse wins and there is no money wagered on him to win, the win pool shall be apportioned among the holders or the place tickets on that horse, if any, otherwise among holders of the show tickets.

(4) If no money has been wagered to place on a horse which is placed first or second in a race, the place pool for that race shall be apportioned among the holders of the place tickets on the other horse which was placed first or second.

(5) If no money has been wagered to show on a horse which has placed first, second or third in a race, the show pool in that race shall be apportioned among the holders of show tickets on the other horses which are placed first, second or third in that race.

(6) In the event that only two (2) horses finish in any one (1) race, the show pool shall be figured the same as the place pool and monies apportioned to the holders of show tickets on the two (2) finishing horses. In the event only one (1) horse finishes in any one (1) race all three (3) pools shall be figured separately as straight pools and all the monies shall be awarded to the ticket holders of the finishing horse. In the event no horse finishes the race, then the entire pool shall be refunded to all ticket holders.

(7) If two (2) horses finish in a dead heat for first place, the money in the win mutuel pool is divided between the two (2) dead-heaters according to their proportionate shares in the pool.

(8) If two (2) horses finish in a dead heat for second place, the division is made as follows: There shall be allotted to the pool of the winner of the race one-half (½) of the place pool and the two (2) dead-heaters one-half (½) each of the remaining half of the place pool.

(9) If two (2) horses coupled in the betting as an "entry" or "the field" finish first and second, first and third, or second and third, two-thirds (⅔) of the net show pool shall be allotted to the pool of the entry and the balance one-third (⅓) to the other horse.

(10) In the event that one (1) horse of the entry or the field finishes first or second and the other part of the entry or field finishes in a dead heat for third with another horse, the division of the net show pool shall be as follows: one-half (½) of the net show pool shall be allotted to the pool of the entry, one-third (⅓) to the non-entry horse not involved in the dead heat, and one-sixth (1/6) to the non-entry horse finishing in the dead heat.

(11) If the entry or field horses should finish first, second and third, the entire money in each pool goes to the entry or field tickets, no other tickets participating.

(12) No mutiliated pari-mutuel ticket that is not easily identifiable as being a valid ticket shall be accepted for payment.

(13) No claims for lost pari-mutuel tickets shall be considered.

(14) In the event an error is made in calculation resulting in a price being too high, the association shall lose such amount between the proper price and the one paid. If the error in calculation results in a price being too low, such amount between proper price and price paid shall be added to the net pool of the same position in the following race on the same day or if it is the last race of the day then it shall be added to the net pool of the same position in the same race on the following day. If such an error occurs causing underpayment on the last race of the entire racing meeting, the underpayment shall be paid to the Kentucky Department of Revenue.

Section 6. Daily Doubles. (1) Positively no exchange of daily double tickets after purchaser thereof has left the sales window.

(2) The daily double is not a parlay, and has no connection with or relation to the "tote" betting. All tickets on the daily double will be calculated in an entirely separate pool. Without prior commission approval, only one (1) daily double will be permitted during any single program.

(3) All tickets will be to win (straight) only. Entries and the field run as one (1) horse in the daily double. If two (2) or more horses in a race are coupled on the same totalizator ticket, there shall be no refunds, unless all of the horses so coupled are excused before off time.

(4) Selections are to be made of one (1) horse for each of two (2) races in the daily double by "tote" program numbers.

(5) If no ticket is sold combining the two (2) winners of the daily double, the pool shall then be apportioned equally between those having tickets including the winner in the first race of the daily double and those having tickets including the winner in the second race of the daily double in the same manner in which a place pool is calculated and distributed.

(6) If no ticket is sold on the winner of the first race of the daily double on any combination, the entire pool is apportioned to the holders of tickets on the winner of the second race of the daily double. Likewise, if no ticket is sold on the winner of the second race of the daily double or any combination, the entire pool is apportioned to the holders of tickets on the winner of the first race of the daily double.

(7) If a dead heat to win should result in either the first or second race of the daily double, the total pool is calculated as a place pool. In case of a dead heat for the winner of the first race of the daily double, the posting of payoff prices will be made after winner of second race of the daily double is official.

(8) Should no ticket be sold containing the numbers of either winner on any combination, the pool shall be allotted to those having tickets on horses finishing next to the winners.

(9) In the event any horse or horses in the first half of the daily double should be excused by the judges after the horses shall have left the paddock for the post, or after the betting on the daily double has been closed, or should any horse or horses in the first half of the daily double be prevented from racing because of failure of the arm or arms of the starting gate to open, the money wagered on any horse or horses so excused or prevented from racing shall be deducted from the daily double pool and refunded to the purchaser or purchasers of tickets on the horse or horses so excused or prevented from racing.

(10) If a horse is scratched from the second half of the daily double before it becomes a starter in the second half, but after the first half of the daily double has been run, all

daily double tickets combining the scratched horse in the second race of the daily double with the actual winner of the first race of the daily double shall be paid a price equivalent to that fraction of the net pool derived by dividing the net pool by the total purchase price of all tickets combining the winner of the first race of the daily double with all horses in the second race of the daily double. The total payoff on all tickets combining the winner of the first race of the daily double with the scratched horse in the second race of the daily double as determined by the method set forth in this rule shall be deducted from the net daily double pool.

(11) The possible payoff prices shall be posted or announced to the public before the start of the last race of the daily double, and as soon as possible after the horses in the race of the last half of the daily double have entered upon the track on the way to the post.

(12) If for any reason the second race of the daily double is cancelled or declared "no race" by the judges after the first daily double race is declared official, then the net daily double pool shall be distributed to wagering combinations which include the horse or betting interest which finished first in the first daily double race.

(13) If a daily double is scheduled to be held, subsections (1) to (12) of this section shall be printed in conspicuous places in the grandstand area and an abbreviated version shall be printed on the day's racing program, and notice printed on said program as follows: "Retain Your Tickets Until The Result Of the Daily Double Has Been Posted."

Section 7. Perfecta Wagering. (1) The "perfecta" (also known as exacta or correcta) is a contract by the purchaser of a ticket combining two (2) horses in a single race, selecting the two (2) horses that will subsequently finish first and second in that race. Payment of the ticket shall be made only to the purchaser who has selected the same order of finish as officially posted.

(2) The perfecta is not a "parlay" and has no connection with or relation to the win, place or show betting and will be calculated as an entirely separate pool.

(3) If no ticket is sold on the winning combination of a perfecta pool, the net pool shall be distributed equally between holders of tickets selecting the winning horse to finish first and/or holders of tickets selecting the second place horse to finish second.

(4) If no ticket is sold that would require distribution of a perfecta pool to winner as above defined, the association shall make a complete and full refund of perfecta pool.

(5) In case of a dead heat between two (2) horses for first place the net perfecta pool shall be calculated and distributed as a place pool to holders of tickets of the winning combination(s). In case of a dead heat between two (2) horses for second place, the perfecta pool shall be figured as a place pool, the holders of tickets combining the winning horse and the two (2) horses finishing second participating in the payoff.

(6) In the event of a dead heat for second place, if no ticket is sold on one (1) of the two (2) winning combinations, the entire net pool shall be calculated as a win pool and distrubited to those holding tickets on the other winning combination. If no tickets combine the winning horse with either of the place horses in the dead heat, the perfecta pool shall be calculated and distributed as a place pool to holders of tickets representing any interest in the net pool.

(7) In the event two (2) or three (3) horses coupled in an entry or the mutuel field finish first and second or first, second and third, the winning combination shall be the coupled horses and the horse placed immediately behind such entry or field.

Section 8. Quinella Wagering. (1) The "quinella" is a form of a pari-mutuel wagering consisting of selecting the first two (2) horses to finish, irrespective of their place of finish.

(2) The quinella is not a "parlay" and has no connection with or relations to the win, place or show betting and will be calculated as an entirely separate pool.

(3) In case of a dead heat between two (2) horses for first place, the combination shall be the winner of the quinella pool. In case of a dead heat between two (2) horses for second place, the quinella pool shall be figured as a place pool, the holders of tickets combining the winning horse and the two (2) horses finishing second participating in the payoff.

(4) In the event of a dead heat for second place, if no ticket is sold on one (1) of the winning combinations, the entire net pool shall be calculated as a win pool and distributed to those holding tickets on the other winning combination. If no tickets combine the winning horse with either of the place horses in the dead heat, the net pool shall be calculated and distributed as a place pool to holders of tickets combining either of the place horses; however, if any tickets combine both horses in the dead heat for place, the net pool shall be calculated and distributed as a win pool to holders of such tickets.

(5) If no ticket is sold on the winning combination of a quinella pool, the net pool shall then be apportioned equally between those having tickets including the horse finishing first and those having tickets including the horse finishing second in the same manner in which a place pool is calculated and distributed.

(6) If no ticket is sold that would require distribution of a quinella pool to a winner as above defined, the association shall make a complete and full refund of the quinella pool.

(7) If a perfecta and/or quinella is scheduled to be held, each association shall print an abbreviated version of this rule on the day's racing program.

(8) In the event two (2) or three (3) horses coupled in an entry or the mutuel field finish first and second or first, second and third, the winning combination shall be the coupled horses and the horse placed immediately behind such entry or field.

Section 9. Double Perfecta Wagering. (1) the double perfecta is a form of pari-mutuel wagering in which the bettor selects the two (2) horses that will finish first and second in each of two (2) consecutive races in the exact order as officially posted.

(2) Double perfecta tickets shall be sold only at double perfecta windows and only from automatic double issue machines.

(3) Each bettor purchasing double perfecta tickets shall designate his two (2) selections as the first two (2) horses to finish in that order in the first of two (2) consecutive races.

(4) After the official declaration of the first two (2) horses to finish in the first race of the double perfecta, each bettor holding a ticket combining the first two (2) horses in the exact order of finish must, prior to the running of the second double perfecta race exchange ticket at the double perfecta window and at such time shall select the two (2) horses to finish in the second race of the double perfecta in the exact order as officially posted. No further money shall be required of the holder of the ticket in order to make the exchange.

(5) No double perfecta exchange ticket upon the second race shall be issued except upon the surrender of the double perfecta ticket from the first race as described in these rules. The double perfecta pool obtained from the sales of

double perfecta tickets upon the first race shall be held, subject to these rules, and divided among the winning tickets of the double perfecta exchange tickets, subject to those rules to the contrary. Double perfecta windows shall be open for the purpose of making the exchange as described only after the first race has been declared official.

(6) If a winning double perfecta ticket from the first race is not presented for exchange within the time provided the bettor forfeits all rights to any distribution or refund except in the event the second half of the double perfecta is cancelled or declared "no race."

(7) If a horse is scratched in the first race of the double perfecta races, all double perfecta tickets on the scratched horse will be refunded.

(8) If a horse is scratched in the second race of the double perfecta, after the first race of the double perfecta has been declared official, all exchange tickets combining the scratched horse shall become consolation tickets and shall be paid a price per dollar denomination calculated as follows: the net double perfecta pool (gross pool less commission) shall be divided by the total purchase price of all tickets combining the winners of the first race of the double perfecta. The quotient thus obtained shall be the price to be paid to holders of exchange tickets combining the scratched horse in the second race of the double perfecta. The entire consolation pool (number of eligible tickets times the consolation price) shall be deducted from the net double perfecta pool.

(9) If no double perfecta ticket is sold as a winning combination in the first race of the double perfecta, the double perfecta pool shall be divided among those having tickets including the horse finishing first and those having tickets including the horse finishing second and such distributions shall be calculated and made as a place pool. In such an instance the double perfecta race shall end and the pool be closed for the day.

(10) If no double perfecta exchange ticket is sold on the winning combination the net pool shall then be apportioned equally between those having tickets including the horse finishing first and those having tickets including the horse finishing second in the same manner in which a place pool is calculated and distributed.

(11) If a double perfecta exchange ticket combines only one (1) of the two (2) winners and no double perfecta exchange ticket combines the other winner, the entire pool shall be distributed as a straight pool to the holders of those tickets.

(12) If no exchange ticket includes either the first or second horse of the second half of the double perfecta the entire net pool shall be distributed as a straight pool to all holders of exchange tickets.

(13) In the event of a dead heat for place in the first race of the double perfecta races, all double perfecta tickets combining the first horse and either of the place horses shall be eligible for exchange for double perfecta exchange tickets.

(14) In the event of a dead heat for place in the second race of the double perfecta, the double perfecta pool shall be divided, calculated and distributed as a place pool to the holders of double perfecta exchange tickets combining the first horse and either of the place horses. In the event of the dead heat to place and there are no tickets sold on one (1) combination, then the other combination having the winning horses shall be declared the winner. If no exchange tickets combining the winning horse with either of the place horses in the dead heat, the double perfecta pool shall be calculated and distributed as a win pool to holders of tickets representing any interest in the net pool.

(15) If for any reason the second of the double perfecta races is cancelled or declared "no race," the pool shall be calculated as a straight pool and shall be distributed among the holders of the tickets combining the first two (2) horses of the first race of the double perfecta otherwise eligible for double perfecta exchange tickets and also distributed to holders of the double perfecta exchange tickets.

(16) If there is a dead heat for the winning horse in either of the two (2) consecutive races for the double perfecta, such calculation of distribution of the double perfecta pool shall be made in the manner in which any ordinary perfecta pool would be made should there be a dead heat for the win despite the number of horses involved in the dead heat.

(17) The purchase of double perfecta tickets other than through pari-mutuel machines and the sale of double perfecta tickets from one (1) individual to another shall be deemed illegal and is prohibited.

Section 10. Big "Q" Rules (1) Each operator wishing to conduct Big "Q" wagering must first petition the commission for permission to do so.

(2) Each operator shall either print in the daily program or prominently post at all areas where Big Q wagering is conducted the complete rules for Big Q wagering as set forth in the following sections:

(a) The Big Q consists of selecting the quinella (the first two (2) horses to finish) of each of two (2) consecutive races. Pari-mutuel wagering tickets are to be sold upon the first race of the two (2) races only. The division of the pool shall be calculated as in a straight pool, subject to provisions of these rules to the contrary.

(b) No entries or field horses shall be allowed to start in any race comprising the Big Q.

(c) Tickets shall be sold only at Big Q windows and only from automatic double issuing machines.

(d) Each bettor purchasing tickets shall designate his two (2) selections as the first two (2) horses to finish in the first race of the two (2) races.

(e) After the official declaration of the first two (2) horses to finish the first of the Big Q races, each bettor holding a ticket combining the said two (2) horses to finish must, prior to the running of the second race, exchange such winning ticket for a Big Q exchange ticket at the Big Q windows and at such time the said holder shall select the first two (2) horses to finish in the second race of the Big Q. No further money shall be required of the holder of the ticket in order to make the exchange.

(f) No Big Q exchange ticket upon the second race shall be issued except upon the surrender of the Big Q ticket from the first race as described in these sections. The Big Q pool obtained from the sales of the Big Q tickets upon the first race shall be held subject to these sections, and divided among the winning tickets of the Big Q exchange tickets, subject to these sections to the contrary. Big Q windows shall be open for the purpose of making the exchange as described only after the first race has been declared official and such windows shall close at post time at the start of the second race of the Big Q races.

(g) If a winning Big Q ticket from the first race is not presented for exchange within the time provided, the bettor forfeits all rights to any distribution or refund except in the event the second half of the Big Q is cancelled or declared "no race" or if no exchange ticket includes either the first or second horse of the second half of the Big Q.

(h) If a horse is scratched in the first race, all Big Q tickets on the scratched horse will be refunded. If a horse is scratched in the second race, the holders of tickets on the scratched horse will be entitled to exchange their tickets for

another selection. In the event of a late scratch, after the exchange windows have been closed, all exchange tickets combining the scratched horse shall become consolation tickets and shall be paid a price per dollar denomination calculated as follows: The net Big Q pool (gross pool less commission) shall be divided by the total purchase price of all tickets combining the winnings of the first race of the Big Q. The quotient thus obtained shall be the price to be paid to holders of exchange tickets combining the scratched horse in the second race of the Big Q. The entire consolation pool (number of eligible tickets times the consolation price) plus the breakage shall be deducted from the net Big Q pool.

(i) If no ticket is sold as a winning combination in the first race of the Big Q, the Big Q pool shall be divided among those having tickets including the horse finishing first or second and such distributions shall be calculated and made as a place pool. In such an instance, the Big Q race shall end and the pool be closed for the day.

(j) If no Big Q exchange ticket is sold on the winning combination, the net pool shall be apportioned equally between those having tickets including the horse finishing second in the same manner in which a place pool is calculated and distributed.

(k) If a Big Q exchange ticket combines only one (1) of the winners and no Big Q exchange ticket combines the other winner, the entire pool shall be distributed as a straight pool to the holders of those tickets.

(l) If no exchange ticket includes either the first or second horse of the second half of the Big Q, the entire net pool will be distributed as a straight pool to all holders of exchange tickets and winning combinations of the first half that have not been exchanged.

(m) In the event of a dead heat for place in the first race of the Big Q races all Big Q tickets combining the first horse and either of the place horses shall be eligible for exchange for Big Q exchange tickets.

(n) In the event of a dead heat for place in the second race of the Big Q races the pool will be divided, calculated and distributed as a place pool to the holders of Big Q exchange tickets combining the first horse and either of the place horses. In the event of the dead heat to place and there are no tickets sold on one (1) combination, then the other combination having winning horses shall be declared the winner.

(o) If no exchange tickets combine the winning horse with either of the place horses in the dead heat, the Big Q pool shall be calculated and distributed as a place pool to holders of tickets combining either of the place horses, however if any exchange tickets combine both horses in the dead heat for place, the Big Q pool shall be calculated and distributed as a place pool to holders of such tickets.

(p) If for any reason the first race of the Big Q races is cancelled or declared "no race" full and complete refund shall be made from the Big Q pool.

(q) If for any reason, the second of the Big Q races is cancelled or declared "no race" the pool shall be calculated as a straight pool and shall be distributed among the holders of tickets combining the first two (2) horses of the first race of the Big Q otherwise eligible for Big Q exchange tickets and also distributed to holders of the Big Q exchange tickets.

(r) If there is a dead heat for the winning horses in either of the two (2) consecutive races for the Big Q such calculation of distribution of the Big Q pool shall be made in the manner in which any ordinary quinella pool would be made should there be a dead heat for the win despite the number of horses involved in the dead heat.

(s) In the event that an incorrect exchange ticket is issued during the second half of the Big Q pool, such incorrect exchange ticket must be turned in to the State Auditor prior to the running of the second half. Said tickets shall be deducted from both exchange and individual combination totals. The ticket shall be voided and filed with the performance worksheets and a report including the seller's name and license number, shall be made to the commission of the complete incident.

Section 11. Trifecta Wagering. (1) The "Trifecta" is a contract by the purchaser of a ticket combining three (3) horses in a single race, selecting the three (3) horses that will subsequently finish first, second and third in that race. Payment of the ticket shall be made only to the purchaser who has selected the same order of finish as officially posted.

(2) The "Trifecta" is not a parlay and has no connection with or relation to the Win, Place and Show betting and will be calculated as an entirely separate pool.

(3) Trifecta tickets shall be sold in not less than one dollar ($1) denominations.

(4) If no ticket is sold on the winning combination of a Trifecta Pool, the net pool shall be distributed to the holders of tickets selecting the win and place finishers in that order. If no ticket is sold combining the win and place finish, the net pool will be distributed to the holders of tickets selecting the winner.

(5) If no ticket is sold that would require distribution of the net Trifecta Pool to a winner as above defined, the association shall make a full refund of the Trifecta Pool.

(6) In the event of a dead heat or dead heats, all Trifecta tickets selecting the correct order of finish, counting a horse in a dead heat as finishing in either position dead heated, shall be winning tickets. The payoff will be calculated as a place pool.

(7) In the event of a scratch in the Trifecta no exchanges will be made. All tickets which include the scratched horse are eliminated from further participation in the Trifecta Pool and will be refunded.

(8) No entries or field horses shall be allowed in any race that the Trifecta is being sold.

(9) Trifecta tickets shall be sold only by the licensee through pari-mutuel machines programmed to print all selections on one (1) ticket. Resale of such tickets from one (1) individual to another is prohibited and shall be grounds for ejection.

(10) Each association shall print in heavy type in a conspicuous place in its printed program all the provisions of this section and post printed copies of this section about the track in such places as it may deem advisable.

(11) For the purpose of trifecta wagering the trifecta race shall be drawn to consist of nine (9) starters *except where the tote board has only eight (8) numbers then the trifecta race shall be drawn to consist of eight (8) starters* [and two (2) also eligibles].

(12) Nothing in this section shall preclude the sale of combination trifecta tickets in the amount of six dollars ($6).

Section 12. Types of Wagering Allowed. The following types of wagering shall be permitted at all tracks given racing dates by the commission:

(1) Normal win, place and show betting on each race.

(2) A daily double on the first and second races.

(3) Any other methods of betting approved in advance by the commission.

CARL B. LARSEN, Supervisor of Racing
ADOPTED: May 26, 1983
APPROVED: LEONARD B. MARSHALL, JR. Secretary
RECEIVED BY LRC: June 15, 1983 at 2:30 p.m.
SUBMIT COMMENT OR REQUEST FOR HEARING TO: Carl B. Larsen, Supervisor of Racing, Kentucky Harness Racing Commission, 1051 H Newtown Road, Lexington, Kentucky 40511.

CABINET FOR HUMAN RESOURCES
Department for Health Services
(Proposed Amendment)

902 KAR 9:010. Environmental health.

RELATES TO: KRS 211.920 to 211.945
PURSUANT TO: KRS 13.082, 194.050, 211.090, 211.925
NECESSITY AND FUNCTION: KRS 211.920 to 211.945 authorizes the *Cabinet* [Department] for Human Resources to adopt rules, regulations, and standards relating to the public health or health aspects of the operation of state [and local] confinement facilities. This regulation establishes uniform standards to safeguard the environmental health of persons confined in state [and local] confinement facilities.

Section 1. Definitions. As used in this regulation: *(1) "Cabinet" means Cabinet for Human Resources and the local health department having jurisdiction and their duly designated representatives.*

(2) [(1)] "Cell" means a room used to confine one (1) inmate;

(3) [(2)] "Dayroom" means a room used to confine inmates during the day;

[(3) "Department" means the Department for Human Resources and the local health department having jurisdiction and their duly designated representatives;]

(4) "Dormitory" means a room used to confine two (2) or more inmates;

(5) "Inmate" means any person confined in a state [or local] confinement facility.

Section 2. Sanitary Facilities and Controls. (1) The water supply shall be potable, adequate and from an approved source and shall be developed and approved in accordance with applicable requirements of the [Department for] Natural Resources and Environmental Protection *Cabinet.*

(2) All sewage and liquid 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 in accordance with the requirements of the *cabinet* [state plumbing code]; provided, however, if a public sewerage system subsequently becomes available, connections shall be made thereto and the confinement facilitiy's sewerage system shall be discontinued.

(3) A drinking fountain with a diagonal jet orifice or single service drinking cups shall be provided for each cell, dormitory and dayroom. The use of a common drinking vessel is prohibited.

(4) Each cell shall be provided with a modern prison-type commode. Dayrooms and dormitories shall be provided with one (1) commode for every eight (8) inmates or fraction thereof. Urinals may be substituted for one-half (½) the commodes in facilities used to house male inmates. All commodes and urinals shall be kept clean and in good repair. An adequate supply of toilet tissue shall be provided at each commode.

(5) Each cell shall be provided with a modern prison-type lavatory. Dayrooms and dormitories shall be provided with one (1) lavatory for every eight (8) inmates or fraction thereof. All lavatories shall be kept clean and in good repair. Each lavatory shall be equipped with hot and cold running water, hand-cleansing soap and approved sanitary towels or other approved hand-drying devices.

(6) Showers shall be provided on a ratio of one (1) shower for each fifteen (15) inmates or fraction thereof. All showers shall be kept clean and in good repair. Under normal operating conditions, each inmate shall be permitted to take one (1) shower per day. An adequate supply of soap and individual towels shall be available for showers. Each shower shall be equipped with hot and cold running water.

(7) All hot water outlets in confinement areas shall have controls to prevent the distribution of water at a temperature which would scald an inmate.

(8) All plumbing shall comply with the state plumbing code.

(9) All garbage and rubbish shall, prior to disposal, be kept in leakproof, nonabsorbent containers and such containers shall be kept covered with tight-fitting lids when stored. Containers used in confinement areas shall be flame-retardant. Adequate cleaning facilities shall be provided and containers shall be kept clean. All garbage and rubbish shall be removed from confinement areas on a daily basis and shall be disposed of at least weekly or more often if necessary, and in such a manner as to prevent a nuisance.

Section 3. Facilities and Equipment. (1) Each cell shall:

(a) Have at least forty-eight (48) square feet of floor space;

(b) Have at least eight (8) foot ceilings;

(c) Contain a bed; and

(d) Provide facilities for storage of the inmate's personal belongings, including clothing and towels.

(2) Each dormitory shall:

(a) Have at least eight (8) foot ceilings;

(b) Provide at least fifty (50) square feet of floor space per inmate;

[(c) Not serve more than fifteen (15) inmates at any one time;]

(c) [(d)] Contain a bed for each inmate; and

(d) [(e)] Provide facilities for storage of inmates' personal belongings, including clothing and towels.

(3) All floors, walls, ceilings, and equipment shall be constructed of easily cleanable material, kept in good repair and clean. All parts of the confinement facility and its premises shall be kept clean, neat and free of litter and rubbish.

[(4) A separate confinement unit shall be provided in all confinement facilities used to confine persons who may be intoxicated. Each such unit shall be equipped with concrete bunks at least twenty-four (24) inches wide and not over four (4) inches in height, and edges shall be rounded smooth. Each unit shall be equipped with a prison-type commode, a flush action floor drain, and a lavatory with a drain adequate to accommodate the refuse commonly associated with such units.]

(4) [(5)] Separate cells and dormitories shall be provided for: adult males; adult females; male juveniles; and female

juveniles. Physical, visual and audible separation shall be provided. Separate confinement cells shall be provided for mentally disturbed inmates.

(5) [(6)] A medical examining room physically and visually separated from cells and dormitories shall be provided.

Section 4. Lighting. Each cell, dayroom, and dormitory room shall be provided with natural or artificial light sufficient to provide fifty (50) foot candles of light for reading purposes. Lighting shall be available for all areas of the confinement facility equal to twenty (20) foot candles to permit observation, proper cleaning and maintenance. All light fixtures shall be kept in good repair and clean.

Section 5. Heating and Cooling. Adequate automatic standard heating equipment shall be provided. If radiators are provided, they shall be located in the inspection corridor and adequately shielded to prevent accidental injury. In no case shall the heating system constitute a fire or safety hazard. Cells, dormitories, dayrooms and other areas of confinement facilities used to house inmates shall be properly heated so the inside temperature does not fall below sixty-five (65) degrees Fahrenheit, and an adequate cooling and ventilation system shall be provided and maintained to prevent the inside temperature from rising above eighty-five (85) degrees Fahrenheit.

Section 6. Ventilation. Cells, dormitories, and dayrooms shall be provided with natural or mechanical ventilation which admits fresh air and removes disagreeable odors.

Section 7. Vermin Control. (1) The confinement facility premises shall be free of vermin at all times. Effective measures to eliminate the presence of rodents, flies, roaches, and other vermin on the premises shall be utilized. The premises shall be kept in such condition as to prevent the harborage or breeding of vermin.

(2) Openings to the outside shall be effectively protected against the entrance of rodents, insects and other vermin 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 8. Bedding. As a minimum each inmate detained [overnight] in a confinement facility shall be provided with: (i) an approved flame-retardant and water-repellent mattress and pillow; (ii) a pillowcase; (iii) a sheet or cloth mattress cover; and (iv) a blanket. Provided, however, that if, in the sound discretion of the [jailer or other] appropriate person in charge of the confinement facility, any items listed in this section would constitute a danger or hazard to the inmate confined due to a behavior or mental condition [or intoxication], such items may be withheld. Mattresses, pillows, blankets, sheets, pillowcases, and mattress covers shall be kept in good repair and clean. Sheets, pillow cases and mattress covers, if used without sheets, shall be changed and laundered at least weekly and before being issued to another inmate.

Section 9. Supplies for Inmates. An [inmate detained for more than twelve (12) hours shall be provided a clean cloth towel. Thereafter, the] inmate shall be provided a clean cloth towel at least every fourth day. Clothing worn by inmates shall be kept clean.

Section 10. Exercise, Visitation and Multi-Purpose Areas. Adequate space shall be provided to allow all inmates an opportunity to obtain adequate exercise. Adequate individual visitation space shall be provided. Separate areas for educational and other multi-purpose uses shall be provided in confinement facilities housing fifteen (15) or more inmates.

Section 11. Food Service. All confinement facilities shall comply with the food service provisions of KRS 219.011 to 219.081 and 219.991 and the state food service code. If food for inmates is not prepared by the confinement facility, food shall be obtained from a commercial food service establishment holding a valid permit from the *cabinet* [department].

Section 12. Food Manufacturing. All food manufacturing and processing conducted at confinement facilities shall be operated in accordance with applicable public health laws and the *cabinet's* [department's] regulations relating thereto.

Section 13. Existing Facilities and Equipment. Notwithstanding the other provisions of this regulation, facilities and equipment being used by existing confinement facilities, which do not fully meet the design and construction requirements of this regulation, may be continued in use, if in good repair, capable of being maintained in a sanitary condition, and creates no health hazard.

Section 14. Plan Review of Future Construction. Plans for alteration or new construction of *state confinement facilities* [jails] shall be submitted *to the cabinet for approval* [and approved in accordance with KRS 441.410 to 441.450. Plans for alteration or new construction of other confinement facilities shall be submitted to [the department,] the State Fire Marshal, the Department for Natural Resources and Environmental Protection and the *Department* [Bureau] of Corrections for approval]. All such plans and specifications shall show building layout, type of construction material, size and location of fixed equipment and facilities, and a plumbing riser diagram. [All plans shall be initially submitted to the local health department concerned to be reviewed and forwarded to the department.]

Section 15. Inspection of Confinement Facilities. (1) At least once each six (6) months, the *cabinet* [department] shall inspect each confinement facility and shall make as many additional inspections and reinspections as are necessary for carrying out the provisions of this regulation.

(2) Whenever an agent of the *cabinet* [department] makes an inspection of a confinement facility, he shall record his findings on an official *cabinet* [department] inspection report form and provide the appropriate official of the confinement facility with a copy of the report. The inspection report shall set forth the specific deficiencies found.

Section 16. (1) A waiver of the facility standards may be granted by the cabinet for any existing state confinement facility if the cabinet determines:

(a) That strict compliance will cause unreasonable difficulties;

(b) That such waiver will not seriously affect the security and supervision of inmates and programs, or the safe, healthful or efficient operation of the facility; and

(c) That compliance with the standard is to be achieved in a manner other than that which is specified, but in a manner which is sufficient to meet the intent of the en-

vironmental standards for state confinement facilities.

(2) To request a waiver of any of the requirements of this regulation, the Corrections Cabinet shall submit a written request to the Cabinet for Human Resources. The written request shall include the following information:

(a) Citation of the specific standard involved;

(b) Specification of the efforts of the Corrections Cabinet to bring the facility into strict compliance;

(c) Identification and description of the specific difficulties involved in meeting strict compliance;

(d) Description of the alternative proposed; and

(e) Provision of documentation sufficient, in the opinion of the Cabinet for Human Resources, to demonstrate that the waiver, if granted, will not jeopardize the security and supervision of inmates and programs, or the safe, healthful or efficient operation of the facility.

(3) A waiver, if granted, shall apply only to the specific situation or circumstance described and for such time as specified by the Cabinet for Human Resources, and shall include any requirements imposed as conditions for approval of the waiver. No waiver shall be granted for longer than twelve (12) months. Any waiver granted shall be subject to review upon expiration for the purpose of reapproval.

DAVID T. ALLEN, Commissioner
ADOPTED: June 15, 1983
APPROVED: BUDDY H. ADAMS, Secretary
RECEIVED BY LRC: June 15, 1983 at 4 p.m.
SUBMIT COMMENT OR REQUEST FOR HEARING TO: Secretary, Cabinet for Human Resources, CHR Building, 275 East Main Street, Frankfort, Kentucky 40621.

CABINET FOR HUMAN RESOURCES
Department for Social Insurance
(Proposed Amendment)

904 KAR 2:006. Technical requirements; AFDC.

RELATES TO: KRS 205.010, 205.200(2),(3)
PURSUANT TO: KRS 13.082, 194.050
NECESSITY AND FUNCTION: The Cabinet for Human Resources has the responsibility under the provisions of KRS Chapter 205 to administer the assistance program of Aid to Families with Dependent Children, hereinafter referred to as AFDC, in accordance with Title IV-A of the Social Security Act. KRS 205.200(2) requires that the conditions of eligibility to receive AFDC money grants be prescribed by regulations in conformity with the Social Security Act and federal regulations. This regulation sets forth the technical requirements of residence, deprivation, living with a relative, age, one (1) category of assistance, work registration, cooperation in child support activities and potential entitlement for other programs for eligibility for AFDC.

Section 1. Residence and Citizenship. Residence is determined in accordance with 45 CFR 233.40 which, in summary, provides that a resident is anyone who is living in the state, entered the state with a job commitment or seeking employment, and is not receiving AFDC benefits from another state. Citizenship is determined in accordance with 45 CFR 233.50 which states that AFDC can be provided only to citizens or aliens lawfully admitted for permanent residence or otherwise permanently residing in the United States under color of law.

Section 2. Deprivation. (1) To be eligible for AFDC, a child must be in need and must be deprived of parental support or care due to the death, continued absence from the home or physical or mental incapacity of a natural or adoptive parent. A married child living with her/his spouse in the home of her/his parents is not deprived of parental support or care. A married child living in the home of her/his parents but divorced or legally separated from her/his spouse is deprived of parental support if she/he is dependent on the parent and a parent is dead, incapacitated or continually absent from the home.

(2) Continued absence from the home. To be eligible for AFDC, a needy child must be physically separated from the parent and the nature of the absence of the parent is such as either to interrupt or terminate the parent's functioning as a provider of maintenance, physical care, or guidance for the child, and the known or indefinite duration of absence precludes counting on the parent's performance of his/her function in planning for the present support or care of the child. Absence may be voluntary or involuntary. Voluntary absence includes divorce, legal separation, marriage annulment, desertion of thirty (30) days or more, or birth out-of-wedlock. Involuntary absence includes commitment to a penal institution for thirty (30) days or more, long term hospitalization, deportation or single parent adoption. A parent who is a convicted offender but is permitted to live at home while serving a court-imposed sentence by performing unpaid public work or unpaid community service during the workday is considered absent from the home.

(3) Incapacity defined. Incapacity is any condition of mind or body which makes a parent physically or mentally unable to provide the necessities of life for his/her needy child. The condition must be anticipated to continue for at least thirty (30) days beyond the date of application and may be presumed to continue during a period in which the parent is undergoing diagnostic studies and/or evaluation of rehabilitation potential. Incapacity of the parent must prevent him/her from working in an occupation in which he/she previously engaged, or another job for which he/she is equipped and which is accessible in the county or community where he/she normally resides. If a job opportunity exists in the community or county, it shall be considered accessible regardless of its immediate availability. Scarcity of work does not establish incapacity unless there is a causal relationship between the parent's unemployment and actual physical or mental disability. Lack of paid work experience does not preclude the parent from being considered incapacitated.

Section 3. Living with a Specified Relative. To be eligible for AFDC a needy child must be living in the home of a relative as specified in the Social Security Act and interpreted as follows:

(1) A blood relative, including father, mother, grandfather, grandmother, brother, sister, uncle, aunt, nephew, niece, first cousin.

(2) Also relatives of the half-blood and preceding generations as denoted by prefixes of grand, great or great-great; a stepfather, stepmother, stepbrother, stepsister.

(3) Adoptive parents as well as the natural and other legally adopted children and other relatives of such parents.

(4) Husband or wife of any persons listed above even if the marriage may have terminated, providing termination occurred after the birth of the child.

(5) A child is considered as living in the home even when temporarily absent for medical care, attendance at boar-

ding school, college or vocational school, emergency foster care or short visits with friends or relatives, if the parent continues to exercise control over the child.

Section 4. Age and School Attendance. A child may be eligible for AFDC from birth to age eighteen (18), or to age nineteen (19) if a full-time student in a secondary school or the equivalent level of vocational or technical training and if expected to complete the program prior to or during the month of their nineteenth birthday. Full and part-time is defined in 904 KAR 2:016, standards for need and amount; AFDC. A child is considered in regular attendance in months in which he/she is not attending because of official school or training program vacation, illness, convalescence or family emergency unless he/she has indicated an intention not to re-enter school.

Section 5. One Category of Assistance. A child or adult relative shall not be eligible for AFDC if receiving supplemental security income.

Section 6. Strikers. (1) A family shall be ineligible for benefits for any month in which the natural or adoptive parent, with whom the child is living is, on the last day of such month, participating in a strike; and

(2) No individual shall be considered eligible for benefits for any month if, on the last day of such month, such individual is participating in a strike.

(3) Strike shall be defined to include a strike or other concerted stoppage of work by employees (including a stoppage by reason of expiration of a collective bargaining agreement) and any concerted slowdown or other concerted interruption of operations by employees.

Section 7. Work Registration. (1) Unless exempt under the criteria specified in Title IV of the Social Security Act and 45 CFR Section 224.20(b), an individual who has applied for or is receiving AFDC shall be ineligible for benefits if he/she refuses to register for the Work Incentive Program, (WIN) or if registered, refuses to participate without good cause. Participation in a strike shall not constitute good cause.

(2) Individuals exempt from WIN registration pursuant to 45 CFR 224.20(b) are as follows:

(a) An individual under age sixteen (16);

(b) A child age sixteen (16) to age eighteen (18), if enrolled as a full-time student; or to age nineteen (19), if a full-time student who meets the requirements set forth in Section 4 of this regulation;

(c) An individual who has a medically determined temporary illness or injury with recovery anticipated within ninety (90) days;

(d) An individual who has a medically determined physical or mental incapacity which is expected to exist longer than ninety (90) days;

(e) An individual age sixty-five (65) or over;

(f) An individual whose presence is required in the home to care for another member of the household who has been medically determined to be precluded from self-care and for whom alternate care arrangements are not feasible;

(g) A parent or other relative who cares for a child under six (6), and who personally provides full-time care of the child with only very brief and infrequent absences from the child;

(h) A person so far remote from a work incentive project that his/her effective participation is precluded;

(i) An individual who is employed not less than thirty (30) hours per week, in unsubsidized employment expected to last a minimum of thirty (30) days, except when there is a temporary break in such employment expected to last longer than ten (10) days.

Section 8. Cooperation in Child Support Activities. (1) Inclusion of a specified relative in the AFDC budget is dependent upon his/her cooperation in child support activities pursuant to 45 CFR 232.12 and refusal, except for "good cause," results in ineligibility of the relative with AFDC payments on behalf of the child(ren) made to a protective payee.

(2) If, after exclusion from the grant for failure to cooperate, the individual states that he/she is willing to cooperate and wishes to be reinstated, a supplemental application must be completed. If eligibility criteria are met, the individual will be added to the grant effective with the month of application and the protective payee will be removed.

(3) Pursuant to 45 CFR Part 232.40, the Cabinet for Human Resources will provide written notice to the applicant or recipient that he/she may claim good cause for refusing to cooperate.

(4) The applicant or recipient will be determined to have "good cause" for failing to cooperate only when one (1) or more of the following criteria is met:

(a) The applicant or recipient's cooperation is reasonably anticapted to result in physical or emotional harm of a serious nature to the child; or

(b) The applicant or recipient's cooperation is reasonably anticipated to result in physical or emotional harm of a serious nature to himself/herself to such an extent that it would reduce his/her capacity to care for the child(ren) adequately; or

(c) The child was conceived as a result of incest or forcible rape and the department believes it would be detrimental to the child to require the applicants's/recipient's cooperation; or

(d) Legal proceedings for adoption of the child by a specific family are pending before a court of competent jurisdiction; and the department believes it would be detrimental to the child to require the applicant's/recipient's cooperation; or

(e) The applicant/recipient is being assisted by a public or licensed private social agency to resolve whether to keep the child or release him/her for adoption and discussion has not gone on for more than three (3) months and the cabinet believes it would be detrimental to the child to require the applicant's/recipient's cooperation.

(5) Specific requirements in determining the existence of good cause and the time limits for providing substantiation of claims are made pursuant to the regulation at 45 CFR 232.42 and 45 CFR 232.43.

Section 9. Potential Entitlement for Other Programs. All applicants/recipients must apply for any statutory benefit(s) if potential entitlement exists. Failure to apply results in ineligibility for AFDC.

Section 10. Furnishing of Social Security Account Numbers. All applicants/recipients must furnish social security account numbers pursuant to 45 CFR 232.10.

Section 11. Assignment of Rights to Support. Pursuant to KRS 205.720, by accepting assistance for or on behalf of a child, a recipient is deemed to have made an assignment to the Cabinet for Human Resources of any child support owed for the child not to exceed the amount of AFDC payments made to the recipient.

Section 12. Photo-Identification Card. Effective August 1, 1983, the payee for a person or persons determined to be eligible for AFDC shall be subject to the photo-identification card requirement. All payees for AFDC benefits shall be photographed and issued a photo-identification card which shall be used as identification in cashing an AFDC check. All payees shall pose for their photo-identification cards, except that:

(1) Invalids, or other individuals, including the homebound, not able to pose for a photo-identification card because of physical or mental handicaps under criteria established by the cabinet, shall receive a suitable card to meet the requirement stated herein.

(2) Any religious belief, as stated by a member of the clergy of a person's established religion and verified through direct contact with such, which prohibits the photographing of an individual member, exempts that person from this requirement, and that person shall receive a suitable card to meet the requirement stated herein.

(3) A payee may be provided the opportunity to demonstrate good cause for not being photographed. If good cause is established, the provision set forth in subsection (2) of this section pertaining to issuance of a photo-identification card will be followed.

JOHN CUBINE, Commissioner
ADOPTED: June 13, 1983
APPROVED: BUDDY H. ADAMS, Secretary
RECEIVED BY LRC: June 13, 1983 at 2:30 p.m.
SUBMIT COMMENT OR REQUEST FOR HEARING TO: Secretary for Human Resources, CHR Building, 275 East Main Street, Frankfort, Kentucky 40621.

CABINET FOR HUMAN RESOURCES
Department for Social Insurance
(Proposed Amendment)

904 KAR 3:035. Certification process.

RELATES TO: KRS 194.050
PURSUANT TO: KRS 13.082, 194.050
NECESSITY AND FUNCTION: The Cabinet for Human Resources has responsibility to administer a Food Stamp Program as prescribed by the Food Stamp Act of 1977, as amended, and 7 CFR Part 270 through 280. KRS 194.050 provides that the secretary shall, by regulation, develop policies and operate programs concerned with the welfare of the citizens of the Commonwealth. This regulation sets forth the certification process used by the cabinet in the administration of the Food Stamp Program.

Section 1. Eligibility and Benefit Levels. Eligibility and benefit levels shall be determined by the cabinet by considering the households circumstances for the entire month(s) for which each household is certified. Procedures specified in 7 CFR Parts 273.3, 273.10(a), 273.10(b), 273.10(c), 273.10(d), 273.10(e) and, as appropriate, 273.21(e) shall be used to determine eligibility and calculate net income and benefit levels. The criteria set forth in this section shall be applicable to all households. In addition, certain households require special/additional certification procedures as specified in Section 5 of this regulation.

Section 2. Certification Periods. The cabinet shall establish a definite period of time within which a household shall be eligible to receive benefits. At the expiration of each certification period entitlement to food stamp benefits ends. Further eligibility shall be established only upon a recertification based upon a newly completed application, an interview, and verification. Certification periods for non-public assistance households shall be in accordance with those specified in 7 CFR Part 273.10(f)(3)(4)(5)(6). Households in which all members are included in a PA grant shall be certified, *effective July 1, 1983, for a period of time which ensures, to the extent possible, that the recertification date and the PA reinvestigation date coincide* [for one (1) year, except that the food stamp case shall be recertified at the same time they are redetermined for PA].

Section 3. Certification Notices to Households. The cabinet shall provide applicants with one (1) of the following written notices as soon as a determination is made, but no later than thirty (30) days after the date of the initial application:

(1) Notice of eligibility.
(2) Notice of denial.
(3) Notice of pending status.

Section 4. Application for Recertification. The cabinet shall process applications for recertification in accordance with 7 CFR Part 273.10(g)(2), Part 273.14 and Part 273.21(p).

Section 5. Certification Process for Specific Households. The following households have circumstances that are substantially different from other households and therefore require special/additional certification procedures:

(1) Households with self-employed members shall have their cases processed in accordance with 7 CFR Part 273.11(a).

(2) Households with boarders shall have their case processed in accordance with 7 CFR Part 273.11(b).

(3) Households with excluded household members which have been disqualified from program participation due to intentional program violation, failure to provide a Social Security number, because they are ineligible aliens or because they have not verified their citizenship or alien status prior to certification, shall have their case processed in accordance with 7 CFR Part 273.11(c).

(4) Households with non-household members shall be processed in accordance with 7 CFR Part 273.11(d).

(5) Residents of drug/alcoholic treatment and rehabilitation programs shall have their case processed in accordance with 7 CFR Part 273.11(e).

(6) Residents of group living arrangements who are blind or disabled receive benefits under Title II or Title XVI of the Social Security Act shall have their case processed in accordance with 7 CFR Part 273.*11*(f), which allows residents to apply in their own behalf or through the use of an authorized/certified facility's authorized representative.

(7) Residents of shelters for battered women and children shall have their case processed in accordance with 7 CFR 273.11(g).

(8) Households consisting only of Supplemental Security Income (SSI) applicants or recipients shall have their case processed in accordance with 7 CFR 273.2(k).

(9) Households with a member who is on strike shall have their case processed in accordance with 7 CFR 273.1(g).

(10) Households requesting replacement allotments shall be processed in accordance with 7 CFR 273.11(h), 274.2(h) and 274.3(c).

(11) Student households or households containing a member(s) who is a student shall have their case processed in accordance with 7 CFR Part 273.5.

(12) Households containing a sponsored alien(s) shall have their case processed in accordance with 7 CFR Part 273.11(h).

(13) Households residing in a county which is implementing mandatory monthly reporting and which are required to report monthly, shall have their case processed in accordance with 7 CFR Part 273.21 with selected options as follows:

(a) A two (2) month system shall will be used whereby the issuance month is the second month following its corresponding budget month. This system includes two (2) beginning months, the month of application and the following month.

(b) Ongoing eligibility shall be determined by considering all factors of eligibility prospectively for each of the issuance months. Initial eligibility and benefit calculation shall be determined in accordance with 7 CFR Part 273.21(e) for the beginning months.

(c) Actual earned and unearned income received in the corresponding budget month shall be considered.

(d) Consider the PA grant to be issued in the corresponding budget month.

(e) Counties will terminate cases in accordance with 7 CFR Part 273.21(m) or will suspend in accordance with 7 CFR Part 273.21(n).

(f) Households shall be recertified using the recertification form and a monthly report will not be required for that month.

(g) All households specified in 7 CFR Part 273.21(b)(2), as well as any others exempted by the appropriate federal agency, shall be excluded from mandatory monthly reporting.

Section 6. Reporting Changes. Certified households are required to report those changes in household circumstances specified in 7 CFR Part 273.12(a) within ten (10) days of the date the change becomes known to the household. An applying household shall report all changes related to its food stamp elibility and benefits at the certification interview, or for changes occurring after the interview but prior to receipt of the notice of eligibility, within ten (10) days of the date of the notice. The cabinet shall act on reported changes in accordance with 7 CFR Part 273.12(c). The cabinet shall comply with other change reporting provisions outlined in 7 CFR Part 273.12. Households participating in a county which is implementing mandatory monthly reporting and which are required to report monthly, shall not be required to submit any reports of changes other than the monthly reports required under Section 5(13) of this regulation.

[Section 7. Provisions contained in this regulation shall become effective April 1, 1983.]

JOHN CUBINE, Commissioner
ADOPTED: June 10, 1983
APPROVED: BUDDY H. ADAMS, Secretary
RECEIVED BY LRC: June 10, 1983 at 2:30 p.m.
SUBMIT COMMENT OR REQUEST FOR HEARING TO: Secretary for Human Resources, CHR Building, 275 East Main Street, Frankfort, Kentucky 40621.

Proposed Regulations

NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION CABINET
Department for Environmental Protection
Division of Water

401 KAR 5:110. Disposal of produced water from oil and gas facilities.

RELATES TO: KRS Chapters 151, 224
PURSUANT TO: KRS 13.082, 151.125, 224.033, 224.060
NECESSITY AND FUNCTION: KRS 224.033 requires that the cabinet promulgate regulations pertaining to the issuance of permits and the prevention, abatement and control of water pollution. This regulation provides for preventing, abating, and controlling water pollution from oil and gas facilities.

Section 1. Applicability. The provisions of this regulation shall apply to the owner or operator of any facility which causes or is capable of producing produced water.

Section 2. Definitions. Terms used in this regulation shall have the meaning given to them by 401 KAR 5:090, KRS Chapters 151 and 224 or the meaning attributed by common use.

Section 3. Prohibition. No person shall construct, modify or operate a facility in such a manner as to cause violations of state or federal water quality standards or other applicable standards in this regulation.

Section 4. Produced Water Disposal. (1) Produced water shall be disposed of into a permitted disposal well or an enhanced recovery well except when any one (1) of the following occur:

(a) A geological zone suitable to receive the produced water does not exist at the lease;

(b) The cost of constructing and operating a disposal well system or the inability to use a non-owned disposal well would necessitate a shutdown of operations at that particular facility; and

(c) De minimus amounts of produced water are produced, except for those facilities included in Subpart C—Onshore Subcategory of 40 CFR 435.

(2) Where disposal is not mandatory, no discharge of produced water from a facility shall cause an in-stream chloride concentration above 250 mg/l.

Section 5. Disposal of Produced Water Off the Facility. (1) No operator shall authorize or allow the transportation of produced water away from a facility where it is produced unless such operator has first submitted the following

information to the director and obtained approval:
(a) Operator's name, mailing address and telephone number;
(b) Transporter's name, mailing address and telephone number;
(c) Name of disposer, mailing address, telephone number, disposal site and permit number;
(d) Vehicle identification information, including license number and vehicle description; and
(e) Quantity of produced water to be transported.
(2) Delivery of produced water to any location other than a cabinet or Underground Injection Control (UIC) permitted disposal system is prohibited.
(3) The operator of a disposal well may receive produced water from other facilities in accordance with the notification procedures of subsection (1) of this section.
(4) Spills during transfer of produced water shall be reported in accordance with 401 KAR 5:015.

JACKIE SWIGART, Secretary
ADOPTED: June 15, 1983
RECEIVED BY LRC: June 15, 1983 at 4:30 p.m.
SUBMIT COMMENT OR REQUEST FOR HEARING TO: T. Michael Taimi, Commissioner, Department for Environmental Protection, 18 Reilly Road, Frankfort, Kentucky 40601.

NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION CABINET
Department for Environmental Protection
Division of Water

401 KAR 5:120. Fees for permits to control water pollution from oil and gas facilities.

RELATES TO: KRS Chapters 151 and 224
PURSUANT TO: KRS 13.082, 151.125, 224.033, 244.060
NECESSITY AND FUNCTION: This regulation defines the assessment of fees applicable to the issuance of permits under 401 KAR 5:090.

Section 1. Applicability. The provisions of this regulation shall apply to the owner or operator of any facility required to have a permit by 401 KAR 5:090.

Section 2. Definitions. Terms used in this regulation shall have the meaning given to them by 401 KAR 5:090, KRS Chapters 151 and 224 or the meaning attributed by common use.

Section 3. Permit fees. (1) The provisions of this section shall apply to the operator of each facility required to have a permit by 401 KAR 5:090 except for any facility permitted under a general permit.
(a) Every operator who is issued a permit under the provisions of 401 KAR 5:090 shall be assessed a permit fee in accordance with the provisions set forth in subsection (2) of this section; and
(b) Upon making the determination that a permit can be issued under 401 KAR 5:090, the director will notify the applicant and send a bill for a permit fee. The permit will be issued by the director upon receipt of the total amount of the permit fee. Failure by the applicant to pay the assessed permit fee on or before the due date may result in the denial of the permit.
(2) The fee for each type of permit is listed below:

Facility and Type of Permit	Permit Fee
Construction of "holding pit"	$100.00
Operation of existing "disposal well"	$125.00
Construction of "disposal well"	$650.00

(3) In addition to the requirements of this regulation, facilities issued KPDES permits will be assessed a fee pursuant to 401 KAR 5:085.
(4) Duplicate permit fee. Upon application for the issuance of a duplicate permit for activities covered under this regulation, the duplicate permit shall be issued by the cabinet upon receipt of a fifteen dollar ($15) permit fee.
(5) Terms of payment.
(a) Payment of a permit fee as provided for by this section will be made within thirty (30) days of the billing date; and
(b) Certified checks or money orders, if used, shall be payable to the Kentucky State Treasurer.

JACKIE SWIGART, Secretary
ADOPTED: June 15, 1983
RECEIVED BY LRC: June 15, 1983 at 4:30 p.m.
SUBMIT COMMENT OR REQUEST FOR HEARING TO: T. Michael Taimi, Commissioner, Department for Environmental Protection, 18 Reilly Road, Frankfort, Kentucky 40601.

NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION CABINET
Department for Environmental Protection
Division of Waste Management

401 KAR 31:020. Criteria for identifying the characteristics of hazardous waste and criteria for listing.

RELATES TO: KRS 224.864(3), 224.868, 224.876
PURSUANT TO: KRS 13.082, 13.083, 224.017, 224.864(3)
NECESSITY AND FUNCTION: KRS 224.864(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 regulation establishes the criteria for identifying the characteristics of hazardous waste. It also establishes the criteria for listing a hazardous waste.

Section 1. Criteria for Identifying the Characteristics of Hazardous Waste. The cabinet shall identify and define a characteristic of hazardous waste in 401 KAR 31:030 only upon determining that:
(1) A waste that exhibits the characteristic may:
(a) Cause, or significantly contribute to, an increase in mortality or an increase in serious irreversible, or incapacitating reversible, illness; or
(b) Pose a substantial present or potential hazard to human health or the environment when it is improperly treated, stored, transported, disposed of or otherwise managed; and
(2) The characteristic can be:
(a) Measured by an available standardized test method which is reasonably within the capability of generators of waste or private sector laboratories that are available to serve generators of waste; or
(b) Reasonably detected by generators of waste through their knowledge of their waste.

Section 2. Criteria for Listing Hazardous Waste. (1) The cabinet shall list a waste as a hazardous waste only upon determining that the waste meets one (1) of the following criteria:

(a) It exhibits any of the characteristics of hazardous waste identified in 401 KAR 31:030.

(b) It has been found to be fatal to humans in low doses or, in the absence of data on human toxicity, it has been shown in studies to have an oral LD_{50} toxicity (rat) of less than fifty (50) milligrams per kilogram, an inhalation LC_{50} toxicity (rat) of less than two (2) milligrams per liter, or a dermal LD_{50} toxicity (rabbit) of less than 200 milligrams per kilogram or is otherwise capable of causing or significantly contributing to an increase in serious irreversible, or incapacitating reversible, illness. (Waste listed in accordance with these criteria will be designated acute hazardous waste.)

(c) It contains any of the toxic constitutents listed in 401 KAR 31:170 unless, after considering any of the following factors, the cabinet concludes that the waste is not capable of posing a substantial present or potential hazard to human health or the environment when improperly treated, stored, transported, disposed, or otherwise managed:

1. The nature of the toxicity presented by the constituent.
2. The concentration of the constituent in the waste.
3. The potential of the constituent or any toxic degradation product of the constituent to migrate from the waste into the environment under the types of improper management considered in subparagraph 7 of this paragraph.
4. The persistence of the constituent or any toxic degradation product of the constituent.
5. The potential for the constituent or any toxic degradation product of the constituent to degrade into nonharmful constituents and the rate of degradation.
6. The degree to which the constituent or any degradation product of the constituent bioaccumulates in ecosystems.
7. The plausible types of improper management to which the waste could be subjected.
8. The quantities of the waste generated at individual generation sites or on a regional or national basis.
9. The nature and severity of the human health and environmental damage that has occurred as a result of the improper management of wastes containing the constituent.
10. Action taken by other governmental agencies or regulatory programs based on the health or environmental hazard posed by the waste or waste constituent.
11. Such other factors as may be appropriate. Substances will be listed in 401 KAR 31:170 only if they have been shown in scientific studies to have toxic, carcinogenic, mutagenic or teratogenic effects on humans or other life forms. (Wastes listed in accordance with these criteria will be designated toxic wastes.)

(2) The cabinet may list classes or types of waste as hazardous waste if the cabinet has reason to believe that individual wastes, within the class or type of waste, typically or frequently are hazardous under the definition of hazardous waste found in KRS 224.005(24)(b).

(3) The cabinet will use the criteria for listing specified in this section to establish the exclusion limits referred to in 401 KAR 31:010, Section 5(3).

JACKIE SWIGART, Secretary
ADOPTED: June 10, 1983
RECEIVED BY LRC: June 13, 1983 at 11:30 a.m.
See public hearings scheduled on page 1.

NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION CABINET
Department for Environmental Protection
Division of Waste Management

401 KAR 31:060. Rulemaking petitions for hazardous waste.

RELATES TO: KRS 224.864(3), 224.868, 224.876
PURSUANT TO: KRS 13.082, 13.083, 224.017, 224.864(3)
NECESSITY AND FUNCTION: KRS 224.864(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 wastes. This regulation establishes the procedures 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 regulation sets forth requirements for petitions 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 must be submitted to the cabinet by certified mail and must 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 will make a tentative decision to grant or deny a petition. If the tentative decision is to deny, the cabinet will notify the petitioner. If the tentative decision is to grant the petition, the cabinet will propose an amendment to 401 KAR 31:070.

(4) Upon the written request of any interested person, the cabinet will hold a public hearing as specified in KRS 13.085.

(5) After evaluating all public comments the cabinet will either file the proposed amendment with the Legislative Research Commission for adoption or deny the petition.

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 regulation under this section and Section 1 of this regulation. To be successful, the petitioner must 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 and, in the case of an acutely hazardous waste listed under Section 2(1)(b) of 401 KAR 31:020, that it also does not meet the criterion of Section 2(1)(c) of 401 KAR 31:020. A waste which is so excluded may still, however, be a hazardous waste in accordance with 401 KAR 31:030.

(2) The procedures in this section and Section 1 of this regulation may also be used to petition the cabinet for a regulatory amendment to exclude from Section 3 of 401 KAR 31:010, a waste which is described in those sections and is either a waste listed in 401 KAR 31:040, contains 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 must 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 may be made with respect to each constituent listed waste or the waste mixture as a whole. 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, the petitioner must show that demonstration samples of the waste do not exhibit the relevant characteristic defined in 401 KAR 31:030 by using any applicable test methods prescribed therein.

(4) If the waste is listed with code "T" in 401 KAR 31:040, the petitioner must demonstrate that:

(a) Demonstration samples of the waste do not contain the constituent (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

(b) The waste does not meet the criterion of Section 2(1)(c) of 401 KAR 31:020 when considering the factors in Section 2(1)(c)1 through 11 of 401 KAR 31:020.

(5) If the waste is listed with the code "H" in 401 KAR 31:040, the petitioner must demonstrate that the waste does not meet both of the following criteria:

(a) The criterion of Section 2(1)(b) of 401 KAR 31:020.

(b) The criterion of Section 2(1)(c) of 401 KAR 31:020 when considering the factors listed in Section 2(1)(c)1 through 11 of 401 KAR 31:020.

(6) Demonstration samples must 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 must include, in addition to the information required by Section 1(2) of this 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 will only apply to the waste generated at the individual facility covered by the demonstration and will 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 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 special waste in accordance with KRS 224.868 and be subject to the requirements for special waste disposal in 401 KAR Chapter 47 and reporting requirements under KRS 224.868.

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 whenever:

(1) The cabinet has obtained information, which was not available at the time the petition for exclusion was granted, which leaves the cabinet to believe that reasonable probability exists that the waste:

(a) Should not have been excluded from regulation in accordance with Section 2 of this regulation;

(b) Should 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) Should 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 224.005.

(2) The cabinet has obtained information that a petition for an exclusion was incomplete, inaccurate or based on erroneous data or calculations.

(3) The cabinet has obtained information from any other agency of state or federal government, including the EPA, that the waste should be regulated as a hazardous waste consistent with the Resource Conservation and Recovery Act (P.L. 94-580), as amended, and pursuant to KRS Chapter 224.

Section 5. Compatibility with the Federal Acts. 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 would be consistent with the requirements in KRS 224.864(3);

(2) Petitioning fees have been paid in accordance with 401 KAR 39:020; and

(3) All the requirements of this regulation are satisfied.

JACKIE SWIGART, Secretary

ADOPTED: June 10, 1983

RECEIVED BY LRC: June 13, 1983 at 11:30 a.m.

See public hearings scheduled on page 1.

NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION CABINET
Department for Environmental Protection
Division of Waste Management

401 KAR 31:070. Delisted hazardous waste streams.

RELATES TO: KRS 224.864(3), 224.868, 224.876
PURSUANT TO: KRS 13:082, 13.083, 224.017, 224.864
NECESSITY AND FUNCTION: KRS 224.864(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 wastes. This regulation contains the list of industries whose waste stream exclusion petitions have been granted a temporary exclusion based on the criteria in 401 KAR 31:060.

Section 1. Purpose of Temporary Exclusions. The cabinet may (but shall not be required to) grant a temporary exclusion before making a final decision under 401 KAR 31:060 whenever it finds that there is a substantial likelihood that an exclusion will finally be granted. The cabinet will publish notice of any such temporary exclusion in accordance with Section 2 of this regulation.

Section 2. List of Granted Temporary Exclusions. Each petitioner has claimed that the samples are representative of any variation of the constitutent level in the waste stream(s). A copy of the petitions listed in this section has been filed with the Legislative Research Commission, Regulation Compiler's Office, The Capitol, Frankfort, Kentucky 40601. The petition is also on file at the Natural Resources and Environmental Protection Cabinet, Department for Environmental Protection, Division of Waste Management, 18 Reilly Road, Frankfort, Kentucky 40601. The following waste streams have been granted temporary exclusions from the lists of hazardous waste in 401 KAR 31:040:

(1) (a) National Standard Company of Corbin. The National Standard Company of Corbin, involved in the production of industrial wire cloth and low carbon steel wire, has petitioned the secretary to exclude its treated filter cake, listed as EPA Hazardous Waste No. K062, (spent pickle liquor from steel finishing operations), from the list of hazardous wastes contained in 401 KAR 31:040.

(b) In the petition submitted to the cabinet, the test results found in this paragraph were contained. EP toxicity tests revealed maximum total chromium and lead levels in the waste extract of 0.074 and 0.175 mg/l, respectively.

(2) (a) General Electric Company. The General Electric Company—Appliance Park located in Louisville, involved in the manufacturing of various kitchen and home appliances, has petitioned the cabinet to exclude its sludge from the lists of hazardous wastes:

1. EPA Hazardous Waste No. F006—Wastewater treatment sludges from electroplating operations except for the following processes:
   a. Sulfuric acid anodizing of aluminum;
   b. Tin plating on carbon steel;
   c. Zinc plating (segregated basis) on carbon steel;
   d. Aluminum or zinc—aluminum plating on carbon steel; and
   e. Cleaning or stripping associated with tin, zinc and aluminum plating on carbon steel; and
   f. Chemical etching and milling of aluminum;
2. EPA Hazardous Waste No. F019—Wastewater treatment sludges from the chemical conversion coating of aluminum; and
3. EPA Hazardous Waste No. K062—Spent pickle liquor from steel finishing operations.

(b) In the petition submitted to the cabinet, the test results found in this paragraph were contained. EP toxicity tests of the final treatment sludge revealed maximum cadmium, chromium, nickel, and lead concentrations of 0.001, 0.03, 4.53 and 0.15 ppm. Total constituent analysis for cyanide indicated a maximum concentration of $1.05 ppm. The pH ranged from 8.2 to 8.4. The maximum allowable limits for cadmium, hexavalent chromium, nickel, lead, cyanide, and pH (as described in this paragraph) are 1.0, 5.0, 20.0, 5.0, 10.0, and 2.0

JACKIE SWIGART, Secretary
ADOPTED: June 10, 1983
RECEIVED BY LRC: June 13, 1983 at 11:30 a.m.
See public hearings scheduled on page 1.

NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION CABINET
Department for Environmental Protection
Division of Waste Management

401 KAR 34:060. Groundwater protection.

RELATES TO: KRS 224.033, 224.060, 224.071, 224.842, 224.855, 224.860, 224.866
PURSUANT TO: KRS 13.082, 13.083, 224.017, 224.862, 224.866
NECESSITY AND FUNCTION: KRS 224.866 requires that persons engaging in the storage, treatment, and disposal of hazardous waste obtain a permit. KRS 224.866 requires the Natural Resources and Environmental Protection Cabinet to establish standards for these permits, to establish minimum standards for closure for all facilities and the post-closure monitoring and maintenance of hazardous waste disposal facilities. This chapter establishes minimum standards for hazardous waste sites or facilities. This regulation establishes the minimum groundwater protection standards for new hazardous waste sites or facilities.

Section 1. Applicability. (1) Except as provided in subsection (2) of this section, the requirement in this regulation apply to owners and operators of facilities that treat, store, or dispose of hazardous waste in surface impoundments, waste piles, land treatment units, or landfills. The owner or operator must satisfy the requirements of this regulation for all wastes (or constituents thereof) contained in any such waste management unit at the facility that receives hazardous waste after the effective date of this regulation (hereinafter referred to as a "regulated unit"). Any waste or waste constituent migrating beyond the waste management area under Section 6(2) of this regulation is assumed to originate from a regulated unit unless the cabinet finds that such waste or waste constituent originated from another source.

(2) The owner or operator is not subject to the requirements of this regulation if:

(a) He is exempted under Section 1 of 401 KAR 34:010;

(b) He designs and operates a surface impoundment in compliance with Section 3 of 401 KAR 34:200, a pile in compliance with Sections 1(3), 3 or 4 of 401 KAR 34:210, or a landfill in compliance with Section 3 of 401 KAR 34:230;

(c) The cabinet finds pursuant to Section 8(4) of 401 KAR 34:220 that there is no potential for migration of liquid from a regulated unit to the uppermost aquifer during the active life of the regulated unit (including the closure period) and the post-closure care period specified under Section 7 of 401 KAR 34:070. This demonstration must be certified by a qualified geologist or geotechnical engineer. In order to provide an adequate margin of safety in the prediction of potential migration of liquid, the owner or operator must base any predictions made under this subsection on assumptions that maximize the rate of liquid migration.

(3) This regulation applies during the active life of the regulated unit (including the closure period). After closure of the regulated unit, this regulation:

(a) Does not apply if all waste, waste residues, contaiminated containment system components, and contaminated subsoils are removed or decontaminated at closure;

(b) Applies during the post-closure care period under Section 7 of 401 KAR 34:070 if the owner or operator is conducting a detection monitoring program under Section 9 of this regulation; or

(c) Applies during the compliance period under Section 7 of this regulation if the owner or operator is conducting a compliance monitoring program under Section 10 of this regulation or a corrective action program under Section 11 of this regulation.

Section 2. Required Programs. (1) Owners and operators subject to this regulation must conduct a monitoring and response program as follows:

(a) Whenever hazardous constituents under Section 4 of this regualtion from a regulated unit are detected at the compliance point under Section 6 of this regulation, the owner or operator must institute a compliance monitoring program under Section 10 of this regulation;

(b) Whenever the groundwater protection standard under Section 3 of this regulation is exceeded, the owner or operator must institute a corrective action program under Section 11 of this regulation;

(c) Whenever hazardous constituents under Section 4 of this regulation from a regulated unit exceed concentration limits under Section 5 of this regulation in groundwater between the compliance point under Section 6 of this regulation and the downgradient facility property boundary, the owner or operator must institute a corrective action program under Section 11 of this regulation; or

(d) In all other cases, the owner or operator must institute a detection monitoring program under Section 9 of this regulation.

(2) The cabinet will specify in the facility permit the specific elements of the monitoring and response program. The cabinet may include one (1) or more of the programs identified in subsection (1) of this section in the facility permit as may be necessary to protect human health and the environment and will specify the circumstances under which each of the programs will be required. In deciding whether to require the owner or operator to be prepared to institute a particular program, the cabinet will consider the potential adverse effects on human health and the environment that might occur before final administrative action on a permit modification application to incorporate such a program could be taken.

Section 3. Groundwater Protection Standard. The owner or operator must comply with conditions specifed in the facility permit that are designed to ensure the hazardous constituents under Section 4 of this regulation entering the groundwater from a regulated unit do not exceed the concentration limits under Section 5 of this regulation in the uppermost aquifer underlying the waste management area beyond the point of compliance under Section 6 of this regulation during the compliance period under Section 7 of this regulation. The cabinet will establish this groundwater protection standard in the facility permit.

Section 4. Hazardous Constituents. The cabinet will specify in the facility permit the hazardous constituents to which the groundwater protection standard of Section 3 of this regulation applies. Hazardous constituents are constituents identified in 401 KAR 31:170 that have been detected in groundwater in the uppermost aquifer underlying a regulated unit and that are reasonably expected to be in or derived from waste contained in a regulated unit.

Section 5. Concentration Limits. The cabinet will specify in the facility permit concentration limits in the groundwater for hazardous constituents established under Section 4 of this regulation. The concentration of a hazardous constituent:

(1) Must not exceed the background level of that constituent in the groundwater at the time that limit is specified in the permit; or

(2) For any of the constituents listed in Section 2(1) and (2) of 401 KAR 30:030, must not exceed the respective value given in that section if the background level of the constituent is below the value given in Section 2(1) and (2) of 401 KAR 30:030.

Section 6. Point of Compliance. (1) The cabinet will specify in the facility permit the point of compliance at which the groundwater protection standard of Section 3 of this regulation applies and at which monitoring must be conducted. The point of compliance is a vertical surface located at the hydraulically downgradient limit of the waste management area that extends down into the uppermost aquifer underlying the regulated units.

(2) The waste management area is the limit projected in the horizontal plane of the area on which waste will be place during the active life of a regulated unit.

(a) The waste management area includes horizontal space taken up by any liner, dike, or other barrier designed to contain waste in a regulated unit.

(b) If the facility contains more than one (1) regulated unit, the waste management area is described by an imaginary line circumscribing the several regulated units.

Section 7. Compliance Period. (1) The cabinet will specify in the facility permit the compliance period during which the groundwater protection standard of Section 3 of this regulation applies. The compliance period is the number of years equal to the active life of the waste management area (including any waste management activity prior to permitting, and the closure period).

(2) The compliance period begins when the owner or operator initiates a compliance monitoring program meeting the requirements of Section 10 of this regulation.

(3) If the owner or operator is engaged in a corrective action program at the end of the compliance period specified in subsection (1) of this section, the compliance period is extended until the owner or operator can demonstrate that the groundwater protection standard of Section 3 of this regulation has not been exceeded for a period of three (3) consecutive years.

Section 8. General Groundwater Monitoring Requirements. The owner or operator must comply with the following requirements for any groundwater monitoring program developed to satisfy Section 9, 10 or 11 of this regulation:

(1) The groundwater monitoring system must consist of a sufficient number of wells, installed at appropriate locations and depths to yield groundwater samples from the uppermost aquifer that:

(a) Represent the qualify of background water that has not been affected by leakage from a regulated unit;

(b) Represent the quality of groundwater passing the point of compliance; and

(c) Yield enough samples to accomplish the requirements in paragraphs (a) and (b) of this subsection. For new facilities, the minimum number of wells shall be two (2) upgradient and two (2) downgradient to the facility. Wells shall be spaced no more than fifty (50) feet apart along aline perpendicular to groundwater flow beneath the facility such that no more than fifty (50) feet of the perpendicular side of the facility is unmonitored. The cabinet may grant a variance to the requirements in this paragraph in accordance with Section 2 of 401 KAR 30:020 if the owner or operator demonstrates that:

1. The placement of aquifers beneath the facility justifies a different number or spacing of the groundwater monitoring wells; or

2. Circumstances exist beyond the control of the owner or operator, such as the location of an existing building, which justify a different number or spacing of groundwater monitoring wells.

(2) If a facility contains more than one (1) regulated unit, separate groundwater monitoring systems are not required for each regulated unit provided that provisions for sampling the groundwater in the uppermost aquifer will enable detection and measurement at the compliance point of hazardous constituents from the regulated units that have entered the groundwater in the uppermost aquifer.

(3) All monitoring wells must be cased in a manner that maintains the integrity of the monitoring-well bore hole. This casing must be screened or perforated and packed with gravel or sand, where necessary, to enable collection of groundwater samples. The annular space (i.e., the space between the bore hole and well casing) above the sampling depth must be sealed to prevent contamination of samples and the groundwater.

(4) The groundwater monitoring program must include consistent sampling and analysis procedures that are designed to ensure monitoring results that provide a reliable indication of groundwater quality below the waste management area. At a minimum the program must include procedures and techniques for:

(a) Sample collection;

(b) Sample preservation and shipment;

(c) Analytical procedures; and

(d) Chain of custody control.

(5) The groundwater monitoring program must include sampling and analytical methods that are appropriate for groundwater sampling and that accurately measure hazardous constituents in groundwater samples.

(6) The groundwater monitoring program must include a determination of the groundwater surface elevation each time groundwater is sampled.

(7) Where appropriate, the groundwater monitoring program must establish background groundwater quality for each of the hazardous constituents or monitoring parameters or constituents specified in the permit.

(a) In the detection monitoring program under Section 9 of this regulation, background groundwater quality for a monitoring parameter or constituent must be based on data from at least quarterly sampling of wells upgradient from the waste management area for one (1) year.

(b) In the compliance monitoring program under Section 10 of this regulation, background groundwater quality for a hazardous constituent must be based on data from upgradient wells that:

1. Is available before the permit is issued;

2. Accounts for measurement errors in sampling and analysis; and

3. Accounts, to the extent feasible, for seasonal fluctuations in background groundwater quality if such fluctuations are expected to affect the concentration of the hazardous constituent.

(c) Background quality may be based on sampling of wells that are not upgradient from the waste management area where sampling at other wells will provide an indication of background groundwater quality that is as representative or more representative than that provided by the upgradient wells. The owner or operator shall submit documentation that demonstrates to the satisfaction of the cabinet that such other wells will provide samples that are at least as representative than that which would reasonably be expected to be provided from an upgradient well.

(d) In developing the data base used to determine a background value for each parameter or constituent, the owner or operator must take a minimum of one (1) sample from each well and a minimum of four (4) samples from the entire system used to determine background quality, each time the system is sampled.

(8) The owner or operator must use the following statistical procedure in determining whether background values or concentration limits have been exceeded:

(a) If, in a detection monitoring program, the level of a constituent at the compliance point is to be compared to the constituent's background value and that background value has a sample coefficient of variation less than 1.00:

1. The owner or operator must take at least four (4) portions from a sample at each well at the compliance point and determine whether the difference between the mean of the constituent at each well (using all portions taken) and the background value for the constituent is significant at the 0.05 level using the Cochran's Approximation to the Behrens-Fisher Students' t-test as described in 401 KAR 34:320. If the test indicates that the difference is significant, the owner or operator must repeat the same procedures (with at least the same number of portions as used in the first test) with fresh samples from the monitoring wells. If this second round of analyses indicates that the difference is significant, the owner or operator must conclude that a statistically significant change has occurred; or

2. With prior approval from the cabinet, the owner or operator may use an equivalent statistical procedure for determining whether a statistically significant change has occurred. The cabinet will specify such a procedure in the facility permit if it is found that the alternative procedure reasonably balances the probability of falsely identifying a non-contaminating regulated unit and the probability of failing to identify a contaminating regulated unit in a manner that is comparable to that of the statistical procedure described in subparagraph 1 of this paragraph.

(b) In all other situations in a detection monitoring program and in a compliance monitoring program, the owner or operator must use a statistical procedure specified in the permit which provides reasonable confidence that the migration of hazardous constituents from a regulated unit

into and through the aquifer will be indicated. The cabinet will specify a statistical procedure in the facility permit which:

1. Is appropriate for the distribution of the data used to establish background values or concentration limits; and

2. Provides a reasonable balance between the probability of falsely identifying a non-contaminating regulated unit and the probability of failing to identify a contaminating regulated unit.

Section 9. Detection Monitoring Program. An owner or operator required to establish a detection monitoring program under this regulation must, at a minimum, discharge the following responsbilities:

(1) The owner or operator must monitor for indicator parameters (e.g., specific conductance, total organic carbon, or total organic halogen), waste constituents, or reaction products that provide a reliable indication of the presence of hazardous constituents in groundwater. The cabinet will specify the parameters or constituents to be monitored in the facility permit, after considering the following factors:

(a) The types, quantities, and concentrations of constituents in wastes managed at the regulated unit;

(b) The mobility, stability, and persistence of waste constituents or their reaction products in the saturated and unsaturated zone beneath the waste management area;

(c) The detectability of indicator parameters, waste constituents, and reaction products in groundwater; and

(d) The concentrations or values and coefficients of variation of proposed monitoring parameters or constituents in the background groundwater quality.

(2) The owner or operator must install a groundwater monitoring system at the compliance point as specified under Section 6 of this regulation. The groundwater monitoring system must comply with Section 8(1)(b), (2) and (3).

(3) The owner or operator must establish a background value for each monitoring parameter or constituent specified in the permit pursuant to subsection (1) of this section. The permit will specify the background values for each parameter or specify the procedures to be used to calculate the background values.

(a) The owner or operator must comply with Section 8(7) of this regualtion in developing the data base used to determine the background values.

(b) The owner or operator must express background values in a form necessary for the determination of statistically significant increases under Section 8(8) of this regulation.

(c) In taking samples used in the determination of background values, the owner or operator must use a groundwater monitoring system that complies with Section 8(1)(a), (2) and (3) of this regulation.

(4) The owner or operator must determine groundwater quality at each monitoring well at the compliance point at least semi-annually during the active life of a regulated unit (including the closure period) and the post-closure care period. The owner or operator must express the groundwater quality at each monitoring well in a form necessary for the determination of statistically significant increases under Section 8(8) of this regulation. The cabinet shall specify in the permit the frequency of sampling necessary to determine whether a statistically significant increase has occurred under Section 8(8) of this regulation.

(5) The owner or operator must determine the groundwater flow rate and direction in the uppermost aquifer as specified in the permit. This determination shall be made at least annually.

(6) The owner or operator must use procedures and methods for sampling and analysis that meet the requirements of Section 8(4) and (5) of this regulation.

(7) The owner or operator must determine whether there is a statistically significant increase over background values for any parameter or constituent specified in the permit pursuant to subsection (1) of this section each time he determines groundwater quality at the compliance point under subsection (4) of this section.

(a) In determining whether a statistically significant increase has occurred, the owner or operator must compare the groundwater quality at each monitoring well at the compliance point for each parameter or constituent to the background value for that parameter or constituent, according to the statistical procedure specified in the permit under Section 8(8) of this regulation.

(b) The owner or operator must determine whether there has been a statistically significant increase at each monitoring well at the compliance point within a reasonable time period after completion of sampling. The cabinet 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 groundwater samples.

(8) If the owner or operator determines, pursuant to subsection (7) of this section, that there is a statistically significant increase for parameters or constituents specified pursuant to subsection (1) of this section at any monitoring well at the compliance point he must:

(a) Notify the cabinet of this finding in writing within seven (7) days. The notification must indicate what parameters or constituents have shown statistically significant increases;

(b) Immediately sample the groundwater in all monitoring wells and determine the concentration of all constituents identified in 401 KAR 31:170 that are present in groundwater.

(c) Establish a background value for each constituent from 401 KAR 31:170 that has been found at the compliance point under paragraph (b) of this section, as follows:

1. The owner or operator must comply with Section 8(7) of this regulation in developing the data base used to determine background values;

2. The owner or operator must express background values in a form necessary for the determination of statistically significant increases under Section 8(8) of this regulation; and

3. In taking samples used in the determination of background values, the owner or operator must use a groundwater monitoring system that complies with Section 8(1)(a), (2) and (3) of this regulation;

(d) Within ninety (90) days, submit to the cabinet an application for a permit modification to establish a compliance monitoring program meeting the requirements of Section 10 of this regulation. The application must include the following information:

1. An identification of the concentration of any constituents from 401 KAR 31:170 found in the groundwater at each monitoring well at the compliance point;

2. Any proposed changes to the groundwater monitoring system at the facility necessary to meet the requirements of Section 10 of this regulation;

3. Any proposed changes to the monitoring frequency, sampling and analysis procedures or methods, or statistical procedures used at the facility necessary to meet the requirements of Section 10 of this regulation;

4. For each hazardous constituent found at the compliance point, a proposed concentration limit under Sec-

tion 5(1)(a) or (b) of this regulation; and

(e) Within 180 days, submit to the cabinet an engineering feasibility plan for a corrective action program necessary to meet the requirements of Section 11 of this regulation.

(9) If the owner or operator determines, pursuant to subsection (7) of this section, that there is a statistically significant increase of parameters or constituents specified pursuant to subsection (1) of this section at any monitoring well at the compliance point, he may demonstrate that a source other than a regulated unit caused the increase or that the increase resulted from 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 (8)(d) of this section, he is only relieved of the requirement to submit a permit modification application within the time specified in subsection (8)(d) of this section if the cabinet approves the demonstration made under this subsection showing that a source other than a 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 must:

(a) Notify the cabinet in writing within seven (7) days of determining a statistically significant increase at the compliance point that he intends to make a demonstration under this subsection;

(b) If appropriate, within ninety (90) days, submit a report to the cabinet which demonstrates that a source other than a regulated unit 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 detection monitoring program at the facility; and

(d) Continue to monitor in accordance with the detection monitoring program established under this section.

(10) If the owner or operator determines that the detection monitoring program no longer satisfies the requirements of this section, he must, within ninety (90) days, submit an application for a permit modification to make any appropriate changes to the program.

(11) The owner or operator must assure that monitoring and corrective action measures necessary to achieve compliance with the groundwater protection standard under Section 3 of this regulation are taken during the term of the permit.

Section 10. Compliance Monitoring Program. An owner or operator required to establish a compliance monitoring program under this regulation must, at a minimum, discharge the following responsibilities:

(1) The owner or operator must monitor the groundwater to determine whether all regulated units are in compliance with the groundwater protection standard under Section 3 of this regulation. The cabinet will specify the groundwater protection standard in the facility permit, including:

(a) A list of the hazardous constituents identified under Section 4 of this regulation;

(b) Concentration limits under Section 5 of this regulation for each of those hazardous constituents;

(c) The compliance point under Section 6 of this regulation; and

(d) The compliance period under Section 7 of this regulation.

(2) The owner or operator must install a groundwater monitoring system at the compliance point as specified under Section 6 of this regulation. The groundwater monitoring system must comply with Section 8(1)(b), (2) and (3).

(3) Where a concentration limit established under subsection (1)(b) of this section is based on background groundwater quality, the cabinet will specify the concentration limit in the permit as follows:

(a) If there is a high temporal correlation between upgradient and compliance point concentrations of the hazardous constituents, the owner or operator may establish the concentraion limit through sampling at upgradient wells each time groundwater is sampled at the compliance point. The cabinet will specify the procedures used for determining the concentration limit in this manner in the permit. In all other cases, the concentration limit will be the mean of the pooled data on the concentration of the hazardous constituent at the upgradient well.

(b) If a hazardous constituent is identified in Section 2(1) and (2) of 401 KAR 30:030 and the difference between the respective concentration limit in Section 2(1) and (2) of 401 KAR 30:030 and the background value of that constituent under Section 8(7) of this regulation is not statistically significant, the owner or operator must use the background value of the constituent as the concentration limit. In determining whether this difference is statistically significant, the owner or operator must use a statistical procedure specified in the permit which is capable of providing reasonable confidence that a real difference will be indicated. The statistical procedure must:

1. Be appropriate for the distribution of the data used to establish background values; and

2. Provide a reasonable balance between the probability of falsely identifying a significant difference and the probability of failing to identify a significant difference.

(c) The owner or operator must:

1. Comply with Section 8(7) of this regulation in developing the data base used to determine background values;

2. Express background values in a form necessary for the determination of statistically significant increases under Section 8(8) of this regulation; and

3. Use a groundwater monitoring system that complies with Section 8(1)(a), (2) and (3) of this regulation.

(4) The owner or operator must determine the concentration of hazardous constituents in the groundwater at each monitoring well at the compliance point as specified in the permit and which shall be no less frequently than at least quarterly during the compliance period. The owner or operator must express the concentration at each monitoring well in a form necessary for the determination of statistically significant increases under Section 8(8) of this regulation.

(5) The owner or operator must determine the groundwater flow rate and direction in the uppermost aquifer as specified in the permit and which shall be no less frequently than at least annually.

(6) The owner or operator must analyze samples from all monitoring wells at the compliance point for all constituents contained in 401 KAR 31:170 as specified in the permit at least annually to determine whether additional hazardous constituents are present in the uppermost aquifer. If the owner or operator finds constituents from 401 KAR 31:170 in the groundwater that are not identified in the permit as hazardous constituents, the owner or operator must report the concentrations of these additional constituents to the cabinet within seven (7) days after completion of the analysis.

(7) The owner or operator must use procedures and methods for sampling and analysis that meet the requirements of Section 8(4) and (5) of this regulation.

(8) The owner or operator must determine whether there is a statistically significant increase over the concentration limits for any hazardous constituents specified in the permit pursuant to subsection (1) of this section each time he determines the concentration of hazardous constituents in the groundwater at the compliance point.

(a) In determining whether a statistically significant increase has occurred, the owner or operator must compare the groundwater quality at each monitoring well at the compliance point for each hazardous constituent to the concentration limit for that constituent according to the statistical procedures specified in the permit under Section 8(8) of this regulation.

(b) The owner or operator must determine whether there has been a statistically significant increase at each monitoring well at the compliance point, within a reasonable time period after completion of sampling. The cabinet 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 groundwater samples.

(9) If the owner or operator determines, pursuant to subsection (8) of this section, that the groundwater protection standard is being exceeded at any monitoring well at the point of compliance, he must:

(a) Notify the cabinet of this finding in writing within seven (7) days. The notification must indicate what concentration limits have been exceeded.

(b) Submit to the cabinet an application for a permit modification to establish a corrective action program meeting the requirements of Section 11 of this regulation within 180 days, or within ninety (90) days if an engineering feasibility study has been previously submitted to the cabinet under Section 9(8)(e) of this regulation. The application must at a minimum include the following information:

1. A detailed description of corrective actions that will achieve compliance with the groundwater protection standard specified in the permit under subsection (1) of this section; and

2. A plan for a groundwater monitoring program that will demonstrate the effectiveness of the corrective action. Such a groundwater monitoring program may be based on a compliance monitoring program developed to meet the requirements of this section.

(10) If the owner or operator determines, pursuant to subsection (8) of this section, that the groundwater protection standard is being exceeded at any monitoring well at the point of compliance, he may demonstrate that a source other than a regulated unit caused the increase or that the increase resulted from 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 (9)(b) of this section, he is only relieved of the requirement to submit a permit modification application within the time specified in subsection (9)(b) of this section if the cabinet approves the demonstration made under this subsection showing that a source other than a 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 must:

(a) Notify the cabinet in writing within seven (7) days that he intends to make a demonstration under this subsection;

(b) If appropriate, within ninety (90) days, submit a report to the cabinet which demonstrates that a source other than a regulated unit caused the standard to be exceeded or that the apparent noncompliance with the standards resulted from error in sampling, analysis, or evaluation;

(c) Within ninety (90) days, submit to the secretary an application for a permit modification to make any appropriate changes to the compliance monitoring program at the facility; and

(d) Continue to monitor in accordance with the compliance monitoring program established under this section.

(11) If the owner or operator determines that the compliance monitoring program no longer satisfies the requirements of this section, he must, within ninety (90) days, submit an application for a permit modification to make any appropriate changes to the program.

(12) The owner or operator must assure that monitoring and corrective action measures necessary to achieve compliance with the groundwater protection standard under Section 3 of this regulation are taken during the term of the permit.

Section 11. Corrective Action Program. An owner or operator required to establish a corrective action program under this regulation must, at a minimum, discharge the following responsibilities:

(1) The owner or operator must take corrective action to ensure that regulated units are in compliance with the groundwater protection standard under Section 3 of this regulation. The cabinet will specify the groundwater protection standard in the facility permit, including:

(a) A list of the hazardous constituents identified under Section 4 of this regulation;

(b) Concentration limits under Section 5 of this regulation for each of those hazardous constituents;

(c) The compliance point under Section 6 of this regulation; and

(d) The compliance period under Section 7 of this regulation.

(2) The owner or operator must implement a corrective action program that prevents hazardous constituents from exceeding their respective concentration limits at the compliance point by removing the hazardous waste constituents or treating them in place. The permit will specify the specific measures that will be taken.

(3) The owner or operator must begin corrective action within a reasonable time period after the groundwater protection standard is exceeded. The cabinet will specify that time period in the facility permit. If a facility permit includes a corrective action program in addition to a compliance monitoring program, the permit will specify when the correction action will begin and such a requirement will operate in lieu of Section 10(9)(b) of this regulation.

(4) In conjunction with a corrective action program, the owner or operator must establish and implement a groundwater monitoring program to demonstrate the effectiveness of the corrective action program. Such a monitoring program may be based on the requirements for a compliance monitoring program under Section 10 of this regulation and must be as effective as that program in determining compliance with the groundwater protection standard under Section 3 of this regulation and in determining the success of a corrective action program under subsection (5) of this section, where appropriate.

(5) In addition to the other requirements of this section, the owner or operator must conduct a corrective action program to remove or treat in place any hazardous constituents under Section 4 of this regulation that exceed con-

centration limits under Section 5 of this regulation in groundwater between the compliance point under Section 6 of this regulation and the downgradient facility property boundary. The permit will specify the measures to be taken.

(a) Corrective action measures under this subsection must be initiated and completed within a reasonable period of time as specified by the cabinet considering the extent of contamination.

(b) Corrective action measures under this subsection may be terminated upon approval of the cabinet once the concentration of hazardous constituents under Section 4 of this regulation is reduced to levels below their respective concentration limits under Section 5 of this regulation.

(6) The owner or operator must continue corrective action measures during the compliance period to the extent necessary to ensure that the groundwater protection standard is not exceeded. If the owner or operator is conducting corrective action at the end of the compliance period, he must continue that corrective action for as long as necessary to achieve compliance with the groundwater protection standard. The owner or operator may terminate correction action measures taken beyond the period equal to the active life of the waste management area (including the closure period) if he can demonstrate to the satisfaction of the cabinet based on data from the groundwater monitoring program under subsection (4) of this section, that the groundwater protection standard of Section 3 of this regulation has not been exceeded for a period of three (3) consecutive years.

(7) The owner or operator must report in writing to the cabinet on the effectiveness of the corrective action program. The owner or operator must submit these reports at least semi-annually on a schedule determined by the cabinet.

(8) If the owner or operator determines that the corrective action program no longer satisfies the requirements of this section, he must, within ninety (90) days, submit an application for a permit modification to make any appropriate changes to the program.

JACKIE SWIGART, Secretary
ADOPTED: June 10, 1983
RECEIVED BY LRC: June 14, 1983 at 11 a.m.
See public hearings scheduled on page 1.

NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION CABINET
Department for Environmental Protection
Division of Waste Management

401 KAR 34:168. Wording of the instruments for a cash account or certificates of deposit.

RELATES TO: KRS 224.033, 224.071, 224.830 through 224.877, 224.994

PURSUANT TO: KRS 13.082, 13.083, 224.017, 224.862, 224.866

NECESSITY AND FUNCTION: KRS 224.866 requires that persons engaging in the storage, treatment, and disposal of hazardous waste obtain a permit. KRS 224.866 requires the Natural Resources and Environmental Protection Cabinet to establish standards for these permits, to require adequate financial responsibility, and to establish minimum standards for closure for all facilities and for post-closure monitoring and maintenance of hazardous waste disposal facilities. This chapter establishes minimum standards for new hazardous waste sites or facilities. This regulation establishes the wording of the instruments for a cash account or certification(s) of deposit.

Section 1. Hazardous Waste Site or Facility Bond. A hazardous waste site, or facility bond, as specified in Section 9 of 401 KAR 34:090 or Section 9 of 401 KAR 34:100 or Section 8 of 401 KAR 35:090 or Section 8 of 401 KAR 35:100 must be executed on a form provided by the cabinet which is worded as follows, except that the instructions in parentheses are to be replaced with the relevant information and the parentheses deleted.

Hazardous Waste Site or Facility Bond

Date bond executed: (insert date executed)
Effective date: (insert effective date)
Principal: (insert name of legal name of owner or operator) (insert address of principal)
Type of organizations: (insert "individual," "joint venture," "partnership," "association," or "corporation,") Commonwealth/State of incorporation: (insert state in which incorporated)

EPA Identification Number: (insert EPA identification number). Closure and/or post-closure amount(s) for the facility guaranteed by this bond are:
Closure Bond Amount: $(insert amount of closure bond)
Post-Closure Bond Amount: $(insert amount of post-closure bond)
Total Penal Sum: $(insert total amount of bond)

Know all persons by these presents, that the Principal hereto is firmly bound to the Natural Resources and Environmental Protection Cabinet (hereinafter called Cabinet) in the above penal sum for the payment of which it binds itself, its heirs, executors, administrators, successors, and assigns, jointly and severally.

The above sum is herewith deposited with the Division of Waste Management by and through its Escrow Agent (insert name of escrow agent) as a guarantee that the Principal will comply with all applicable laws, rules, and regulations regarding closure and/or post-closure for the following facility(ies):
(insert names of facility(ies))

Whereas, said Principal is required under Kentucky Revised Statutes Chapter 224 to have a permit or permits, or interim status, in order to own or operate each hazardous waste site or facility(ies) identified above; and

Whereas, said Principal is required to provide financial assurance for closure, or closure and post-closure care, as a condition of the permit or interim status.

The condition of this obligation is such that if the Principal shall faithfully perform all the requirements of the applicable laws, rules and regulations, then this obligation shall be released; otherwise, it is agreed that said penal sum shall be paid to the Commonwealth of Kentucky, Natural Resources and Environmental Protection Cabinet, upon receipt of an Order of the Cabinet.

The persons whose signatures appear below hereby certify that they are authorized to execute this bond on behalf of the Principal.

Principal

Signatures: (Authorized signature for Principal)
(Typed name of signatory)

(Typed title of signatory)
(Typed name of Principal)
(Authorized signature for Principal)
(Typed name of signatory)
(Typed title of signatory)
(Typed name of Principal)

Corporate seal: (Apply corporate seal)

Subscribed and sworn to before me by (insert name of Principal(s)) this the (insert date) day of (insert month), (insert year).

(signature of Notary Public)
Notary Public

My commission expires: (insert day, month, and year of commission expiration)

Section 2. Escrow Agreement. An escrow agreement for cash accounts or certificates of desposit, as specified in Section 9 of 401 KAR 34:090, or Section 9 of 401 KAR 34:100 or Section 8 of 401 KAR 35:090 or Section 8 of 401 KAR 35:100 must be executed on a form provided by the cabinet which is worded as follows, except that the instructions in parentheses are to be replaced with the relevant information and the parentheses deleted:

Escrow Agreement

THIS AGREEMENT, made, executed and delivered this the (insert the date) day of (insert the month), (insert the year), by and between (insert the name of the owner or operator, the EPA identification number and address) as the Applicant/Permittee and (insert name and address of the escrow agent), as Escrow Agent, and the Kentucky Natural Resources and Environmental Protection Cabinet, Department for Environmental Protection, Division of Waste Management, hereinafter called the Cabinet.

WITNESSETH:

WHEREAS, the Applicant/Permittee desires to operate a hazardous waste site or facility in the Commonwealth of Kentucky; and

WHEREAS, the laws of the Commonwealth require that financial assurance be posted to insure the closure and/or post-closure of the facility and to otherwise guarantee compliance with all applicable laws and regulations of the Commonwealth administered by the Cabinet; and

WHEREAS, the Applicant/Permittee desires to meet the financial assurance for a hazardous waste site or facility in the Commonwealth of Kentucky by executing such bond and posting surety in the sum of (insert the amount being posted in words) Dollars, $(insert the numerical figure of the bond), with the Cabinet to be held by the Escrow Agent, which sum is hereby acknowledged by the Cabinet to be sufficient and acceptable for the above named Applicant/Permittee; and

WHEREAS, such sum shall be placed in the safe custody of the Escrow Agent and the Escrow Agent is directed to purchase certificates of deposit, hereinafter the Certificates, of the (insert name of financial institution issuing the Certificates, and address of financial institution), or establish a cash account, hereinafter the Account, which are more fully described as follows:

Certificate no. (insert certificate number for each certificate)	Date of Issuance (insert date of issuance for each certificate)	Principal Amount (insert principal amount for each certificate)
Cash Account No. (insert number of the Account)	Date of Opening (insert opening date of the Account)	Principal Amount (insert amount in the Account)

AND WHEREAS, this Agreement is a supplement to the Hazardous Waste Site or Facility Bond filed by the Applicant/Permittee with the EPA identification number(s) (insert EPA identification number(s)) for a permit to operate a hazardous waste facility.

NOW THEREFORE, in consideration of the premises set forth herein, the parties mutually agree as follows:

1. The Escrow Agent acknowledges receipt of the Certificates and the Account above listed, to be safely and securely kept by it for the stated purposes of this Agreement and subject to the terms and conditions herein, and binds itself to perform completely under the terms of this Agreement and to dispose of the Certificates or Account or the proceeds therefrom only as provided herein. The Escrow Agent further agrees to exercise due care in the safekeeping and delivery of the Certificates or the Account;

2. The parties agree that the Certificates or any subsequent Certificates are and shall be made payable in favor of the Escrow Agent only. If it is an Account, it is to be established in favor of the Escrow Agent. The parties further agree that until such time as the Cabinet orders that the bond be forfeited or until such itme as the bond is released, all interest accruing on the Certificates or the Account shall be disposed of in accordance with paragraphs 4, 5, and 6 of this Agreement;

3. The parties agree that the Escrow Agent is hereby authorized and directed to insure that the Certificates or the Account remain in full force during the term of this Agreement and the Escrow Agent may, upon notice of all parties, and upon the maturity of the Certificates, issue new Certificates of face value equal to the outstanding amount of the bond. In the event of such issuance, the new Certificate shall replace the Certificates herein for all purposes and shall be subject to the conditions of this Agreement;

4. No interest shall be paid to the Applicant/Permittee on any Certificate or Account until a full release has been obtained from the Cabinet or until the bond has been forfeited and any penalty resulting from the cashing of the Certificate has been satisfied;

5. Upon the Cabinet's written notice to the Escrow Agent of the Cabinet's certification of the satisfactory completion of all or part of closure and/or post-closure activities and the release of such bond in whole or in part, the Applicant/Permittee may direct the Escrow Agent to either issue one (1) or more new Certificates in the name of the Applicant/Permittee or a cashier's check for the amount so released.

6. In the event of forfeiture of the hazardous waste site or facility bond herein and upon the Cabinet's written notice of such forfeiture to the Escrow Agent, the Escrow Agent shall promptly cash the Certificates or draw from the Acocunt and forward to the Cabinet a cashier's check in the outstanding amount of the bond, pay any penalties which result from the cashing of the Certificates or drawing from the Account from the interest accrued thereon, and remit any remaining interest and principal to the Applicant/Permittee;

7. The parties agree that neither the Escrow Agent nor the Cabinet shall be liable for any loss of interest which may result to the Applicant/Permittee as a result of an Order of Forfeiture;

8. In the event the Escrow agent cancels the Account or Certificate(s) of Deposit, as provided by regulation, the proceeds shall be paid to the Cabinet;

9. The Escrow Agent shall not be liable for inquiring whether there has been performance by the Applicant/Permittee or to see the application of any monies paid on the instruction of the Cabinet and in such matters the Escrow Agent may rely upon the instructions of the Cabinet executed by the Secretary of the Cabinet, his designee or his successor, or the successor agency as porvided by law. The Escrow Agent need not verify the apparent authority of an agent of the Cabinet in carrying out the Cabinet's instructions. Nothing herein shall prevent the Commonwealth from designating a person authorized to act for it in any other lawful manner;

10. That for value received, the Applicant/Permittee does hereby assign, transfer, and set over to the Commonwealth of Kentucky all right, title and interest which the Applicant/Permittee may have in the Certificates or the Account. The parties agree that the Certificates or the Account are being held solely for the benefit of the Commonwealth of Kentucky and that the Applicant/Permittee has relinquished all right, title and interest to the Certificates or the Account as provided hereinafter. The Applicant/Permittee may not pledge or encumber in any manner the Certificates or the Account or any renewal certificates, or the interest due thereon, so long as the same are subject to the conditions of the bond herein;

11. The Cabinet agrees that upon the satisfactory completion of all closure and/or post-closure activities pursuant to the laws of the Commonwealth by the Applicant and upon the Cabinet's inspection and certification of the same, the Cabinet shall release the bond herein and promptly notify the Escrow Agent and the Applicant of such release;

12. It is agreed that in the event the Escrow Agent closes or goes into receivership, any Federal Deposit Insurance Corporation, Federal Savings and Loan Insurance Corporation, or National Credit Union Administration insurance proceeds paid on, to, or as a result of the Certificates or the Account shall first be applied to cover the Certificates or the Account;

13. The parties agree that the Escrow Agent shall be the Cabinet's agent for holding the Certificates or the Account for the purpose of perfecting the Cabinet's security interest in those Certificates or the Account under KRS Chapter 355;

14. This agreement shall be binding upon the successors and assigns of the respective parties; and

15. Upon receipt by the Escrow Agent of written notification by the Cabinet of the forfeiture or the release of the bond herein, and disbursement pursuant to this agreement by the Escrow Agent of the Certificates or in the proceeds therefrom and any interest accrued thereon, the Escrow Agent shall be discharged of any and all duties and liabilities arising out of or as a result of this agreement.

SIGNED, SEALED AND DELIVERED, the day and date first above written by the appropriately authorized officers.

APPLICANT: (insert the typed name of the owner or operator)
BY: (insert the signature of the owner or operator)
TITLE: (insert the typed title of the above signatory)

ESCROW AGENT: (insert the typed name of the escrow agent)
BY: (insert the signature of the authorized representative of the escrow agent)
TITLE: (insert the typed title of the signatory for the escrow agent)

NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION CABINET

BY: (insert signature of the Director of Division of Waste Management)
TITLE: Director, Division of Waste Management

JACKIE SWIGART, Secretary
ADOPTED: June 10, 1983
RECEIVED BY LRC: June 14, 1983 at 11 a.m.
See public hearings scheduled on page 1.

NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION CABINET
Department for Environmental Protection
Division of Waste Management

401 KAR 34:220. Land treatment.

RELATES TO: KRS 224.033, 224.060, 224.071, 224.835, 224.842, 224.855, 224.860, 224.866
PURSUANT TO: KRS 13.082, 13.083, 224.017, 224.862, 224.866
NECESSITY AND FUNCTION: KRS 224.866 requires that persons engaging in the storage, treatment, and disposal of hazardous waste obtain a permit. KRS 224.866 requires the Natural Resources and Environmental Protection Cabinet to establish standards for these permits, to require adequate financial responsibility, to establish minimum standards for closure for all facilities and the post-closure 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 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 regulation 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 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 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 regulation; and

(c) Unsaturated zone monitoring provisions meeting the requirements of Section 6 of this regulation.

(2) The cabinet will specify in the facility permit the hazardous constituents that must be degraded, transformed, or immobilized under this regulation. Hazardous con-

stituents 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 Section 2 of 401 KAR 30:030.

(3) The cabinet 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 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 be applied to the treatment zone, the owner or operator 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 must obtain a treatment or disposal permit under Section 4 of 401 KAR 38:060. The cabinet 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 clean-up 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 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 be completely degraded, transformed, or immoblized 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;
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 will specify in the facility permit how the owner or operator will design, construct, operate, and maintain the land treatment unit in compliance with this section.

(1) The owner or operator 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 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 regulation. At a minimum, the cabinet 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 reaction (e.g., fertilization, tilling); and

(d) Measures to control the moisture content of the treatment zone.

(2) The owner or operator 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 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 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) associated with run-on and run-off control systems 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 must manage the unit to control wind dispersal.

(7) The owner or operator 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 must be located entirely above the seasonal highwater table and out of the 100-year floodplain, 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 will specify in the facility permit the specific food-chain crops which may be grown.

(1) (a) The owner or operator 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 not be transferred to the food or feed portions of the crop by plant uptake or direct contact, and will not otherwise be ingested by food-chain animals (e.g., by grazing); or
2. 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 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 must determine all maximum groundwater contaminant levels as identified in Section 2 of 401 KAR 30:030 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 must:

1. Base the demonstration on conditions similar to those present in the treatment zone, including soil characteristics (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 must obtain a permit for conducting such activities.

(2) The owner or operator 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 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 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 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 to Dec. 31, 1986	1.25
Beginning Jan. 1, 1987	0.5

3. The cumulative application of cadmium from waste 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 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 must be the only food-chain crop produced;

2. The pH of the waste and soil mixture 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 must be maintained whenever food-chain crops are grown;

3. There must be an operating plan which demonstrates how the animal feed will be distributed to preclude ingestion by humans. The operating plan 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 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 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 regulation must establish an unsaturated zone monitoring program to discharge the following responsibilities:

(1) The owner or operator 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 regulation.

(b) The cabinet may require monitoring for principal hazardous constituents (PHCs) in lieu of the constituents specified under Section 2(2) of this 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 will establish PHCs, based on waste analyses, treatment demonstrations, or other data, that demonstrate effective degradation, transformation, or immobilization of the PHCs will assure treatment at least equivalent levels for the other hazardous constituents in the wastes.

(2) The owner or operator 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 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 must establish a background value for each hazardous constituent to be monitored under subsection (1) of this section. The permit 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 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 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 must use an unsaturated zone monitoring system that complies with subsection (2)(a) of this section.

(4) The owner or operator must conduct soil monitoring and soil-pore liquid monitoring immediately below the

treatment zone. The cabinet 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 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 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 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 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 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 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 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 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 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 must:

(a) Notify the cabinet of this finding in writing within seven (7) days. The notification 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 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 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 Post-Closure Care. (1) During the closure period the owner or operator 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 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 regulation;

(c) Maintain the run-on control system required under Section 4(3) of this regulation;

(d) Maintain the run-off management system required under Section 4(4) of this regulation;

(e) Control wind dispersal of hazardous waste if required under Section 4(6) of this regulation;

(f) Continue to comply with any prohibitions or conditions concerning growth of food-chain crops under Section 5 of this regulation;

(g) Continue unsaturated zone monitoring in compliance with Section 6 of this 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 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 post-closure care period the owner or operator 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 post-closure 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 regulation;

(d) Maintain the run-off management system required under Section 4(4) of this regulation;

(e) Control wind dispersal of hazardous waste if required under Section 4(6) of this regulation;

(f) Continue to comply with any prohibitions or conditions concerning growth of food-chain crops under Section 5 of this regulation; and

(g) Continue unsaturated zone monitoring in compliance with Section 6 of this regulation.

(4) The owner or operator is not subject to 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 post-closure care periods. For the purposes of this subsection:

(a) The owner or operator 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 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 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 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 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 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 treament zone.

(5) The owner or operator is not 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 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 must not apply ignitable or reactive waste to the treatment zone unless the waste is immediately incorporated into the soil so that:

(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 34:020 is complied with.

Section 10. Special Requirements for Incompatible Wastes. The owner or operator must not place incompatible wastes, or incompatible wastes and materials (see 401 KAR 34:030 for examples), in or on the same treatment zone.

JACKIE SWIGART, Secretary
ADOPTED: June 10, 1983
RECEIVED BY LRC: June 14, 1983 at 11 a.m.
See public hearings scheduled on page 1.

NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION CABINET
Department for Environmental Protection
Division of Waste Management

401 KAR 34:230. Landfills.

RELATES TO: KRS 224.033, 224.071, 224.835, 224.842, 224.855, 224.860, 224.866
PURSUANT TO: KRS 13.082, 13.083, 224.017, 224.862, 224.866
NECESSITY AND FUNCTION: KRS 224.866 requires that persons engaging in the storage, treatment, and disposal of hazardous waste obtain a permit. KRS 224.866 requires the Natural Resources and Environmental Protection Cabinet to establish standards for these permits, to require adequate financial responsibility, to establish minimum standards for closure for all facilities and the post-closure 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 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) A landfill (except for an existing portion of a landfill) must 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 live (including the closure period) of the landfill. The liner must be constructed of materials that prevent wastes from passing into the liner during the active life of the facility. The liner 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;

2. Placed upon a foundation or base capable of providing support to the liner and resistant to pressure gra-

dients 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 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 will specify design and operating conditions in the permit to ensure that the leachate depth over the liner does not exceeds thirty (30) cm (approximately one (1) foot). The leachate collection and removal system must 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 landfill.

(2) The owner or operator will be exempted from the requirements of subsecction (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 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 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 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 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.

(4) The owner or operator 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) associated with run-on and run-off control systems must be emptied or otherwise managed expeditiously after storms to maintain design capacity of the system.

(6) If the landfill contains any particulate matter which may be subject to wind dispersal, the owner or operator must cover or otherwise manage the landfill to control wind dispersal.

(7) A new landfill shall not be constructed in a floodway, the 100-year floodplain or in an area of seasonal high water table in accordance with Section 9(2) of 401 KAR 34:020.

(8) Existing landfills within the 100-year floodplain shall be protected from inundation by waters of the 100-year flood in accordance with Section 9(2) of 401 KAR 34:020.

(9) 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 3. Double-Lined Landfills Exemption from Groundwater Protection Requirements. (1) The owner or operator of a double-lined landfill is not subject to the requirements of 401 KAR 34:060 if the following conditions are met:

(a) The landfill (including its underlying liners) must be located entirely above the seasonal high water table.

(b) The landfill must be underlain by two (2) liners which are designed and constructed in a manner to prevent the migration of liquids into or out of the space between the liners. Both liners must meet all the specifications of Section 2(1)(a) of this regulation.

(c) A leak detection system must be designed, constructed, maintained, and operated between the liners to detect any migration of liquid into the space between the liners.

(d) The landfill must have a leachate collection and removal system above the top liner that is designed, constructed, maintained, and operated in accordance with Section 2(1)(b) of this regulation.

(2) If liquid leaks into the leak detection system, the owner or operator must:

(a) Notify the cabinet of the leak in writing within seven (7) days after detecting the leak; and

(b) 1. Within a period of time specified in the permit, remove accumulated liquid, repair or replace the liner which is leaking to prevent the migration of liquids through the liner, and obtain a certification from a qualified engineer registered in Kentucky that, to the best of his knowledge and opinion, the leak has been stopped; or

2. If a detection monitoring program pursuant to Section 9 of 401 KAR 34:060 has already been established in the permit (to be complied with only if a leak occurs), begin to comply with that program and any other applicable requirements of this regulation within a period of time specified in the permit.

(3) 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 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 regulation) and cover systems (e.g., membranes, sheets, or coatings) 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 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 must be inspected for imperfections including lenses, cracks, channels, root holes, or other structural non-uniformities that may cause an increase in the permeability of the liner or cover.

(2) While a landfill is in operation, it must 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 liquids in leak detection systems, where installed to comply with Section 3 of this regulation;

(c) Proper functioning of wind dispersal control systems, where present; and

(d) The presence of leachate in and proper functioning of leachate collection and removal systems, where present.

Section 5. Surveying and Recordkeeping. The owner or operator of a landfill must 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; and

(2) The contents of each cell and the approximate location of each hazardous waste type within each cell.

(3) Any other information specified by the cabinet in the permit.

Section 6. Closure and Post-Closure Care. (1) At final closure of the landfill or upon closure of any cell, the owner or operator 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 the permeability of any bottom liner system or natural subsoils present.

(2) After final closure, the owner or operator must comply with all post-closure requirements contained in Sections 7 through 10 of 401 KAR 34:070, including maintenance and monitoring throughout the post-closure care period (specified in the permit under Section 7 of 401 KAR 34:070). The owner or operator 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 Section 3 of this regulation, where such a system is present between double liner systems;

(c) Continue to operate the leachate collection and removal system until leachate is no longer detected;

(d) Maintain and monitor the groundwater monitoring system and comply with all other applicable requirements of this regulation;

(e) Prevent run-on and run-off from eroding or otherwise damaging the final cover; and

(f) Protect and maintain surveyed benchmarks used in complying with Section 5 of this regulation.

(3) During the post-closure care period, if liquid leaks into a leak detection system installed under Section 3 of this regulation, the owner or operator must notify the cabinet of the leak in writing within seven (7) days after detecting the leak. The cabinet will modify the permit to require compliance with the requirements of this regulation.

Section 7. Special Requirements for Ignitable or Reactive Waste. Except as provided in subsection (2) of this section, and in Section 11 of this regulation, ignitable or reactive waste must not be placed in a landfill, unless the waste is treated, rendered, or mixed before placement in a landfill so that:

(1) The resulting waste 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) must not be placed in the same landfill cell.

Section 9. Special Requirements for Liquid Waste. (1) Bulk or non-containerized liquid waste or waste containing free liquids must not be placed in a landfill unless before disposal, the liquid waste or waste containing free liquids is treated or stabilized, chemically or physically (e.g., by mixing with an absorbent solid), so that free liquids are no longer present.

(2) Containers holding free liquids must not be placed in a landfill unless:

(a) All free-standing liquid:

1. Has been removed by decanting, or other methods;

2. Has been mixed with absorbent or solidified so that free-standing liquid is no longer observed; or

3. Has been othrwise 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 regulation and is disposed of in accordance with Section 11 of this regulation.

Section 10. Special Requirements for Containers. Unless they are very small, such as an ampule, containers must be either:

(1) At least ninety percent (90%) 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 must be packaged in non-leaking inside containers. The inside containers must be of a design and constructed of a material that will not react dangerously with, be decomposed by, or be ignited by the contained waste. Inside containers must be tightly and securely sealed. The inside containers 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 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 must be full after packing with inside containers and absorbent material.

(3) The absorbent material used 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 34:020.

(4) Incompatible wastes, as defined in 401 KAR 30:010, must not be placed in the same outside container.

(5) Reactive wastes, other than cyanide- or sulfide-bearing waste as defined in Section 4 of 401 KAR 31:030 must be treated or rendered non-reactive prior to packaging in accordance with subsections (1) through (4) of this section. Cyanide- and sulfide-bearing reactive waste may

be packed in accordance with subsections (1) through (4) of this section upon approval of the cabinet without first being treated or rendered non-reactive.

JACKIE SWIGART, Secretary
ADOPTED: June 10, 1983
RECEIVED BY LRC: June 14, 1983 at 11 a.m.
See public hearings scheduled on page 1.

NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION CABINET
Department for Environmental Protection
Division of Waste Management

401 KAR 34:320. Appendix on statistical testing.

RELATES TO: KRS 224.033, 224.071, 224.835, 224.842, 224.855, 224.860, 224.866
PURSUANT TO: KRS 13.082, 13.083, 224.017, 224.862, 224.866
NECESSITY AND FUNCTION: KRS 224.866 requires that persons engaging in the storage, treatment, and disposal of hazardous waste obtain a permit. KRS 224.866 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 post-closure monitoring and maintenance of hazardous waste disposal facilities. This chapter establishes minimum standards for new hazardous waste sites or facilities. This regulation establishes the method for calculating the Cochran's Approximation to the Behrens-Fisher Students' t-test.

Section 1. Cochran's Approximation to the Behrens-Fisher Students' t-test. Using all the available background data (N_b readings), calculate the background mean (X_B) and background variance (S_B^2). For the single monitoring well under investigation ($n_m$reading), calculate the monitoring mean (X_m) and monitoring variance (S_m^2).

For any set of data (X_1, X_2...X_n) the mean is calculated by:

$$\bar{X} = \frac{X_1 + X_2 \ldots + X_n}{n}$$

and the variance is calculated by:

$$S^2 = \frac{(X_1 - \bar{X})^2 + (X_2 - \bar{X})^2 \ldots + (X_n - \bar{X})^2}{n-1}$$

where "n" denotes the number of observations in the set of data.

The t-test uses these data summary measures to calculate a t-statistic (t*) and a comparison t-statistic (t_c). The t* value is compared to the t_c value and a conclusion reached as to whether there has been a statistically significant change in any indicator parameter.

The t-statistic for all parameters except pH and similar monitoring parameters is:

$$t^* = \frac{X_m - \bar{X}_B}{\sqrt{\frac{S_m^2}{\bar{N}_m} + \frac{S_B^2}{\bar{N}_B}}}$$

If the value of this t-statistic is negative then there is no significant difference between the monitoring data and background data. It should be noted that significantly small negative values may be indicative of a failure of the assumption made for test validity or that errors have been made in collecting the background data.

The t-statistic (t_c), against which t* will be compared, necessitates finding t_B and t_m from standard (one-tailed) tables where,

t_B = t-tables with (n_B - 1) degrees of freedom, at the 0.05 level of significance.

t_m = t-tables with (n_m - 1) degrees of freedom, at the 0.05 level of significance.

Finally, the special weightings W_B and W_m are defined as:

$$W_B = \frac{S_B^2}{\bar{n}_B} \quad \text{and} \quad W_m = \frac{S_m^2}{\bar{n}_m}$$

and so the comparison t-statistic is:

$$t_c = \frac{W_B t_B + W_m t_m}{W_B + W_m}$$

The t-statistic (t*) is now compared with the comparison t-statistic (t_c) using the following decision-rule:

If t* is equal to or larger than t_c, then conclude that there most likely has been a significant increase in this specific parameter.

If t* is less than t_c, then conclude that most likely there has not been a change in this specific parameter.

The t-statistic for testing pH and similar monitoring parameters is constructed in the same manner as previously described except the negative sign (if any) is discarded and the caveat concerning the negative value is ignored. The statndard (two-tailed) tables are used in the construction t_c for pH and similar monitoring parameters.

If t* is equal to or larger than t_c, then conclude that there most likely has been a significant increase (if the initial t* had been negative, this would imply a significant decrease). If t* is less than t_c then conclude that there most likely has been no change.

Section 2. Additional Sources of Information. A further discussion of the test may be found in Statistical Methods (6th Edition, Section 4.14) by G.W. Snedecor and W.G. Cochran, or "Principles and Procedures of Statistics" (1st Edition, Section 5.8) by R.G.D. Steel and J.H. Torrie.

Section 3. Standard T-Tables 0.05 Level of Significance.

Degrees of freedom	t-values (one-tail)	t-values (two-tail)
1	6.314	12.706
2	2.920	4.303
3	2.353	3.182
4	2.132	2.776
5	2.015	2.571
6	1.943	2.447
7	1.895	2.365
8	1.860	2.306
9	1.833	2.262
10	1.812	2.228
11	1.796	2.201
12	1.782	2.179
13	1.771	2.160
14	1.761	2.145
15	1.753	2.131
16	1.746	2.120
17	1.740	2.110
18	1.734	2.101
19	1.729	2.093
20	1.725	2.086
21	1.721	2.080
22	1.717	2.074
23	1.714	2.069
24	1.711	2.064
25	1.708	2.060
30	1.697	2.042
40	1.684	2.021

Adopted from Table III of "Statistical Tables for Biological, Agricultural, and Medical Research" (1947, R.A. Fisher and F. Yates).

JACKIE SWIGART, Secretary
ADOPTED: June 10, 1983
RECEIVED BY LRC: June 14, 1983 at 11 a.m.
See public hearings scheduled on page 1.

NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION CABINET
Department for Environmental Protection
Division of Waste Management

401 KAR 35:020. General facilities standards (IS).

RELATES TO: KRS 224.033, 224.830 through 224.877, 224.994
PURSUANT TO: KRS 13.082, 13.083, 224.017, 224.033, 224.866
NECESSITY AND FUNCTION: KRS 224.866 requires that persons engaging in the storage, treatment, and disposal of hazardous waste obtain a permit. KRS 224.866 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 post-closure 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 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 must 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 must 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 transfering ownership or operation of a facility during its operating life, or of a disposal facility during the post-closure care period, the owner or operator must 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 waste, he must obtain a detailed chemical and physical analysis of a representative sample of the waste. At a minimum, this analysis must contain all the information which must be known to treat, store, or dispose of the waste in accordance with the requirements of this chapter.

(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 must be repeated as necessary to ensure that it is accurate and up to date. At a minimum, the analysis must be repeated:

1. When the owner or operator is notified, or has reason to believe, that the process or operation generating the hazardous waste 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 must 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 must develop and follow a written waste analysis plan which describes the procedures which he will carry out to comply with subsection (1) of this section. He must keep this plan at the site or facility. At a minimum, the plan must specify:

(a) The parameters for which each hazardous waste will be analyzed and the rationale for the selection of these parameters (i.e., how analysis for these parameters will provide sufficient information on the waste's properties to comply with subsection (1) of this section);

(b) The test methods which will be used to test for these parameters;

(c) The sampling method which will 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 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 be used to meet the additional waste analysis requirements for specific waste management methods as specified in Section 3 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.

(3) For off-site facilities, the waste analysis plan required in subsection (2) of this section must also specify the procedures which will 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 must describe:

(a) The procedures which will be used to determine the identity of each movement of waste managed at the facility; and

(b) The sampling method which will be used to obtain a representative sample of the waste to be idenified, if the identification method includes sampling.

Section 5. Security. (1) The owner or operator must 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 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 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 must have:

(a) A twenty-four (24) hour surveillance system (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 exempt under subsection (1)(a) and (b) of this section, a sign with the legend, "Danger—Unauthorized Personnel Keep Out," must 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 must be written in English and in any other language predominant in the area surrounding the facility, and must 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 post-closure care period).

Section 6. General Inspection Requirements. (1)(a) The owner or operator must 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 must 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 must 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) He must keep this schedule at the facility.

(c) The schedule must identify the types of problems (e.g., malfunctions or deterioration) which are to be checked during the inspection (e.g., inoperative sump pump, leaking fitting, 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, must be inspected daily when in use. At a minimum, the inspection schedule must include the items and frequencies called for in Section 5 of 401 KAR 35:180, Section 4 of 401 KAR 35:190, Section 5 of 401 KAR 35:200, Section 4 of 401 KAR 35:240, Section 4 of 401 KAR 35:250 and Section 4 of 401 KAR 35:260.

(3) The owner or operator must 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 must be taken immediately.

(4) The owner or operator must record inspections in an inspection log or summary. He must keep these records for at least three (3) years from the date of inspection. At a minimum, these records must 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 must 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 must ensure that this program includes all the elements described in the document required under subsection (4)(c) of this section.

(b) This program must be directed by a person trained in hazardous waste management procedures, and must 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 must 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 cut-off 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 must 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, must not work in unsupervised positions until they have completed the training requirements of subsection (1) of this section.

(3) Facility personnel must take part in an annual review of the initial training required in subsection (1) of this section.

(4) The owner or operator must 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 must 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 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 must be kept until closure of the site or facility; training records on former employees must 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 must take precautions to prevent accidential ignition or reaction of ignitable or reactive waste. This waste must 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), and radiant heat. While ignitable or reactive waste is being handled, the owner or operator must confine smoking and open flames to specially designated locations. "No Smoking" signs must be conspicuously placed wherever there is a hazard from ignitable or reactive waste.

(2) Where specifically required by other sections of this regulation, the treatment, storage or disposal of ignitable or reactive waste, and the mixture or commingling of incompatible wastes, or incompatible wastes and materials, must 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.

JACKIE SWIGART, Secretary
ADOPTED: June 10, 1983
RECEIVED BY LRC: June 14, 1983 at 11 a.m.
See public hearings scheduled on page 1.

NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION CABINET
Department for Environmental Protection
Division of Waste Management

401 KAR 34:030. Preparedness and prevention (IS).

RELATES TO: KRS 224.033, 224.830 through 224.877, 224.994
PURSUANT TO: KRS 13.082, 13.083, 224.017, 224.033, 224.866
NECESSITY AND FUNCTION: KRS 224.866 requires that persons engaging in the storage, treatment, and disposal of hazardous waste obtain a permit. KRS 224.866 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 post-closure 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 procedures and standards for preparedness and prevention of hazardous waste releases.

Section 1. Applicability. The requirements in this regulation apply to owners and operators of all hazardous waste facilities, except as Section 1 of 401 KAR 35:010 provides otherwise.

Section 2. Design and Operation of Facility. Facilities must be maintained and operated to minimize the possibility of a fire, explosion, or any unplanned sudden or nonsudden release of hazardous waste or hazardous waste constituents to air, soil or surface water which could threaten human health or the environment.

Section 3. Required Equipment. All facilities must be equipped with the following, unless none of the hazards posed by waste handled at the site or facility could require a particular kind of equipment specified below:

(1) An internal communications or alarm system capable of providing immediate emergency instruction (voice or signal) to facility personnel;

(2) A device, such as a telephone (immediately available at the scene of operations) or a hand-held two-way radio, capable of summoning emergency assistance from local police departments, fire departments, or state or local emergency response teams;

(3) Portable fire extinguishers, fire control equipment (including special extinguishing equipment, such as that using foam, inert gas, or dry chemicals), spill control equipment, and decontamination equipment; and

(4) Water at adequate volume and pressure to supply water hose streams, or foam producing equipment, or automatic sprinklers, or water spray systems.

Section 4. Testing and Maintenance of Equipment. All

facility communications or alarm systems, fire protection equipment, spill control equipment and decontamination equipment, where required, must be tested and maintained as necessary to assure its proper operation in time of emergency.

Section 5. Access to Communications or Alarm System. (1) Whenever hazardous waste is being poured, mixed, spread or otherwise handled, all personnel involved in the operation must have immediate access to an internal alarm or emergency communication device, either directly or through visual or voice contact with another employee, unless such a device is not required under Section 3 of this regulation.

(2) If there is ever just one (1) employee on the premises while the facility is operating, he must have immediate access to a device, such as a telephone (immediately available at the scene of operation) or a hand-held two-way radio, capable of summoning external emergency assistance, unless such a device is not required under Section 3 of this regulation.

Section 6. Required Aisle Space. The owner or operator must maintain aisle space to allow the unobstructed movement of personnel, fire protection equipment, spill control equipment and decontamination equipment to any area of facility operation in an emergency, unless aisle space is not needed for any of these purposes.

Section 7. Arrangements with Local Authorities. (1) The owner or operator must attempt to make the following arrangements, as appropriate for the type of waste handled at his facility and the potential need for the services of these organizations:

(a) Arrangements to familiarize police, fire departments, and emergency response teams with the layout of the facility, properties of hazardous waste handled at the facility and associated hazards, places where facility personnel would normally be working, entrances to roads inside the facility and possible evacuation routes;

(b) Where more than one (1) police and fire department might respond to an emergency, agreements designating primary emergency authority to a specific police and a specific fire department and agreements with any others to provide support to the primary emergency authority;

(c) Agreements with state emergency response teams, emergency response contractors, and equipment suppliers; and

(d) Arrangements to familiarize local hospitals with the properties of hazardous waste handled at the facility and the types of injuries or illnesses which could result from fires, explosions, or releases at the facility.

(2) Where state or local authorites decline to enter into such arrangements, the owner or operator must document the refusal in the operating record.

JACKIE SWIGART, Secretary
ADOPTED: June 10, 1983
RECEIVED BY LRC: June 13, 1983 at 11:30 a.m.
See public hearings scheduled on page 1.

NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION CABINET
Department for Environmental Protection
Division of Waste Management

401 KAR 35:040. Contingency plan and emergency procedures (IS).

RELATES TO: KRS 224.033, 224.830 through 224.877, 224.994
PURSUANT TO: KRS 13.082, 13.083, 224.017, 224.033, 224.866
NECESSITY AND FUNCTION: KRS 224.866 requires that persons engaging in the storage, treatment, and disposal of hazardous waste obtain a permit. KRS 224.866 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 post-closure 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 contingency planning and emergency procedures for facilities.

Section 1. Applicability. The requirements in this regulation apply to owners and operators of all hazardous waste facilities, except as Section 1 of 401 KAR 35:010 provides otherwise.

Section 2. Purpose and Implementation of Contingency Plan. (1) Each owner or operator must have a contingency plan for his facility. The contingency plan must be designed to minimize hazards to human health or the environment from fires, explosions, or any unplanned sudden or nonsudden release of hazardous waste or hazardous waste constituents to air, soil or surface water.

(2) The provisions of the plan must be carried out immediately whenever there is a fire, explosion, or release of hazardous waste or hazardous waste constituents which could threaten human health or the environment.

Section 3. Content of Contingency Plan. (1) The contingency plan must describe the actions facility personnel must take to comply with Sections 2 and 7 of this regulation in response to fires, explosions, or any unplanned sudden or nonsudden release of hazardous waste or hazardous waste constituents to air, soil, or surface water at the facility.

(2) If the owner or operator has already prepared a Spill Prevention, Control, and Countermeasures (SPCC) Plan in accordance with 40 CFR Part 112 or 40 CFR Part 1510, or some other emergency or contingency plan, he need only amend that plan to incorporate hazardous waste management provisions that are sufficient to comply with the requirements of this chapter.

(3) The plan must describe arrangements agreed to by local police departments, fire departments, hospitals, contractors, and state and local emergency response teams to coordinate emergency services, pursuant to Section 7 of 401 KAR 35:030.

(4) The plan must list names, addresses and phone numbers (office and home) of all persons qualified to act as emergency coordinator (see Section 6 of this regulation), and this list must be kept up to date. Where more than one (1) person is listed, one (1) person must be named as primary emergency coordinator and others must be listed in the order in which they will assume responsibility as alternates.

(5) The plan must include a list of all emergency equipment at the facility (such as fire extinguishing systems, spill control equipment, communications, alarm systems (internal and external), and decontamination equipment), where this equipment is required. This list must be kept up to date. In addition, the plan must include the location and a physical description of each item on the list, and a brief outline of its capabilities.

(6) The plan must include an evacuation plan for facility personnel where there is a possibility that evacuation could be necessary. This plan must describe signal(s) to be used to begin evacuation, evacuation routes, and alternate evacuation routes (in cases where the primary routes could be blocked by releases of hazardous waste or fires).

Section 4. Copies of Contingency Plan. A copy of the contingency plan and all revisions to the plan must be:

(1) Maintained at the facility; and

(2) Submitted to all local police departments, fire departments, hospitals, and state and local emergency response teams that may be called upon to provide emergency services.

Section 5. Amendment of Contingency Plan. The contingency plan must be reviewed and immediately amended, if necessary, whenever:

(1) Applicable regulations are revised;

(2) The plan fails in an emergency;

(3) The facility changes (in its design, construction, operation, maintenance, or other circumstances) in a way that materially increases the potential for fires, explosions, or releases of hazardous waste or hazardous waste constituents, or changes the response necessary in an emergency;

(4) The list of emergency coordinators changes; or

(5) The list of emergency equipment changes.

Section 6. Emergency Coordinator. At all times, there must be at least one (1) employee either on the facility premises or on call (i.e., available to respond to an emergency by reaching the facility within a short period of time) with the responsibility for coordinating all emergency response measures. This emergency coordinator must be thoroughly familiar with all aspects of the facility's contingency plan, all operations and activities at the facility, the location and characteristics of waste handled, the location of all records within the facility and the facility layout. In addition, this person must have the authority to commit the resources needed to carry out the contingency plan.

Section 7. Emergency Procedures. (1) Whenever there is an imminent or actual emergency situation, the emergency coordinator (or his designee when the emergency coordinator is on call) must immediately:

(a) Activate internal facility alarms or communication systems, where applicable, to notify all facility personnel; and

(b) Notify appropriate state or local agencies with designated response roles if their help is needed.

(2) Whenever there is a release, fire or explosion, the emergency coordinator must immediately identify the character, exact source, amount, and areal extent of any released materials. He may do this by observation or review of facility records or manifests and, if necessary, by chemical analysis.

(3) Concurrently, the emergency coordinator must assess possible hazards to human health or the environment that may result from the release, fire or explosion. This assessment must consider both direct and indirect effects of the release, fire or explosion (e.g., the effects of any toxic, irritating or asphyxiating gases that are generated, or the effects of any hazardous surface water run-off from water or chemical agents used to control fire and heat-induced explosions).

(4) If the emergency coordinator determines that the facility has had a release, fire or explosion which could threaten human health or the environment outside the facility, he must report his findings as follows:

(a) If his assessment indicates that evacuation of local areas may be advisable, he must immediately notify appropriate local authorities. He must be available to help appropriate officials decide whether local areas should be evacuated; and

(b) He must immediately notify either the government official designated as the on-scene coordinator for that geographical area (in the applicable regional contingency plan under 40 CFR Part 1510), or the National Response Center (using their twenty-four (24) hour toll free number 800-424-8802). The report must include:

1. Name and telephone number of the reporter;
2. Name and address of the facility;
3. Time and type of incident (e.g., release, fire);
4. Name and quantity of material(s) involved, to the extent known;
5. The extent of injuries, if any; and
6. The possible hazards to human health or the environment outside the facility.

(5) During an emergency, the emergency coordinator must take all reasonable measures necessary to ensure that fires, explosions and releases do not occur, recur or spread to other hazardous waste at the facility. These measures must include, where applicable, stopping processes and operations, collecting and containing released waste, and removing or isolating containers.

(6) If the facility stops operations in response to a fire, explosion or release, the emergency coordinator must monitor for leaks, pressure buildup, gas generation or ruptures in valves, pipes or other equipment, wherever this is appropriate.

(7) Immediately after an emergency, the emergency coordinator must provide for treating, storing or disposing of recovered waste, contaminated soil or surface water, or any other material that results from a release, fire or explosion at the facility.

(8) The emergency coordinator must ensure that, in the affected area(s) of the facility:

(a) No waste that may be incompatible with the released material is treated, stored or disposed of until cleanup procedures are completed; and

(b) All emergency equipment listed in the contingency plan is cleaned and fit for its intended use before operations are resumed.

(9) The owner or operator must notify the cabinet and appropriate state and local authorities that the facility is in compliance with subsection (10) of this section before operations are resumed in the affected area(s) of the facility.

(10) The owner or operator must note in the operating record the time, date and details of any incident that requires implementing the contingency plan. Within fifteen (15) days after the incident, he must submit a written report on the incident to the cabinet. The report must include:

(a) Name, address and telephone number of the owner or operator;

(b) Name, address and telephone number of the facility;

(c) Date, time and type of incident (e.g., fire, explosion);

(d) Name and quantity of material(s) involved;
(e) The extent of injuries, if any;
(f) An assessment of actual or potential hazards to human health or the environment, where this is applicable; and
(g) Estimated quantity and disposition of recovered material that resulted from the incident.

JACKIE SWIGART, Secretary
ADOPTED: June 10, 1983
RECEIVED BY LRC: June 13, 1983 at 11:30 a.m.
See public hearings scheduled on page 1.

NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION CABINET
Department for Environmental Protection
Division of Waste Management

401 KAR 35:050. Manifest system, recordkeeping and reporting (IS).

RELATES TO: KRS 224.033, 224.830 through 224.877, 224.994
PURSUANT TO: KRS 13.082, 13.083, 224.017, 224.033, 224.866
NECESSITY AND FUNCTION: KRS 224.866 requires that persons engaging in the storage, treatment, and disposal of hazardous waste obtain a permit. KRS 224.866 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 post-closure 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 manifest system, recordkeeping and reporting requirements for facilities.

Section 1. Applicability. The requirements in this regulation apply to owners and operators of both on-site and off-site facilities, except as Section 1 of 401 KAR 35:010 provides otherwise. Sections 2, 3 and 7 of this regulation do not apply to owners and operators of on-site facilities that do not receive any hazardous waste from off-site sources.

Section 2. Use of Manifest System. (1) If a facility receives hazardous waste accompanied by a manifest, the owner or operator (or his agent) must:
(a) Sign and date each copy of the manifest to certify that the hazardous waste covered by the manifest was received;
(b) Note any significant discrepancies in the manifest (as defined in Section 3(1) of this regulation) on each copy of the manifest;
(c) Immediately give the transporter at least one (1) copy of the signed manifest;
(d) Within thirty (30) days after the delivery, send a copy of the manifest to the generator; and
(e) Retain at the facility a copy of each manifest for at least three (3) years from the date of delivery.
(2) If a facility receives from a rail or water (bulk shipment) transporter hazardous waste which is accompanied by a shipping paper containing all the information required on the manifest (excluding the EPA identification numbers, generator's certification and signatures), the owner or operator (or his agent) must:
(a) Sign and date each copy of the manifest or shipping paper (if the manifest has not been received) to certify that the hazardous waste covered by the manifest or shipping paper was received;
(b) Note any significant discrepancies (as defined in Section 3(1) of this regulation) in the manifest or shipping paper (if the manifest has not been received) on each copy of the manifest or shipping paper;
(c) Immediately give the rail or water (bulk shipment) transporter at least one (1) copy of the manifest or shipping paper (if the manifest has not been received);
(d) Within thirty (30) days after the delivery, send a copy of the signed and dated manifest to the generator; however, if the manifest has not been received within thirty (30) days after delivery, the owner or operator, or his agent, must send a copy of the shipping paper signed and dated to the generator; and
(e) Retain at the facility a copy of the manifest and shipping paper (if signed in lieu of the manifest at the time of delivery) for at least three (3) years from the date of delivery.
(3) Whenever a shipment of hazardous waste is initiated from a facility, the owner or operator of the facility must comply with the requirements of 401 KAR Chapter 32.

Section 3. Manifest Discrepancies. (1) Manifest discrepancies are differences between the quantity or type of hazardous waste designated on the manifest or shipping paper, and the quantity or type of hazardous waste a facility actually receives.
(a) Significant discrepancies in quantity are:
1. For bulk waste, variations greater than ten (10) percent in weight; and
2. For batch waste, any variation in piece count, such as a discrepancy of one (1) drum in a truckload.
(b) Significant discrepancies in type are obvious differences which can be discovered by inspection or waste analysis, such as waste solvent substituted for waste acid, or toxic constituents not reported on the manifest or shipping paper.
(2) Upon discovering a significant discrepancy, the owner or operator must attempt to reconcile the discrepancy with the waste generator or transporter (e.g., with telephone conversations). If the discrepancy is not resolved within fifteen (15) days after receiving the waste, the owner or operator must immediately submit to the cabinet a letter describing the discrepancy and attempts to reconcile it, and a copy of the manifest or shipping paper at issue.

Section 4. Operating Record. (1) The owner or operator must keep a written operating record at his facility.
(2) The following information must be recorded, as it becomes available, and maintained in the operating record until closure of the facility:
(a) A description and the quantity of each hazardous waste received, and the method(s) and date(s) of its treatment, storage or disposal at the facility as required by 401 KAR 35:290;
(b) The location of each hazardous waste within the facility and the quantity at each location. For disposal facilities, the location and quantity of each hazardous waste must be recorded on a map or diagram of each cell or disposal area. For all facilities, this information must include cross-references to specific manifest document numbers, if the waste was accompanied by a manifest (see Section 9 of 401 KAR 35:070, Section 6 of 401 KAR 35:220 and Section 3 of 401 KAR 35:230 for related requirements);
(c) Records and results of waste analysis and trial tests performed as specified in:

1. Section 4 of 401 KAR 35:020;
2. Section 3 of 401 KAR 35:190;
3. Section 4 of 401 KAR 35:200;
4. Section 3 of 401 KAR 35:210;
5. Section 3 of 401 KAR 35:220;
6. Section 2 of 401 KAR 35:240;
7. Section 3 of 401 KAR 35:250; and
8. Section 3 of 401 KAR 35:260.

(d) Summary reports and details of all incidents that require implementing the contingency plan as specified in Section 7(10) of 401 KAR 35:040;

(e) Records and results of inspections as required by Section 6(4) of 401 KAR 35:020 (except these data need be kept only three (3) years);

(f) Monitoring, testing or analytical data where required by:

1. Section 1 of 401 KAR 35:060;
2. Section 4 of 401 KAR 35:060 (requires monitoring data at disposal facilities must be kept throughout the post-closure period);
3. Sections 4, 5 and 7(4)(a) of 401 KAR 35:220;
4. Section 4 of 401 KAR 35:240; and
5. Section 4 of 401 KAR 35:250.

(g) All closure cost estimates under Section 1 of 401 KAR 35:090 and for disposal facilities, all post-closure cost estimates under Section 1 of 401 KAR 35:100.

Section 5. Availability, Retention, and Disposition of Records. (1) All records, including plans, required under this chapter must be furnished upon request, and made available at all reasonable times for inspection by any officer, employee or representative of the cabinet who is duly designated by the secretary.

(2) The retention period for all records required under this chapter is extended automatically during the course of any unresolved enforcement action regarding the site or facility or as requested by the cabinet.

(3) A copy of records of waste disposal locations and quantities under Section 4(2)(b) of this regulation must be submitted to the cabinet and local land authority upon closure of the facility (see Section 9 of 401 KAR 35:070).

Section 6. Annual Report. The owner or operator must prepare and submit a single copy of an annual report to the cabinet by March 1 of each year. The report form and instructions in 401 KAR 35:300 must be used for this report. The annual report must cover site or facility activities during the previous calendar year and must include the following information:

(1) The EPA identification number, name and address of the facility;

(2) The calendar year covered by the report;

(3) For off-site facilities, the EPA identification number of each hazardous waste generator from which the facility received a hazardous waste during the year; for imported shipments, the report must give the name, number and address of the foreign generator;

(4) A description and the quantity of each hazardous waste the facility received during the year. For off-site facilities, this information must be listed by EPA identification number of each generator;

(5) The method of treatment, storage or disposal for each hazardous waste;

(6) Monitoring data under Sections 5(1)(b)2 and 3, and 5(2)(b) of 401 KAR 35:060, where required;

(7) The most recent closure cost estimate under Section 1 of 401 KAR 35:090 and for disposal facilities, the most recent post-closure cost estimate under Section 1 of 401 KAR 35:100; and

(8) The certification signed by the owner or operator of the facility or his authorized representative.

Section 7. Unmanifested Waste Report. If a facility accepts for treatment, storage or disposal any hazardous waste from an off-site source without accompanying manifest, or without an accompanying shipping paper as described in Section 1(5)(b) of 401 KAR 33:020, and if the waste is not excluded from the manifest requirement by Section 5 of 401 KAR 31:010, then the owner or operator must prepare and submit a single copy of a report to the cabinet within fifteen (15) days after receiving the waste. The report form and instructions in 401 KAR 35:300 must be used for this report. The report must include the following information:

(1) The EPA identification number, name and address of the facility;

(2) The date the facility received the waste;

(3) The EPA identification number, name and address of the generator and the transporter, if available;

(4) A description and the quantity of each unmanifested hazardous waste the facility received;

(5) The method of treatment, storage or disposal for each hazardous waste;

(6) The certification signed by the owner or operator of the facility or his authorized representative; and

(7) A brief explanation of why the waste was unmanifested, if known.

Section 8. Additional Reports. In addition to submitting the annual report and unmanifested waste reports described in Sections 6 and 7 of this regulation, the owner or operator must also report to the cabinet:

(1) Releases, fires and explosions as specified in Section 7(10) of 401 KAR 35:040;

(2) Groundwater contamination and monitoring data as specified in Sections 4 and 5 of 401 KAR 35:060; and

(3) Facility closure as specified in Section 6 of 401 KAR 35:070.

JACKIE SWIGART, Secretary
ADOPTED: June 10, 1983
RECEIVED BY LRC: June 13, 1983 at 11:30 a.m.
See public hearings scheduled on page 1.

NATURAL RESOURCE AND ENVIRONMENTAL PROTECTION CABINET
Department for Environmental Protection
Division of Waste Management

401 KAR 35:060. Groundwater monitoring (IS).

RELATES TO: KRS 224.033, 224.830 through 224.877, 224.994
PURSUANT TO: KRS 13.082, 13.083, 224.017, 224.033, 224.866
NECESSITY AND FUNCTION: KRS 224.866 requires that persons engaging in the storage, treatment, and disposal of hazardous waste obtain a permit. KRS 224.866 requires the Natural Resources and Environmental Protection Cabinet to establish standards for these permits, to require adequate financial responsibility, and to establish minimum standards for closure for all facilities and the post-closure 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, the owner or operator of a surface impoundment, landfill, or land treatment facility which is used to manage hazardous waste 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 must install, operate and maintain a groundwater monitoring system which meets the requirements of Section 2 of this regulation, and must comply with Sections 3 through 5 of this regulation. This groundwater monitoring program must be carried out during the active life of the facility and for disposal facilities during the post-closure 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 must be in writing and must be kept at the facility. This demonstration must be certified by a qualified geologist or geotechnical engineer and 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 (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 (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 regultion would show statistically significant increases (or decreases in the case of pH) when evaluated under Section 4(2) of this regulation, he may install, operate and maintain an alternate groundwater monitoring system (other than the one described in Sections 2 and 3 of this regulation). If the owner or operator decides to use an alternate groundwater monitoring system he must:

(a) By November 19, 1981, submit to the cabinet a specific plan, certified by a qualified geologist and geotechnical engineer, which satisfies the requirements of Sction 4(4)(c) of this 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 regulation;

(c) Prepare and submit a written report in accordance with Section 4(4)(e) of this regulation;

(d) Continue to make the determinations specified in Section 4(4)(d) of this 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 regulation.

(5) (a) The groundwater monitoring requirements of this 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 must establish, based upon the consideration of the characteristics of the wastes and the impoundment, that the corrosive wastes will be neutralized to the extent that they no longer meet the corrosivity characteristic before they can migrate out of the impoundment. The demonstration must be in writing and must be certified by a qualified professional.

Section 2. Groundwater Monitoring System. (1) A groundwater monitoring system must be capable of yielding groundwater samples for analysis and must consist of:

(a) Monitoring wells (at least one (1) well) installed hydraulically upgradient (i.e., in the direction of increasing static head) from the limit of the waste management area. Their number, locations and depths 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 (i.e., in the direction of decreasing static head) at the time of the waste management area. Their number, locations and depths 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.

(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 managment 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 must be cased in a manner that maintains the integrity of the monitoring well bore hole. This casing 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 (i.e., the space between the bore hole and well casing) above the sampling depth must be sealed with a suitable material (e.g., cement grout or bentonite slurry) to prevent contamination of samples and the groundwater.

Section 3. Sampling and Analysis. (1) The owner or operator must obtain and analyze samples from the installed groundwater monitoring system. The owner or operator must develop and follow a groundwater sampling and analysis plan. He must keep this plan at the facility. The plan 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 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. Managanese,
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 must establish initial background concentrations or values of all parameters specified in subsection (2) of this section. He 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 must be obtained for each sample and the initial background arithmetic mean and variance 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 must be sampled and the samples analyzed with the following frequencies:

(a) Samples collected to establish groundwater quality 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 must be obtained and analyzed for the parameters specified in subsection (2)(c) of this section at least semi-annually.

(5) Elevation of the groundwater surface at each monitoring well must be determined each time a sample is obtained.

Section 4. Preparation, Evaluation and Response. (1) By August 1, 1982 the owner or operator must prepare an outline of a groundwater quality assessment program. The outline must describe a more comprehensive groundwater monitoring program (than that described in Sections 2 and 3 of this 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) of this regulation, the owner or operator 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 regulation, and compare these results with its initial background arithmetic mean. The comparison must consider individually each of the wells in the monitoring system, and 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 must submit this information in accordance with Section 5(1)(b)2 of this 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 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 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 must develop and submit to the director a specific plan, based on the outline required under subsection (1) of this section and certified by a qualified geologist or geotechnical enigneer, for a groundwater quality assessment program at the facility.

(c) The plan to be submitted under Section 1(4)(a) of this regulation or subsection (4)(b) of this section 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 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 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 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 regulation and subsection (2) of this section. If the owner or operator reinstates the indicator evaluation program, he must so notify the 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. 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 post-closure care period.

(5) Notwithstanding any other provision of this 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 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 must evaluate the data on groundwater surface elevations obtained under Section 3(5) of this regulation to determine whether the requirements under Section 2(1) of this regulation for locating the monitoring wells continues to be satified. If the evaluation shows that Section 2(1) of this regulation is no longer satisfied, the owner or operator 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 regulation, the owner or operator must:

(a) Keep records of the analyses required in Section 3(3) and (4) of this regulation, the associated groundwater surface elevations required in Section 3(5) of this regulation and the evaluations required in Section 4(2) of this regulation throughout the active life of the site or facility and, for disposal facilities, throughout the post-closure care period as well; and

(b) Report the following groundwater monitoring information to the 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 regulation for each groundwater monitoring well within fifteen (15) days after completing each quarterly analysis. The owner or operator 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 regulation for each groundwater monitoring well, along with the required evaluations for these parameters under Section 4(2) of this regulation. The owner or operator must separately identify any significant differences from initial background found in the upgradient wells, in accordance with Section 4(3)(a) of this regulation. During the active life of the facility, this information 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 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 regulation, the owner or operator must:

(a) Keep records of the analyses and evaluations specified in the plan which satisfies the requirements of Section 4(4)(c) of this regulation throughout the active life of the facility and, for disposal facilities, throughout the post-closure care period as well; and

(b) Annually, until final closure of the facility, submit to the 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 must be submitted as part of the annual report required under Section 6 of 401 KAR 35:050.

JACKIE SWIGART, Secretary
ADOPTED: June 10, 1983
RECEIVED BY LRC: June 14, 1983 at 11 a.m.
See public hearings scheduled on page 1.

NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION CABINET
Department for Environmental Protection
Division of Waste Management

401 KAR 35:070. Closure and post-closure (IS).

RELATES TO: KRS 224.033, 224.830 through 224.877, 224.994
PURSUANT TO: KRS 13.082, 13.083, 224.017, 224.033, 224.866
NECESSITY AND FUNCTION: KRS 224.866 requires that persons engaging in the storage, treatment, and disposal of hazardous waste obtain a permit. KRS 224.866 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 post-closure 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 standards for closure and post-closure of facilities.

Section 1. Applicability. Except as Section 1 of 401 KAR 35:010 provides otherwise:

(1) Sections 2 through 6 of this regulation (which concern closure) apply to the owners and operators of all hazardous waste sites or facilities; and

(2) Sections 7 through 10 of this regulation (which concern post-closure care) apply to the owners and operators of all hazardous waste disposal facilities.

Section 2. Closure Performance Standards. The owner or operator must close his facility in a manner that:

(1) Minimizes the need for further maintenance; and

(2) Controls, minimizes or eliminates to the extent necessary to prevent threats to human health and the environment, post-closure escape of hazardous waste, hazardous waste constitutents, leachate, contaminated rainfall, or waste decomposition products to the groundwaters or surface waters or to the atmosphere.

Section 3. Closure Plan; Amendment of Plan. (1) By May 19, 1981, the owner or operator must have a written closure plan. He must keep a copy of the closure plan and all revisions to the plan at the facility until closure is completed and certified in accordance with Section 6 of this regulation. This plan must identify the steps necessary to completely or partially close the facility at any point during its intended operating life. The closure plan must include at least:

(a) A description of how and when the facility will be partially closed (if applicable) and finally closed. The description must identify the maximum extent of the operation which will be unclosed during the life of the facility, and how the requirements of Sections 2, 4, 5 and 6 of this regulation and the applicable closure requirements

of Section 5 of 401 KAR 35:190, Section 6 of 401 KAR 35:200, 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 will be met;

(b) An estimate of the maximum inventory of wastes in storage and in treatment at any time during the life of the facility;

(c) A description of the steps needed to decontaminate facility equipment during closure; and

(d) An estimate of the expected year of closure and a schedule for final closure. The schedule must include, at a minimum, the total time required to close the facility and the time required for intervening closure activities which will allow tracking of the progress of closure (for example, in the case of a landfill, estimates of the time required to treat and dispose of all waste inventory and of the time required to place a final cover must be included).

(2) The owner or operator may amend his closure plan at any time during the active life of the facility (the active life of the facility is that period during which wastes are periodically received). The owner or operator must amend the plan whenever changes in operating plans or facility design affect the closure plan, or whenever there is a change in the expected year of closure of the facility. The plan must be amended within sixty (60) days of the changes.

(3) The owner or operator must submit his closure plan to the director at least 180 days before the date he expects to begin closure. The owner or operator must submit his closure plan to the director no later than fifteen (15) days after:

(a) Termination of interim status (except when a permit issued to the facility simultaneously with termination of interim status): or

(b) Issuance of a judicial decree or compliance order under KRS Chapter 224 to cease receiving wastes or close.

(4) The director will provide the owner or operator and the public (through a newspaper notice) the opportunity to submit written comments on the plan and request modifications of the plan within thirty (30) days of the date of the notice. He will also (in response to a request or at his own discretion) hold a public hearing whenever such a hearing might clarify one (1) or more issues concerning a closure plan. The director will 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 director will approve, modify or disapprove the plan within ninety (90) days of its receipt. If the director does not approve the plan, the owner or operator must modify the plan or submit a new plan for approval within thirty (30) days. The director will approve or modify this plan in writing within sixty (60) days. If the director modifies the plan, the modified plan becomes the approved closure plan. The director's decision must assure that the approved closure plan is consistent with Sections 2, 4, 5 and 6 of this regulation and the applicable requirements of Section 5 of 401 KAR 35:190, Section 6 of 401 KAR 35:200, Section 7 of 401 KAR 35:220, Section 4 of 401 KAR 35:230, Section 5 of 401 KAR 35:240, and Section 5 of 401 KAR 35:260. A copy of this modified plan must be mailed to the owner or operator. If the owner or operator plans to begin closure before November 19, 1981, he must 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 ninety (90) days after approval of the closure plan if that is later, the owner or operator must treat, remove from the site, or dispose of on-site all hazardous wastes in accordance with the approved closure plan. The director may approve a longer period using the procedures under Section 3(4) of this regulation 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 facility has the capacity to receive additional wastes;

b. There is a reasonable likelihood that a person other than the owner or operator will recommence operation of the site; and

c. Closure of the facility would be incompatible with continued operation of the site; and

(b) He has taken and will continue to take all steps to prevent threats to human health and the environment.

(2) The owner or operator must complete closure activities in accordance with the approved closure plan and within 180 days after receiving the final volume of wastes or 180 days after approval of the closure plan if that is later. The director may approve a longer closure period using the procedures under Section 3(3) of this regulation if the owner or operator demonstrates that:

(a) 1. The closure activities will of necessity take him longer than 180 days to complete; or

2. a. The facility has the capacity to receive additional wastes;

b. There is a reasonable likelihood that a person other than the owner or operator will recommence operation of the site; and

c. Closure of the facility would be incompatible with continued operation of the site; and

(b) He has taken and will continue to take all steps to prevent threats to human health and the environment from the unclosed but inactive facility.

Section 5. Disposal or Decontamination of Equipment. When closure is completed, all facility equipment and structures must have been properly disposed of or decontaminated by removing all hazardous waste and residues.

Section 6. Certificate of Closure. When closure is completed, the owner or operator must submit to the director certification both by the owner or operator and by 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.

Section 7. Post-Closure Care and Use of Property. (1) Post-closure care must continue for thirty (30) years after the date of completing closure and must consist of at least the following:

(a) Groundwater monitoring and reporting in accordance with the requirements of 401 KAR 35:060;

(b) Maintenance and monitoring of waste containment systems as specified in Section 2 of 401 KAR 35:060, Sections 3 and 6 of 401 KAR 35:200, Section 7 of 401 KAR 35:220, and Section 4 of 401 KAR 35:230, where applicable.

(2) The cabinet may require continuation of any of the security requirements of Section 5 of 401 KAR 35:020 for thirty (30) years after the date closure has been completed when:

(a) Wastes may remain exposed after completion of closure; or

(b) Access by the public or domestic livestock may pose a hazard to human health. In extending any of these requirements the cabinet will use the procedures of Section 8(3) of this regulation.

(3) Post-closure use of property on or in which hazardous wastes remain after closure must never be allowed to disturb the integrity of the final cover, liner(s), any other components of any containment system or the function of the facility's monitoring system unless the owner or operator can demonstrate to the director, either in the post-closure plan or by petition, through the procedures in Section 8(3) or (6) of this regulation (as appropriate), 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 post-closure care activities must be performed in accordance with the provisions of the approved post-closure plan as specified in Section (8) of this regulation. (Note: KRS 224.866(4) establishes that the post-closure care is a minimum of thirty (30) years after closure of the disposal facility.)

Section 8. Post-Closure Plan; Amendment of Plan. (1) By May 19, 1981, the owner or operator of a disposal facility must have a written post-closure plan. He must keep a copy of the post-closure plan and all revisions to the plan at the facility until the post-closure care period begins. The post-closure plan must identify the activities which will be carried on after closure and the frequency of these activities, and include at least:

(a) A description of the planned groundwater monitoring activities and frequencies at which they will be performed to comply with 401 KAR 35:060 during the post-closure period;

(b) A description of the planned maintenance activities and frequencies at which they will be performed to ensure:

1. The integrity of the cap and final cover or other containment structures as specified in Section 3 and 6 of 401 KAR 35:200, Section 7 of 401 KAR 35:220, and Section 4 of 401 KAR 35:230 where applicable; and

2. The function of the facility monitoring equipment as specified in Section 2 of 401 KAR 35:060; and

(c) The name, address and phone number of the person or office to contact about the disposal facility during the post-closure care period. This person or office must keep an updated post-closure plan during the post-closure care period.

(2) The owner or operator may amend his post-closure plan at any time during the active life of the disposal facility. The owner or operator must amend his plan any time changes in operating plans or facility design, or events which occur during the active life of the facility, affect his post-closure plan. The plan must be amended within sixty (60) days after the changes or events occur.

(3) The owner or operator of a disposal facility must submit his post-closure plan to the director at least 180 days before the date he expects to begin closure. The date when he "expects to begin closure" should be immediately after the date on which he expects to receive the final volume of wastes. The owner or operator must submit his closure plan to the director 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 compliance order under KRS Chapter 224 to cease receiving wastes or close.

(4) The director will provide the owner or operator and the public through a newspaper notice the opportunity to submit written comments on the plan and request modification of the plan including modification of the year post-closure period required in Section 7 of this regulation within thirty (30) days of the date of the notice. He may also (in response to a request or at his own discretion) hold a public hearing whenever a hearing might clarify one (1) or more issues concerning the post-closure plan. The director will 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). The director will approve, modify or disapprove the plan within ninety (90) days of its receipt. If the director does not approve the plan, the owner or operator must modify the plan or submit a new plan for approval within thirty (30) days. The director will approve or modify this plan in writing within sixty (60) days. If the director modifies the plan, this modified plan becomes the approved post-closure plan. The director must base his decision upon the criteria required of petitions under subsection (6)(a)1 of this section. A copy of this modified plan must be mailed to the owner or operator. If an owner or operator plans to begin closure before November 19, 1981, he must submit the post-closure plan by May 19, 1981.

(5) The owner or operator may amend his post-closure plan during the post-closure care period. The owner or operator must amend his plan any time changes in monitoring or maintenance plans or events which occur during the post-closure care period affect the post-closure plan. The owner or operator must petition the director within sixty (60) days of the changes or events under the procedures of subsection (6) of this section to allow the plan to be modified.

(6) The post-closure plan (or period) may be modified during the post-closure care period or at the end of the post-closure care period in either of the following two (2) ways:

(a) The owner or operator or any member of the public may petition the director to extend or reduce the post-closure care period based on cause, or alter the requirements of the post-closure care period based on cause.

1. The petition must include evidence demonstrating that:

a. The secure nature of the facility makes the post-closure care requirement(s) unnecessary or supports reduction of the post-closure care period specified in the current post-closure plan (e.g., leachate or groundwater monitoring results, characteristics of the waste, application of advance 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 post-closure care period or alternation of post-closure care requirements is necessary to prevent threats to human health and the environment.

2. These petitions will be considered by the director only when they present new and relevant information not previously considered by the director. Whenever the director is considering a petition, he will 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. He will also (in response to a request or at his own discretion) hold a public hearing

whenever a hearing might clarify one (1) or more issues concerning the post-closure plan. The director will give the public hearing 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, he will issue a final determination, based upon the criteria set forth in this paragraph.

3. If the director denies the petition, he will send the petitioner a brief written response giving a reason for the denial.

(b) The director may tentatively decide to modify the post-closure plan if he deems it necessary to prevent threats to human health and the environment. He may propose to extend or reduce (except that the post-closure period shall not be less than thirty (30) years) the post-closure care period based on cause or alter the requirements of the post-closure care period based on cause.

1. The director will 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 subsection (1)(a)2 of this section. After considering the comments, he will issue a final determination.

2. The director will base his final determination upon the same criteria as required for petitions under paragraph (a)1 of this subsection.

Section 9. Notice to Local Land Authority. Within ninety (90) days after closure is completed, the owner or operator of a disposal facility must submit to the local land authority and to the director a survey plan indicating the location and dimensions of landfill cells or other disposal areas with respect to permanently surveyed benchmarks. This plan must be prepared and certified by a professional land surveyor, or professional civil engineer, registered in Kentucky. The plan filed with the local land authority must contain a note, prominently displayed, which states the owner's or operator's obligation to restrict disturbance of the site as specified in Section 7(3) of this regulation. In addition, the owner or operator must submit to the director and to the local land authority a record of the type, location and quantity of hazardous wastes disposed of within each cell or area of the facility. The owner or operator must identify the type, location and quantity of hazardous wastes disposed of within each cell or area of the facility. For wastes disposed of before January 7, 1981, the owner or operator must identify the type, location and quantity of the wastes to the best of his knowledge and in accordance with any records he has kept.

Section 10. Notice in Deed to Property. The owner of the property on which a disposal facility is located must 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 in perpetuity notify any potential purchaser of the property that:

(1) The land has been used to manage hazardous waste; and

(2) Its use is restricted under Section 7(3) of this regulation.

JACKIE SWIGART, Secretary

ADOPTED: June 10, 1983
RECEIVED BY LRC: June 13, 1983 at 11:30 a.m.
See public hearings scheduled on page 1.

NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION CABINET
Department for Environmental Protection
Division of Waste Management

401 KAR 35:080. General financial requirements (IS).

RELATES TO: KRS 224.033, 224.071, 224.830 through 224.877, 224.994
PURSUANT TO: KRS 13.082, 13.083, 224.017, 224.862, 224.866
NECESSITY AND FUNCTION: KRS 224.866 requires that persons engaging in the storage, treatment, and disposal of hazardous waste obtain a permit. KRS 224.866 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 post-closure 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 financial requirements.

Section 1. General. (1) This regulation and 401 KAR 35:090 through 35:130 inclusively contain the financial requirements to establish adequate financial responsibility as required by KRS 224.866(3) for hazardous waste sites or facilities. A reference to this section is a citation of this regulation and 401 KAR 35:090 through 35:130.

(2) Except as specifically provided in this regulation and 401 KAR 35:090 through 35:130, no variance (Section 2 of 401 KAR 30:020) or other waivers of these financial requirements shall be granted by the secretary or the director.

Section 2. Applicability. (1) The requirements of 401 KAR 35:090, 35:120 and 35:130 apply to owners and operators of all hazardous waste sites or facilities, except as provided otherwise in this section or in Section 1 of 401 KAR 35:010.

(2) The requirements of 401 KAR 35:100 and 35:110 apply only to owners and operators of disposal facilities.

(3) States and the federal government are exempt from the requirements of Section 1 of this regulation.

Section 3. Financial Requirement Definitions. (1) When used in Section 1 of this regulation the following terms shall have the meanings given below:

(a) "Closure plan" means the plan for closure prepared in accordance with the requirements of Section 3 of 401 KAR 35:070.

(b) "Current closure cost estimate" means the most recent of the estimates prepared in accordance with Section 1(1), (2) and (3) of 401 KAR 35:090.

(c) "Current post-closure cost estimate" means the most recent of the estimates prepared in accordance with Section 1(1), (2) and (3) of 401 KAR 35:100.

(d) "Parent corporation" means a corporation which directly owns at least fifty (50) percent of the voting stock of the corporation which is the facility owner or operator; the latter corporation is deemed a "subsidiary" of the parent corporation.

(e) "Post-closure plan" means the plan for post-closure care prepared in accordance with the requirements of Sections 7 through 10 of 401 KAR 35:070.

(2) The following terms are used in the specifications for the financial test for closure, post-closure care and liability self-insurance. The definitions are intended to assist in the understanding of these regulations and are not intended to limit the meanings of terms in a way that conflicts with generally accepted accounting practices.

(a) "Assets" means all existing and all probable future economic benefits obtained or controlled by a particular entity.

(b) "Current assets" means cash or other assets or resources commonly identified as those which are reasonably expected to be realized in cash or sold or consumed during the normal operating cycle of the business.

(c) "Current liabilities" means obligations whose liquidation is reasonably expected to require the use of existing resources properly classifiable as current assets or the creation of other current liabilities.

(d) "Independently audited" refers to an audit performed by an independent certified public accountant in accordance with generally accepted auditing standards.

(e) "Liabilities" means probable future sacrifices of economic benefits arising from present obligations to transfer assets or provide services to other entities in the future as a result of past transactions or events.

(f) "Net working capital" means current assets minus current liabilities.

(g) "Net worth" means total assets minus total liabilities and is equivalent to owner's equity.

(h) "Tangible net worth" means the tangible assets that remain after deducting liabilities; such assets would not include intangibles such as goodwill and rights to patents or royalties.

(3) In the liability insurance requirements the terms "bodily injury" and "property damage" shall have the meanings given these terms by applicable Kentucky statutes. However, these terms do not include those liabilities which, consistent with standard industry practices, are excluded from coverage in liability policies for bodily injury and property damage. The cabinet intends the meanings of other terms used in the liability insurance requirements to be consistent with their common meanings within the insurance industry. The definitions given below of several of the terms are intended to assist in the understanding of these regulations and are not intended to limit their meanings in a way that conflicts with general insurance industry usage.

(a) "Accidental occurrence" means an accident, including continuous or repeated exposure to conditions, which results in bodily injury or property damage neither expected nor intended from the standpoint of the insured.

(b) "Legal defense costs" means any expenses that an insurer incurs in defending against claims of third parties brought under the terms and conditions of an insurance policy.

(c) "Nonsudden accidental occurrence" means an occurrence which takes place over time and involves continuous or repeated exposure.

(d) "Sudden accidental occurrence" means an occurrence which is not continuous or repeated in nature.

JACKIE SWIGART, Secretary
ADOPTED: June 10, 1983
RECEIVED BY LRC: June 13, 1983 at 11:30 a.m.
See public hearings scheduled on page 1.

NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION CABINET
Department for Environmental Protection
Division of Waste Management

401 KAR 35:090. Closure financial requirements (IS).

RELATES TO: KRS 224.033, 224.071, 224.830 through 224.877, 224.994

PURSUANT TO: KRS 13.082, 13.083, 224.017, 224.862, 224.866

NECESSITY AND FUNCTION: KRS 224.866 requires that persons engaging in the storage, treatment, and disposal of hazardous waste obtain a permit. KRS 224.866 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 post-closure 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.

Section 1. Cost Estimate for Facility Closure. (1) On May 19, 1981, the owner or operator of an interim status facility must prepare a written estimate, in current dollars, of the cost of closing the facility in accordance with the closure plan as specified in Section 3 of 401 KAR 34:070. The closure cost estimate must equal the cost of closure at the point in the facility's operating life when the extent and manner of its operation would make closure the most expensive, as indicated by its closure plan.

(2) The owner or operator must adjust the closure cost estimate for inflation within thirty (30) days after each anniversary of the date on which the first closure cost estimate was prepared. The adjustment must be made as specified in paragraphs (a) and (b) of this subsection, using an inflation factor derived from the annual Implicit Price Deflator for Gross National Product as published by the U.S. Department of Commerce in its Survey of Current Business. 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 closure cost estimate by the inflation factor. The result is the adjusted closure cost estimate.

(b) Subsequent adjustments are made by multiplying the latest adjusted closure cost estimate by the latest inflation factor.

(3) The owner or operator must revise the closure cost estimate whenever a change in the closure plan increases the cost of closure. The revised closure cost estimate must be adjusted for inflation as specified in subsection (2) of this section.

(4) The owner or operator 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 must establish financial assurance for closure of the facility. He must choose from the options as specified in Sections 3 through 8 of this regulation.

Section 3. Closure Trust Fund. (1) An owner or operator may satisfy the requirements of this 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 director. The trustee 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 must be executed on the form provided by the cabinet containing wording identical to the

wording specified in Section 1 of 401 KAR 34:140 and the trust agreement must be accompanied by a formal certification of acknowledgement (for an example, see Section 2 of 401 KAR 34:140). Schedule A of the trust agreement 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 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 must be made as follows:

(a) The first payment must be made by October 8, 1982, except as provided in subsection (5) of this section. The first payment must be at least equal to the current closure cost estimate (see Section 1 of this regulation), except as provided in Section 9 of this regulation, divided by the number of years in the pay-in period.

(b) Subsequent payments must be made no later than thirty (30) days after each anniversary date of the first payment. The amount of each subsequent payment 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 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 regulation, his first payment 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 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, 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 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 regulation for all or part of the trust fund, he may submit a written request to the 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 director will instruct the trustee to release to the owner or operator such funds as the director specifies in writing.

(10) 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 director. Within sixty (60) days after receiving bills for closure activities, the director will determine whether the closure expenditures are in accordance with the closure plan or otherwise justified, and if so, the director will instruct the trustee to make reimbursement in such amounts as the director specifies in writing. If the director has reason to believe that the cost of closure 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 regulation, that the owner or operator is no longer required to maintain financial assurance for closure.

(11) The 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 director releases the owner or operator from the requirements of this regulation in accordance with Section 11 of this regulation.

Section 4. Surety Bond Guaranteeing Payment into a Closure Trust Fund. (1) An owner or operator may satisfy the requirements of this regulation by obtaining a surety bond which conforms to the requirements of this section and submitting the bond to the director. The surety company issuing the bond 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 must be executed on the form 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 regulation must also establish a standby trust fund. Under the terms of the bond, all payments made thereunder will be deposited by the surety directly into the standby trust fund in accordance with instructions from the director. This standby trust fund must meet the requirements specified in Section 3 of this regulation, except that:

(a) An originally signed duplicate of the trust agreement must be submitted to the director with the surety bond; and

(b) Until the standby trust fund is funded pursuant to the requirements of this regulation, the following are not required by these regulations:

1. Payments into the trust fund as specified in Section 3 of this 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 must guarantee that the owner or operator 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 closure is issued by the secretary or by 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 regulation and obtain the director's written approval of the assurance provided, within ninety (90) days after receipt by both the owner or operator and the director of a notice of cancellation of the bond from the surety.

(5) Under the terms of the bond, the surety 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 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 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, 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 director, or obtain other financial assurance as specified in this 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 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 director. 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 director, as evidenced by return receipt.

(9) The owner or operator may cancel the bond if the director has given prior written consent based on the director's receipt of evidence of alternate financial assurance as specified in this regulation.

Section 5. Closure Letter of Credit. (1) An owner or operator may satisfy the requirements of this regulation by obtaining an irrevocable standby letter of credit which conforms to the requirements of this section and by submitting the letter to the director. The issuing institution 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 must be identical to the wording specified in Section 1 of 401 KAR 34:152.

(3) An owner or operator who uses a letter of credit to satisfy the requirements of this regulation must also establish a standby trust fund. Under the terms of the letter of credit, all amounts paid pursuant to a draft by the director will be deposited by the issuing institution directly into the standby trust fund in accordance with instructions from the director. The standby trust fund must meet the requirements of the trust fund specified in Section 3 of this regulation, except that:

(a) An originally signed duplicate of the trust agreement must be submitted to the director with the letter of credit; and

(b) Unless the standby trust fund is funded pursuant to the requirements of this regulation, the following are not required by these regulations:

1. Payments into the trust fund as specified in Section 3 of this 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 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 must be irrevocable and issued for a period of at least one (1) year. The letter of credit 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 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 director have received the notice, as evidenced by the return receipts.

(6) The letter of credit must be issued for at least the amount of the current closure cost estimate except as provided in Section 9 of this 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, 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 director, or obtain other financial assurance as specified in this 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 director.

(8) Following a determination pursuant to KRS 224.866 that the owner or operator has failed to perform final closure in accordance with the closure plan and other interim status requirements when required to do so, the director may draw on the letter of credit.

(9) If the owner or operator does not establish alternate financial assurance as specified in this regulation and obtain written approval of such alternate assurance from the director within ninety (90) days after receipt by both the owner or operator and the 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 director will draw on the letter of credit. The 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 director will draw on the letter of credit if the owner or operator has failed to provide alternate financial assurance as specified in this regulation and obtain written approval of such assurance from the director.

(10) The 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 regulation; or

(b) The director releases the owner or operator from the requirements of this regulation in accordance with Section 11 of this regulation.

Section 6. Closure Insurance. (1) An owner or operator may satisfy the requirements of this regulation by obtaining closure insurance which conforms to the requirements of this section and by submitting a certificate of such insurance to the director. By October 8, 1982, the owner or

operator must submit to the 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 must submit the certificate of insurance to the director or establish other financial assurance as specified in this regulation. Each insurance policy providing primary coverage must be issued by an insurer who is licensed to transact the business of insurance in the Commonwealth of Kentucky. Each insurance policy providing excess coverage must be issued by an insurer who is licensed to transact the business of insurance in a state.

(2) The certificate of insurance must be executed on a form provided by the cabinet containing wording identical to the wording specified in 401 KAR 34:156.

(3) The closure insurance policy must be issued for a face amount at least equal to the current closure cost estimate, except as provided in Section 9 of this regulation. The term "face amount" means the total amount the insurer is obligated to pay under the policy. Actual payments by the insurer will not change the face amount, although the insurer's future liability will be lowered by the amount of the payments.

(4) The closure insurance policy must guarantee that funds will be available to close a facility whenever final closure occurs. The policy must also guarantee that once final closure begins, the insurer will be responsible for paying out funds, up to an amount equal to the face amount of the policy, upon the direction of the director to such party or parties as the director specifies.

(5) 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 director. Within sixty (60) days after receiving bills for closure activities, the director will determine whether the closure expenditures are in accordance with the closure plan or otherwise justified, and if so, he will instruct the insurer to make reimbursement in such amounts as the director specifies in writing. If the director has reason to believe that the cost of closure 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 regulation, that the owner or operator is no longer required to maintain financial assurance for closure of the facility.

(6) The owner or operator must maintain the policy in full force and effect until the 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 regulation, will constitute a significant violation of these regulations, warranting such remedy as the director deems necessary. Such violation will be deemed to begin upon receipt by the 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 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 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 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 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 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 director deems the facility abandoned; or

(b) Interim status is terminated or revoked; or

(c) Closure is ordered by the 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, 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 director, or obtain other financial assurance as specified in this 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 director.

(10) The 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 regulation; or

(b) The director releases the owner or operator from the requirements of this regulation in accordance with Section 11 of this regulation.

Section 7. Financial Test and Corporate Guarantee for Closure. (1) An owner or operator may satisfy the requirements of this regulation by demonstrating that he passes a financial test as specified in this section. To pass this test the owner or operator must meet the criteria of either paragraph of this subsection:

(a) The owner or operator 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 post-closure cost estimates; and

3. Tangible net worth of at least $10 million; and

4. Assets in the Commonwealth of Kentucky amounting to either at least ninety (90) percent of his total assets or at least six (6) times the sum of the current closure and post-closure cost estimates.

(b) The owner or operator 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 post-closure cost estimates; and

3. Tangible net worth of at least $10 million; and

4. Assets located in the Commonwealth of Kentucky amounting to either, at least, ninety (90) percent of his total assets or at least six (6) times the sum of the current closure and post-closure cost estimates.

(2) The phrase "current closure and post-closure cost estimates" as used in subsection (1) of this section refers to

the cost estimates required to be shown in paragraphs 1 through 4 of the letter from the owner's or operator's chief financial officer (see 401 KAR 34:159).

(3) To demonstrate that he meets this test, the owner or operator must submit the following three (3) items to the director:

(a) A letter executed on the form 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 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 must send, by October 8, 1982, a letter to the director. This letter from the chief financial officer 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 post-closure 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 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 must send updated information to the director within ninety (90) days after the close of each succeeding fiscal year. This information 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 must send notice to the director of intent to establish alternate financial assurance as specified in this regulation. The notice 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 must provide alternate financial assurance within 120 days after the end of such fiscal year.

(7) The 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 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 must provide alternate financial assurance as specified in this regulation within thirty (30) days after notification of such a finding.

(8) The 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 will be cause for disallowance. The director will evaluate other qualifications on an individual basis. The owner or operator must provide alternate financial assurance as specified in this 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 regulation;

(b) The director releases the owner or operator from the requirements of this regulation by terminating the financial requirements in accordance with Section 11 of this regulation.

(10) An owner or operator may meet the requirements of this regulation by obtaining a written guarantee, hereafter referred to as the "corporate guarantee." The guarantor must be the parent corporation of the owner or operator. The guarantor must meet the requirements for owners or operators in subsections (1) through (8) of this section and must comply with the terms of the corporate guarantee. The corporate guarantee must be executed on a form 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 director as specified in subsection (3) of this section. The terms of the corporate guarantee 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 will do so or establish a trust fund as specified in Section 3 of this regulation in the name of the owner or operator.

(b) The corporate guarantee will remain in force unless the guarantor sends notice of cancellation by certified mail to the owner or operator and to the 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 director, as evidenced by the return receipts.

(c) If the owner or operator fails to provide alternate financial assurance as specified in this regulation and obtain the written approval of such alternate assurance from the director within ninety (90) days after receipt by both the owner or operator and the director of a notice of cancellation of the corporate guarantee from the guarantor, the guarantor 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 regulation by submitting to the director a bond guaranteeing compliance with KRS Chapter 224 and

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. The bank or financial institution holding the cash account or certificate(s) of deposit in escrow must be regulated and examined by a federal or state agency.

(2) The bond must be executed on a form 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 must be executed on a form provided by the cabinet which has wording identical to the wording specified in Section 2 of 401 KAR 34:168.

(3) The cabinet must be the beneficiary of the escrow agreement for the cash account or certificate(s) of deposit. The director must be empowered to draw upon the funds if the owner or operator fails to perform closure or post-closure care in accordance with the closure plan and other permit requirements.

(4) The sum of the cash account or certificate(s) of deposit 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 regulation.

(5) After each interest period is completed, whenever the current closure cost estimate changes, the owner or operator 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, 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 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 director. 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 director, as evidenced by return receipt.

(8) The owner or operator may terminate the cash account or certificate(s) of deposit if the director has given prior written consent based on the director's receipt of evidence of alternate financial assurance as specified in this 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 director. Within sixty (60) days after receiving bills for closure activities, the director will determine whether the closure expenditures are in accordance with the closure plan or otherwise justified, and if so, the director will instruct the trustee to make reimbursement in such amounts as the director specifies in writing. If the director has reason to believe that the cost of closure 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 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 regulation by establishing more than one (1) financial mechanism per facility. These mechanisms are limited to trust funds, surety bonds, letters of credit, insurance, certificate(s) of deposit and cash accounts. The mechanisms must be as specified in Sections 3, 4, 5, 6, and 8, respectively, of this regulation, except that it is the combination of mechanisms rather than each single mechanism which 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 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 regulation to meet the requirements of this regulation for more than one (1) facility. Evidence of financial assurance submitted to the 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 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 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 Regulation. Within sixty (60) days after receiving certifications from the owner or operator and an independent professional engineer who is registered in Kentucky that closure has been accomplished in accordance with the closure plan (see Section 6 of 401 KAR 35:070 and KRS 224.866(3) and (4)), the director will notify the owner or operator in writing that he is no longer required by this regulation to maintain financial assurance for closure of the particular facility, unless the director has reason to believe that closure has not been in accordance with the closure plan.

JACKIE SWIGART, Secretary
ADOPTED: June 10, 1983
RECEIVED BY LRC: June 14, 1983 at 11 a.m.
See public hearings scheduled on page 1.

Section 1 of 401 KAR 34:140) to show current post-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 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 post-closure 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 must be irrevocable and issued for a period of at least one (1) year. The letter of credit 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 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 director have received the notice, as evidenced by the return receipts.

(6) The letter of credit must be issued in an amount at least equal to the current post-closure cost estimate, except as provided in Section 9 of this regulation.

(7) Whenever the current post-closure 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, must either cause the amount of the credit to be increased so that it at least equals the current post-closure cost estimate and submit evidence of such increase to the director, or obtain other financial assurance as specified in this regulation to cover the increase. Whenever the current post-closure cost estimate decreases during the operating life of the facility, the amount of the credit may be reduced to the amount of the current post-closure cost estimate following written approval by the director.

(8) During the period of post-closure care, the director may approve a decrease in the amount of the letter of credit if the owner or operator demonstrates to the director that the amount exceeds the remaining cost of post-closure care.

(9) Following a determination pursuant to KRS 224.866 that the owner or operator has failed to perform post-closure care in accordance with the post-closure plan and other permit requirements, the director may draw on the letter of credit.

(10) If the owner or operator does not establish alternate financial assurance as specified in this regulation and obtain written approval of such alternate assurance from the director within ninety (90) days after receipt by both the owner or operator and the 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 director will draw on the letter of credit. The 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 director will draw on the letter of credit if the owner or operator has failed to provide alternate financial assurance as specified in this regulation and obtain written approval of such financial assurance from the director.

(11) The 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 regulation; or

(b) The director releases the owner or operator from the requirements of this regulation in accordance with Section 11 of this regulation.

Section 6. Post-Closure Insurance. (1) An owner or operator may satisfy the requirements of this regulation by obtaining post-closure insurance which conforms to the requirements of this section and submitting a certificate of such insurance to the director. By October 8, 1982, the owner or operator must submit to the director a letter from an insurer stating that the insurer is considering issuance of post-closure insurance conforming to the requirements of this section to the owner or operator. By January 8, 1983, the owner or operator must submit the certificate of insurance to the director or establish other financial assurance as specified in this regulation. Each insurance policy providing primary coverage must be issued by an insurer who is licensed to transact the business of insurance in the Commonwealth of Kentucky. Each insurance policy providing excess coverage must be issued by an insurer who is licensed to transact the business of insurance in a state.

(2) The certificate of insurance must be executed on a form provided by the cabinet containing wording identical to the wording specified in 401 KAR 34:156.

(3) The post-closure insurance policy must be issued for a face amount at least equal to the current post-closure cost estimate, except as provided in Section 9 of this regulation. The term "face amount" means the total amount the insurer is obligated to pay under the policy. Actual payments by the insurer will not change the face amount, although the insurer's future liability will be lowered by the amount of the payments.

(4) The post-closure insurance policy must guarantee that funds will be available to provide post-closure care of the facility whenever the post-closure care period begins. The policy must also guarantee that once post-closure care begins, the insurer will be responsible for paying out funds, up to an amount equal to the face amount of the policy, upon the direction of the director to such party or parties as the director specifies.

(5) An owner or operator or any other person authorized to perform post-closure care may request reimbursement for post-closure expenditures by submitting itemized bills to the director. Within sixty (60) days after receiving bills for post-closure activities, the director will determine whether the post-closure expenditures are in accordance with the post-closure plan or otherwise justified, and if so, he will instruct the insurer to make reimbursement in such amounts as the director specifies in writing.

(6) The owner or operator must maintain the policy in full force and effect until the 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 regulation, will constitute a significant violation of these regulations, warranting such remedy as the director deems necessary. Such violation will be deemed to begin upon receipt by the 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 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 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 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 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 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 director deems the facility abandoned; or

(b) Interim status is terminated or revoked; or

(c) Closure is ordered by the 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 post-closure 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, must either cause the face amount to be increased to an amount at least equal to the current post-closure cost estimate and submit evidence of such increase to the director, or obtain other financial assurance as specified in this regulation to cover the increase. Whenever the current post-closure cost estimate decreases during the operating life of the facility, the face amount may be reduced to the amount of the current post-closure cost estimate following written approval by the director.

(10) Commencing on the date that liability to make payments pursuant to the policy accrues, the insurer will thereafter annually increase the face amount of the policy. Such increase 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 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 regulation; or

(b) The director releases the owner or operator from the requirements in accordance with Section 11 of this regulation.

Section 7. Financial Test and Corporate Guarantee for Post-Closure Care. (1) An owner or operator may satisfy the requirements of this regulation by demonstrating that he passes a financial test as specified in this section. To pass this test the owner or operator must meet the criteria of either paragraph (a) or (b) of this subsection:

(a) The owner or operator 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 post-closure cost estimates; and

3. Tangible net worth of at least $10 million; and

4. Assets in the Commonwealth of Kentucky amounting to either, at least, ninety (90) percent of his total assets or at least six (6) times the sum of the current closure and post-closure cost estimates.

(b) The owner or operator 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 post-closure cost estimates; and

3. Tangible net worth of at least $10 million; and

4. Assets located in the Commonwealth of Kentucky amounting to either, at least, ninety (90) percent of his total assets or at least six (6) times the sum of the current closure and post-closure cost estimates.

(2) The phrase "current closure and post-closure cost estimates" as used in subsection (1) of this section refers to the cost estimates required to be shown in paragraphs 1 through 4 of the letter from the owner's or operator's chief financial officer (see 401 KAR 34:159).

(3) To demonstrate that he meets this test, the owner or operator must submit the following three (3) items to the director:

(a) A letter executed on the form 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 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 must send, by October 8, 1982, a letter to the director. This letter from the chief financial officer 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 post-closure 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 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 be audited by an independent certified accountant.

NATURAL RESOURCES AND
ENVIRONMENTAL PROTECTION CABINET
Department for Environmental Protection
Division of Waste Management

401 KAR 35:100. Post-closure financial requirements (IS).

RELATES TO: KRS 224.033, 224.071, 224.830 through 224.877, 224.994
PURSUANT TO: KRS 13.082, 13.083, 224.017, 224.862, 224.866
NECESSITY AND FUNCTION: KRS 224.866 requires that persons engaging in the storage, treatment, and disposal of hazardous waste obtain a permit. KRS 224.866 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 post-closure 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 post-closure financial requirements.

Section 1. Cost Estimate for Facility Post-Closure Care. (1) On May 19, 1981, the owner or operator of a disposal facility must prepare a written estimate, in current dollars, of the annual cost of post-closure monitoring and maintenance of the facility in accordance with the applicable post-closure regulations in Sections 7 through 10 of 401 KAR 35:070. The post-closure cost estimate is calculated by multiplying the annual post-closure cost estimate by the number of years of post-closure care required under 401 KAR 35:070.

(2) During the operating life of the facility, the owner or operator must adjust the post-closure cost estimate for inflation within thirty (30) days after each anniversary of the date on which the first post-closure cost estimate was prepared. The adjustment must be made as specified in paragraphs (a) and (b) of this subsection, using an inflation factor derived from the annual Implicit Price Deflator for Gross National Product as published by the U.S. Department of Commerce in its Survey of Current Business. 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 post-closure cost estimate by the inflation factor. The result is the adjusted post-closure cost estimate.

(b) Subsequent adjustments are made by multiplying the latest adjusted post-closure cost estimate by the latest inflation factor.

(3) The owner or operator must revise the post-closure cost estimate whenever a change in the post-closure plan increases the cost of post-closure care. The revised post-closure cost estimate must be adjusted for inflation as specified in subsection (2) of this section.

(4) The owner or operator must keep the following at the facility during the operating life of the facility: The latest post-closure 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 post-closure cost estimate.

Section 2. Financial Assurance for Post-Closure Care. By October 8, 1982, the owner or operator of each disposal facility must establish financial assurance for post-closure care of the facility. Financial assurance must be established as specified in Sections 3 through 8 of this regulation.

Section 3. Post-Closure Trust Fund. (1) An owner or operator may satisfy the requirements of this regulation by establishing a post-closure trust fund which conforms to the requirements of this section and submitting an originally signed duplicate of the trust agreement to the director. The trustee 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 must be executed on the form provided by the cabinet containing wording identical to the wording specified in Section 1 of 401 KAR 34:140 and the trust agreement must be accompanied by a formal certification of acknowledgement (for an example, see Section 2 of 401 KAR 34:140). Schedule A of the trust agreement must be updated within sixty (60) days after a change in the amount of the current post-closure cost estimate covered by the agreement.

(3) Payments to the trust fund 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 post-closure trust fund must be made as follows:

(a) The first payment must be made by October 8, 1982, except as provided in subsection (5) of this section. The first payment must be at least equal to the current post-closure cost estimate, except as provided in Section 9 of this regulation, divided by the number of years in the pay-in period.

(b) Subsequent payments must be made no later than thirty (30) days after each anniversary date of the first payment. The amount of each subsequent payment must be determined by this formula:

$$\text{NEXT payment} = \frac{CE - CV}{Y}$$

Where CE is the current post-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 current post-closure cost estimate at the time the fund is established. However, he 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 post-closure trust fund after having used one (1) or more alternate mechanisms specified in this regulation, his first payment 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 post-closure cost estimate changes during the operating life of the facility, the owner or operator 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, must either deposit an amount into the fund so that its value after this deposit at least equals the amount of the current post-closure cost estimate, or obtain other financial assurance as specified in this 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 post-closure cost estimate, the owner or operator

may submit a written request to the director for release of the amount in excess of the current post-closure cost estimate.

(8) If an owner or operator substitutes other financial assurance as specified in this regulation for all or part of the trust fund, he may submit a written request to the director for release of the amount in excess of the current post-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 director will instruct the trustee to release to the owner or operator such funds as the director specifies in writing.

(10) During the period of post-closure care, the director may approve a release of funds if the owner or operator demonstrates to the director that the value of the trust fund exceeds the remaining cost of post-closure care.

(11) An owner or operator or any other person authorized to perform post-closure care may request reimbursement for post-closure expenditures by submitting itemized bills to the director. Within sixty (60) days after receiving bills for post-closure activities, the director will determine whether the post-closure expenditures are in accordance with the post-closure plan or otherwise justified, and if so, he will instruct the trustee to make reimbursement in such amounts as the director specifies in writing.

(12) The director will agree to termination of the trust when:

(a) An owner or operator substitutes alternate financial assurance as specified in this regulation; or

(b) The director releases the owner or operator from the requirements of this regulation in accordance with Section 11 of this regulation.

Section 4. Surety Bond Guaranteeing Payment into a Post-Closure Trust Fund. (1) An owner or operator may satisfy the requirements of this regulation by obtaining a surety bond which conforms to the requirements of this section and submitting the bond to the director. The surety company issuing the bond 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 must be executed on the form 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 regulation must also establish a standby trust fund. Under the terms of the bond, all payments made thereunder will be deposited by the surety directly into the standby trust fund in accordance with instructions from the director. This standby trust fund must meet the requirements specified in Section 3 of this regulation, except that:

(a) An originally signed duplicate of the trust agreement must be submitted to the director with the surety bond; and

(b) Until the standby trust fund is funded pursuant to the requirements of this regulation, the following are not required by these regulations:

1. Payments into the trust fund as specified in Section 3 of this regulation;

2. Updating of Schedule A of the trust agreement (see Section 1 of 401 KAR 34:140) to show current post-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 must guarantee that the owner or operator 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 closure is issued by the director or circuit court or other court of competent jurisdiction; or

(c) Provide alternate financial assurance as specified in this regulation, and obtain the director's written approval of the assurance provided, within ninety (90) days after receipt by both the owner or operator and the director of a notice of cancellation of the bond from the surety.

(5) Under the terms of the bond, the surety 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 must be in an amount at least equal to the amount of the current post-closure cost estimate, except as provided in Section 9 of this regulation.

(7) Whenever the current post-closure cost estimate increases to an amount greater than the penal sum, the owner or operator, within sixty (60) days after the increase, must either cause the penal sum to be increased to an amount at least equal to the current post-closure cost estimate and submit evidence of such increase to the director, or obtain other financial assurance as specified in this regulation to cover the increase. Whenever the current post-closure cost estimate decreases, the penal sum may be reduced to the amount of the current post-closure cost estimate following written approval by the director.

(8) Under the terms of the bond, the surety may cancel the bond by sending a notice of cancellation by certified mail to both the owner or operator and to the director. 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 director, as evidenced by return receipt.

(9) The owner or operator may cancel the bond if the director has given prior written consent based on his receipt of evidence of alternate financial assurance as specified in this regulation.

Section 5. Post-Closure Letter of Credit. (1) An owner or operator may satisfy the requirements of this regulation by obtaining an irrevocable standby letter of credit which conforms to the requirements of this section and by submitting the letter to the director. The issuing institution 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 must be identical to the wording specified in Section 1 of 401 KAR 34:152.

(3) An owner or operator who uses a letter of credit to satisfy the requirements of this regulation must also establish a standby trust fund. Under the terms of the letter of credit, all amounts paid pursuant to a draft by the director will be deposited by the issuing institution directly into the standby trust fund in accordance with instructions from the director. The standby trust fund must meet the requirements of the trust fund specified in Section 3 of this regulation, except that:

(a) An originally signed duplicate of the trust agreement must be submitted to the director with the letter of credit; and

(b) Unless the standby trust fund is funded pursuant to the requirements of this regulation, the following are not required by these regulations:

1. Payments into the trust fund as specified in Section 3 of this regulation;

2. Updating the Schedule A of the trust agreement (see

(5) After the initial submission of items specified in subsection (3) of this section, the owner or operator must send updated information to the director within ninety (90) days after the close of each succeeding fiscal year. This information 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 must send notice to the director of intent to establish alternate financial assurance as specified in this regulation. The notice 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 must provide alternate financial assurance within 120 days after the end of such fiscal year.

(7) The 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 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 must provide alternate financial assurance as specified in this regulation within thirty (30) days after notification of such a finding.

(8) The 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 will be cause for disallowance. The director will evaluate other qualifications on an individual basis. The owner or operator must provide alternate financial assurance as specified in this regulation within thirty (30) days after notification of the disallowance.

(9) During the period of post-closure care, the director may approve a decrease in the current post-closure cost estimate for which this test demonstrates financial assurance if the owner or operator demonstrates to the director that the amount of the cost estimate exceeds the remaining cost of post-closure 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 regulation;

(b) The director releases the owner or operator from the requirements of this regulation by terminating the financial requirements in accordance with Section 11 of this regulation.

(11) An owner or operator may meet the requirements of this regulation by obtaining a written guarantee, hereafter referred to as "corporate guarantee." The guarantor must be the parent corporation of the owner or operator. The guarantor must meet the requirements for owners or operators in subsections (1) through (9) of this section and must comply with the terms of the corporate guarantee. The corporate guarantee must be executed on a form 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 director as specified in subsection (3) of this section. The terms of the corporate guarantee must provide that:

(a) If the owner or operator fails to perform post-closure care of a facility covered by the corporate guarantee in accordance with the post-closure plan and other interim status requirements whenever required to do so, the guarantor will do so or establish a trust fund as specified in Section 3 of this regulation in the name of the owner or operator.

(b) The corporate guarantee will remain in force unless the guarantor sends notice of cancellation by certified mail to the owner or operator and to the 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 director, as evidenced by the return receipts.

(c) If the owner or operator fails to provide alternate financial assurance as specified in this regulation and obtain the written approval of such alternate assurance from the director within ninety (90) days after receipt by both the owner or operator and the director of a notice of cancellation of the corporate guarantee from the guarantor, the guarantor 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 regulation by submitting to the director a bond guaranteeing compliance with KRS Chapter 224 and 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. The bank or other financial institution holding the cash account or certificate(s) of deposit in escrow must be regulated and examined by a federal or state agency.

(2) The bond must be executed on a form 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 must be executed on a form provided by the cabinet which has wording identical to the wording specified in Section 2 of 401 KAR 34:168.

(3) The cabinet must be the beneficiary of the escrow agreement for the cash account or certificate(s) of deposit. The director must be empowered to draw upon the funds if the owner or operator fails to perform post-closure care in accordance with the post-closure care plan and other permit requirements.

(4) The sum of the cash account or certificate(s) of deposit must be in an amount at least equal to the amount of the current post-closure cost estimate, except as provided in Section 9 of this regulation.

(5) After each interest period is completed, whenever the current closure cost estimate changes, the owner or operator 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, 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 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 director. 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 director, as evidenced by return receipt.

(8) The owner or operator may terminate the cash account or certificate(s) of deposit if the director has given prior written consent based on his receipt of evidence of alternate financial assurance as specified in this regulation.

(9) An owner or operator or any other person authorized to conduct post-closure may request reimbursement for post-closure expenditures by submitting itemized bills to the director. Within sixty (60) days after receiving bills for post-closure activities, the director may instruct the bank or financial institution to make reimbursements in those amounts as the director specifies in writing if the director determines that the post-closure expenditures are in accordance with the post-closure plan or otherwise justified.

Section 9. Use of Multiple Financial Mechanisms. An owner or operator may satisfy the requirements of this 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 must be as specified in Sections 3, 4, 5, 6, and 8, respectively, of this regulation, except that it is the combination of mechanisms rather than the single mechanism which must provide financial assurance for an amount at least equal to the current post-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 the other mechanisms. A single standby trust fund may be established for two (2) or more mechanisms. The director may use any or all of the mechanisms to provide for post-closure 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 regulation to meet the requirements of this 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 director must include a list showing for each facility the EPA Identification Number, name, address, and the amount of funds for post-closure care assured by the mechanism. The amount of funds available through the mechanism 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 post-closure care of any of the facilities covered by the mechanism, the 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 Regulation. When an owner or operator has completed to the satisfaction of the director all post-closure care requirements in accordance with the post-closure plan, the director will, at the request of the owner or operator, notify him in writing that he is no longer required by this regulation to maintain financial assurance for post-closure care of the particular facility.

JACKIE SWIGART, Secretary
ADOPTED: June 10, 1983
RECEIVED BY LRC: June 14, 1983 at 11 a.m.
See public hearings scheduled on page 1.

NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION CABINET
Department for Environmental Protection
Division of Waste Management

401 KAR 35:110. Use of a mechanism for closure and post-closure (IS).

RELATES TO: KRS 224.033, 224.071, 224.830 through 224.877, 224.994
PURSUANT TO: KRS 13.082, 13.083, 224.017, 224.862, 224.866
NECESSITY AND FUNCTION: KRS 224.866 requires that persons engaging in the storage, treatment, and disposal of hazardous waste obtain a permit. KRS 224.866 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 post-closure 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 use of one (1) financial mechanism for both closure and post-closure.

Section 1. Use of a Mechanism for Financial Assurance of Both Closure and Post-Closure Care. An owner or operator may satisfy the requirements for financial assurance for both closure and post-closure care for one (1) or more facilities by using a trust fund, surety bond, letter of credit, insurance, financial test, corporate guarantee, cash account or certificate of deposit that meets the specifications for the mechanism in both 401 KAR 35:090 and 401 KAR 35:100. The amount of funds available through this mechanism must be no less than the sum of funds that would be available if a separate mechanism had been established and maintained for financial assurance of closure and of post-closure care.

JACKIE SWIGART, Secretary
ADOPTED: June 10, 1983
RECEIVED BY LRC: June 13, 1983 at 11:30 a.m.
See public hearings scheduled on page 1.

NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION CABINET
Department for Environmental Protection
Division of Waste Management

401 KAR 35:120. Liability requirements (IS).

RELATES TO: KRS 224.033, 224.071, 224.830 through 224.877, 224.994
PURSUANT TO: KRS 13.082, 13.083, 224.017, 224.862, 224.866
NECESSITY AND FUNCTION: KRS 224.866 requires that persons engaging in the storage, treatment, and disposal of hazardous waste obtain a permit. KRS 224.866 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 post-closure 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 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, must 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 must 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. A hazardous waste disposal site or facility shall maintain additional excess liability coverage in the amount of at least $10,000,000. This liability coverage may be demonstrated in one (1) of three (3) ways, as specified in subsections (1), (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 must be amended by attachment of the hazardous waste facility liability endorsement or evidenced by a certificate of liability insurance. The liability endorsement must be executed on a form provided by the cabinet containing wording identical to the wording specified in 401 KAR 34:172. The certificate of liability insurance must be on a form provided by the cabinet containing wording identical to the wording specified in 401 KAR 34:176. The owner or operator must submit an originally signed duplicate of the endorsement or the certificate of insurance to the director. If requested by the director, the owner or operator must provide an originally signed duplicate of the insurance policy.

(b) Each primary insurance policy must be issued by an insurer which, at a minimum, is licensed to transact the business of primary insurance in Kentucky. Each excess insurance policy must 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 regulation by passing a financial test for liability self-insurance coverage as specified in Section 6 of this regulation.

(3) An owner or operator may demonstrate the required liability coverage through use of both the financial test and insurance as these mechanisms are specified in this regulation. The amounts of coverage demonstrated must total at least the minimum amounts required by this section.

Section 2. Coverage for Nonsudden Accidental Occurrences. An owner or operator of a surface impoundment, landfill, or land treatment facility which is used to manage hazardous waste, or a group of such facilities, must 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 must have and maintain additional liability coverage for nonsudden accidental occurrences in the amount of at least $5,000,000 per occurrence with an annual aggregate of at least $10,000,000, exclusive of legal defense costs. This liability coverage may be demonstrated in one (1) of three (3) ways, as specified in subsections (1), (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 must be amended by attachment of the hazardous wwste facility liability endorsement or evidenced by a certificate of liability insurance. The liability endorsement must be on a form provided by the cabinet containing wording identical to the wording specified in 401 KAR 34:172. The certificate of liability insurance must be on a form provided by the cabinet containing wording identical to the wording specified in 401 KAR 34:176. The owner or operator must submit an originally signed duplicate of the endorsement or the certificate of insurance to the director. If requested by the director, the owner or operator must provide an originally signed duplicate of the insurance policy.

(b) Each primary insurance policy must be issued by an insurer which, at a minimum, is licensed to transact the business of primary insurance in Kentucky. Each excess insurance policy must 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 regulation by passing a financial test for liability self-insurance coverage as specified in Section 6 of this regulation.

(3) An owner or operator may demonstrate the required liability coverage through use of both the financial test and insurance as these mechanisms are specified in this regulation. The amounts of coverage demonstrated must total at least the minimum amounts required by this section.

(4) The required liability coverage for nonsudden accidental occurrences must 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, will 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 will determine the date by which the coverage must 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 Director. If the director determines that the levels of financial responsibility required by Sections 1 and 2 of this 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 director may increase the level of financial responsibility required under Sections 1 and 2 of this regulation as may be necessary to protect human health and the environment. This adjusted level will be based on the director'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 director 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 director may require that the owner or operator of the facility comply with Section 2 of this regulation. An owner or operator must furnish to the director, within a reasonable time, any information which the director 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 pro-

cedures 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 director that the increased level of financial responsibility required by Section 3 of this regulation is not consistent with the degree and duration of tasks associated with the treatment, storage, or disposal at each facility or group of facilities, the owner or operator may obtain a variance from the director. The request for a variance must be submitted to the director in writing. The director shall not grant any requests for a variance which seek to decrease the level of financial responsibility below the minimums required by KRS 224.866(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 director's assessment of the degree and duration of risks associated with the ownership or operation of each facility or group of facilities. The director may require an owner or operator who requests a variance to provide such technical and engineering information as is deemed necessary by the director to determine a level of financial responsibility other than that required by Sections 1 and 2 of this 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 must continuously provide liability coverage for a facility as required by this regulation until certification of termination pursuant to the requirements of KRS 224.866.

Section 6. Liability Self-Insurance. (1) An owner or operator may satisfy the requirements of this regulation by demonstrating that he passes a financial test as specified in this section. To pass this test the owner or operator must demonstrate that the level of self-insurance does not exceed ten (10) percent of equity and must meet the criteria of either paragraph (a) or (b) of this subsection:

(a) The owner or operator must 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 Commonwealth of Kentucky 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 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 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 Commonwealth of Kentucky 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 regulation.

(3) To demonstrate that he meets this test, the owner or operator must submit the following three (3) items to the director:

(a) A letter signed by the owner's or operator's chief financial officer and executed on 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.

(4) An owner or operator of a new facility must submit the items specified in subsection (3) of this section to the director 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 must send updated information to the director within ninety (90) days after the close of each succeeding fiscal year. This information 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 must obtain insurance for the entire amount of required liability coverage as specified in this regulation. Evidence of insurance must be submitted to the director 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 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 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 must provide liability insurance as specified in this regulation within thirty (30) days after notification of such a finding.

(8) The 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)(c) of this section). An adverse opinion or a disclaimer of opinion will be cause for disallowance. The

director will evaluate other qualifications on an individual basis. The owner or operator must provide liability insurance for the entire amount of liability coverage as specified in this regulation within thirty (30) days after notification of the disallowance.

JACKIE SWIGART, Secretary

ADOPTED: June 10, 1983
RECEIVED BY LRC: June 13, 1983 at 11:30 a.m.
See public hearings scheduled on page 1.

NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION CABINET
Department for Environmental Protection
Division of Waste Management

401 KAR 35:130. Incapacity of owners or operators, guarantors financial institutions (IS).

RELATES TO: KRS 224.033, 224.071, 224.830 through 224.877, 224.994
PURSUANT TO: KRS 13.082, 13.083, 224.017, 224.862, 224.866
NECESSITY AND FUNCTION: KRS 224.866 requires that persons engaging in the storage, treatment, and disposal of hazardous waste obtain a permit. KRS 224.866 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 post-closure 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 requirements regarding incapacity of owners or operators, guarantors, or financial institutions.

Section 1. Notification. An owner or operator must notify the director by certified mail of the commencement of a voluntary or involuntary proceeding under Title 11 (Bankruptcy), U.S. Code, naming the owner or operator as debtor, within ten (10) days after commencement of the proceeding. A guarantor of a corporate guarantee as specified in Section 7 of 401 KAR 35:090 and Section 7 of 401 KAR 35:100 must make such a notification if he is named as debtor as specified under the terms of the corporate guarantee (see 401 KAR 34:165).

Section 2. Establishment of Other Assurance or Liability Coverage. An owner or operator who fulfills the requirements of 401 KAR 35:090, 401 KAR 35:100 or 401 KAR 35:120 by obtaining a trust fund, letter of credit, surety bond, insurance policy or escrow agreement will be deemed to be without the required financial assurance or liability coverage in the event of bankruptcy of the trustee or escrow agent or issuing institution, or a suspension or revocation of the authority of the trustee institution to act as trustee, or of the institution issuing the surety bond, letter of credit or escrow agreement to issue such instruments. The owner or operator must establish other financial assurance or liability coverage within sixty (60) days of such events.

JACKIE SWIGART, Secretary

ADOPTED: June 10, 1983
RECEIVED BY LRC: June 13, 1983 at 11:30 a.m.
See public hearings scheduled on page 1.

NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION CABINET
Department for Environmental Protection
Division of Waste Management

401 KAR 35:180. Use and management of containers (IS).

RELATES TO: KRS 224.033, 224.830 through 224.877, 224.994
PURSUANT TO: KRS 13.082, 13.083, 224.017, 224.033, 224.866
NECESSITY AND FUNCTION: KRS 224.866 requires that persons engaging in the storage, treatment, and disposal of hazardous waste obtain a permit. KRS 224.866 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 post-closure 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 the use and management of containers.

Section 1. Applicability. The requirements in this regulation apply to owners and operators of all hazardous waste sites or facilities that store containers of hazardous waste, except as Section 1 of 401 KAR 35:010 provides otherwise.

Section 2. Condition of Containers. If a container holding hazardous waste is not in good condition or if it begins to leak, the owner or operator must transfer the hazardous waste from this container to a container that is in good condition, or manage the waste in some other way that complies with the requirements of this chapter.

Section 3. Compatibility of Waste with Containers. The owner or operator must use a container made of or lined with materials which will not react with, and are otherwise compatible with, the hazardous waste to be stored so that the ability of the container to contain the waste is not impaired.

Section 4. Management of Containers. (1) A container holding hazardous waste must always be closed during storage, except when it is necessary to add or remove waste.

(2) A container holding hazardous waste must not be opened, handled or stored in a manner which may rupture the container or cause it to leak.

Section 5. Inspections. The owner or operator must inspect areas where containers are stored, at least weekly, looking for leaks and for deterioration of containers and the containment system caused by corrosion or other factors.

Section 6. Special Requirements for Ignitable or Reactive Waste. Containers holding ignitable or reactive waste must be located at least fifteen (15) meters (approximately fifty (50) feet) from the facility's property line.

Section 7. Special Requirements for Incompatible Wastes. (1) Incompatible wastes, or incompatible wastes and materials (see 401 KAR 35:330 for examples), must not be placed in the same container, unless Section 8(2) of 401 KAR 35:020 is complied with.

(2) Hazardous waste must not be placed in an unwashed container that previously held an incompatible waste or material (see 401 KAR 35:330 for examples), unless Section 8(2) of 401 KAR 35:020 is complied with.

(3) A storage container holding a hazardous waste that is incompatible with any waste or other materials stored nearby in other containers, piles, open tanks or surface impoundments must be separated from the other materials or protected from them by means of a dike, berm, wall or other device.

JACKIE SWIGART, Secretary
ADOPTED: June 10, 1983
RECEIVED BY LRC: June 14, 1983 at 11 a.m.
See public hearings scheduled on page 1.

NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION CABINET
Department for Environmental Protection
Division of Waste Management

401 KAR 35:190. Tanks (IS).

RELATES TO: KRS 224.033, 224.830 through 224.877, 224.994

PURSUANT TO: KRS 13.082, 13.083, 224.017, 224.033, 224.866

NECESSITY AND FUNCTION: KRS 224.866 requires that persons engaging in the storage, treatment, and disposal of hazardous waste obtain a permit. KRS 224.866 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 post-closure 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 tanks.

Section 1. Applicability. The requirements in this regulation apply to owners and operators of sites or facilities that use tanks to treat or store hazardous waste except as Section 1 of 401 KAR 35:010 provides otherwise.

Section 2. General Operating Requirements. (1) Treatment or storage of hazardous waste in tanks must comply with Section 8(2) of 401 KAR 35:020.

(2) Hazarous wastes or treatment reagents must not be placed in a tank if they could cause the tank or its inner liner to rupture, leak, corrode or otherwise fail before the end of its intended life.

(3) Uncovered tanks must be operated to ensure at least sixty (60) centimeters (aproximately two (2) feet) of freeboard unless the tank is equipped with a containment structure (e.g., dike or trench), a drainage control system or a diversion structure (e.g., standby tank) with a capacity that equals or exceeds the volume of the top sixty (60) centimeters (2 feet) of the tank.

(4) Where hazardous waste is continuously fed into a tank, the tank must be equipped with a means to stop this inflow (e.g., a waste feed cutoff system or by-pass system to a stand-by tank).

Section 3. Waste Analysis and Trial Tests. In addition to the waste analysis required by Section 4 of 401 KAR 35:020, whenever a tank is to be used to:

(1) Chemically treat or store a hazardous waste which is substantially different from waste prevously treated or stored in that tank; or

(2) Chemically treat hazardous waste with a substantially different process than any previously used in that tank; the owner or operator must before treating or storing the different waste or using the different process:

(a) Conduct waste analyses and trial treatment or storage tests (e.g., bench scale or pilot plant scale tests); or

(b) Obtain written, documented information of similar storage or treatment of similar waste under similar operating conditions, to show that this proposed treatment or storage will meet all applicable requirements of Section 2(1) and (2) of this regulation.

Section 4. Inspections. The owner or operator of a tank must inspect, where present:

(1) Discharge control equipment (e.g., waste feed cutoff systems, by-pass systems and drainage systems) at least once each operating day to ensure that it is in good working order;

(2) Data gathered from monitoring equipment (e.g., pressure and temperature gauges) at least once each operating day to ensure that the tank is being operated according to its design;

(3) The level of waste in the tank, at least once each operating day, to ensure compliance with Section 2(3) of this regulation;

(4) The construction materials of the tank, at least weekly, to detect corrosion or leaking of fixtures or seams; and

(5) The construction materials of, and the area immediately surrounding, discharge confinement structures (e.g., dikes), at least weekly, to detect erosion or obvious signs of leakage (e.g., wet spots or dead vegetation).

Section 5. Closure. At closure, all hazardous waste and hazardous waste residues must be removed from tanks, discharge control equipment and discharge confinement structures.

Section 6. Special Requirements for Ignitable or Reactive Waste. (1) Ignitable or reactive waste must 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 dissolution of material no longer meets the definition of ignitable or reactive waste under Sections 2 and 3 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 which may cause the waste to ignite or react; or

(c) The tank is used solely for emergencies.

(2) The owner or operator of a facility which treats or stores ignitable or reactive waste in covered tanks must comply with the buffer zone requirements for tanks contained in Tables 2-1 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 7. Special Requirements for Incompatible Wastes. (1) Incompatible wastes, or incompatible wastes and materials (see 401 KAR 35:330 for examples) must not be placed in the same tank unless Section 8(2) of 401 KAR 35:020 is complied with.

(2) Hazardous waste must not be placed in an unwashed tank which previously held an incompatible waste or

material, unless Section 8(2) of 401 KAR 35:020 is complied with.

JACKIE SWIGART, Secretary
ADOPTED: June 10, 1983
RECEIVED BY LRC: June 13, 1983 at 11:30 a.m.
See public hearings scheduled on page 1.

NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION CABINET
Department for Environmental Protection
Division of Waste Management

401 KAR 35:200. Surface impoundments (IS).

RELATES TO: KRS 224.033, 224.830 through 224.877, 224.994
PURSUANT TO: KRS 13.082, 13.083, 224.017, 224.033, 224.866
NECESSITY AND FUNCTION: KRS 224.866 requires that persons engaging in the storage, treatment, and disposal of hazardous waste obtain a permit. KRS 224.866 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 post-closure 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 surface impoundments.

Section 1. Applicability. The requirements in this 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. General Operating Requirements. A surface impoundment must maintain enough freeboard to prevent any overtopping of the dike by overfilling, wave action, or a storm. There must be at least sixty (60) centimeters (approximately two (2) feet) of freeboard.

Section 3. Containment System. All earthen dikes must 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 prevously 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 must, 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 comply with Section 8(2) of 401 KAR 35:020.

Section 5. Inspections. The owner or operator must inspect:
(1) The freeboard level at least once each operating day to ensure compliance with Section 2 of this regulation; and
(2) The surface impoundment, including dikes and vegetation surrounding the dike, at least a week to detect any leaks, deterioration or failures in the impoundment.

Section 6. Closure and Post-Closure Care. (1) At closure, the owner or operator may elect to remove from the impoundment:
(a) Standing liquids;
(b) Waste and waste residues;
(c) The liner, if any; and
(d) Underlying and surrounding contaminated soil.
(2) If the owner or operator removes all the impoundment materials in subsection (1) of this section, or can demonstrate under Sections 3(3) and 3(4) of 401 KAR 31:010 that none of the materials listed in subsection (1) of this section remaining at any stage of removal are hazardous wastes, the impoundment is not further subject to the requirements of this chapter.
(3) If the owner or operator does not remove all the impoundment materials in subsection (1) of this section, or does not make the demonstration in subsection (2) of this section, he must close the impoundment and provide post-closure care as for a landfill under 401 KAR 35:070 and Section 4 of 401 KAR 35:230. If necessary to support the final cover specified in the approved closure plan, the owner or operator must treat remaining liquids, residues and soils by removal of liquids, drying or other means. If the owner or operator did not specify in the original Part A application that the impoundment is a disposal facility, the requirements of 401 KAR 38:500 must be satisfied in order for the surface impoundment to become a disposal facility.

Section 7. Special Requirements for Ignitable or Reactive Waste. (1) Ignitable or reactive waste must not be placed in a surface impoundment unless:
(a) The waste is treated, rendered or mixed before or immediately after 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; and
(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) must not be placed in the same surface impoundment.

Section 9. Recordkeeping. The owner or operator must record the level of liquid in the surface impoundment every day with respect to a fixed reference elevation.

JACKIE SWIGART, Secretary
ADOPTED: June 10, 1983
RECEIVED BY LRC: June 13, 1983 at 11:30 a.m.
See public hearings scheduled on page 1.

NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION CABINET
Department for Environmental Protection
Division of Waste Management

401 KAR 35:210. Waste piles (IS).

RELATES TO: KRS 224.033, 224.830 through 224.877, 224.994
PURSUANT TO: KRS 13.082, 13.083, 224.017, 224.033, 224.866
NECESSITY AND FUNCTION: KRS 224.866 requires that persons engaging in the storage, treatment, and disposal of hazardous waste obtain a permit. KRS 224.866 requires the Natural Resources and Environmental Protection Cabinet to establish standards for these permits, to require adequate financial responsibility, and to establish minimum standards for closure for all facilities and the post-closure 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 waste piles.

Section 1. Applicability. The requirements in this regulation apply to owners and operators of sites or facilities that treat or store hazardous waste in piles, except as Section 1 of 401 KAR 35:010 provides otherwise. Alternatively, a pile of hazardous waste may be managed as a landfill under 401 KAR 35:230.

Section 2. Protection from Wind. The owner or operator of a pile containing hazardous waste which could be subject to dispersal of wind must cover or otherwise manage the pile so that wind dispersal is controlled.

Section 3. Waste Analysis. (1) In addition to the waste analysis required by Section 4 of 401 KAR 35:020, the owner or operator must analyze a representative sample of waste from each incoming movement before adding the waste to any existing pile, unless:
(a) The only wastes the facility receives which are amenable to piling are compatible with each other, or
(b) The waste received is compatible with the waste in the pile to which it is to be added.
(2) The analysis conducted must be capable of differentiating between the types of hazardous waste the owner or operator place in piles, so that mixing of incompatible waste does not inadvertently occur. The analysis must include a visual comparison of color and texture.

Section 4. Containment. If leachate or run-off from a pile is a hazardous waste then either subsection (1) or (2) of this section must be complied with:
(1) (a) The pile must be place on an impermeable base that is compatible with the waste under the conditions of treatment or storage;
(b) The owner or operator 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.
(c) The owner or operator 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; and
(d) Collection and holding facilities (e.g., tanks or basins) associated with run-on and run-off control systems must be emptied or otherwise manage expeditiously to maintain design capacity of the system; or
(2) (a) The pile must be protected from precipitation and run-on by some other means; and
(b) No liquids or wastes containing free liquids may be placed in the pile.

Section 5. Special Requirements for Ignitable or Reactive Waste. Ignitable or reactive wastes must not be placed in a pile, unless prior to addition of the waste to an existing pile.
(1) The waste or mixture no longer meeting the definition of ignitable or reactive waste under Section 2 or 4 of 401 KAR 31:030, and
(2) Complies with Section 8(2) of 401 KAR 35:020.

Section 6. Speical Requirements for Incompatible Wastes. (1) Incompatible wastes or incompatible wastes and materials (see 401 KAR 35:330 for examples), 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, piles, open tanks or surface impoundments must be separated from the other materials or protected from them by means of a dike, berm, wall or other device.
(3) Hazardous waste must not be piled on the same area where incompatible wastes or materials were previously piled, unless that area has been decontaminated sufficiently to ensure compliance with Section 8(2) of 401 KAR 35:020.

Section 7. Closure and Post-Closure Care. (1) At closure the owner or operator must remove or decontaminate all waste residue, 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
(2) If, after removing or decontaminating all residue 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 must close the facility and perform post-closure care in accordance with the closure and post-closure requirements that apply to landfills (see Section 4 of 401 KAR 35:230). If the owner or operator did not list the waste pile as a disposal facility in the original Part A application, the requirements of 401 KAR 38:500 must be satisfied in order to become a disposal facility.

JACKIE SWIGART, Secretary
ADOPTED: June 10, 1983
RECEIVED BY LRC: June 14, 1983 at 11 a.m.
See public hearings scheduled on page 1.

NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION CABINET
Department for Environmental Protection
Division of Waste Management

401 KAR 35:220. Land treatment (IS).

RELATES TO: KRS 224.033, 224.830 through 224.877, 224.994
PURSUANT TO: KRS 13.082, 13.083, 224.017, 224.033, 224.866
NECESSITY AND FUNCTION: KRS 224.866 requires that persons engaging in the storage, treatment and

disposal of hazardous waste obtain a permit. KRS 224.866 requires the Natural Resources and Environmental Protection Cabinet to establish standards for these permits, to require adequate financial responsibility, and to establish minimum standards for closure for all facilities and the post-closure 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 minimum standards for land treatment.

Section 1. Applicability. The requirements in this 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 must not be placed in or on a land treatment facility unless the waste can be made less hazardous or non-hazardous by biological degradation or chemical reactions occurring in or on the soil.

(2) The owner or operator must 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 must 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) associated with run-on and run-off control systems must 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 must 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 must:

(1) Determine the concentrations in the waste of any substances which exceed the maximum concentrations contained in Table 1 of 401 KAR 31:030, Section 5(3), that cause a waste to exhibit the EP 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 will be grown in the future, must notify the cabinet within sixty (60) days after January 7, 1981.

(2) (a) Food chain crops must 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 consituents identified under Section 3(2) of this regulation:

1. Will not be transferred to the food portion of the crop by plant uptake or direct contact, and will not otherwise be ingested by food chain animals (e.g., by grazing); or

2. Will 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 must be kept at the land treatment facility and must, 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 must 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 to Dec. 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.

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 will 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 must not be grown except in compliance with this paragraph.

Section 5. Unsaturated Zone (Zone of Aeration) Monitoring. (1) The owner or operator must have in writing, and must implement, an unsaturated zone monitoring plan which is designed to:
(a) Detect the vertical migration of hazardous waste and hazardous waste consituents 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 must be conducted before or in conjunction with the monitoring required under paragraph (a) of this subsection.
(2) The unsaturated zone monitoring plan must 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 must 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 regulation in the waste and in the soil; and
2. The soil type(s); 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 must keep at the facility his unsaturated zone monitoring plan, and the rationale used in developing this plan.
(5) The owner or operator must 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 regulation.

Section 6. Recordkeeping. The owner or operator must include hazardous waste application dates and rates in the operating record required under Section 4 of 401 KAR 35:050.

Section 7. Closure and Post-Closure Care. (1) In the closure plan under Section 3 of 401 KAR 35:070 and the post-closure plan under Section 8 of 401 KAR 35:070, the owner or operator must address the following objectives and indicate how they will 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 regulation concerning the growth of food-chain crops.
(2) The owner or operator must consider at least the following factors in addressing the closure and post-closure 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 (e.g., proximity to groundwater, surface water and drinking water sources);
(d) Climate, including amount, frequency and pH of precipation;
(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 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 must consider at least the following methods in addressing the closure and post-closure 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); 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 must:
(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 regulation;
(c) Maintain the run-off management system required under Section 2(3) of this 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 7 of 401 KAR 35:070, during the post-closure care period the owner or operator of a land treatment facility must:
(a) Continue soil-core monitoring by collecting and

analyzing samples in a manner and frequency specified in the post-closure plan;

(b) Restrict access to the land treatment facility as appropriate for its post-closure use;

(c) Assure that growth of food chain crops complies with Section 4 of this regulation; and

(d) Control wind dispersal of hazardous waste.

Section 8. Special Requirements for Ignitable or Reactive Waste. Ignitable or reactive waste must not be land treated unless the waste is immediately incorporated into the soil so that:

(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.

Section 9. Special Requirements for Incompatible Wastes. Incompatible wastes, or incompatible wastes and materials (see 401 KAR 35:330 for examples), must not be placed in the same land treatment area.

JACKIE SWIGART, Secretary

ADOPTED: June 10, 1983
RECEIVED BY LRC: June 14, 1983 at 11 a.m.
See public hearings scheduled on page 1.

NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION CABINET
Department for Environmental Protection
Division of Waste Management

401 KAR 35:230. Landfill (IS).

RELATES TO: KRS 224.033, 224.830 through 224.877, 224.994

PURSUANT TO: KRS 13.082, 13.083, 224.017, 224.033, 224.866

NECESSITY AND FUNCTION: KRS 224.866 requires that persons engaging in the storage, treatment, and disposal of hazardous waste obtain a permit. KRS 224.866 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 post-closure 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 landfills.

Section 1. Applicability. The requirements in this 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 regulation.

Section 2. General Operating Requirements. (1) The owner or operator 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.

(2) The owner or operator 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.

(3) Collection and holding facilities (e.g., tanks or basins) associated with run-on and run-off control systems must be emptied or otherwise managed expeditiously after storms to maintain design capacity of the system.

(4) The owner or operator of a landfill containing hazardous waste which is subject to dispersal by wind must cover or otherwise manage the landfill so that wind dispersal of the hazardous waste is controlled.

Section 3. Surveying and Recordkeeping. The owner or operator of a landfill 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 Post-Closure Care. (1) The owner or operator must place a final cover over the landfill, and the closure plan under Section 2 of 401 KAR 35:070 must specify the function and design of the cover. In the post-closure plan under Section 8 of 401 KAR 35:070, the owner or operator must include the post-closure care requirements of subsection (4) of this section;

(2) In the closure and post-closure 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 must consider at least the following factors in addressing the closure and post-closure 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 (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) In addition to the requirements of Section 7 of 401 KAR 35:070, during the post-closure period, the owner or operator of a hazardous waste landfill must:

(a) Maintain the function and integrity of the final cover as specified in the approved closure plan;

(b) Maintain and monitor the leachate collection, removal and treatment system (if there is one present in the landfill) to prevent excess accumulation of leachate in the system;

(c) 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;

(d) Protect and maintain surveyed benchmarks; and

(e) Restrict access to the landfill as appropriate for its post-closure use.

Section 5. Special Requirements for Ignitable or Reactive Waste. Ignitable or reactive waste must not be placed in a landfill unless the waste is treated, rendered or mixed before placement in a landfill 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) must not be placed in the same landfill cell.

Section 7. Special Requirements for Liquid Waste. (1) Bulk or non-containerized liquid waste or waste containing free liquid waste must not be placed in a landfill.

(2) Containers holding free liquids must not be placed in a landfill unless:

(a) All free-standing liquid:

1. Has been removed by decanting or other methods;
2. Has been mixed with absorbent or solidified so that free-standing liquid is no longer observed; or
3. 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 9 of this regulation and is disposed of in accordance with Section 9 of this regulation.

(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.

Section 8. Special Requirements for Containers. (1) An empty container must be crushed flat, shredded or similarly reduced in volume before it is buried beneath the surface of a landfill.

(2) The date for compliance with this section is January 7, 1981.

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 must be packaged in non-leaking inside containers. The inside containers 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 must be tightly and securely sealed. The inside containers 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 must be overpacked in an open head DOT-specification metal shipping container (49 CFR Parts 178 and 179) of no more than 416-liter (appoximately 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 must be full after packing with inside containers and absorbent material.

(3) The absorbent material used 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, must not be placed in the same outside container.

(5) Reactive waste must be treated or rendered nonreactive prior to packaging in accordance with subsections (1) through (4) of this section.

JACKIE SWIGART, Secretary
ADOPTED: June 10, 1983
RECEIVED BY LRC: June 14, 1983 at 11 a.m.
See public hearings scheduled on page 1.

NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION CABINET
Department for Environmental Protection
Division of Waste Management

401 KAR 35:240. Incinerators (IS).

RELATES TO: KRS 224.033, 224.830 through 224.877, 224.994
PURSUANT TO: KRS 13.082, 13.083, 224.017, 224.033, 224.866
NECESSITY AND FUNCTION: KRS 224.866 requires that persons engaging in the storage, treatment, and disposal of hazardous waste obtain a permit. KRS 224.866 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 post-closure 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.

Section 1. Applicability. (1) The requirements in this regulation apply to owners and operators of sites or facilities that treat hazardous waste in incinerators, except as Section 1 of 401 KAR 35:010 and subsection (2) of this section provide otherwise.

(2) Incineration of wastes which:

(a) Meet only the ignitability characteristic under 401 KAR 31:030; or

(b) Are listed in 401 KAR 31:040 for ignitability on (Hazard Code I), are exempted from the requirements of this regulation except Section 5 of this regulation, if the owner or operator can document that the waste feed would not reasonably be expected to contain constituents listed in 401 KAR 31:170. Such documentation must be in writing and must be kept at the facility.

Section 2. Waste Analysis. In addition to the waste analyses required by Section 4 of 401 KAR 35:020, the owner or operator must 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 must 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 shut-down of an incinerator, the owner or operator must not feed hazardous waste unless the in-

cinerator 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 must conduct, at a minimum, the following monitoring and inspections when incinerating hazardous waste:

(1) Existing instruments which relate to combustion and emission control must be monitored at least every fifteen (15) minutes. Appropriate corrections to maintain steady state combustion conditions must 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, etc.) must be inspected at least daily for leaks, spills and fugitive emissions, and all emergency shutdown controls and system alarms must be checked to assure proper operation.

Section 5. Closure. At closure, the owner or operator must remove all hazardous waste and hazardous waste residues (including but not limited to ash, scrubber waters, and scrubber sludges) from the incinerator.

JACKIE SWIGART, Secretary
ADOPTED: June 10, 1983
RECEIVED BY LRC: June 14, 1983 at 11 a.m.
See public hearings scheduled on page 1.

NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION CABINET
Department for Environmental Protection
Division of Waste Management

401 KAR 35:250. Thermal treatment (IS).

RELATES TO: KRS 224.033, 224.830 through 224.877, 224.994
PURSUANT TO: KRS 13.082, 13.083, 224.017, 224.033, 224.866
NECESSITY AND FUNCTION: KRS 224.866 requires that persons engaging in the storage, treatment, and disposal of hazardous waste obtain a permit. KRS 224.866 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 post-closure 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 thermal treatment facilities.

Section 1. Applicability. The requirements in this regulation apply to owners and operators of sites or facilities that thermally treat hazardous waste in devices other than incinerators except as Section 1 of 401 KAR 35:010 provides otherwise. Thermal treatment incinerators are subject to the requirements of 401 KAR 35:240.

Section 2. General Operating Requirements. Before adding hazardous waste, the owner or operator must bring his thermal treatment process to steady state (normal) conditions of operation (including steady state operating temperature) using auxiliary fuel or other means unless the process is a non-continuous (batch) thermal treatment process which requires a complete thermal cycle to treat a discrete quantity of hazardous waste.

Section 3. Waste Analysis. In addition to the waste analyses required by Section 4 of 401 KAR 35:020, the owner or operator must sufficiently analyze any waste which he has not previously treated in his thermal process to enable him to establish steady state (normal) or other appropriate (for a non-continuous process) operating conditions (including waste and auxiliary fuel feed) and to determine the type of pollutants which might be emitted. At a minimum, the analysis must 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 4. Monitoring and Inspections. The owner or operator must conduct, at a minimum, the following monitoring and inspections when thermally treating hazardous waste:

(1) Existing instruments which relate to temperature and emission control (if an emission control device is present) must be monitored at least every fifteen (15) minutes. Appropriate corrections to maintain steady state or other appropriate thermal treatment conditions must be made immediately either automatically or by the operator. Instruments which relate to temperature and emission control would normally include those measuring waste feed, auxiliary fuel feed, treatment process temperature, and relevant process flow and level controls.

(2) The stack plume (emissions), where present, must be observed visually at least hourly for normal appearance (color and opacity). The operator must immediately make any indicated operating corrections necessary to return any visible emissions to their normal appearance.

(3) The complete thermal treatment process and associated equipment (pumps, valves, conveyors, pipes, etc.) must be inspected at least daily for leaks, spills and fugitive emissions, and all emergency shutdown controls and system alarms must be checked to assure proper operation.

Section 5. Closure. At closure, the owner or operator must remove all hazardous waste and hazardous waste residues (including but not limited to ash) from the thermal treatment process or equipment.

Section 6. Open Burning; Waste Explosives. Open burning of hazardous waste is prohibited except for the open burning detonation of waste explosives. Waste explosives include waste which has the potential to detonate and bulk military propellants which cannot safely be disposed of through other modes of treatment. Detonation is an explosion in which chemcial transformation passes through the material faster than the speed of sound (0.33 kilometers/second at sea level). Owners or operators choosing to open burn or detonate waste explosives must do so in accordance with Table 1 of this section and in a manner that does not threaten human health or the environment.

Table 1

Pounds of Waste Explosives or Propellants	Minimum Distance from Open Burning or Detonation to the Property of Others
0 to 100	204 meters (approx. 670 feet)
101 to 1,000	380 meters (approx. 1,250 feet)
1,001 to 10,000	530 meters (approx. 1,730 feet)
10,001 to 30,000	690 meters (approx. 2,260 feet)

JACKIE SWIGART, Secretary
ADOPTED: June 10, 1983
RECEIVED BY LRC: June 14, 1983 at 11 a.m.
See public hearings scheduled on page 1.

NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION CABINET
Department for Environmental Protection
Division of Waste Management

401 KAR 35:260. Chemical, physical and biological treatment (IS).

RELATES TO: KRS 224.033, 224.830 through 224.877, 224.994
PURSUANT TO: KRS 13.082, 13.083, 224.017, 224.033, 224.866
NECESSITY AND FUNCTION: KRS 224.866 requires that persons engaging in the storage, treatment, and disposal of hazardous waste obtain a permit. KRS 224.866 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 post-closure 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 chemical, physical and biological treatment.

Section 1. Applicability. The requirements in this regulation apply to owners and operators of sites or facilities which treat hazardous wastes by chemical, physical or biological methods in other than tanks, surface impoundments, and land treatment facilities, except as Section 1 of 401 KAR 35:010 provides otherwise. Chemical, physical and biological treatment of hazardous waste in tanks, surface impoundments, and land treatment facilities must be conducted in accordance with 401 KAR 35:190, 35:200 and 35:220, respectively.

Section 2. General Operating Requirements. (1) Chemical, physical, or biological treatment of hazardous waste must comply with Section 8(2) of 401 KAR 35:020.

(2) Hazardous wastes or treatment reagents must not be placed in the treatment process or equipment if they could cause the treatment process or equipment to rupture, leak, corrode or otherwise fail before the end of its intended life.

(3) Where hazardous waste is continuously fed into a treatment process or equipment, the process or equipment must be equipped with a means to stop this inflow (e.g., a waste feed cut-off system or by-pass system to a standby containment device).

Section 3. Waste Analysis and Trial Tests. In addition to the waste analysis required by Section 4 of 401 KAR 35:020, whenever:

(1) A hazardous waste which is substantially different from waste previously treated in a treatment process or equipment at the facility is to be treated in that process or equipment; or

(2) A substantially different process than any previously used at the facility is to be used to chemically treat hazardous waste;

(3) The owner or operator must before treating the different waste or using the different process or equipment comply with paragraph (a) or (b) of this subsection to show that this proposed treatment will meet all the requirements of Section 2(1) and (2) of this regulation:

(a) Conduct waste analyses and trial treatment tests (e.g., bench scale or pilot plant scale tests; or

(b) Obtain written, documented information on similar treatment of similar waste under similar operating conditions to show that this proposed treatment will meet all applicable requirements of Section 2(1) and (2) of this regulation.

Section 4. Inspections. The owner or operator of a treatment facility must inspect (where present):

(1) Discharge control and safety equipment (e.g., waste feed cut-off systems, bypass systems, drainage systems and pressure relief systems), at least once each operating day, to ensure that it is in good working order;

(2) Data gathered from monitoring equipment (e.g., pressure and temperature gauges), at least once each operating day, to ensure that the treatment process or equipment is being operated according to its design;

(3) The contruction materials of the treatment process or equipment, at least weekly, to detect corrosion or leaking of fixtures or seams; and

(4) The construction materials of, and the area immediately surrounding, discharge confinement structures (e.g., dikes), at least weekly, to detect erosion or obvious signs of leakage (e.g., wet spots or dead vegetation).

Section 5. Closure. At closure, all hazardous waste and hazardous waste residues must be removed from treatment processes or equipment, discharge control equipment, and discharge confinement structures.

Section 6. Special Requirements for Ignitable or Reactive Waste. Ignitable or reactive waste must not be placed in a treatment process or equipment unless:

(1) The waste is treated, rendered or mixed before or immediately after placement in the treatment process or equipment so that:

(a) 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

(b) Section 8(2) of 401 KAR 35:020 is complied with; or

(2) The waste is treated in such a way that it is protected from any material or conditions which may cause the waste to ignite or react.

Section 7. Special Requirements for Incompatible Wastes. (1) Incompatible wastes or incompatible wastes and materials (see 401 KAR 35:330 for examples) must not be placed in the same treatment process or equipment, unless Section 8(2) of 401 KAR 35:020 is complied with.

(2) Hazardous waste must not be placed in unwashed

treatment equipment which previously held an incompatible waste or material, unless Section 8(2) of 401 KAR 35:020 is complied with.

JACKIE SWIGART, Secretary
ADOPTED: June 10, 1983
RECEIVED BY LRC: June 14, 1983 at 11 a.m.
See public hearings scheduled on page 1.

NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION CABINET
Department for Environmental Protection
Division of Waste Management

401 KAR 35:270. Underground injection (IS).

RELATES TO: KRS 224.033, 224.830 through 224.877, 224.994
PURSUANT TO: KRS 13.082, 13.083, 224.017, 224.033, 224.866
NECESSITY AND FUNCTION: KRS 224.866 requires that persons engaging in the storage, treatment, and disposal of hazardous waste obtain a permit. KRS 224.866 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 post-closure 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 underground injection.

Section 1. Applicability. Except as Section 1 of 401 KAR 35:010 provides otherwise:
(1) The owner or operator of a site or facility which disposes of hazardous waste by underground injection is excluded from the requirements of 401 KAR 35:070 through 35:130.
(2) The requirements of this regulation apply to owners and operators of wells used to dispose of hazardous waste which are classified as Class I under 40 CFR 144.6(a) and which are classified as Class IV under 40 CFR 144.6.

JACKIE SWIGART, Secretary
ADOPTED: June 10, 1983
RECEIVED BY LRC: June 14, 1983 at 11 a.m.
See public hearings scheduled on page 1.

NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION CABINET
Department for Environmental Protection
Division of Waste Management

401 KAR 35:290. Appendix on recordkeeping instructions (IS).

RELATES TO: KRS 224.033, 224.830 through 224.877, 224.994
PURSUANT TO: KRS 13.082, 13.083, 224.017, 224.033, 224.866
NECESSITY AND FUNCTION: KRS 224.866 requires that persons engaging in the storage, treatment, and disposal of hazardous waste obtain a permit. KRS 224.866 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 post-closure 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 recordkeeping.

Section 1. Recordkeeping Instructions. The recordkeeping provisions of Section 4 of 401 KAR 35:050 specify that an owner or operator must keep a written operating record at his site or facility. This appendix provides additional instructions for keeping portions of the operating record. See Section 4(2) of 401 KAR 35:050 for additional recordkeeping requirements. The following information must be recorded as it becomes available and maintained in the operating record until closure of the facility in the following manner. Records of each hazardous waste received, treated, stored or disposed of at the facility which include the following:
(1) A description by its common name and the EPA Hazardous Waste Number(s) from 401 KAR Chapter 31 which apply to the waste. The waste description also must include the waste's physical form (i.e., liquid, sludge, solid, or contained gas). If the waste is not listed in 401 KAR 31:040, the description also must include the process that produced it (for example, solid filter cake from production of _____, EPA Hazardous Waste Number W051). Each hazardous waste listed in 401 KAR 31:040 and each hazardous waste characteristic defined in 401 KAR 31:030 has a four (4) digit EPA Hazardous Waste Number assigned to it. This number must be used for recordkeeping and reporting purposes. Where a hazardous waste contains more than one (1) listed hazardous waste, or where more than one (1) hazardous waste characteristic applies to the waste, the waste description must include all applicable EPA Hazardous Waste Numbers.
(2) The estimated or manifest-reported weight, or volume and density, where applicable, in one (1) of the units of measure specified in Table 1; and
(3) The method(s) (by handling code(s) as specified in Table 2) and date(s) of treatment, storage or disposal.

Table 1

Unit of Measure	Symbol[1]	Density
Pounds	P	
Short tons (2000 lbs.)	T	
Gallons (U.S.)	G	P/G
Cubic yards	Y	
Kilograms	K	
Tonnes (1000 kg)	M	
Liters	L	K/L
Cubic meters	C	M/C

[1]Single digit symbols are used here for data processing purposes.

Table 2—Handling Codes for Treatment, Storage, and Disposal Methods

(Enter the handling code(s) listed below that most closely represents the technique(s) used at the facility to treat, store, or dispose of each quantity of hazardous waste received.)

1.	Storage		
S01	Container (barrel, drum, etc.)	S03	Waste pile
S02	Tank	S04	Surface impoundment
		S05	Other (specify)

2.	Treatment		
(a)	Thermal Treatment		
T06	Liquid injection incinerator	T13	Wet air oxidation
T07	Rotary kiln incinerator	T14	Calcination
T08	Fluidized bed incinerator	T15	Microwave discharge
T09	Multiple hearth incinerator	T16	Cement kiln
T10	Infrared furnace incinerator	T17	Lime kiln
T11	Molten salt destructor	T18	Other (specify)
T12	Pyrolysis		
(b)	Chemical Treatment		
T19	Absorption mound	T27	Cyanide destruction
T20	Absorption field	T28	Degradation
T21	Chemical fixation	T29	Detoxification
T22	Chemical oxidation	T30	Ion exchange
T23	Chemical precipitation	T31	Neutralization
T24	Chemical reduction	T32	Ozonation
T25	Chlorination	T33	Photolysis
T26	Chlorinolysis	T34	Other (specify)
(c)	Physical Treatment		
	(1) Separation of components		
T35	Centrifugation	T42	Flotation
T36	Clarification	T43	Foaming
T37	Coagulation	T44	Sedimentation
T38	Decanting	T45	Thickening
T39	Encapsulation	T46	Ultrafiltration
T40	Filtration	T47	Other (specify)
T41	Flocculation		
	(2) Removal of Specific Components		
T48	Absorption-molecular sieve	T58	High gradient magnetic separation
T49	Activated carbon	T59	Leaching
T50	Blending	T60	Liquid ion exchange
T51	Catalysis	T61	Liquid-liquid extraction
T52	Crystallization	T62	Reverse osmosis
T53	Dialysis	T63	Solvent recovery
T54	Distillation	T64	Stripping
T55	Electrodialysis	T65	Sand filter
T56	Electrolysis	T66	Other (specify)
T57	Evaporation		
(d)	Biological Treatment		
T67	Activated sludge	T73	Spray irrigation
T68	Aerobic lagoon	T74	Thickening filter
T69	Aerobic tank	T75	Tricking filter
T70	Anaerobic lagoon	T76	Waste stabilization pond
T71	Composting	T77	Other (specify)
T72	Septic tank		
3.	Disposal		
D80	Underground injection	D84	Surface impoundment (to be closed as a landfill)
D81	Landfill	D85	Other (specify)
D82	Land treatment		
D83	Ocean disposal		

JACKIE SWIGART, Secretary
ADOPTED: June 10, 1983
RECEIVED BY LRC: June 14, 1983 at 11 a.m.
See public hearings scheduled on page 1.

NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION CABINET
Department for Environmental Protection
Division of Waste Management

401 KAR 35:310. Appendix on interim primary drinking water standards (IS).

RELATES TO: KRS 224.033, 224.071, 224.830 through 224.877, 224.994
PURSUANT TO: KRS 13.082, 13.083, 224.017, 224.862, 224.866
NECESSITY AND FUNCTION: KRS 224.866 requires that persons engaging in the storage, treatment, and disposal of hazardous waste obtain a permit. KRS 224.866 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 post-closure 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 interim primary drinking water standards.

Section 1. Primary Drinking Water Standards. Table 1 contains the interim primary drinking water standards for use in characterizing groundwater and surface water at a hazardous waste site or facility.

Table 1. Interim Primary Drinking Water Standards

Parameter	Maximum Level
Arsenic	0.05 (mg/l)
Barium	1.0 (mg/l)
Cadmium	0.01 (mg/l)
Chromium	0.05 (mg/l)
Fluoride	1.4-2.4 (mg/l)
Lead	0.05 (mg/l)
Mercury	0.002 (mg/l)
Nitrate (as N)	10 (mg/l)
Selenium	0.01 (mg/l)
Silver	0.05 (mg/l)
Endrin	0.0002 (mg/l)
Lindane	0.004 (mg/l)
Methoxychlor	0.1 (mg/l)
Toxaphene	0.005 (mg/l)
2,4-D	0.1 (mg/l)
2,4,5-TP Silvex	0.001 (mg/l)
Radium	5 pCi/1
Gross Alpha	15 pCi/1
Gross Beta	4 millirem/yr
Turbidity*	1/TU
Coliform bacteria	1/100 ml

*Turbidity is applicable only to surface water supplies.

JACKIE SWIGART, Secretary
ADOPTED: June 10, 1983
RECEIVED BY LRC: June 14, 1983 at 11 a.m.
See public hearings scheduled on page 1.

NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION CABINET
Department for Environmental Protection
Division of Waste Management

401 KAR 35:320. Appendix on tests for significance (IS).

RELATES TO: KRS 224.033, 224.071, 224.830 through 224.877, 224.994
PURSUANT TO: KRS 13.082, 13.083, 224.017, 224.862, 224.866
NECESSITY AND FUNCTION: KRS 224.866 requires that persons engaging in the storage, treatment, and disposal of hazardous waste obtain a permit. KRS 224.866

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 post-closure 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 tests for significance.

Section 1. Tests for Significance. As required in Section 4(2) of 401 KAR 35:060 the owner or operator must use the student's t-test to determine statistically significant changes in the concentration or value of an indicator parameter in periodic groundwater samples when compared to the initial background concentration or value of that indicator parameter. The comparison must consider individually each of the wells in the monitoring system. For three (3) of the indicator parameters (specific conductance, total organic carbon, and total organic halogen) a single-tailed student's t-test must be used to test at the 0.01 level of significance for significant increases over background. The difference test for pH must be a two-tailed Student's t-test at the overall 0.01 level of significance.

The student's t-test involves calculation of the value of a t-statistic for each comparison of the mean (average) concentration or value (based on a minimum of four (4) replicate measurements) of an indicator parameter with its initial background concentration or value. The calculated value of the t-statistic must then be compared to the value of the t-statistic found in a table for t-test of significance at the specified level of significance. A calculated value of t which exceeds the value of t found in the table indicates a statistically significant change in the concentration or value of the indicator parameter.

Formulae for calculation of the t-statistic and tables for t-test of significance can be found in most introductory statistics texts.

JACKIE SWIGART, Secretary
ADOPTED: June 10, 1983
RECEIVED BY LRC: June 14, 1983 at 11 a.m.
See public hearings scheduled on page 1.

NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION CABINET
Department for Environmental Protection
Division of Waste Management

401 KAR 35:330. Appendix on examples of potentially incompatible waste (IS).

RELATES TO: KRS 224.033, 224.830 through 224.877, 224.994
PURSUANT TO: KRS 13.082, 13.083, 224.017, 224.862, 224.866
NECESSITY AND FUNCTION: KRS 224.866 requires that persons engaging in the storage, treatment, and disposal of hazardous waste obtain a permit. KRS 224.866 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 post-closure 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 examples of potentially incompatiable wastes.

Section 1. Examples of Potentially Incompatible Waste. Many hazardous wastes, when mixed with other waste or materials at a hazardous waste site or facility, can produce effects which are harmful to human health and the environment, such as:

(1) Heat or pressure;
(2) Fire or explosion;
(3) Violent reaction;
(4) Toxic dusts, mists, fumes, or gases; or
(5) Flammable fumes or gases.

Below are examples of potentially incompatible wastes, waste components, and materials, along with the harmful consequences which result from mixing materials in one (1) group with materials in another group. The list is intended as a guide to owners or operators of treatment, storage and disposal facilities, and to enforcement and permit-granting officials, to indicate the need for special precautions when managing these potentially incompatible waste materials or components. This list is not intended to be exhaustive. An owner or operator must, as the regulations require, adequately analyze his wastes so that he can avoid creating uncontrolled substances or reactions of the type listed below, whether they are listed below or not. It is possible for potentially incompatible wastes to be mixed in a way that precludes a reaction (e.g., adding acid to water rather than water to acid) or that neutralizes them (e.g., a strong acid mixed with a strong base), or that controls substances produced (e.g., by generating flammable gases in a closed tank equipped so that ignition cannot occur, and burning the gases in an incinerator). In the lists below, the mixing of a Group A material with a Group B material may have the potential consequence as noted.

Group 1-A	Group 1-B
Acetylene sludge	Acid sludge
Alkaline caustic liquids	Acid and water
Alkaline cleaner	Battery acid
Alkaline corrosive liquids	Chemical cleaners
Alkaline corrosive battery fluid	Electrolyte, acid
Caustic wastewater	Etching acid liquid or solvent
Lime sludge and other corrosive alkalies	Pickling liquor and other corrosive acids
Lime wastewater	Spent acid
Lime and water	Spent mixed acid
Spent caustic	Spent sulfuric acid

Potential consequences: Heat generation; violent reaction.

Group 2-A	Group 2-B
Aluminum	Any waste in Group 1-A or 1-B
Beryllium	
Calcuim	
Lithium	
Magnesium	
Potassium	
Sodium	
Zinc powder	
Other reactive metals and metal hydrides	

Potential consequences: Fire or explosion; generation of flammable hydrogen gas.

Group 3-A	Group 3-B
Alcohols	Any concentrated waste in Groups 1-A or 1-B
Water	Calcium
	Lithium
	Metal hydrides
	Potassium
	SO_2Cl_2, $SOCl_2$, PCl_3, CH_3SiCl_3
	Other water-reactive waste

Potential consequences: Fire, explosion, or heat generation; generation of flammable or toxic gases.

Group 4-A	Group 4-B
Alcohols	Concentrated Group 1-A or 1-B wastes
Aldehydes	Group 2-A wastes
Halogenated hydrocarbons	
Nitrated hydrocarbons	
Unsaturated hydrocarbons	
Other reactive organic compounds and solvents	

Potential consequences: Fire, explosion, or violent reaction.

Group 5-A	Group 5-B
Spent cyanide and sulfide solutions	Group 1-B wastes

Potential consequences: Generation of toxic hydrogen cyanide or hydrogen sulfide gas.

Group 6-A	Group 6-B
Chlorates	Acetic acid and other organic acids
Chlorine	Concentrated mineral acids
Chlorites	Group 2-A wastes
Chromic acid	Group 4-A wastes
Hypochlorites	Other flammable and combustible wastes
Nitrates	
Nitric acid, fuming	
Perchlorates	
Permanganates	
Peroxides	
Other strong oxidizers	

Potential consequences: Fire, explosion, or violent reaction.

JACKIE SWIGART, Secretary
ADOPTED: June 10, 1983
RECEIVED BY LRC: June 14, 1983 at 11 a.m.
See public hearings scheduled on page 1.

NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION CABINET
Department for Environmental Protection
Division of Waste Management

401 KAR 38:090. General contents of Part B application.

RELATES TO: KRS 224.033, 224.036, 224.071, 224.087, 224.830 through 224.877, 224.994
PURSUANT TO: KRS 13.082, 13.083, 224.017, 224.866
NECESSITY AND FUNCTION: KRS 224.842 and 224.866 require any person who treats, stores, recycles or disposes of hazardous waste to first obtain a hazardous waste site or facility permit from the Natural Resources and Environmental Protection 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 regulation and the specific informational requirements in 401 KAR 38:100 through 38:210 applicable to the facility. Part B information requirements presented below 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 2 of 401 KAR 38:070. Certain technical data, such as design drawings and specifications, and engineering studies shall be certified by a 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, Section 4 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, and Section 4 of 401 KAR 34:230.

(6) A justification of any request for a variance(s) 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 34:200 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 forklifts);

(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).

(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 must 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 must be of such quality to be acceptable to geologists experienced in identifying and evaluation seismic activity. The information submitted must 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 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 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 will 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 floodplain, floodway or seasonal high water tables in accordance with Section 9(2) of 401 KAR 34:020. This identification must 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) which must 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 will normally be determinative of whether a facility is located within or outside of the 100-year floodplain. However, where the FIA map excludes an area (usually areas of the floodplain less than 200 feet in width), these areas must be considered and a determination made as to whether they are in the 100-year floodplain. Where FIA maps are not available for a proposed facility location, the owner or operator must use equivalent mapping techniques to determine whether the facility is within the 100-year floodplain, and if so located, what the 100-year flood elevation would be.

(d) Owners and operators of facilities located in the 100-year floodplain must proivde 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 (e.g., tanks, incinerators) and flood prevention devices (e.g., floodwalls, dikes) at the facility and how these will 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 be moved and demonstration that those facilities will be eligible to receive hazardous waste in accordance with the regulations under 401 KAR Chapters 34 through 38;

c. The planned procedures, equipment, and personnel to be used and the means to ensure that such resources will 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 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 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 post-closure plan required by Sections 3 and 8 of 401 KAR 34:070. Include where applicable as part of the plans, specific requirements in Section 9 of 401 KAR 34:180, Section 5 of 401 KAR 34:190, Section 6 of 401 KAR 34:200, Section 8 of 401 KAR 34:210, Section 8 of 401 KAR 34:200, Section 6 of 401 KAR 34:230, and Section 8 of 401 KAR 34:240.

(14) For existing facilities, documentation that a notice has been placed in the deed or appropriate alternate instrument as required by Section 10 of 401 KAR 34:070.

(15) The most recent closure cost estimate for the facility prepared in accordance with Section 1 of 401 KAR 34:090 plus a copy of the financial assurance mechanism adopted in compliance with 401 KAR 34:090.

(16) Where applicable, the most recent post-closure cost estimate for the facility prepared in accordance with Section 1 of 401 KAR 34:100 plus a copy of the financial assurance mechanism adopted in compliance with 401 KAR 34:100.

(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 must be shown on the map. The contour interval must 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 should use larger contour intervals to adequately show topographic profiles of facilities. The map shall clearly show the following:

(a) Map scale and date;

(b) One-hundred year floodplain 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 (i.e., prevailing windspread 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, fire control facilities, 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 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 must submit to the cabinet a plan in accordance with KRS 224.866(1). The plan must address each of the following issues specifically, must document the applicant's decisions with respect to the proposal, must 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 must include:

(a) An evaluation of alternatives including other site locations and treatment, storage and disposal approaches (see KRS 224.866(1)(a));

(b) An evaluation of the public health, safety and environmental aspects on the affected community (see KRS 224.866(1)(b));

(c) An evaluation of the social and economic impacts of the proposal on the affected community (see KRS 224.866(1)(b));

(d) An evaluation of mitigation procedures to alleviate problems identified in paragraphs (a), (b), and (c) of this subsection (see KRS 224.866(1)(d)); and

(e) An evaluation of the relationship of the proposal to local planning and existing development (see KRS 224.866(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 224.855(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 224.2203.

(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 224.866(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 non-individual 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 regulations should 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 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 dollars.

(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.

(21) An evaluation of subsurface geologic formations and surface topography for solution or karst features. If the facility is located in a county which is not listed in paragraph (d) of this subsection, the requirements of this subsection are not applicable. If the facility is located in a county listed in paragraph (d) of this subsection, 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 must 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 will 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 be sealed, filled, isolated or otherwise neutralized to prevent subsidence; and

b. Describe how such solution features will 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 must 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 must 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.

(d) The following is a list of counties in which the evaluation requirements of this subsection must be made redundant:

Adair	Allen	Anderson	Barren
Bath	Bell	Boone	Bourbon
Boyle	Bracken	Breckinridge	Bullitt
Butler	Caldwell	Calloway	Campbell
Carroll	Carter	Casey	Christian
Clark	Clinton	Crittenden	Cumberland
Edmonson	Estill	Fayette	Fleming
Franklin	Gallatin	Garrard	Grant
Grayson	Green	Greenup	Hancock
Hardin	Harlan	Harrison	Hart
Henry	Jackson	Jefferson	Jessamine
Kenton	Knox	Larue	Laurel
Lee	Letcher	Lewis	Lincoln
Livingston	Logan	Lyon	McCreary
Madison	Marion	Marshall	Mason
Meade	Menifee	Mercer	Metcalfe
Monroe	Montgomery	Morgan	Muhlenberg
Nelson	Nicholas		
Ohio	Oldham	Owen	Pendleton
Pike	Powell	Pulaski	Robertson
Rockcastle	Rowan	Russell	Scott
Shelby	Simpson	Spencer	Taylor
Todd	Trigg	Trimble	Warren
Washington	Wayne	Whitley	Woodford

(22) The actual test data showing that the liner is or will be compatible with the waste, if applicable.

(23) 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.

JACKIE SWIGART, Secretary
ADOPTED: June 14, 1983
RECEIVED BY LRC: June 14, 1983 at 11 a.m.
See public hearings scheduled on page 1.

NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION CABINET
Department for Environmental Protection
Division of Waste Management

401 KAR 38:100. Specific Part B requirements for groundwater protection.

RELATES TO: KRS 224.033, 224.036, 224.071, 224.087, 224.830 through 224.877, 224.994

PURSUANT TO: KRS 13.082, 13.083, 224.017, 224.866

NECESSITY AND FUNCTION: KRS 224.842 and 224.866 require any person who treats, stores, recycles, or disposes of hazardous waste to first obtain a hazardous waste site or facility permit from the Natural Resources and Environmental Protection Cabinet. This chapter establishes the permitting process for hazardous waste sites or facilities. An overview of the premit program is found in the Necessity and Function of 401 KAR 38:010. This regulation establishes the additional Part B requirements necessary for the protection of groundwater.

Section 1. Applicability. This regulation applies to all owners or operators of hazardous waste sites or facilities in Kentucky.

Section 2. Part B Requirements for Groundwater Protection. In addition to the information required by 401 KAR 38:080, 38:090, and the applicable requirements of 401 KAR 38:150 through 38:210, the following additional information regarding protection of groundwater is required from owners or operators of hazardous waste surface impoundments, piles, land treatment units, and landfills, except as otherwise provided in Section 1(2) of 401 KAR 34:060.

(1) A summary of the groundwater monitoring data obtained during the interim status period under 401 KAR 35:060, where applicable.

(2) Identification of the uppermost aquifer and aquifers hydroaulically interconnected beneath the facility property, including groundwater flow direction and rate, and the basis for such identification (i.e., the information obtained from hydrogeologic investigations of the facility area).

(3) On the topographic may required under Section 2(18) of 401 KAR 38:090, a delineation of the waste management area, the property boundary, the proposed "point of compliance" as defined under Section 6 of 401 KAR 34:060, the proposed location of groundwater monitoring wells, as required under Section 8 of 401 KAR 34:060, and to the extent possible, the information required in subsection (2) of this section;

(4) A description of any plume of contamination that has entered the groundwater from a regulated unit at the time that the application is submitted that:

(a) Delineates the extent of the plume on the topographic map required under Section 2(18) of 401 KAR 38:090; and

(b) Identifies the concentration of each constituent throughout the plume or identifies the maximum concentrations of each constituent in the plume.

(5) Detailed plans and an engineering report describing the proposed groundwater monitoring program to be implemented to meet the requirements of Section 8 of 401 KAR 34:060;

(6) If the presence of hazardous constituents has not been detected in the groundwater at the time of permit application, the owner or operator must submit sufficient information, supporting data and analyses to establish a detection monitoring program which meets the requirements of Section 9 of 401 KAR 34:060. This submission must address the following items as specified under Section 9 of 401 KAR 34:060:

(a) A proposed list of indicator parameters, waste constituents, or reaction products that can provide a reliable indication of the presence of hazardous constituents in the groundwater;

(b) A proposed groundwater monitoring system;

(c) Background values for each proposed monitoring parameter or constituent, or procedures to calculate such values; and

(d) A description of proposed sampling, analysis and statistical comparison procedures to be utilized in evaluating groundwater monitoring data.

(7) If the presence of hazardous constituents has been detected in the groundwater at the point of compliance at the time of permit application, the owner or operator must submit sufficient information, supporting data, and analyses to establish a compliance monitoring program which meets the requirements of Section 10 of 401 KAR 34:060. The owner or operator must also submit an engineering feasibility plan for a corrective action program necessary to meet the requirements of Section 11 of 401 KAR 34:060, except as provided in Section 9(8)(e) of 401 KAR 34:060. To demonstrate compliance with Section 10 of 401 KAR 34:060, the owner or operator must address the following items:

(a) A description of the wastes previously handled at the facility;

(b) A characterization of the contaminated groundwater, including concentrations of hazardous constituents;

(c) A list of hazardous constituents for which compliance monitoring will be undertaken in accordance with Sections 8 and 10 of 401 KAR 34:060;

(d) Proposed concentration limits for each hazardous constituent, based on the criteria set forth in Section 5 of 401 KAR 34:060;

(e) Detailed plans and an engineering report describing the proposed groundwater monitoring system, in accordance with the requirements of Section 8 of 401 KAR 34:060; and

(f) A description of proposed sampling, analysis, and statistical comparison procedures to be utilized in evaluating groundwater monitoring data.

(8) If hazardous constituents have been measured in the groundwater which exceed the concentration limits established under Section 5 of 401 KAR 34:060 and Section 2(1) and (2) of 401 KAR 30:030, or if groundwater monitoring conducted at the time of permit application under 401 KAR 35:060 at the waste boundary indicates the presence of hazardous constituents from the facility in the groundwater over established background concentrations, the owner or oeprator must submit sufficient information, supporting data, and analyses to establish a corrective action program which meets the requirements of Section 11 of 401 KAR 34:060.

JACKIE SWIGART, Secretary

ADOPTED: June 10, 1983

RECEIVED BY LRC: June 14, 1983 at 11 a.m.

See public hearings scheduled on page 1.

NATURAL RESOURCES AND ENRIRONMENTAL PROTECTION CABINET
Department for Envirnomental Protection
Division of Waste Management

401 KAR 38:150. Specific Part B requirements for containers.

RELATES TO: KRS 224.033, 224.036, 224.071, 224.087, 224.830 through 224.877, 224.994

PURSUANT TO: KRS 13.082, 13.083, 224.017, 224.866

NECESSITY AND FUNCTION: KRS 224.842 and 224.866 require any person who treats, stores, recycles or disposes of hazardous waste to first obtain a hazardous waste site or facility permit from the Natural Resources and Environmental Protection Cabinet. This chapter establishes the permitting process for hazardous waste sites or facilities. An overview of the premit program is found in the Necessity and Function of 401 KAR 38:010. This regulation establishes specific Part B requirements for facilities that manage hazardous waste in containers.

Section 1. Applicability. The requirements in this regulation apply to all owners and operators of hazardous waste sites or facilities that store or will store hazardous waste in containers.

Section 2. Additional Part B Requirements for Containers. In addition to the information required by 401 KAR 38:080, 38:090, and 38:100, owners and operators of facilities that store or will store containers of hazardous waste, except as otherwise provided in Section 1 of 401 KAR 34:010 and in 401 KAR 34:180, must provide the following additional information:

(1) A description of the containment system to demonstrate compliance with Section 6 of 401 KAR 34:180. The description must show at least the following:

(a) Basic design parameters, dimensions, and materials of construction;

(b) How the design promotes drainage or how containers are kept from contact with standing liquids in the containment system;

(c) Capacity of the containment system relative to the number and volume of containers to be stored;
(d) Provisions for preventing or managing run-on; and
(e) How accumlated liquids can be analyzed and removed to prevent overflow.
(2) For storage areas that store containers holding wastes that do not contain free liquids, a demonstration of compliance with Section 6 of 401 KAR 34:180, including:
(a) Test procedures and results or other documentation or information to show that the wastes do not contain free liquids; and
(b) A decription of how the storage area is designed or operated to drain and remove liquids or how containers are kept form contact with standing liquids.
(3) Sketches, drawings, or data demonstrating compliance with Section 7 of 401 KAR 34:180, (location of buffer zone and containers holding ignitable or reactive wastes), and Section 8 of 401 KAR 34:180, (location of incompatible wastes), where applicable.
(4) Where incompatible wastes are stored or otherwise managed in containers, a description of the procedures used to ensure compliance with Section 8(1) and (2) of 401 KAR 34:180, and Sections 8(2) and (3) of 401 KAR 34:020.

JACKIE SWIGART, Secretary
ADOPTED: June 10, 1983
RECEIVED BY LRC: June 13, 1983 at 11:30 a.m.
See public hearings scheduled on page 1.

NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION CABINET
Department for Environmental Protection
Division of Waste Management

401 KAR 38:160. Specific Part B requirements for tanks.

RELATES TO: KRS 224.033, 224.036, 224.071, 224.087, 224.830 through 224.877, 224.994
PURSUANT TO: KRS 13.082, 13.083, 224.017, 224.866
NECESSITY AND FUNCTION: KRS 224.842 and 224.866 require any person who treats, stores, recyles, or disposes of hazardous waste to first obtain a hazardous waste site or facility permit from the Natural Resources and Environmental Protection 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 or store hazardous waste in tanks.

Section 1. Applicability. The requirements in this regulaton apply to all owners or operators of hazardous waste sites or facilities that treat or store or will treat or store hazardous waste in tanks.

Section 2. Additional Part B Requirements for Tanks. In addition to the information required by 401 KAR 38:080, and 38:090, and 38:100, owners and operators of facilities that use or will use tanks to store or treat hazardous waste, except as otherwise provided in Section 1 of 401 KAR 34:010 and Section 1 of 401 KAR 34:190, must provide a description of design and operation procedures which demonstrate compliance with the requirements of Sections 2, 3, 6, and 7, of 401 KAR 34:190, including:
(1) References to design standards or other available information used (or to be used) in design and construction of the tank;
(2) A description of design specifications including identification of construction materials and lining materials (include pertinent characteristics such as corrosion or erosion resistance);
(3) Tank dimensions, capacity, and shell thickness;
(4) A diagram of piping, instrumentation, and process flow;
(5) A description of feed systems, safety cut-off, bypass systems, and pressure controls (e.g., vents); and
(6) A description of procedures for handling incompatible, ignitable, or reactive wastes, including the use of buffer zones.

JACKIE SWIGART, Secretary
ADOPTED: June 10, 1983
RECEIVED BY LRC: June 14, 1983 at 11 a.m.
See public hearings scheduled on page 1.

NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION CABINET
Department for Environmental Protection
Division of Waste Management

401 KAR 38:170. Specific Part B requirements for surface impoundments.

RELATES TO: KRS 224.033, 224.036, 224.071, 224.087, 224.830 through 224.877, 224.994
PURSUANT TO: KRS 13.082, 13.083, 224.017, 224.866
NECESSITY AND FUNCTION: KRS 224.842 and 224.866 require any person who treats, stores, recyles, or disposes of hazardous waste to first obtain a hazardous waste site or facility permit from the Natural Resources and Environmental Protection 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 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, 38:090, and 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, constructed, operated, and maintained to meet the requirements, of Section 2 of 401 KAR 34.200. 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 require-

ment 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) Prevention of overtopping, including flow measuring devices; and

(c) Structural integrity of dikes;

(3) If an exemption from 401 KAR 34:060 is sought, as provided by Section 3(1) of 401 KAR 34:200, detailed plans and an engineering report explaining the location of the saturated zone in relation to the surface impoundment, and the design of a double-liner system that incorporates a leek detection system between the liners;

(4) A description of how each surface impoundment, including the liner and cover systems 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 should be included in the inspection plan submitted under Section 2(5) of 401 KAR 38:090;

(5) A certification by a 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 must submit a statement by a 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;

(6) 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 should be included in the contingency plan submitted under Section 2(7) of 401 KAR 38:090;

(7) 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 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 should be included in the closure plan and, where applicable, the post-closure plan submitted under Section 2(13) of 401 KAR 38:190;

(8) 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;

(9) 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.

JACKIE SWIGART, Secretary

ADOPTED: June 10, 1983

RECEIVED BY LRC: June 13, 1983 at 11:30 a.m.

See public hearings scheduled on page 1.

NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION CABINET
Department for Environmental Protection
Division of Waste Management

401 KAR 38:180. Specific Part B requirements for waste piles.

RELATES TO: KRS 224.033, 224.036, 224.071, 224.087, 224.830 through 224.877, 224.994

PURSUANT TO: KRS 13.082, 13.083, 224.017, 224.866

NECESSITY AND FUNCTION: KRS 224.842 and 224.866 require any person who treats, stores, recyles, or disposes of hazardous waste to first obtain a hazardous waste site or facility permit from the Natural Resources and Environmental Protection 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 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, 38:090, and 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, 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 in Section 1(3) of 401 KAR 34:210, an explanation of how the requirements of Section 1(3) of 401 KAR 34.210 will be complied with;

(3) Detailed plans and an engineering report describing how the pile is or will be designed, constructed, operated and maintained to meet the requirements of Section 2 of 401 KAR 34:210. This submission must address the following items as specified in Section 2 of 401 KAR 34:210.

(a) The liner system (except for an existing portion of a pile). If an exemption from the requirement for a liner is sought, as provided by Section 3(2) of 401 KAR 34:210, the owner or operator 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;

(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) If an exemption from 401 KAR 34:060 is sought as provided by Section 3 or 4 of 401 KAR 34:210, submit detailed plans and an engineering report describing how the requirements of Section 3(1) or 4(1) of 401 KAR 34:210 will be complied with;

(5) A description of how each waste pile, including the liner and appurtenances for control of run-on, and run-

off, will be inspected in order to meet the requirements of Section 5(1) and (2) of 401 KAR 34:210. This information should be included in the inspection plan submitted under Section 2(5) of 401 KAR 38:090. If an exemption is sought to 401 KAR 34:060 pursuant to Section 4 of 401 KAR 34:210, describe in the inspection plan how the inspection requirements of Section 4(1)(c) of 401 KAR 34:210 will be complied with;

(6) 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;

(7) 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 be complied with;

(8) 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;

(9) A description of how hazardous waste residues and contaminated materials 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 must submit detailed plans and an engineering report describing how Section 6(1) and (2) of 401 KAR 34:230 and 38:500 will be complied with. This information should be included in the closure plan and, where applicable, the post-closure plan submitted under Section 2(13) of 401 KAR 38:090.

JACKIE SWIGART, Secretary
ADOPTED: June 10, 1983
RECEIVED BY LRC: June 13, 1983 at 11:30 a.m.
See public hearings scheduled on page 1.

NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION CABINET
Department for Environmental Protection
Division of Waste Management

401 KAR 38:190. Specific Part B requirements for incinerators.

RELATES TO: KRS 224.033, 224.036, 224.071, 224.087, 224.830 through 224.877, 224.994
PURSUANT TO: KRS 13.082, 13.083, 224.017, 224.866
NECESSITY AND FUNCTION: KRS 224.842 and 224.866 require any person who treats, stores, recyles, or disposes of hazardous waste to first obtain a hazardous waste site or facility permit from the Natural Resources and Environmental Protection 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 incinerate hazardous waste.

Section 1. Applicability. The requirements in this regulation apply to all owners and operators of hazardous waste sites or facilities that incinerate or will incinerate hazardous waste.

Section 2. Additional Part B Requirements for Incinerators. In addition to the information required by 401 KAR 38:080, 38:090 and 38:100, owners and operators of facilities that incinerate or will incinerate hazardous waste, except as Section 1 of 401 KAR 34:010 and Section 1 of 401 KAR 34:240, provide otherwise, must fulfill the requirements of subsection (1), (2) or (3) of this section.

(1) When seeking an exemption under Section 1(2) or (3) of 401 KAR 34:240 (ignitable, corrosive or reactive wastes only) submit:

(a) Documentation that the waste is listed as a hazardous waste in Chapter 31 solely because it is ignitable (Hazard Code I), corrosive (Hazard Code C), or both; or

(b) Documentation that the waste is listed as a hazardous waste in Chapter 31 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 not be burned when other hazardouse wastes are present in the combution zone; or

(c) Documentation that the waste is 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) Documentation that the waste is a hazardous waste solely because it possesses the reactivity characteristics listed in Section 4(1)(a), (b), (c), (f), (g) or (h) of 401 KAR 31:030, and that it will not be burned when other hazardous wastes are present in the combustion zone; or

(2) Submit a trial burn plan or the results of a trial burn, including all required determinations, in accordance with Section 3 of 401 KAR 38:060; or

(3) In lieu of a trial burn, the applicant may submit the following information:

(a) An analysis of each waste or mixture of wastes to be burned including:

1. Heat value of the waste in the form and composition in which it will be burned;
2. Viscosity (if applicable), or description of physical form of the waste;
3. An identification of any hazardous organic constituents listed in 401 KAR 31:170, which are present in the 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 must be identified and the basis for their exclusion stated. The waste analysis must rely on analytical techniques specified in "Test Methods for the Evaluation of Solid Waste, Physical/Chemical Methods" incorporated by reference in 401 KAR 30:010, Section 3 or their equivalent;
4. An approximate quantification of the hazardous constituents identified in the waste, within the precision produced by the analytical methods specified in "Test Methods for the Evaluation of Solid Waste, Physical/Chemical Methods" (incorporated by reference in Section 3 of 401 KAR 30:010);
5. A quantification of those hazardous constituents in the waste which may be designated as POHC's based on data submitted from other trial or operational burns which demonstrate compliance with the performance standards in Section 4 of 401 KAR 34:240.

(b) A detailed engineering description of the incinerator, including:

1. Manufacturer's name and model number of incinerator;
2. Type of incinerator;
3. Linear dimension of incinerator unit including cross-sectional area of combustion chamber;
4. Description of auxiliary fuel system (type/feed);
5. Capacity of prime mover;
6. Description of automatic waste feed cut-off system(s);
7. Stack gas monitoring and pollution control monitoring system;
8. Nozzle and burner design;

9. Construction materials;
10. Location and description of temperature, pressure, and flow indicating devices and control devices.

(c) A description and analysis of the waste to be burned compared with the waste for which data from operational or trial burns are provided to support the contention that a trial burn is not needed. The data should include those items listed in subsection (3)(a) of this section. This analysis should specify the POHC's which the applicant has identified in the waste for which a permit is sought, and any differences from the POHC's in the waste for which burn data are provided.

(d) The design and operating conditions of the incinerator unit to be used, compared with that for which comparative burn data are available.

(e) A description of the results submitted from any previously conducted trial burn(s) including:

1. Sampling and analysis techniques used to calculate performance standards in Section 4 of 401 KAR 34:240;
2. Methods and results of monitoring temperatures, waste feed rates, carbon monoxide, and an appropiate indicator of combustion gas velocity (including a statement concerning the precision and accuracy of this measurement);

(f) The expected incinerator operation information to demonstrate compliance with Sections 4 and 6 of 401 KAR 34:240 including:

1. Expected carbon monoxide (CO) level in the stack exhaust gas;
2. Waste feed rate;
3. Combustion zone temperature;
4. Indication of combustion gas velocity;
5. Expected stack gas volume, flow rate, and temperature;
6. Computed residence time for waste in the combustion zone;
7. Expected hydrochloric acid removal efficiency;
8. Expected fugitive emissions and their control procedures; and
9. Proposed waste feed cut-off limits based on the identified significant operating parameters;

(g) Such supplemental information as the cabinet finds necessary to achieve the purposes of this subsection;

(h) Waste analysis data, including that submitted in subsection (3)(a) of this section, sufficient to allow the cabinet to specify as permit Principal Organic Hazardous Constituents (permit POHC's) those constituents for which destruction and removal efficiencies will be required.

(4) The cabinet shall approve a permit application without a trial burn if it finds that:

(a) The wastes are sufficiently similar; and

(b) The incinerator units are sufficiently similar, and the data from other trial burns are adequate to specify (under Section 6 of 401 KAR 34:240) operating conditions that will ensure that the performance standards in Section 4 of 401 KAR 34:240 will be met by the incinerator.

JACKIE SWIGART, Secretary
ADOPTED: June 10, 1983
RECEIVED BY LRC: June 13, 1983 at 11:30 a.m.
See public hearings scheduled on page 1.

NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION CABINET
Department for Environmental Protection
Division of Waste Management

401 KAR 38:200. Specific Part B requirements for land treatment facilities.

RELATES TO: KRS 224.033, 224.036, 224.071, 224.087, 224.830 through 224.877, 224.994
PURSUANT TO: KRS 13.082, 13.083, 224.017, 224.866
NECESSITY AND FUNCTION: KRS 224.842 and 224.866 require any person who treats, stores, recyles, or disposes of hazardous waste to first obtain a hazardous waste site or facility permit from the Natural Resources and Environmental Protection 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 land treatment facilities.

Section 1. Applicability. The requirements in this regulation apply to all owners and operators of hazardous waste sites or facilities that dispose or will dispose of hazardous waste in land treatment facilities.

Section 2. Additional Part B Requirements for Land Treatment Facilities. In addition to the information required by 401 KAR 38:080, 38:090 and 38:100, owners and operators of facilities that use or will use land treatment to dispose of hazardous waste, except as otherwise provided in Section 1 of 401 KAR 34:010 and Section 1 of 401 KAR 34:220, must provide the following additional information:

(1) A description of plans to conduct a treatment demonstration as required under Section 3 of 401 KAR 34:220. The description must include the following information:

(a) The waste for which the demonstration will be made and the potential hazardous constituents in the waste;

(b) The data sources to be used to make the demonstration (e.g., literature, laboratory data, field data, or operating data);

(c) Any specific laboratory or field tests that will be conducted, including:

1. The type of test (e.g., column leaching, degradation);
2. Materials and methods, including analytical procedures;
3. Expected time for completion;
4. Characteristics of the unit that will be simulated in the demonstration, including treatment zone characteristics, climatic conditions, and operating practices;

(2) A description of a land treatment program, as required under Section 2 of 401 KAR 34:220. This information must be submitted with the plans for the treatment demonstration, and updated following the treatment demonstration. The land treatment program must address the following items:

(a) The wastes to be land treated;

(b) Design measures and operating practices necessary to maximize treatment in accordance with Section 4(1) of 401 KAR 34:220 including:

1. Waste application method and rate;
2. Measures to control soil pH;
3. Enhancement of microbial or chemical reactions;

4. Control of moisture content;
(c) Provisions of unsaturated zone monitoring, including:
1. Sampling equipment, procedures, and frequency;
2. Procedures for selecting sampling locations;
3. Analytical procedures;
4. Chain of custody control;
5. Procedures for establishing background values;
6. Statistical methods for interpreting results;
7. The justification for any hazardous constituents recommended for selection as principal hazardous constituents, in accordance with the criteria for such selection in Section 6(1) of 401 KAR 34:220;

(d) A list of hazardous constituents reasonably expected to be in, or derived from, the wastes to be land treated based on waste analysis performed pursuant to Section 4 of 401 KAR 34:020.

(e) The proposed dimensions of the treatment zone;

(3) A description of how the unit is or will be designed, constructed, operated, and maintained in order to meet the requirements of Section 4 of 401 KAR 34:220. This submission must address the following items:

(a) Control of run-on;

(b) Collection and control of run-off;

(c) Minimization of run-off of hazardous constituents from the treatment zone;

(d) Management of collection and holding facilities associated with run-on and run-off control systems;

(e) Periodic inspection of the unit. This information should be included in the inspection plan submitted under Section 2(5) of 401 KAR 38:090;

(f) Control of wind dispersal of particulate matter, if applicable;

(4) If food-chain crops are to be grown in or on the treatment zone of the land treatment unit, a description of how the demonstration required under Section 5(1) of 401 KAR 34:220 will be conducted including:

(a) Characteristics of the food-chain crop for which the demonstration will be made;

(b) Characteristics of the waste, treatment zone, and waste application method and rate to be used in the demonstration;

(c) Procedures for crop growth, sample collection, sample analysis, and data evaluation;

(d) Characteristics of the comparison crop including the location and conditions under which it was or will be grown.

(e) If food-chain crops are to be grown, and cadmium is present in the land treated waste, a description of how the requirements of Section 5(2) of 401 KAR 34:220 will be complied with;

(f) A description of the vegetative cover to be applied to closed portions of the facility, and a plan for maintaining such cover during the post-closure care period, as required under Section 8(1)(h) and (3)(b) of 401 KAR 34:220. This information should be included in the closure plan and, where applicable, the post-closure care plan submitted under Section 2(13) of 401 KAR 38:090;

(g) If ignitable or reactive wastes will be place in or on the treatment zone, an explanation of how the requirements of Section 9 of 401 KAR 34:220 will be complied with;

(h) Incompatible wastes, or incompatible wastes and materials, shall not be placed in or on the same treatment zone in accordance with Section 10 of 401 KAR 34:220.

JACKIE SWIGART, Secretary
ADOPTED: June 10, 1983
RECEIVED BY LRC: June 14, 1983 at 11:30 a.m.
See public hearings scheduled on page 1.

NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION CABINET
Department for Environmental Protection
Division of Waste Management

401 KAR 38:210. Specific Part B requirements for landfills.

RELATES TO: KRS 224.033, 224.036, 224.071, 224.087, 224.830 through 224.877, 224.994
PURSUANT TO: KRS 13.082, 13.083, 224.017, 224.866
NECESSITY AND FUNCTION: KRS 224.842 and 224.866 require any person who treats, stores, recyles, or disposes of hazardous waste to first obtain a hazardous waste site or facility permit from the Natural Resources and Environmental Protection 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 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, 38:090 and 38:100, owners and operators of facilities that dispose or 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, 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, constructed, operated, and maintained to comply with the requirements of Section 2 of 401 KAR 34:230. This submission must address the following items as specified in Section 2 of 401 KAR 34:230:

(a) 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, in conjunction with location aspects, prevent the migration of any hazardous constituent into the groundwater or surface water at any future time;

(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 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 be inspected in order to meet

the requirements of Section 4(1) and (2) of 401 KAR 34:230. This information 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 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 be maintained and monitored after closure in accordance with Section 6(2) of 401 KAR 34:230. This information should be included in the closure and post-closure 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 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 non-containized 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 224.866(2) 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 be complied with.

JACKIE SWIGART, Secretary
ADOPTED: June 10, 1983
RECEIVED BY LRC: June 13, 1983 at 11:30 a.m.
See public hearings scheduled on page 1.

NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION CABINET
Department for Environmental Protection
Division of Waste Management

401 KAR 38:500. Provisions for approval by the local government or the Kentucky Regional Integrated Treatment and Disposal Facility Siting Board.

RELATES TO: KRS 224.033, 224.036, 224.071, 224.087, 224.2201 through 224.2215, 224.830 through 224.877

PURSUANT TO: KRS 13.082, 13.083, 224.017, 224.033, 224.866

NECESSITY AND FUNCTION: KRS 224.842 and 224.866 require any person who treats, stores, recyles, or disposes of hazardous waste to first obtain a hazardous waste site or facility permit from the Natural Resources and Environmental Protection Cabinet. KRS 224.2201 through 224.2215, 224.855(6) and 224.866(1) require that the cabinet may not issue a permit to a regional integrated waste treatment and disposal demonstration facility without approval by the Kentucky Regional Integrated Waste Treatment and Disposal Facility Siting Board. KRS 225.855(5) and (6) and 224.866(1) require that the cabinet may not issue a permit to any hazardous waste disposal facility, except for a regional integrated waste treatment and disposal facility, without approval from the local government. This regulation establishes the permitting process for hazardous waste sites or facilities. This regulation establishes provisions for approval by either the local government or the Kentucky Regional Integrated Waste Treatment and Disposal Facility Siting Board prior to obtaining a permit for a hazardous waste disposal site or facility from the cabinet.

Section 1. Applicability. (1) This regulation applies to owners and operators of new or proposed hazardous waste landfills or other sites or facilities for the land disposal of hazardous waste.

(2) This regulation applies to owners and operators of existing hazardous waste landfills or other sites or facilities for the land disposal of hazardous waste who request a permit modification which does not meet the criteria of a minor modification as defined in Section 3 of 401 KAR 38:040. For permit modifications which are not minor modifications, approval of the local government or board shall only concern those conditions to be included in the permit modification, in accordance with Section 2(3) of 401 KAR 38:050.

(3) This regulation applies to owners and operators of new and existing hazardous waste treatment facilities (as defined in Section 1 of 401 KAR 30:010) and hazardous waste storage facilities (as defined in Section 1 of 401 KAR 30:010) who request a permit modification to include a disposal facility (as defined in Section 1 of 401 KAR 30:010) instead of or in addition to any permitted hazardous waste activity already conducted by the owner or operator.

Section 2. Definitions of Terms Used in this Regulation. Unless otherwise specifically defined in KRS Chapter 224 and 401 KAR 30:010 or otherwise clearly indicated by their context, terms in KRS Chapter 224 and in this regulation shall have the meanings given in this section.

(1) "Board" means the Kentucky Regional Integrated Waste Treatment and Disposal Facility Siting Board (KRS 224.2201(1)).

(2) "Local government" means the fiscal court of the county, urban-county government, or governing body of an incorporated municipality wherein a hazardous waste landfill or other site or facility for the land disposal of hazardous waste is proposed.

(3) "Other site or facility for the land disposal of hazardous waste" means a disposal facility as defined in 401 KAR 30:010, Section 1 but shall not include a storage facility or a treatment facility as defined in 401 KAR 30:010, Section 1.

Section 3. Local Government Approval. The cabinet shall not isssue a permit in accordance with this chapter, to construct or operate a hazardous waste site or facility which meets the requirements of Section 1 of this regulation, unless:

(1) The cabinet has received written approval from the local government in accordance with KRS 224.855(5); or

(2) The disposal facility is a proposed regional integrated waste treatment and disposal demonstration facility not subject to KRS 224.855(5) in accordance with KRS 224.855(6).

Section 4. Board Approval. The cabinet shall not issue a permit in accordance with this chapter, to construct or operate a hazardous waste site or facility which meets the definition of a regional integrated waste treatment and disposal demonstration facility in KRS 224.2201(4), unless the board issues a Certificate of Environmental Safety and Public Necessity in accordance with KRS 224.2207.

JACKIE SWIGART, Secretary
ADOPTED: June 10, 1983
RECEIVED BY LRC: June 13, 1983 at 11:30 a.m.
See public hearings scheduled on page 1.

NATURAL RESOURCES AND
ENVIRONMENTAL PROTECTION CABINET
Department for Environmental Protection
Division of Waste Management

401 KAR 39:020. Delisting fees.

RELATES TO: KRS 224.033, 224.864, 224.866, 224.871
PURSUANT TO: KRS 13.082, 13.083, 224.017, 224.033, 224.871
NECESSITY AND FUNCTION: KRS 224.033(20) states that the Natural Resources and Environmental Protection Cabinet may provide by regulation for a reasonable schedule of fees for the cost of processing applications for permits, exemptions, and partial exemptions. KRS 224.871 requires the cabinet to promulgate regulations requiring the payment of reasonable fees for hazardous waste registration certificates and permits. The purpose of this chapter is to establish a fee schedule for hazardous waste management. This regulation establishes the fees for a petition to delist a hazardous waste.

Section 1. Applicability. A petition to delist a hazardous waste in accordance with Section 1 of 401 KAR 31:040 shall be accompanied by payment of a fee of $1,000 per waste petitioned.

Section 2. Submittal of Fee. The fee for delisting shall be submitted to the cabinet with the petition for delisting. The check should be made payable to the Kentucky State Treasurer.

JACKIE SWIGART, Secretary
ADOPTED: June 10, 1983
RECEIVED BY LRC: June 14, 1983 at 11 a.m.
See public hearings scheduled on page 1.

NATURAL RESOURCES AND
ENVIRONMENTAL PROTECTION CABINET
Department for Environmental Protection
Division of Waste Management

401 KAR 39:030. Treatment facility fees.

RELATES TO: KRS 224.033, 224.864, 224.866, 224.871
PURSUANT TO: KRS 13.082, 13.083, 224.017, 224.033, 224.871
NECESSITY AND FUNCTION: KRS 224.033(20) states that the Natural Resources and Environmental Protection Cabinet may provide by regulation for a reasonable schedule of fees for the cost of processing applications for permits, exemptions, and partial exemptions. KRS 224.871 requires the cabinet to promulgate regulations requiring the payment of reasonable fees for hazardous waste registration certificates and permits. The purpose of this chapter is to establish a fee schedule for hazardous waste management. This regulation establishes the fee schedule for permits for treatment facilities.

Section 1. Applicability. This regulation applies to all treatment facilities required by Section 4 of 401 KAR 38:010 to obtain a construction/operating permit from the cabinet.

Section 2. Schedule of Fees for Part B Permit Applications and Permit Renewals for Treatment Facilities. A fee shall be required in order to obtain a permit for the construction and/or the operation of a hazardous waste treatment facility and for permit renewal. The fee will include a Review of General Facility Requirements Fee of $2,400 assessed for each facility. The Review of General Facility Requirements Fee will be charged once per permit application and will not be charged in duplicate or triplicate for an application for any combination of treatment, storage and disposal activities for the same facility if application for all activities is made at the same time. A fee will be charged for each type of regulated unit at the facility. The fees are as follows:

(1) Incinerator $2,500;
(2) Waste piles $1,700;
(3) Surface impoundments ..... $1,800; and
(4) Tanks ..... $1,600.

Section 3. Submittal of Fees. The $2,400 Review of General Facility Requirements Fee shall be submitted to the cabinet with the permit application. The cabinet shall notify the applicant of the additional amount owed. All checks should be made payable to the Kentucky State Treasurer.

JACKIE SWIGART, Secretary
ADOPTED: June 10, 1983
RECEIVED BY LRC: June 14, 1983 at 11 a.m.
See public hearings scheduled on page 1.

NATURAL RESOURCES AND
ENVIRONMENTAL PROTECTION CABINET
Department for Environmental Protection
Division of Waste Management

401 KAR 39:040. Storage facility fees.

RELATES TO: KRS 224.033, 224.864, 224.866, 224.871
PURSUANT TO: KRS 13.082, 13.083, 224.017, 224.033, 224.871
NECESSITY AND FUNCTION: KRS 224.033(20) states that the Natural Resources and Environmental Protection Cabinet may provide by regulation for a reasonable schedule of fees for the cost of processing applications for permits, exemptions, and partial exemptions. KRS 224.871 requires the cabinet to promulgate regulations requiring the payment of reasonable fees for hazardous waste registration certificates and permits. The purpose of this chapter is to establish a fee schedule for hazardous waste management. This regulation establishes the fee schedule for permits for storage facilities.

Section 1. Applicability. This regulation applies to all storage facilities required by Section 4 of 401 KAR 38:010 to obtain a construction/operating permit from the cabinet.

Section 2. Schedule of Fees for Part B Permit Applications and Renewals for Storage Facilities. A fee shall be required in order to obtain a permit for the construction and/or the operation of a hazardous waste storage facility and for permit renewal. The fee will include a Review of General Facility Requirements Fee of $2,400 assessed for each facility. The Review of General Facility Requirements Fee will be charged once per permit application and will

not be charged in duplicate or triplicate for an application for any combination of treatment, storage and disposal activities for the same facility if application for all activities is made at the same time. A fee will be charged for each type of regulated unit at the facility. The fees are as follows:
(1) Containers $1,600;
(2) Tanks $1,600;
(3) Surface impoundments ..... $1,800; and
(4) Waste piles ..... $1,600.

Section 3. Submittal of Fees. The $2,400 Review of General Facility Requirements Fee shall be submitted to the cabinet with the permit application. The cabinet shall notify the applicant of the additional amount owed. All checks should be made payable to the Kentucky State Treasurer.

JACKIE SWIGART, Secretary
ADOPTED: June 10, 1983
RECEIVED BY LRC: June 14, 1983 at 11 a.m.
See public hearings scheduled on page 1.

NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION CABINET
Department for Environmental Protection
Division of Waste Management

401 KAR 39:050. Disposal facility fees.

RELATES TO: KRS 224.033, 224.864, 224.866, 224.871
PURSUANT TO: KRS 13.082, 13.083, 224.017, 224.033, 224.871
NECESSITY AND FUNCTION: KRS 224.033(20) states that the Natural Resources and Environmental Protection Cabinet may provide by regulation for a reasonable schedule of fees for the cost of processing applications for permits, exemptions, and partial exemptions. KRS 224.871 requires the cabinet to promulgate regulations requiring the payment of reasonable fees for hazardous waste registration certificates and permits. The purpose of this chapter is to establish a fee schedule for hazardous waste management. This regulation establishes the fee schedule for permits for disposal facilities.

Section 1. Applicability. This regulation applies to all disposal facilities required by Section 4 of 401 KAR 38:010 to obtain a construction/operating permit from the cabinet.

Section 2. Schedule of Fees for Part B Permit Applications and Permit Renewals for Disposal Facilities. A fee shall be required in order to obtain a permit for the construction and/or operation of a hazardous waste disposal facility and for permit renewal. The fee will include a Review of General Facility Requirements Fee of $2,400 assessed for each facility. The Review of General Facility Requirements Fee will be charged once per permit application and will not be charged in duplicate or triplicate for an application for any combination of treatment, storage and disposal activities for the same facility if application for all activities is made at the same time. A fee will be charged for each type of regulated unit at the facility. The fees are as follows:
(1) Surface impoundments $2,200;
(2) Land treatment ..... $2,700; and
(3) Landfill ..... $3,000.

Section 3. Submittal of Fees. The $2,400 Review of General Facility Requirements Fee shall be submitted to the cabinet with the permit application. The cabinet shall notify the applicant of the additional amount owed. All checks should be made payable to the Kentucky State Treasurer.

JACKIE SWIGART, Secretary
ADOPTED: June 10, 1983
RECEIVED BY LRC: June 14, 1983 at 11 a.m.
See public hearings scheduled on page 1.

NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION CABINET
Department for Environmental Protection
Division of Waste Management

401 KAR 39:060. Short-term fees.

RELATES TO: KRS 224.033, 224.864, 224.866, 224.871
PURSUANT TO: KRS 13.082, 13.083, 224.017, 224.033, 224.871
NECESSITY AND FUNCTION: KRS 224.033(20) states that the Natural Resources and Environmental Protection Cabinet may provide by regulation for a reasonable schedule of fees for the cost of processing applications for permits, exemptions, and partial exemptions. KRS 224.871 requires the cabinet to promulgate regulations requiring the payment of reasonable fees for hazardous waste registration certificates and permits. The purpose of this chapter is to establish a fee schedule for hazardous waste management. This regulation establishes the fee schedule for short-term permits.

Section 1. Applicability. This regulation applies to facilities which require emergency permits, trial burn permits and land treatment demonstration permits.

Section 2. Fees. The fees for short-term permits are as follows:
(1) Emergency permits $250;
(2) Trial-burn permits ..... $1,200; and
(3) Land treatment demonstration $2,100;

Section 3. Submittal of Fees. The appropriate fee for short-term permits shall be submitted to the cabinet with the permit application. The check should be made payable to the Kentucky State Treasurer.

JACKIE SWIGART, Secretary
ADOPTED: June 10, 1983
RECEIVED BY LRC: June 14, 1983 at 11 a.m.
See public hearings scheduled on page 1.

NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION CABINET
Department for Environmental Protection
Division of Waste Management

401 KAR 39:070. Modification fees.

RELATES TO: KRS 224.033, 224.864, 224.866, 224.871
PURSUANT TO: KRS 13.082, 13.083, 224.017, 224.033, 224.871

NECESSITY AND FUNCTION: KRS 224.033(20) states that the Natural Resources and Environmental Protection Cabinet may provide by regulation for a reasonable schedule of fees for the cost of processing applications for permits, exemptions, and partial exemptions. KRS 224.871 requires the cabinet to promulgate regulations requiring the payment of reasonable fees for hazardous waste registration certificates and permits. The purpose of this chapter is to establish a fee schedule for hazardous waste management. The purpose of this regulation is to establish fees for modification of permits for hazardous waste management.

Section 1. Applicability. (1) This regulation applies to all owners and operators of hazardous waste facilities in Kentucky who require a modification to their hazardous waste management permit as specified in Section 2 of 401 KAR 38:040 and Section 2 of 401 KAR 38:050.

(2) In the event modification of a permit is required as a result of changes in Kentucky Statute or the Hazardous Waste Management Regulations, no modification fee shall be imposed.

Section 2. Minor Modifications. A fee of $50 per minor modification must be submitted to the cabinet with the application for minor modification. Minor modifications are defined in Section 2 of 401 KAR 38:050.

Section 3. Major Modifications. Major modifications are defined in Section 2 of 401 KAR 38:040. The fee schedule is set forth below.

(1) Addition of new wastes $1,500;
(2) For treatment facilities:
(a) Tanks $1,200;
(b) Surface impoundments 1,500;
(c) Waste piles 1,300;
(d) Incinerators 2,000;
(3) For storage facilities:
(a) Containers $1,300;
(b) Tanks 1,200;
(c) Surface impoundments 1,500;
(d) Waste piles 1,300;
(4) For disposal facilities:
(a) Surface impoundments $1,800;
(b) Land treatment 2,200;
(c) Landfills ..... 2,400.

Section 4. Submittal of Fees. The appropriate fee shall be submitted to the cabinet with the application for modification. The checks should be made payable to the Kentucky State Treasurer.

JACKIE SWIGART, Secretary
ADOPTED: June 10, 1983
RECEIVED BY LRC: June 14, 1983 at 11 a.m.
See public hearings scheduled on page 1.

PUBLIC PROTECTION AND REGULATION CABINET
Department of Housing, Buildings and Construction

815 KAR 7:070. Requirements for certification of Kentucky Building Code inspectors.

RELATES TO: KRS 198B.090, 198B.040(3), 198B.050(3)(c), (6)
PURSUANT TO: KRS 198B.050(5)
NECESSITY AND FUNCTION: The department is required by KRS 198B.090 to create and administer a building official's certification program which is designed to ensure uniform statewide enforcement of applicable state building codes. This regulation establishes the testing, training and continuing education requirements for two (2) specifically designated professional classifications of building code inspectors: building inspector and plans and specifications inspector.

Section 1. Definitions and Categories of Inspectors. The scope of authority for each category of inspector identified is specifically limited according to the following description of responsbibilities. Depending on the type and level of responsibility assumed by the jurisdiction, certification in more than one (1) category may be required.

(1) "Certified building inspector" means a person whose responsibility it is to inspect buildings as part of a permit application, to determine that the structures are free from conditions that would present a life safety, health or fire hazard to persons using such buildings, and to determine that the buildings are constructed in accordance with the Kentucky Building Code. This person must have been tested for competency in NCPCCI modules 1B and 3B and otherwise met the requirements of the department. This person is authorized by this regulation to make on-site inspections of all buildings, including one (1) and two (2) family dwellings within his/her jurisdiction, regardless of size. This person is further authorized to review and approve plans on those buildings which are the responsibility of local governments under KRS 198B.060(2).

(2) "Certified plans and specifications inspector" means a person whose responsibility it is to determine that the plans submitted as part of a building permit application comply with the Kentucky Building Code and referenced standards, and who has been tested for competency in NCPCCI modules 1B, 1C, 3B and 3C and otherwise met the requirements of the department as set forth in this regulation. This person is further authorized to inspect all buildings within his/her jurisdiction, regardless of size to determine if those buildings are constructed in accordance with the plans and in accordance with the Kentucky Building Code.

(3) "Limited certificate" means a limited authorization issued by the department which represents the level of competency for which a person has been tested. The department will issue a document specifying on its face that the person is qualified to perform the stated activity only. This certificate shall be issued only after the person has met the training requirements stated in Section 3 of this regulation.

(4) NCPCCI means "National Certification Program for Construction Code Inspectors" and are exam modules developed by the national code enforcement organizations in collaboration with the Educational Testing Service for the purpose of providing nationally recognized evidence of competence and professionalism in construction code enforcement and shall be used to meet the module testing requirements required herein. Other required training or testing shall be provided through the department.

Section 2. Insepction Operations. (1) It is the specific intention of this regulation to ensure that all Kentucky Building Code inspection programs require plan review and on-site inspection of buildings only by persons who have been tested for competency under this regulation.

(2) Each person who has successfully completed any NCPCCI exam module as listed in this regulation shall be given a "limited certificate." This certificate shall qualify the individual only for that inspection or plan review function on which he/she has been tested. For example, per-

sons holding a limited certificate for NCPCCI Module Building One (1) and Two (2) Family-1A are deemed qualified to inspect and review plans for single family and duplex residential buildings only. Each person must renew the certification as required by Section 5(2) of this regulation and otherwise comply with this regulation.

(3) Each local government and the department shall provide for the services of certified inspectors. In circumstances where the jurisdiction chooses to distribute the inspection or plan review functions to more than one (1) person, each person shall be certified in his/her respective area of responsibility.

(4) Certification of plumbing, elevator and electrical inspectors are not covered by this regulation.

Section 3. Training and Testing Requirements to Become Certified as a Kentucky Building Code Inspector. (1) Each candidate seeking to become certified pursuant to this regulation shall be required to be trained and/or tested on the administrative and accessibility sections of the Kentucky Building Code as determined by the board.

(2) Each candidate seeking certification shall successfully complete the NCPCCI exam module(s) which is/are applicable to the activity in which said candidate shall be engaged. Unless the candidate qualifies as actively pursuing departmental certification under Section 4 of this regulation, no person shall be responsible for any inspection or plan review activity for which he/she has not been tested and passed said test. The testing modules are as follows:

(a) Building One (1) and Two (2) Family -1A;
(b) Building General -1B;
(c) Fire Protection General -3B;
(d) Building Plan Review -1C;
(e) Fire Protection Plan Review -3C.

(3) Continuing education. From time to time, the department shall establish continuing education programs for the purpose of keeping the inspectors updated on code requirements. Participation in these programs shall be mandatory for all inspectors in order to maintain certification.

Section 4. Deadline for Certification. (1) All persons charged with the responsibility of inspecting and reviewing buildings plans for compliance with the Kentucky Building Code shall be certified or enrolled and actively pursuing departmental certification by October 1, 1983, or within ninety (90) days after employment of such inspector, whichever is later. Such person shall register with the department, complete the necessary application forms and pay the required fees stated in Section 5 of this regulation, within said timetable.

(2) "Actively pursuing departmental certification" means that each person who is seeking certification pursuant to this regulation shall sit for examination of at least one (1) module of the NCPCCI per year. Failure of any candidate to receive a passing score on each required module within three (3) years of employment shall terminate that person's ability to qualify under this definition. Limited certificates may continue to be renewed after three (3) years.

(3) Time constraints for certification as stated in subsection (2) of this section shall not apply to those persons seeking certification who are not engaged in an inspection or plan review capacity.

Section 5. Application for Training and Certification. (1) Each person seeking to become a candidate for certification pursuant to this regulation shall submit an application on a form provided by the department, together with a fee of twenty-five dollars ($25) to cover the administrative costs of processing the application, establishing the training program and issuing certificates.

(2) Each certified inspector and each candidate actively pursuing certification shall be required to pay an additional annual sum of twenty-five dollars ($25) each succeeding fiscal year in order to maintain his/her certification.

Section 6. Suspension and Revocation of Certification. (1) Formal written complaints concerning an inspector must be submitted through the department to the Board of Housing, Buildings and Construction for review and appropriate action.

(2) If, upon investigation, the board determines that there is reason to believe that the certified inspector has willfully, negligently or recklessly violated his/her duties as set forth in this regulation, the board may take action for the revocation or suspension of his/her certificate. No such action shall be taken unless the inspector is afforded the opportunity to be heard.

CHARLES A. COTTON, Commissioner
ADOPTED: June 9, 1983
APPROVED: LEONARD B. MARSHALL, JR., Secretary
RECEIVED BY LRC: June 15, 1983 at 1:15 p.m.
SUBMIT COMMENT OR REQUEST FOR HEARING TO: Judith G. Walden, Office of General Counsel, Department of Housing, Buildings and Construction, The 127 Building, U.S. 127 South, Frankfort, Kentucky 40601.

CABINET FOR HUMAN RESOURCES
Department for Health Services

902 KAR 2:090. Tuberculosis testing.

RELATES TO: KRS 158.036, 158.037, 211.180, 214.034, 215.520
PURSUANT TO: KRS 13.082, 194.050, 211.090
NECESSITY AND FUNCTION: KRS 211.180 mandates the Cabinet for Human Resources to implement a statewide program for the detection, prevention and control of communicable diseases. KRS 214.034 requires the establishment of tuberculosis testing schedules for children by the Cabinet for Human Resources, and also requires the establishment of methods for epidemiologic determinations necessary to determine the need for tuberculosis testing following the first year of school. KRS 158.037 requires the establishment of reporting regulations for tuberculin skin test results in children attending all public or private elementary or secondary schools by the Cabinet for Human Resources. The regulation specifies the recommended schedule for mandatory tuberculosis testing of children, the methods for epidemiologic determination of the need for tuberculosis testing following the first year of school, and the methods for reporting tuberculin skin test results on children to local health departments.

Section 1. Definitions. (1) "Child" means an individual under the age of eighteen (18) years.

(2) "Tuberculin skin test" means the intracutaneous injection of five (5) tuberculin units of purified protein derivative by the Mantoux technique or multiple puncture, but preferably the former.

Section 2. Each child seeking to attend public or private schools in the Commonwealth is to be tested for tuberculosis by tuberculin skin test within one (1) year prior to entering the public or private schools. A child who has not been tested prior to entering the public or private schools may be permitted to attend class for a period of time not to exceed five (5) days, as approved in writing by the health officer of the local health department having jurisdiction. Further attendance is conditioned upon presentation of proof of having been tested for tuberculosis in accordance with Section 3 of this regulation.

Section 3. (1) Each child entering a public or private school for the first time shall present a valid certificate approved by the Cabinet for Human Resources and signed by the attending physician or by the local health department having jurisdiction, containing the date of the most recent tuberculin skin test, the type of skin test given (Mantoux, multiple puncture or other), and the millimeters of induration at forty-eight (48) and seventy-two (72) hours post-testing. The certificate shall become a permanent part of the child's school health record.

(2) When tuberculin skin testing is medically contraindicated according to the written statement of an attending physician or of the health officer of the local health department having jurisdiction, the child shall receive a chest x-ray.

Section 4. Each public or private school shall, within sixty (60) days of the beginning of each school year, forward to the local health department having jurisdiction in the area a report containing:

(1) A list showing the name, grade, type of tuberculin skin test performed and the millimeters of induration for all enrollees who had any induration at forty-eight (48) to seventy-two (72) hours indicated on their tuberculin skin testing certificate; and

(2) The number of enrollees by school grade.

Section 5. When the incidence of significant tuberculin reactors among first-year enrollees at any school exceeds or equals five-tenths (0.5) of one (1) percent of the total first-year enrollment, at least all students in the highest elementary school grade and all tenth grade students at that same school shall be tuberculin skin tested within ninety (90) days of the beginning of the school year. Results of the testing shall be provided the local health department in that jurisdiction. Additional skin testing may be required at the discretion of the health officer of the local health department having jurisdiction. When tuberculin skin testing is medically contraindicated according to the written statement of an attending physician or the health officer of the local health department having jurisdiction, skin testing will not be required.

DAVID T. ALLEN, Commissioner
ADOPTED: June 15, 1983
APPROVED: BUDDY H. ADAMS, Secretary
RECEIVED BY LRC: June 15, 1983 at 4 p.m.
SUBMIT COMMENT OR REQUEST OR HEARING TO: Secretary for Human Resources, 275 East Main Street, Frankfort, Kentucky 40621.

CABINET FOR HUMAN RESOURCES
Department for Health Services

902 KAR 4:040. Special Supplemental Food Program for Women, Infants and Children (WIC).

RELATES TO: KRS 194.050
PURSUANT TO: KRS 13.082, 194.050, 42 USC 1786
NECESSITY AND FUNCTION: Through operation of 42 USC §1786 and 7 CFR 246.10, the state is required to impose sanctions upon vendors participating in the Special Supplemental Food Program for Women, Infants and Children (WIC) when it is determined that a violation of program requirements has occurred. The purpose of this regulation is to set forth the violations for which sanctions are to be imposed, the applicable sanctions, and the appeal rights assured an affected vendor.

Section 1. Definitions. (1) "Cabinet" means Cabinet for Human Resources.

(2) "Secretary" means Secretary for Human Resources.

(3) "State agency" means the Cabinet for Human Resources or its designated representative.

(4) "Vendor" means a vendor of food items who, by contract, participates in the Special Supplemental Food Program for Women, Infants and Children (WIC).

(5) "WIC program" means the Special Supplemental Food Program for Women, Infants and Children (WIC) administered pursuant to 42 USC §1786.

Section 2. For the following acts or circumstances committed by the vendor, his employe or agent, the cabinet shall impose the following sanctions:

	Period of Disqualification		
Types of Abuse	1st offense	2nd offense	3rd offense
1. Providing cash/credit for WIC checks (trafficking)	1 year	2 years	3 years
2. Selling nonfood items for WIC checks	6 months	1 year	18 months
3. Selling related but unauthorized foods	Written Warning	3 months	6 months
4. Charging more than the current retail market price for WIC food items	6 months	1 year	18 months
5. Charging for food not received by the WIC participant	1 year	2 years	3 years
6. Charging for food not authorized on the WIC check	6 months	1 year	18 months
7. Redeeming WIC checks outside valid period	Written Warning	3 months	6 months
8. Not recording actual purchase price on WIC checks at time of purchase	Written Warning	3 months	6 months
9. Giving due bills, IOU's or rainchecks	Written Warning	3 months	6 months

10. Suspension from Food Stamp Program	Equivalent to food stamp disqualification period (does not have to run concurrently)		
11. Nonpayment of a claim made by state agency	3 months	6 months	1 year
12. Discrimination (separate WIC lines, denying trading stamps, other customer courtesies)	Written Warning	3 months	6 months
13. Failure to allow monitoring and inspection of store premises, records and procedures or access to WIC checks	Written Warning	3 months	6 months
14. Failure to return WIC vendor authorization stamp upon request	Add 3 months to previously established disqualification period or monetary penalty in the amount of unauthorized funds received or both		
15. Requiring cash purchase to redeem WIC checks	Written Warning	3 months	6 months

Sanctions imposed may, in the discretion of the cabinet, run concurrently or consecutively. Notice of sanction to be imposed by the cabinet and the date upon which such sanction is to commence may be hand-delivered to the vendor or mailed certified mail return receipt requested to the vendor's last known address.

Section 3. (1) Any vendor aggrieved by a decision of the cabinet to impose a sanction authorized by this regulation may file a written request for a hearing with the cabinet no later than twenty (20) days after receipt of notice. Upon receipt of a request for a hearing, the secretary shall appoint one (1) or more impartial hearing officer(s) to conduct the hearing. Within five (5) days of a request for a hearing, the cabinet shall advise the subject vendor of the date, time and place of the scheduled hearing and of the opportunity to review the records of the cabinet prior to the date of the hearing.

(2) On the date of the hearing the subject vendor shall have:

(a) An opportunity to present its case against the imposition of any sanction;

(b) The opportunity to be represented by counsel, if desired; and

(c) The opportunity to confront and to cross-examine witnesses.

(3) The hearing officer(s) shall decide upon the validity of the violation and sanction imposed based upon the record of the hearing and the relevant statutory and regulatory provisions governing the WIC program. The decision shall be in writing and shall be the final decision of the cabinet. It need not contain formal findings of fact and conclusions of law.

(4) A decision shall be reached and written notification of the decision forwarded to the vendor no later than sixty (60) days from the date of receipt of the written request for hearing. Any vendor aggrieved shall have the right to appeal such decision to the circuit court of the county wherein the vendor has his principal place of business.

DAVID T. ALLEN, Commissioner
ADOPTED: May 31, 1983
APPROVED: BUDDY H. ADAMS, Secretary
RECEIVED BY LRC: June 1, 1983 at 10:45 a.m.

SUBMIT COMMENT OR REQUEST FOR HEARING TO: Secretary for Human Resources, CHR Building, 275 East Main Street, Frankfort, Kentucky 40621.

CABINET FOR HUMAN RESOURCES
Department for Health Services
Certificate of Need and Licensure Board

902 KAR 20:180. Psychiatric hospitals; operation and services.

RELATES TO: KRS 216B.010 to 216B.131, 216B.990(1)(2)
PURSUANT TO: KRS 13.082, 216B.040(2), 216B.105
NECESSITY AND FUNCTION: KRS 216B.040 and 216B.105 mandate that the Kentucky Health Facilities and Health Services Certificate of Need and Licensure Board regulate health facilities and health services. This regulation provides minimum licensure requirements for the operation and services of psychiatric hospitals and for the provision of psychiatric services in general hospitals which have a psychiatric unit.

Section 1. Scope of Operation and Services. Psychiatric hospitals are establishments with organized professional staffs and permanent facilities with inpatient beds, which provide general medical and psychiatric services, continuous nursing services, psychological services, therapeutic activities, social services, and related support services for the diagnosis and treatment of patients who have a variety of mental illnesses.

Section 2. Definitions. (1) "Governing authority" means the individual, agency, partnership, or corporation, in which the ultimate responsibility and authority for the conduct of the institution is vested.

(2) "Professional staff" means psychiatrists and other physicians, psychologists, psychiatric nurses and other nurses, social workers and other professionals with special education or experience in the care of the mentally ill who are involved in the diagnosis and treatment of patients with mental illness.

(3) "Psychiatric unit" means a department of a general acute care hospital consisting of eight (8) or more psychiatric beds organized for the purpose of providing psychiatric services.

(4) "Restraint" means the application of any physical device, the application of physical body pressure by another person in such a way as to control or limit physical activity, or the intravenous, intramuscular, or subcutaneous administration of any pharmacologic or chemical agent to a mentally ill patient with the sole or primary purpose of controlling or limiting the physical activities of the patient.

(5) "Seclusion" means the confinement of a mentally ill or mentally retarded patient alone in a locked room.

Section 3. Applicability. (1) General acute care hospitals which have a psychiatric unit shall designate the location and number of beds to be licensed as psychiatric beds and shall meet the requirements of 902 KAR 20:016 and the additional requirements contained in this regulation. A facility requesting licensure as a psychiatric hospital exclusively shall meet the requirements of this regulation.

(2) A facility shall not be licensed as or be called a psychiatric hospital unless it provides the full range of services required by this regulation and provides for the treatment of a variety of mental illnesses. Facilities which receive certificate of need approval and are licensed after

the effective date of this regulation which have, according to the last Annual Hospital Utilization Report, an average daily census of patients whose primary illness is alcoholism or other chemical dependency exceeding ten percent (10%) of the licensed bed capacity shall apply for a certificate of need to convert an appropriate number of beds to be licensed under 902 KAR 20:160, Chemical dependency treatment services.

Section 4. Administration and Operation. (1) General requirements.

(a) The hospital shall comply with the requirements of 902 KAR 20:016, Section 3 and the additional requirements contained in this section.

(b) The hospital shall comply with the requirements of KRS Chapters 202A and 202B and 902 KAR Chapter 12, Hospitalization of Mentally Ill and Mentally Retarded.

(2) Professional staff. A facility requesting licensure as a psychiatric hospital exclusively which operates with an organized professional staff shall comply with the following requirements rather than those in 902 KAR 20:016, Section 3(8):

(a) The hospital shall have a professional staff organized under bylaws approved by the governing authority, which is responsible to the governing authority of the hospital for the quality of clinical care provided to patients and for the ethical conduct and professional practice of its members.

(b) The professional staff shall develop and adopt policies or bylaws, subject to the approval of the governing authority, which shall:

1. Require that a licensed physician be responsible for admission, diagnosis, all medical care and treatment, and discharge;
2. State the necessary qualifications for professional staff membership;
3. Define and describe the responsibilities and duties of each category of professional staff (e.g., active, associate, courtesy, consulting, or honorary), delineate the clinical privileges of staff members, and establish a procedure for granting and withdrawing staff privileges, to include credentials review;
4. Provide a mechanism for appeal of decisions regarding staff membership and privileges;
5. Provide a method for the selection of officers of the professional staff;
6. Establish requirements regarding the frequency of, and attendance at, general staff and department/service meetings of the professional staff; and
7. Provide for the appointment of standing and special committees, and include requirements for composition and organization, frequency of and attendance at meetings, and the minutes and reports which shall be part of the permanent records of the hospital. These committees may include: Executive committee, credentials committee, medical audit committee, medical records committee, infections control committee, pharmacy and therapeutic committee, utilization review committee and quality assurance committee.

(c) The hospital shall develop a process of appointment to the professional staff which will assure that the person requesting staff membership is appropriately licensed, certified, registered, or experienced, and qualified for the privileges and responsibilities sought.

(3) Policies.

(a) The hospital's written admission and discharge policies shall be consistent with the requirements of KRS Chapters 202A and 202B and 902 KAR Chapter 12, Hospitalization of Mentally Ill and Mentally Retarded.

(b) The hospital shall have written policies pertaining to patient rights and the use of restraints and seclusion consistent with KRS Chapters 202A and 202B and 902 KAR Chapter 12, Hospitalization of Mentally Ill and Mentally Retarded.

(c) The hospital shall also have written policies concerning the use of special treatment procedures that may have abuse potential, or be life-threatening, and specifying the qualifications required for professional staff using special treatment procedures.

(4) Patient rights. The hospital shall assure that patient rights are provided for pursuant to the requirements of KRS Chapters 202A and 202B and 902 KAR Chapter 12, Hospitalization of Mentally Ill and Mentally Retarded.

(5) Medical records.

(a) Patient information shall be released only on written consent of the patient or the patient's authorized representative, or as otherwise authorized by law. The written consent shall contain the following information:

1. The name of the person, agency or organization to which the information is to be disclosed;
2. The specific information to be disclosed;
3. The purpose of disclosure; and
4. The date the consent was signed and the signature of the individual witnessing the consent.

(b) In addition to the requirements of 902 KAR 20:016, Section 3(11)(d) the medical record shall contain:

1. Appropriate court orders and/or consent of patient, appropriate family members or guardians for admission, evaluation, and treatment;
2. A provisional or admitting diagnosis which includes a physical diagnosis, if applicable, as well as a psychiatric diagnosis;
3. Results of the psychiatric evaluation;
4. A complete social history;
5. An individualized comprehensive treatment plan;
6. Progress notes, dated and signed by physician, nurse, social worker, psychologist, or other appropriate individuals involved in treatment of patient. Progress notes shall document all services and treatments provided and the patient's progress in response to such services and treatments;
7. A record of the patient's weight;
8. Special clinical justification for the use of special treatment procedures specified in Section 5(3) of this regulation;
9. A discharge summary which includes a recapitulation of the patient's hospitalization and recommendations from appropriate services concerning follow-up or after care as well as a brief summary of the patient's condition on discharge;
10. If a patient dies, a summation statement in the form of a discharge summary, including events leading to the death, signed by the attending physician; and
11. When an autopsy is performed, a provisional anatomic diagnosis shall be included in the patient's record within seventy-two (72) hours, with the complete summary and pathology report, including cause of death, recorded within three (3) months.

Section 5. Patient Management. (1) Assessment. The hospital shall be responsible for conducting a complete assessment of each patient.

(a) A provisional or admitting diagnosis, which includes the diagnosis of physical diseases, if applicable, as well as the psychiatric diagnosis, shall be made on each patient at the time of admission.

(b) A physical examination of each patient shall be completed and appropriate laboratory tests shall be initiated within twenty-four (24) hours after admission. A physician shall be responsible for assessing each patient's physical health.

(c) A psychiatric evaluation for each patient shall be completed within seventy-two (72) hours of admission. It shall include a medical history; a record of mental status; details regarding onset of illness and circumstances leading to admission; a description of attitudes and behavior; an estimate of intellectual functioning, memory functioning, and orientation; and an inventory of the patient's assets in a descriptive, not interpretative, fashion.

(d) A social assessment of each patient shall be recorded.

(e) An activities assessment of each patient shall be prepared and shall include information relating to the patient's current skills, talents, aptitudes, and interest.

(f) When appropriate, nutritional, vocational, and legal assessments shall be conducted. The legal assessment shall be used to determine the extent to which the patient's legal status will influence progress in treatment.

(2) Treatment plans. Each patient shall have a written individualized treatment plan that is based on assessments of his/her clinical needs and approved by the patient's attending physician. Overall development and implementation of the treatment plan shall be assigned to appropriate members of the professional staff.

(a) Within seventy-two (72) hours following admission, a designated member of the professional staff shall develop an initial treatment plan that is based on at least an assessment of the patient's present problems, physical health, emotional and behavioral status. Appropriate therapeutic efforts shall begin before a master treatment plan is finalized.

(b) A master treatment plan shall be developed by a multidisciplinary team within ten (10) days for any patient remaining in treatment beyond the initial evaluation. It shall be based on a comprehensive assessment of the patient's needs and include a substantiated diagnosis and the short-term and long-range treatment needs and address the specific treatment modalities required to meet the patient's needs.

1. The treatment plan shall include referrals for services not provided directly by the facility.
2. The treatment plan shall contain specific and measurable goals for the patient to achieve.
3. The treatment plan shall describe the services, activities, and programs to be provided to the patient, and shall specify staff members assigned to work with the patient and also the time/frequency for each treatment procedure.
4. The treatment plan shall specify criteria to be met for termination of treatment.
5. The patient shall participate to the maximum extent feasible in the development of his/her treatment plan, and such participation shall be documented in the patient's record.
6. A specific plan for involving the patient's family or significant others shall be included in the treatment plan when indicated.
7. The treatment plan shall be reviewed and updated through multidisciplinary case conferences as clinically indicated, but in no case shall this review and update be completed later than thirty (30) days following the first ten (10) days of treatment and every sixty (60) days thereafter for the first year of treatment.
8. Following one (1) year of continuous treatment, the review and update may be conducted at three (3) month intervals.

(3) Special treatment procedures.

(a) Special documentation shall be included in the patient's medical record concerning the use of restraints, seclusion and other special treatment procedures which may have abuse potential or be life threatening.

(b) The documentation shall include a physician's written order, justification for the use of the procedure, the required consent forms, a description of any procedures employed to protect the patient's safety and rights, and a description of the procedure used.

(c) The use of physical restraints and seclusion shall be governed by the following:

1. Restraint or seclusion shall be used only to prevent a patient from injuring himself or others, or to prevent serious disruption of the therapeutic program;
2. A written, time-limited order from a physician shall be required for the use of restraint or seclusion;
3. The head of the medical staff shall give written approval when restraint or seclusion is utilized for longer than twenty-four (24) horus;
4. PRN orders shall not be used to authorize the use of restraint or seclusion;
5. The head of the medical staff or his designee shall review daily all uses of restraint or seclusion and investigate unusual or possibly unwarranted patterns of utilization;
6. Restraint or seclusion shall not be used in a manner that causes undue physical discomfort, harm, or pain to the patient; and
7. Appropriate attention shall be paid every fifteen (15) minutes to a patient in restraint or seclusion, especially in regard to regular meals, bathing, and use of the toilet; and staff shall document in the patient's record that such attention was given to the patient.

Section 6. Provision of Services. (1) Psychiatric and general medical services.

(a) Psychiatric services shall be under the supervision of a clinical director, service chief, or equivalent, who is qualified to provide the leadership required for an intensive treatment program.

1. The clinical director, or equivalent, shall be certified by the American Board of Psychiatry and Neurology, or meet the training and experience requirements for examination by the board.
2. If the psychiatrist in charge of the clinical program is not board certified, there shall be evidence that consultation is given to the clinical program on a continuing basis by a psychiatrist certified by the American Board of Psychiatry and Neurology.

(b) General medical services provided in the hospital shall be under the direction of a physician member of the professional staff in accordance with staff privileges granted by the governing authority.

1. A physician member of the professional staff shall conduct and record a complete history and physical examination for the patient within twenty-four (24) hours after admission to the hospital.
2. All incidental medical services necessary for the care and support of patients shall be provided by in-house staff or through agreement with outside resources. When the patient's condition requires services not available in the hospital, the patient, upon physician's orders (except in cases of emergency), shall be transferred promptly to an appropriate level of care.
3. There shall be a written plan delineating the manner in which emergency services are provided by the hospital or through clearly defined arrangements with another facility. The plan shall clearly specify the following:

a. The arrangements the hospital has made to assure that the patient being transferred for emergency services to a nonpsychiatric facility will continue to receive further evaluation and/or treatment of his/her psychiatric problem, as needed;

b. The policy for referring patients needing continued psychiatric care after emergency services back to the referring facility; and

c. The policy concerning notification of the patient's family of emergencies and of arrangements that have been made for referring or transferring the patient to another facility for emergency service.

(c) Physician services shall be available twenty-four (24) hours a day on at least an on-call basis.

(d) There shall be sufficient physician staff coverage for all psychiatric/medical services of the hospital in keeping with their size and scope of activity.

(e) The attending physician shall state his final diagnosis, complete the discharge summary and sign the records within fifteen (15) days following the patient's discharge.

(2) Nursing services.

(a) The hospital shall have a nursing department organized to meet the nursing care needs of the patients and maintain established standards of nursing practice.

(b) The psychiatric nursing service shall be under the direction of a registered nurse who:

1. Has a master's degree in psychiatric or mental health nursing, or its equivalent, from a school of nursing accredited by the National League for Nursing; or

2. Has a baccalaureate degree in nursing with two (2) years' experience in nursing administration or supervision and experience in psychiatric nursing.

(c) There shall be a registered nurse on duty twenty-four (24) hours a day.

(d) There shall be an adequate number of registered nurses, licensed practical nurses, and other nursing personnel to provide the nursing care necessary under each patient's active treatment program.

(e) There shall be continuing in-service and staff development programs to prepare the registered nurses and other nursing personnel for active participation in interdisciplinary meetings affecting the planning or implementation of nursing care plans for patients.

(3) Psychological services.

(a) The hospital shall provide psychological services to meet the needs of patients.

(b) Psychological services shall be provided under the direction of a licensed psychologist.

(c) There shall be an adequate number of psychologists, consultants, and supporting personnel to assist in essential diagnostic formulations, and to participate in program development and evaluation of program effectiveness, in training activities and in therapeutic interventions.

(4) Therapeutic activities.

(a) The hospital shall provide a therapeutic activities program that is appropriate to the needs and interests of the patients and is directed toward restoring and maintaining optimal levels of physical and psychosocial functioning.

(b) The number of qualified therapists, support personnel, and consultants shall be adequate to provide comprehensive therapeutic activities, such as occupational, recreational, and physical therapy, consistent with each patient's active treatment program.

(5) Pharmaceutical services. The hospital shall comply with requirements of 902 KAR 20:016, Section 4(5) and the following additional requirements:

(a) Medications shall be administered by a registered nurse, a physician, or dentist, except in the case of a licensed practical nurse under the supervision of a registered nurse.

(b) No medication shall be given without a written order signed by a physician, or dentist when applicable. Telephone orders for medications shall be given only to registered nurses or a pharmacist and signed by the physician or dentist within twenty-four (24) hours from the time the order is given.

(6) Laboratory services. The hospital shall comply with the requirements of 902 KAR 20:016, Section 4(4) concerning the provision of laboratory and pathology services.

(7) Social services.

(a) The hospital shall provide social services to meet the need of the patients.

(b) There shall be a director of social services who has a master's degree from an accredited school of social work.

(c) There shall be an adequate number of social workers, consultants, and other assistants or case aides to perform the following functions:

1. Secure information about patients development and current life situations to provide psychosocial data for diagnosis and treatment planning and for direct therapeutic services to patients, patient groups or families;

2. Identification or development of community resources including family or foster care programs;

3. Participate in interdisciplinary conferences and meetings concerning diagnostic formulation, treatment planning and progress reviews; and

4. Participate in discharge planning, arrange for follow-up care, and develop mechanisms for exchange of appropriate information with sources outside the hospital.

(8) Dietary services. The hospital shall comply with the requirements of 902 KAR 20:016, Section 4(3), pertaining to the provision of dietary services, plus the additional requirements contained in this subsection.

(a) Dietary service personnel who have personal contact with the patients shall be made aware that emotional factors may cause patients to change their food habits and shall inform appropriate members of the professional staff of any change.

(b) Meals shall be provided in central dining areas for ambulatory patients.

(9) Radiology services. If radiology services are provided within the facility, the hospital shall comply with the requirements of 902 KAR 20:016, Section 4(6) concerning the provision of such services. If they are not provided within the facility, the hospital shall have arrangements with an outside source, which shall be outlined in a written plan, for the provision of radiology services. The outside radiology service shall have a current license or registration pursuant to KRS 211.842 to 211.852 and any regulations promulgated thereunder.

(10) Other services. If surgery, anesthesia, physical therapy or outpatient services are provided within the facility, the hospital shall comply with the applicable sections of 902 KAR 20:016.

(11) Chemical dependency treatment services. Psychiatric hospitals providing chemcial dependency treatment services shall meet the requirements of 902 KAR 20:160, Sections 3 and 4, and designate the location and number of beds to be used for this purpose.

FRANK W. BURKE, SR., Chairman
ADOPTED: May 18, 1983
APPROVED: BUDDY H. ADAMS, Secretary
RECEIVED BY LRC: June 10, 1983 at 2:30 p.m.
SUBMIT COMMENT OR REQUEST FOR HEARING TO: Frank W. Burke, Sr., Chairman, Kentucky Health Facilities and Health Services Certificate of Need and Licensure Board, 275 East Main Street, Frankfort, Kentucky 40621.

CABINET FOR HUMAN RESOURCES
Department for Social Insurance

904 KAR 2:125. Emergency food and shelter program.

RELATES TO: KRS 194.050
PURSUANT TO: KRS 13.082, 194.050
NECESSITY AND FUNCTION: The Cabinet for Human Resources has responsibility to administer the funds made available to the state pursuant to Public Law 98-8 (Emergency Expenditures to Meet National Needs Act of 1983). This regulation specifies the manner in which the cabinet shall distribute funds provided for emergency food and shelter programs in areas in the state that are suffering from high unemployment, labor surplus, or from poverty.

Section 1. Fiscal Agent. The Cabinet for Human Resources will appoint, through contract, a fiscal agent(s) with responsibility to handle the program funds, keep program records, arrange for a program audit, and enter into contracts with local non-profit agencies. This fiscal agent(s) shall be bound by the terms and provisions of the contract and of this regulation. The fiscal agent(s) shall be required to use a contract prototype provided by the cabinet in entering into agreements with local agencies, and local agencies shall be responsible for complying with the terms and conditions therein in the actual expending of funds for emergency food and shelter.

Section 2. Availability of Funds to Subcontractors. An advisory board appointed by the Secretary, Cabinet for Human Resources, shall recommend local non-profit or volunteer agencies for funds, and the amount of their respective grants. The Commissioner, Department for Social Insurance, shall be chairman of the advisory board, and shall be responsible for final selection of local agencies and funding amounts. The commissioner shall provide, in writing, authorization to the fiscal agent(s) for the disbursement of program funds from the fiscal agent to participating agencies.

Section 3. Disbursement and Accountability of Fiscal Agent for Funds. The fiscal agent(s) shall disburse available funds and provide the cabinet with reports of expenditures in accordance with the terms of the contract.

Section 4. Auditing. The fiscal agent(s) shall arrange for and provide to the cabinet an audit of expenditures not later than forty-five (45) days after all program funds are expended as provided for in the contract.

Section 5. Recordkeeping and Access. The fiscal agent(s) shall maintain and retain records of all disbursements, authorizations of disbursements and support documents for a period of three (3) years except as otherwise provided for in the contract. The Director of the Federal Emergency Management Agency, the United States Comptroller General, and the Secretary of the Cabinet for Human Resources, or their authorized representatives, shall have access to any pertinent books, documents, papers, and records of the fiscal agent(s) to make audits, examinations, etc., as deemed necessary.

Section 6. Implementation. The program shall begin on June 1, 1983, and funds must be expended or obligated by September 30, 1983.

JOHN CUBINE, Commissioner
ADOPTED: May 11, 1983
APPROVED: BUDDY H. ADAMS, Secretary
RECEIVED BY LRC: May 16, 1983 at 2:30 p.m.
SUBMIT COMMENT OR REQUEST FOR HEARING TO: Secretary for Human Resources, CHR Building, 275 East Main Street, Frankfort, Kentucky 40621.

ADMINISTRATIVE REGULATION REVIEW SUBCOMMITTEE

Minutes of the May 25-26, 1983 Meeting

(Subject to subcommittee approval at the June 22 meeting.)

The Administrative Regulation Review Subcommittee held its monthly meeting on Wednesday, May 25, at 1:30 p.m., and on Thursday, May 26, 1983, at 10:00 a.m. in Room 104 of the Capitol Annex. Present were:

Members: Representative William T. Brinkley, Chairman; Senator Pat McCuiston; Representatives Albert Robinson, Greg Stumbo and James Bruce.

Guests: Tom Carter and William Schmidt, Board of Medical Licensure; J. H. Voige, Board of Pharmacy; Ked Fitzpatrick, Clifford Jennings, Joe Miller, William Minix, Sharon Rodriguez, and Melba Story, Cabinet for Human Resources; Barbara Ines and Doug Sapp, Corrections Cabinet; Gary Bale, Conley Manning, and Carolyn Wosoba, Department of Education; Bill Graves, Department of Fish and Wildlife Resources; Chuck Cotton and Judith Walden, Department of Housing, Buildings and Construction; Patrick Watts, Department of Insurance; Clark Beauchamp and Jim Ramsey, Finance Cabinet; Gary Cox, Kentucky Council on Higher Education; Kim Burse and Jimmy Jones, Kentucky Development Finance Authority; Karen Cummings, Martha Hall, Kathryn Hargraves, Roger McCann, Charles Martin, Hisham Saaid, and Richard Shogren, Natural Resources and Environmental Protection Cabinet; William Sawyer and John Van Volkenburge, Public Service Commission; Scott Akers, Eddie Mattingly, and B. G. Powell, Revenue Cabinet; Dick Cirre and Bruce Siria, Transportation Cabinet; Tom Fitzgerald, Appalachian Res. and Defense; Charles Fulner, Blue Grass Association for Retarded Citizens; Peggy Barr, Breckinridge County ARC; Geraldine Gordon Brown and Dan McCarthy, Center for Assessible Living; Janette Jacobs and Mary Kate Stinnett, Coalition for Services for Citizens with Handicaps; Olaf Walker, Columbia Gas of Kentucky; Karen Midderdorf, Comprehend Inc.; Dorothy Hagan, Jefferson County Office for Disabled Citizens; Rhonda Henning and Patty Kannapel, Jefferson County Public Schools; Jean Gossick, KARC; V. Wayne Young, Kentucky Association of School Administrators; Bill Caylor, Kentucky Coal Association; Tony Sholar, Kentucky

Chamber of Commerce; Daryl Martin, Kentucky Chapter of the American Association on Mental Deficiency; Jay Runyon, Kentucky Power Company; John Hinkle and Mack Morgan, Kentucky Retail Federation; Herman Regan, Kenvirons Inc.; Charles Brown, Texas Gas Transmission Corp.; Robert Doersam, Williamette Industries Inc.; Woody Curtsinger, Marty Kannapel, Virginia Kinkade and Judy Thornberry.

LRC Staff: Susan Harding, Joe Hood, Dan Risch, June Mabry, Carla Arnold, Paula Payne, Mary Helen Wilson, Janie Jones, Herb Franklin, Jim Peyton, Debbie McGuffey, Scott Payton and Shirley Hart.

Press: WKYT-TV

Chairman Brinkley announced that a quorum was present and called the meeting to order. On motion of Representative Stumbo, seconded by Representative Bruce, the minutes of the April 26, 1983 meeting were approved.

The following regulations were recommended for deferral by the subcommittee until the June 22 meeting:

TRANSPORTATION CABINET
Division of Aeronautics and Airport Zoning
Airport Zoning

602 KAR 50:010. Definitions.
602 KAR 50:020. Administrator.
602 KAR 50:030. Jurisdiction of commission.
602 KAR 50:040. Airport land uses.
602 KAR 50:050. Airport zoning map.
602 KAR 50:060. Construction within jurisdictional airspace.
602 KAR 50:070. Navigable airspace outside conical surface construction permit.
602 KAR 50:080. Permit application content.
602 KAR 50:090. Application procedure.
602 KAR 50:100. Marking and lighting obstruction standards.
602 KAR 50:110. Alteration, construction, valid permit period.
602 KAR 50:115. Enforcement procedures, violations.
602 KAR 50:120. Hearing procedures.

EDUCATION AND HUMANITIES CABINET
Department of Education
School Terms, Attendance and Operation

703 KAR 2:010. Terms and months. (Representative Bruce opposed deferral.)

Instructional Services

704 KAR 3:304. Required program of studies. (Representative Bruce opposed deferral.)
704 KAR 3:305. Minimum unit requirements for high school graduation. (Representative Bruce opposed deferral.)

Elementary and Secondary Education Act

704 KAR 10:022. Elementary, middle and secondary schools standards. (Representative Bruce opposed deferral.)

PUBLIC PROTECTION AND REGULATION CABINET
Public Service Commission
Utilities

807 KAR 5:006. General rules.

The subcommittee took no action on the following emergency regulation:

CORRECTIONS CABINET
Office of Community Service
Jail Standards

501 KAR 3:150E. Jail standards hearings, procedures, disposition.

The subcommittee recommended that the following regulations be approved for filing:

REVENUE CABINET
Department of Professional and Support Services
Selective Excise Tax; Motor Vehicle Usage

103 KAR 44:010. Usage tax.

FINANCE AND ADMINISTRATION CABINET
Department for Administration
State Investment Commission

200 KAR 14:010. General rules. (As amended.)

Investment and Debt Management

200 KAR 14:030. Review procedures.

Division of Occupations and Professions
Board of Pharmacy

201 KAR 2:165. Transfer of prescription information.
201 KAR 2:170. Computerized recordkeeping. (As amended.)
201 KAR 2:175. Emergency/72 hour prescription refills. (As amended.)

Board of Medical Licensure

201 KAR 9:020. Licensing qualifications; approved schools. (As amended.)

COMMERCE CABINET
Department of Fish and Wildlife Resources
Game

301 KAR 2:047. Specified areas; seasons, limits for birds and small game.
301 KAR 2:111. Deer and turkey hunting on special areas.

Development Finance Authority
Kentucky Development

307 KAR 1:010. Bond financed loan program.

NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION CABINET
Department for Environmental Protection
Division of Water Quality

401 KAR 5:050. Definitions and general provisions; KPDES permitting program. (As amended.)
401 KAR 5:055. Scope and applicability of the KPDES program. (As amended.)
401 KAR 5:060. KPDES application requirements. (As amended.)
401 KAR 5:065. KPDES permit conditions.
401 KAR 5:070. Provisions of the KPDES permit.
401 KAR 5:075. Cabinet review procedures for KPDES permits.
401 KAR 5:080. Criteria and standards for the Kentucky pollutant discharge elimination system.
401 KAR 5:085. KPDES discharge permit and variance fee. (As amended.)

Division of Air Pollution
General Administrative Procedures

401 KAR 50:025. Classification of counties.

Existing Source Standards

401 KAR 61:015. Existing indirect heat exchangers.

CORRECTIONS CABINET
Office of Community Services
Jail Standards
501 KAR 3:150. Jail standards hearings, procedures, disposition.

TRANSPORTATION CABINET
Division of Aeronautics and Airport Zoning
Airport Development
602 KAR 15:010. Airport Development loans.

PUBLIC PROTECTION AND REGULATION CABINET
Department of Insurance
Trade Practices and Fraud
806 KAR 12:080. Life insurance; replacement of.
Department of Housing, Buildings and Construction
Kentucky Building Code
815 KAR 7:060. Facilities for the physically disabled in new construction.
Plumbing
815 KAR 20:070. Plumbing fixtures.
815 KAR 20:090. Soil, waste and vent systems.
815 KAR 20:120. Water supply and distribution.

CABINET FOR HUMAN RESOURCES
Department for Health Services
Food and Cosmetics
902 KAR 45:045. Sanitation; retail food markets.
Department for Social Insurance
Medical Assistance
904 KAR 1:009. Physician's services.
904 KAR 1:027. Payments for dental services.
904 KAR 1:028. Other laboratory and x-ray services.
904 KAR 1:140. Alternative home and community based services for the mentally retarded.
904 KAR 1:150. Payments for alternative home and community based services for the mentally retarded.
Public Assistance
904 KAR 2:020. Child support.
904 KAR 2:055. Hearings and appeals.
Food Stamp Program
904 KAR 3:010. Definitions.
904 KAR 3:020. Eligibility requirements.
904 KAR 3:035. Certification process.
904 KAR 3:050. Additional provisions.
904 KAR 3:060. Administrative disqualification hearings and penalties.
904 KAR 3:070. Fair hearings.
Department for Social Services
Community Action Agencies
905 KAR 6:010. Standards.

The meeting was adjourned at 12:40 p.m. on May 26 until June 22, 1983.

Administrative Register of Kentucky

Cumulative Supplement

Locator Index—Effective Dates ..... A 2

KRS Index ..... A 4

Subject Index to Volume 10..... A 7

Locator Index—Effective Dates

NOTE: Emergency regulations expire on being repealed or replaced.

Volume 9

Regulation	9 Ky.R. Page No.	Effective Date
101 KAR 1:055		
Amended	225	
Amended	556	
103 KAR 44:010		
Amended	1157	6-1-83
200 KAR 14:030	1264	6-1-83
200 KAR 14:040	1348	
201 KAR 1:095		
Amended	247	10-6-82
Amended	1303	
201 KAR 2:165	1264	6-1-83
301 KAR 2:047		
Amended	1230	6-1-83
301 KAR 2:111		
Amended	1233	6-1-83
302 KAR 20:040		
Amended	1303	
302 KAR 20:065	1348	
302 KAR 20:090		
Amended	1306	
307 KAR 1:010	1266	6-1-83
401 KAR 5:065	866	
Amended	1127	6-1-83
401 KAR 5:070	872	
Amended	1133	6-1-83
401 KAR 5:075	874	
Amended	1136	6-1-83
401 KAR 5:080	879	
Amended	1141	6-1-83
401 KAR 5:100	1268	
401 KAR 6:015		
Amended	797	
Amended	1287	
401 KAR 50:025		
Amended	935	6-1-83
401 KAR 61:015		
Amended	577	12-1-82
Amended	935	6-1-83
405 KAR 30:010		
Amended	17	
Withdrawn		10-19-82
Amended	941	
405 KAR 30:020		
Amended	21	
Withdrawn		10-19-82
Amended	945	
405 KAR 30:025		
Amended	947	
405 KAR 30:070		
Amended	948	
405 KAR 30:121		
Amended	949	
405 KAR 30:130		
Amended	23	
Withdrawn		10-19-82
Amended	951	
405 KAR 30:160	82	
Withdrawn		10-19-82
Resubmitted	983	
405 KAR 30:201	986	
405 KAR 30:250		
Amended	31	
Withdrawn		10-19-82
Amended	957	
405 KAR 30:280		
Amended	960	
405 KAR 30:320		
Amended	34	
Withdrawn		10-19-82
Amended	962	
405 KAR 30:360	84	
Withdrawn		10-19-82
Resubmitted	1072	
405 KAR 30:370	85	
Withdrawn		10-19-82
Resubmitted	986	
405 KAR 30:390		
Amended	35	
Withdrawn		10-19-82
Amended	964	
501 KAR 3:150	1270	6-1-83
602 KAR 15:010	1235	6-1-83
602 KAR 50:010		
Amended	601	
Amended	1203	
Withdrawn		6-8-83
602 KAR 50:020		
Amended	602	
602 KAR 50:030		
Amended	603	
Withdrawn		6-8-83
602 KAR 50:040		
Amended	603	
Amended	1204	
602 KAR 50:050		
Amended	604	
Amended	1205	
602 KAR 50:060		
Amended	605	
Amended	1206	
Withdrawn		6-8-83
602 KAR 50:070		
Amended	605	
Withdrawn		6-8-83
602 KAR 50:080		
Amended	605	
Amended	1206	
602 KAR 50:090		
Amended	606	
602 KAR 50:100		
Amended	607	
Amended	1207	
602 KAR 50:110		
Amended	608	
602 KAR 50:115		
Amended	608	
602 KAR 50:120		
Amended	609	
702 KAR 5:020		
Amended	1306	
702 KAR 5:060		
Amended	1309	
702 KAR 5:080		
Amended	1309	
702 KAR 5:110		
Amended	1311	
703 KAR 2:010		
Amended	1036	
Amended	1207	
704 KAR 3:025		
Amended	1313	
704 KAR 3:304		
Amended	256	9-8-82
Amended	1037	
Amended	1208	
Amended	1315	
704 KAR 3:305		
Amended	1037	
Amended	1208	
704 KAR 4:020		
Amended	1315	
704 KAR 10:022		
Amended	257	9-8-82
Amended	1038	
Amended	1209	
705 KAR 1:010		
Amended	42	8-11-82
Amended	1316	
705 KAR 5:080		
Amended	1317	
806 KAR 9:030		
Amended	610	12-1-82
Amended	1318	
806 KAR 12:080	655	
Amended	789	
Amended	1004	2-2-83
Amended	1236	6-1-83
806 KAR 14:080		
Amended	383	10-6-82
Amended	965	
Withdrawn		6-1-83
807 KAR 5:006		
Amended	217	
Amended	473	8-24-82
Amended	735	
Amended	1210	
807 KAR 5:008	1075	
815 KAR 7:060		
Amended	815	
Amended	1217	6-1-83
815 KAR 20:050		
Amended	832	
Amended	1200	4-6-83
815 KAR 20:070		
Amended	46	8-11-82
Amended	833	2-2-83
Amended	1237	6-1-83
815 KAR 20:090		
Amended	834	2-2-83
Amended	1238	6-1-83
815 KAR 20:120		
Amended	49	8-11-82
Amended	1242	6-1-83
815 KAR 25:020		
Amended	1318	
900 KAR 2:010	299	12-1-82
Amended	975	
Reprint	1085	
Amended	1302	
902 KAR 20:008		
Amended	61	8-11-82
Amended	745	1-6-83
Amended	1055	4-6-83
Amended	1325	
902 KAR 20:016		
Amended	1327	
902 KAR 20:115		
Amended	976	
902 KAR 20:132	1350	
902 KAR 20:170	1350	
902 KAR 45:005		
Amended	1335	
902 KAR 45:045		
Amended	1168	6-1-83
904 KAR 1:009		
Amended	1243	6-1-83
904 KAR 1:020		
Amended	1244	
904 KAR 1:027		
Amended	1245	6-1-83
904 KAR 1:028		
Amended	1246	6-1-83
904 KAR 1:120	1355	
904 KAR 1:130	1357	
904 KAR 1:140	1082	6-1-83
904 KAR 1:150	1084	6-1-83
904 KAR 1:190	1183	
Withdrawn		4-14-83
Resubmitted	1273	

Regulation	9 Ky.R. Page No.	Effective Date
904 KAR 1:200	1273	
904 KAR 1:210	1274	
904 KAR 2:020		
Amended	1247	6-1-83
904 KAR 2:055		
Amended	1249	6-1-83
904 KAR 3:010		
Amended	275	9-8-82
Amended	1061	4-6-83
Amended	1251	6-1-83
904 KAR 3:020		
Amended	277	9-8-82
Amended	1063	4-6-83
Amended	1253	6-1-83
904 KAR 3:035		
Amended	279	9-8-82
Amended	1067	4-6-83
Amended	1256	6-1-83
904 KAR 3:050		
Amended	507	11-3-82
Amended	1257	6-1-83
904 KAR 3:060		
Amended	507	11-3-82
Amended	1258	6-1-83
904 KAR 3:070		
Amended	1261	6-1-83
905 KAR 6:010	1274	6-1-83

Volume 10

Emergency Regulation	10 Ky.R. Page No.	Effective Date
902 KAR 4:040E	1	6-7-83
904 KAR 2:125E	3	5-31-83

Regulation	10 Ky.R. Page No.	Effective Date
11 KAR 5:010		
Amended	43	
103 KAR 17:010		
Amended	43	
200 KAR 14:010		
Amended	3	6-1-83
201 KAR 2:170		
Amended	4	6-1-83
201 KAR 2:175		
Amended	5	6-1-83
201 KAR 9:020		
Amended	5	6-1-83
201 KAR 9:030		
Amended	44	
201 KAR 13:010		
Amended	45	
201 KAR 13:040		
Amended	45	
401 KAR 5:050		
Amended	6	6-1-83
401 KAR 5:055		
Amended	9	6-1-83
401 KAR 5:060		
Amended	25	6-1-83
401 KAR 5:085		
Amended	33	6-1-83
401 KAR 5:090		
Amended	35	
401 KAR 5:110	184	
401 KAR 5:120	185	
401 KAR 30:010		
Amended	46	
401 KAR 30:020		
Amended	54	
401 KAR 30:030		
Amended	56	
401 KAR 31:010		
Amended	58	
401 KAR 31:020	185	
401 KAR 31:030		
Amended	62	
401 KAR 31:040		
Amended	64	
401 KAR 31:060	186	
401 KAR 31:070	188	
401 KAR 31:100		
Amended	72	
401 KAR 31:110		
Amended	73	
401 KAR 31:120		
Amended	75	
401 KAR 31:160		
Amended	77	
401 KAR 31:170		
Amended	78	
401 KAR 33:010		
Amended	82	
401 KAR 33:020		
Amended	83	
401 KAR 34:020		
Amended	84	
401 KAR 34:050		
Amended	87	
401 KAR 34:060	188	
401 KAR 34:070		
Amended	89	
401 KAR 34:080		
Amended	91	
401 KAR 34:090		
Amended	92	
401 KAR 34:100		
Amended	99	
401 KAR 34:110		
Amended	105	
401 KAR 34:120		
Amended	106	
401 KAR 34:130		
Amended	108	
401 KAR 34:140		
Amended	109	
401 KAR 34:144		
Amended	111	
401 KAR 34:148		
Amended	113	
401 KAR 34:152		
Amended	114	
401 KAR 34:156		
Amended	115	
401 KAR 34:159		
Amended	116	
401 KAR 34:162		
Amended	117	
401 KAR 34:165		
Amended	119	
401 KAR 34:168	194	
401 KAR 34:172		
Amended	120	
401 KAR 34:176		
Amended	121	
401 KAR 34:200		
Amended	122	
401 KAR 34:210		
Amended	126	
401 KAR 34:220	196	
401 KAR 34:230		
Amended	200	
401 KAR 34:240		
Amended	130	
401 KAR 34:320	203	
401 KAR 35:010		
Amended	132	
401 KAR 35:020	204	
401 KAR 35:030	206	
401 KAR 35:040	207	
401 KAR 35:050	209	
401 KAR 35:060	210	
401 KAR 35:070	213	
401 KAR 35:080	216	
401 KAR 35:090	217	
401 KAR 35:100	223	
401 KAR 35:110	228	
401 KAR 35:120	228	
401 KAR 35:130	231	
401 KAR 35:180	231	
401 KAR 35:190	232	
401 KAR 35:200	233	
401 KAR 35:210	234	
401 KAR 35:220	234	
401 KAR 35:230	237	
401 KAR 35:240	238	
401 KAR 35:250	239	
401 KAR 35:260	240	
401 KAR 35:270	241	
401 KAR 35:290	241	
401 KAR 35:310	242	
401 KAR 35:320	242	
401 KAR 35:330	243	
401 KAR 38:010		
Amended	134	
401 KAR 38:020		
Amended	137	
401 KAR 38:030		
Amended	138	
401 KAR 38:040		
Amended	141	
401 KAR 38:050		
Amended	145	
401 KAR 38:060		
Amended	148	
401 KAR 38:070		
Amended	152	
401 KAR 38:080		
Amended	157	
401 KAR 38:090	244	
401 KAR 38:100	247	
401 KAR 38:150	248	
401 KAR 38:160	249	
401 KAR 38:170	249	
401 KAR 38:180	250	
401 KAR 38:190	251	
401 KAR 38:200	252	
401 KAR 38:210	253	
401 KAR 38:500	254	
401 KAR 39:010		
Amended	161	
401 KAR 39:020	255	
401 KAR 39:030	255	
401 KAR 39:040	255	
401 KAR 39:050	256	
401 KAR 39:060	256	
401 KAR 39:070	256	
401 KAR 40:010		
Amended	162	
401 KAR 40:020		
Amended	162	
401 KAR 40:030		
Amended	164	
401 KAR 40:040		
Amended	165	
401 KAR 40:050		
Amended	166	
401 KAR 47:020		
Amended	166	
401 KAR 47:040		
Amended	168	
401 KAR 47:070		
Amended	172	
806 KAR 9:130		
Amended	173	
811 KAR 1:125		
Amended	174	
815 KAR 7:070	257	
902 KAR 2:090	258	
902 KAR 4:040	259	
902 KAR 9:010		
Amended	179	
902 KAR 20:111		
Amended	37	
902 KAR 20:160		
Amended	38	
902 KAR 20:180	260	
904 KAR 2:006		
Amended	181	
904 KAR 2:125	264	
904 KAR 3:035		
Amended	183	

KRS Index

KRS Section	Regulation
141.020	103 KAR 17:010
Chapter 151	401 KAR 5:090
	401 KAR 5:110
	401 KAR 5:120
158.036	902 KAR 2:090
158.037	902 KAR 2:090
164.740 to 164.764	11 KAR 5:010
164.780	11 KAR 5:010
164.785	11 KAR 5:010
194.050	902 KAR 4:040
	904 KAR 2:125
	904 KAR 3:035
198B.040	815 KAR 7:070
198B.050	815 KAR 7:070
198B.090	815 KAR 7:070
205.010	904 KAR 2:006
205.200	904 KAR 2:006
211.180	902 KAR 2:090
211.920 to 211.945	902 KAR 9:010
214.034	902 KAR 2:090
215.520	902 KAR 2:090
216B.010 to 216B.130	902 KAR 20:111
216B.010 to 216B.131	902 KAR 20:160
	902 KAR 20:180
216B.990	902 KAR 20:111
	902 KAR 20:160
	902 KAR 20:180
Chapter 224	401 KAR 5:090
	401 KAR 5:110
	401 KAR 5:120
224.032	401 KAR 40:010
	401 KAR 40:020
	401 KAR 40:030
	401 KAR 40:040
	401 KAR 40:050
224.033	401 KAR 30:010
	401 KAR 30:020
	401 KAR 30:030
	401 KAR 34:020
	401 KAR 34:050
	401 KAR 34:060
	401 KAR 34:070
	401 KAR 34:080
	401 KAR 34:090
	401 KAR 34:100
	401 KAR 34:110
	401 KAR 34:120
	401 KAR 34:130
	401 KAR 34:140
	401 KAR 34:144
	401 KAR 34:148
	401 KAR 34:152
	401 KAR 34:156
	401 KAR 34:159
	401 KAR 34:162
	401 KAR 34:165
	401 KAR 34:168
	401 KAR 34:172
	401 KAR 34:176
	401 KAR 34:200
	401 KAR 34:210
	401 KAR 34:220
	401 KAR 34:230
	401 KAR 34:240
	401 KAR 34:320
	401 KAR 35:010
	401 KAR 35:020
	401 KAR 35:030
	401 KAR 35:040
	401 KAR 35:050
	401 KAR 35:060
	401 KAR 35:070
	401 KAR 35:080
	401 KAR 35:090
	401 KAR 35:100
	401 KAR 35:110
	401 KAR 35:120
	401 KAR 35:130
	401 KAR 35:180

KRS Section	Regulation
224.033 (cont'd)	401 KAR 35:190
	401 KAR 35:200
	401 KAR 35:210
	401 KAR 35:220
	401 KAR 35:230
	401 KAR 35:240
	401 KAR 35:250
	401 KAR 35:260
	401 KAR 35:270
	401 KAR 35:290
	401 KAR 35:310
	401 KAR 35:320
	401 KAR 35:330
	401 KAR 38:010
	401 KAR 38:020
	401 KAR 38:030
	401 KAR 38:040
	401 KAR 38:050
	401 KAR 38:060
	401 KAR 38:070
	401 KAR 38:080
	401 KAR 38:090
	401 KAR 38:100
	401 KAR 38:150
	401 KAR 38:160
	401 KAR 38:170
	401 KAR 38:180
	401 KAR 38:190
	401 KAR 38:200
	401 KAR 38:210
	401 KAR 38:500
	401 KAR 39:010
	401 KAR 39:020
	401 KAR 39:030
	401 KAR 39:040
	401 KAR 39:050
	401 KAR 39:060
	401 KAR 39:070
	401 KAR 40:010
	401 KAR 40:020
	401 KAR 40:030
	401 KAR 40:040
	401 KAR 40:050
224.036	401 KAR 38:010
	401 KAR 38:020
	401 KAR 38:030
	401 KAR 38:040
	401 KAR 38:050
	401 KAR 38:060
	401 KAR 38:070
	401 KAR 38:080
	401 KAR 38:090
	401 KAR 38:100
	401 KAR 38:150
	401 KAR 38:160
	401 KAR 38:170
	401 KAR 38:180
	401 KAR 38:190
	401 KAR 38:200
	401 KAR 38:210
	401 KAR 38:500
224.060	401 KAR 34:060
	401 KAR 34:220
224.071	401 KAR 33:010
	401 KAR 33:020
	401 KAR 34:020
	401 KAR 34:050
	401 KAR 34:060
	401 KAR 34:070
	401 KAR 34:080
	401 KAR 34:090
	401 KAR 34:100
	401 KAR 34:110
	401 KAR 34:120
	401 KAR 34:130
	401 KAR 34:140
	401 KAR 34:144
	401 KAR 34:148
	401 KAR 34:152

KRS Section	Regulation
224.071 (cont'd)	401 KAR 34:156
	401 KAR 34:159
	401 KAR 34:162
	401 KAR 34:165
	401 KAR 34:168
	401 KAR 34:172
	401 KAR 34:176
	401 KAR 34:200
	401 KAR 34:210
	401 KAR 34:220
	401 KAR 34:230
	401 KAR 34:240
	401 KAR 34:320
	401 KAR 35:080
	401 KAR 35:090
	401 KAR 35:100
	401 KAR 35:110
	401 KAR 35:130
	401 KAR 35:310
	401 KAR 35:320
	401 KAR 35:330
	401 KAR 38:010
	401 KAR 38:020
	401 KAR 38:030
	401 KAR 38:040
	401 KAR 38:050
	401 KAR 38:060
	401 KAR 38:070
	401 KAR 38:080
	401 KAR 38:090
	401 KAR 38:100
	401 KAR 38:150
	401 KAR 38:160
	401 KAR 38:170
	401 KAR 38:180
	401 KAR 38:190
	401 KAR 38:200
	401 KAR 38:210
	401 KAR 38:500
	401 KAR 40:010
	401 KAR 40:020
	401 KAR 40:030
	401 KAR 40:040
	401 KAR 40:050
224.081	401 KAR 40:010
	401 KAR 40:020
	401 KAR 40:030
	401 KAR 40:040
	401 KAR 40:050
224.083	401 KAR 40:010
	401 KAR 40:020
	401 KAR 40:030
	401 KAR 40:030
	401 KAR 40:040
	401 KAR 40:050
224.087	401 KAR 38:010
	401 KAR 38:020
	401 KAR 38:030
	401 KAR 38:040
	401 KAR 38:050
	401 KAR 38:060
	401 KAR 38:070
	401 KAR 38:080
	401 KAR 38:090
	401 KAR 38:100
	401 KAR 38:150
	401 KAR 38:160
	401 KAR 38:170
	401 KAR 38:180
	401 KAR 38:190
	401 KAR 38:200
	401 KAR 38:210
	401 KAR 38:500
224.2201 to 224.2215	401 KAR 38:500
224.830 to 224.846	401 KAR 30:020
	401 KAR 30:030
224.830 to 224.877	401 KAR 31:010
	401 KAR 31:030
	401 KAR 31:040

KRS Section	Regulation
224.830 to 224.877 (cont'd)	401 KAR 31:100
	401 KAR 31:110
	401 KAR 31:120
	401 KAR 31:160
	401 KAR 31:170
	401 KAR 34:090
	401 KAR 34:100
	401 KAR 34:120
	401 KAR 34:130
	401 KAR 34:140
	401 KAR 34:144
	401 KAR 34:148
	401 KAR 34:152
	401 KAR 34:156
	401 KAR 34:159
	401 KAR 34:162
	401 KAR 34:165
	401 KAR 34:168
	401 KAR 34:172
	401 KAR 35:010
	401 KAR 35:020
	401 KAR 35:030
	401 KAR 35:040
	401 KAR 35:050
	401 KAR 35:060
	401 KAR 35:070
	401 KAR 35:080
	401 KAR 35:090
	401 KAR 35:100
	401 KAR 35:110
	401 KAR 35:120
	401 KAR 35:130
	401 KAR 35:180
	401 KAR 35:190
	401 KAR 35:200
	401 KAR 35:210
	401 KAR 35:220
	401 KAR 35:230
	401 KAR 35:240
	401 KAR 35:250
	401 KAR 35:260
	401 KAR 35:270
	401 KAR 35:290
	401 KAR 35:310
	401 KAR 35:320
	401 KAR 35:330
	401 KAR 38:010
	401 KAR 38:020
	401 KAR 38:040
	401 KAR 38:050
	401 KAR 38:060
	401 KAR 38:070
	401 KAR 38:080
	401 KAR 38:090
	401 KAR 38:100
	401 KAR 38:150
	401 KAR 38:160
	401 KAR 38:170
	401 KAR 38:180
	401 KAR 38:190
	401 KAR 38:200
	401 KAR 38:210
	401 KAR 38:500
	401 KAR 40:010
	401 KAR 40:020
	401 KAR 40:030
	401 KAR 40:040
	401 KAR 40:050
224.835	401 KAR 30:010
	401 KAR 33:010
	401 KAR 33:020
	401 KAR 34:020
	401 KAR 34:050
	401 KAR 34:070
	401 KAR 34:080
	401 KAR 34:110
	401 KAR 34:176
	401 KAR 34:200
	401 KAR 34:210
	401 KAR 34:220
	401 KAR 34:230
	401 KAR 34:240
	401 KAR 34:320

KRS Section	Regulation
224.835 (cont'd)	401 KAR 38:030
	401 KAR 47:020
	401 KAR 47:040
224.842	401 KAR 34:020
	401 KAR 34:050
	401 KAR 34:060
	401 KAR 34:070
	401 KAR 34:080
	401 KAR 34:110
	401 KAR 34:176
	401 KAR 34:200
	401 KAR 34:210
	401 KAR 34:220
	401 KAR 34:230
	401 KAR 34:240
	401 KAR 34:320
	401 KAR 38:030
	401 KAR 47:020
	401 KAR 47:040
224.844	401 KAR 47:070
224.846	401 KAR 47:070
	401 KAR 30:010
224.855	401 KAR 47:020
	401 KAR 34:020
	401 KAR 34:050
	401 KAR 34:060
	401 KAR 34:070
	401 KAR 34:080
	401 KAR 34:110
	401 KAR 34:176
	401 KAR 34:200
	401 KAR 34:210
	401 KAR 34:220
	401 KAR 34:230
	401 KAR 34:240
	401 KAR 34:320
	401 KAR 38:030
	401 KAR 47:020
	401 KAR 47:040
224.855 to 224.889	401 KAR 30:010
	401 KAR 30:020
	401 KAR 30:030
224.860	401 KAR 34:020
	401 KAR 34:050
	401 KAR 34:060
	401 KAR 34:070
	401 KAR 34:080
	401 KAR 34:110
	401 KAR 34:176
	401 KAR 34:200
	401 KAR 34:210
	401 KAR 34:220
	401 KAR 34:230
	401 KAR 34:240
	401 KAR 34:320
	401 KAR 38:030
224.862	401 KAR 38:030
224.864	401 KAR 31:020
	401 KAR 31:060
	401 KAR 31:070
	401 KAR 38:030
	401 KAR 39:010
	401 KAR 39:020
	401 KAR 39:030
	401 KAR 39:040
	401 KAR 39:050
	401 KAR 39:060
	401 KAR 39:070
	401 KAR 34:020
	401 KAR 34:050
	401 KAR 34:060
	401 KAR 34:070
	401 KAR 34:080
	401 KAR 34:110
	401 KAR 34:176
	401 KAR 34:200
	401 KAR 34:210
	401 KAR 34:220
	401 KAR 34:230
	401 KAR 34:240
	401 KAR 34:320
	401 KAR 38:030
	401 KAR 39:010

KRS Section	Regulation
224.866 (cont'd)	401 KAR 39:020
	401 KAR 39:030
	401 KAR 39:040
	401 KAR 39:050
	401 KAR 39:060
	401 KAR 39:070
224.868	401 KAR 31:020
	401 KAR 31:060
	401 KAR 31:070
224.871	401 KAR 38:030
	401 KAR 38:030
	401 KAR 39:010
	401 KAR 39:020
	401 KAR 39:030
	401 KAR 39:040
	401 KAR 39:050
	401 KAR 39:060
	401 KAR 39:070
224.873	401 KAR 33:010
	401 KAR 33:020
	401 KAR 38:030
224.874	401 KAR 38:030
224.876	401 KAR 31:020
	401 KAR 31:060
	401 KAR 31:070
	401 KAR 38:030
224.877	401 KAR 38:030
224.994	401 KAR 31:010
	401 KAR 31:030
	401 KAR 31:040
	401 KAR 31:100
	401 KAR 31:110
	401 KAR 31:120
	401 KAR 31:160
	401 KAR 31:170
	401 KAR 34:090
	401 KAR 34:100
	401 KAR 34:120
	401 KAR 34:130
	401 KAR 34:140
	401 KAR 34:144
	401 KAR 34:148
	401 KAR 34:152
	401 KAR 34:156
	401 KAR 34:159
	401 KAR 34:162
	401 KAR 34:165
	401 KAR 34:168
	401 KAR 34:172
	401 KAR 35:010
	401 KAR 35:020
	401 KAR 35:030
	401 KAR 35:040
	401 KAR 35:050
	401 KAR 35:060
	401 KAR 35:070
	401 KAR 35:080
	401 KAR 35:090
	401 KAR 35:100
	401 KAR 35:110
	401 KAR 35:120
	401 KAR 35:130
	401 KAR 35:180
	401 KAR 35:190
	401 KAR 35:200
	401 KAR 35:210
	401 KAR 35:220
	401 KAR 35:230
	401 KAR 35:240
	401 KAR 35:250
	401 KAR 35:260
	401 KAR 35:270
	401 KAR 35:290
	401 KAR 35:310
	401 KAR 35:320
	401 KAR 35:330
	401 KAR 38:010
	401 KAR 38:020
	401 KAR 38:040
	401 KAR 38:050
	401 KAR 38:060
	401 KAR 38:070
	401 KAR 38:080
	401 KAR 38:090

KRS Section	Regulation
224.994 (cont'd)	401 KAR 38:100
	401 KAR 38:150
	401 KAR 38:160
	401 KAR 38:170
	401 KAR 38:180
	401 KAR 38:190
	401 KAR 38:200
	401 KAR 38:210
	401 KAR 40:010
	401 KAR 40:020
	401 KAR 40:030
	401 KAR 40:040
	401 KAR 40:050
230.630	811 KAR 1:125
230.640	811 KAR 1:125
230.690	811 KAR 1:125
230.710	811 KAR 1:125
304.9-130	806 KAR 9:130
304.9-210	806 KAR 9:130
311.530 to 311.620	201 KAR 9:030
311.990	201 KAR 9:030
326.020	201 KAR 13:010
	201 KAR 13:040
365.015	806 KAR 9:130

KRS Section	Regulation

KRS Section	Regulation

Subject Index

HEALTH SERVICES
Certificate of Need, Licensure
Chemical dependency treatment facilities; 902 KAR 20:160
Medical detoxification services; 902 KAR 20:111
Psychiatric hospitals; 902 KAR 20:180
Communicable Diseases
Tuberculosis testing; 902 KAR 2:090
Confinement Facilities
Environmental health; 902 KAR 9:010
Maternal, Child Health
Supplemental food program; 902 KAR 4:040; 902 KAR 4:040E

HOUSING, BUILDINGS, CONSTRUCTION
Building Code
Inspector requirements; 815 KAR 7:070

HUMAN RESOURCES
Health Services
Certificate of need, licensure; 902 KAR 20:111 to 902 KAR 20:180
Communicable diseases; 902 KAR 2:090
Confinement facilities; 902 KAR 9:010
Maternal, child health; 902 KAR 4:040; 902 KAR 4:040E
Social Insurance
Food stamp program; 904 KAR 3:035
Public assistance; 902 KAR 2:006 to 904 KAR 2:125

INSURANCE
Agents, Consultants, Solicitors, Adjusters
Agent's assumed business name; 806 KAR 9:130

MEDICAL LICENSURE
Examinations; 201 KAR 9:030

NATURAL RESOURCES
Environmental Protection
Water; 401 KAR 5:090 to 401 KAR 5:120
Waste management (see various chapters under WASTE MANAGEMENT); 401 KAR Chapter 30 through 401 KAR Chapter 47

OCCUPATIONS, PROFESSIONS
Medical licensure; 201 KAR 9:030
Ophthalmic dispensers; 201 KAR 13:010; 201 KAR 13:040

OPHTHALMIC DISPENSERS
Board; powers, duties, meetings; 201 KAR 13:010
Licensing; application, examination, temporary permit; 201 KAR 13:040

PUBLIC PROTECTION, REGULATION
Housing, Buildings, Construction
Building code; 815 KAR 7:070
Insurance
Agents, consultants, solicitors, adjusters; 815 KAR 9:130
Racing
Harness; 811 KAR 1:125

RACING
Harness
Pari-mutuel rules; 811 KAR 1:125

REVENUE
Income Tax
Individual; 103 KAR 17:010

SOCIAL INSURANCE
Food Stamp Program
Certification process; 904 KAR 3:035
Public Assistance
AFDC, technical requirements; 904 KAR 2:006
Food, shelter program; emergency; 904 KAR 2:125; 904 KAR 2:125E

TAXATION
Income; Individual
Residence; 103 KAR 17:010

WASTE MANAGEMENT
Administration Procedures, General
Definitions; 401 KAR 30:010
Environmental performance standards; 401 KAR 30:030
General provisions; 401 KAR 30:020
Enforcement, Compliance Monitoring
General enforcement provisions; 401 KAR 40:010
Hearings; 401 KAR 40:030
Inspections; 401 KAR 40:020
Penalties; 401 KAR 40:050
Remedies; 401 KAR 40:040
Fee Schedule, Hazardous Waste
Delisting; 401 KAR 39:020
Disposal facility; 401 KAR 39:050
Generator registration; 401 KAR 39:010
Modification; 401 KAR 39:070
Short-term; 401 KAR 39:060
Storage facility; 401 KAR 39:040
Treatment facility; 401 KAR 39:030
Identification of Hazardous Waste
Appendices
Basis for listing; 401 KAR 31:160
Chemical analysis test methods; 401 KAR 31:120
EP toxicity test procedure; 401 KAR 31:110
Hazardous waste constituents; 401 KAR 31:170
Representative sampling methods; 401 KAR 31:100
Characteristics; 401 KAR 31:030
Criteria for identification; 401 KAR 31:020
Delisted streams; 401 KAR 31:070
General provisions; 401 KAR 31:010
Lists; 401 KAR 31:040
Rulemaking petitions; 401 KAR 31:060
Interim Status Standards, Hazardous Waste
Appendices
Interim primary drinking water standards; 401 KAR 35:310
Potentially incompatible waste; 401 KAR 35:330
Recordkeeping instructions; 401 KAR 35:290
Tests for significance; 401 KAR 35:320
Chemical, physical, biological treatment; 401 KAR 35:260
Closure financial requirements; 401 KAR 35:090
Closure, post-closure; 401 KAR 35:070
Closure, post-closure mechanism; 401 KAR 35:110
Containers; 401 KAR 35:180
Contingency, emergency plan; 401 KAR 35:040
General facility provisions; 401 KAR 35:010
General facility standards; 401 KAR 35:020
General financial requirements; 401 KAR 35:080
Groundwater monitoring; 401 KAR 35:060
Incapacity of owners, operators, guarantors, financial institutions; 401 KAR 35:130
Incinerators; 401 KAR 35:240
Landfill; 401 KAR 35:230
Land treatment; 401 KAR 35:220
Liability requirements; 401 KAR 35:120
Manifest system; 401 KAR 35:050
Post-closure financial requirements; 401 KAR 35:100
Preparedness, prevention; 401 KAR 35:030
Surface impoundments; 401 KAR 35:200
Tanks; 401 KAR 35:190
Thermal treatment; 401 KAR 35:250
Underground injection; 401 KAR 35:270
Waste piles; 401 KAR 35:210
New Hazardous Waste Site Standards
Cash account, certificate of deposit; 401 KAR 34:168
Certificate of insurance; 401 KAR 34:156

WASTE MANAGEMENT (Cont'd)
Certificate of liability; 401 KAR 34:176
Closure financial requirements; 401 KAR 34:090
Closure, post-closure; 401 KAR 34:070
Closure, post-closure mechanism; 401 KAR 34:110
Corporate guarantee; 401 KAR 34:165
Financial test; closure, post-closure; 401 KAR 34:159
Financial test, liability coverage; 401 KAR 34:162
General facility standards; 401 KAR 34:020
General financial requirements; 401 KAR 34:080
Groundwater protection; 401 KAR 34:060
Incapacity; owners, operators, guarantors, financial institutions; 401 KAR 34:130
Incinerators; 401 KAR 34:240
Landfills; 401 KAR 34:230
Land treatment; 401 KAR 34:220
Letter of credit; 401 KAR 34:152
Liability endorsement; 401 KAR 34:172
Liability requirements; 401 KAR 34:120
Manifest system; 401 KAR 34:050
Post-closure financial requirements; 401 KAR 34:100
Statistical testing; 401 KAR 34:320
Surety bond; 401 KAR 34:144; 401 KAR 34:148
Surface impoundments; 401 KAR 34:200
Trust funds; 401 KAR 34:140
Waste piles; 401 KAR 34:210
Permitting Process, Hazardous Waste
Application procedures; 401 KAR 38:070
Approval provisions; 401 KAR 38:500
Changes, expiration; 401 KAR 38:040
Conditions; 401 KAR 38:030
Containers; 401 KAR 38:150
General provisions; 401 KAR 38:010
Groundwater protection; 401 KAR 38:100
Incinerators; 401 KAR 38:190
Interim status provisions; 401 KAR 38:020
Landfills; 401 KAR 38:210
Land treatment facilities; 401 KAR 38:200
Part A application; 401 KAR 38:080
Part B application; 401 KAR 38:090
Public information; 401 KAR 38:050
Special permits; 401 KAR 38:060
Surface impoundments; 401 KAR 38:170
Tanks; 401 KAR 38:160
Waste piles; 401 KAR 38:180
Solid Waste Standards
Operator certification; 401 KAR 47:070
Permit process; 401 KAR 47:020
Sanitary landfills; 401 KAR 47:040
Transporter Standards, Hazardous Waste
General provisions; 401 KAR 33:010
Manifest system; 401 KAR 33:020

WATER
Oil and Gas Facilities
Permit fees to control water pollution; 401 KAR 5:120
Produced water disposal; 401 KAR 5:110
Water pollution control; 401 KAR 5:090