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COMPILER'S NOTE: Due to the amount of proposed regulations received before November 15, the December 1, 1985 Administrative Register contains two parts.

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UNLESS WRITTEN NOTIFICATION OF INTENT TO ATTEND A PUBLIC HEARING IS RECEIVED BY THE PROMULGATING AGENCY AT LEAST FIVE (5) DAYS BEFORE THE HEARING DATE, THE HEARING MAY BE CANCELLED.

MEETING NOTICE: The next meeting of the Administrative Regulation Review Subcommittee is December 9 and 10, 1985. For information, call 502-564-8100, ext. 312.

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

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

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PUBLIC HEARINGS

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

This information shall be published in the "Administrative Register" at the same time as the initial publication of the administrative regulation. Any person interested in attending the hearing must submit written notification of such to the administrative body at least five (5) days before the scheduled hearing. If no written notice is received at least five (5) days before the hearing, the administrative body may cancel the hearing.

If the hearing is cancelled, the administrative body shall notify the Compiler immediately by telephone of the cancellation with a follow-up letter and the Compiler will note upon the face of the original administrative regulation that the hearing was cancelled.

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

If an administrative body has several proposed administrative regulations published at the same time, the proposed administrative regulations may be grouped at the convenience of the administrative body for purposes of hearings.

EMERGENCY REGULATIONS NOW IN EFFECT

(NOTE: Emergency regulations expire 90 days from publication or upon replacement or repeal.)

STATEMENT OF EMERGENCY

Under KRS Chapter 13A the administrative body is required to implement this regulation or not have the authority to operate. Therefore, in order to continue to operate the Department of Personnel in accordance with KRS Chapter 18A, the Department of Personnel needs to implement this emergency regulation. An ordinary administrative regulation cannot suffice because agency policy will not be accurately reflected in a timely manner. This emergency regulation will be replaced by an ordinary administrative regulation in accordance with KRS Chapter 13A.

MARTHA LAYNE COLLINS, Governor

DEPARTMENT OF PERSONNEL

101 KAR 1:051E. Compensation plan.

RELATES TO: KRS 18A.030, 18A.075, 18A.110, 18A.165

PURSUANT TO: KRS 13A.100, 18A.075, 18A.110

EFFECTIVE: October 29, 1985

NECESSITY AND FUNCTION: KRS 18A.110 requires the Commissioner of Personnel to prepare and submit to the Personnel Board rules which provide for a pay plan for all employees in the classified service, taking into account such factors as the relative level of duties and responsibilities of various classes, rates paid for comparable positions elsewhere, and the state's financial resources. This rule is to assure uniformity and equity in administration of the pay plan in accordance with statutory requirements.

Section 1. Preparation, Approval, and Maintenance of the Plan. (1) After consultation with appointing authorities, the Secretary of the Finance and Administration Cabinet, and after conducting an annual wage and salary survey of relevant labor markets, the Commissioner of Personnel shall prepare a compensation plan for all classes of positions based on the concepts of internal job equity and external market competitiveness. The plan shall provide pay grades or specific salary rates as appropriate for the various classes. Each job class shall be assigned an appropriate pay grade or rate with consideration given to internal job evaluation data and external market conditions. All rates of pay for classes shall be consistent with the functions outlined in the classification plan.

(2) When the Commissioner of Personnel determines through relevant salary surveys that the state's overall compensation plan is inadequate in relation to that of other employers, he may authorize, upon certification of the State Budget Director and the Office for Policy and Management as to the availability of funds, a general adjustment of all pay grades in the pay structure to provide salary rates which are comparable to the external market. Additional surveys may be conducted as necessary to determine market conditions for specific classes.

(3) The Commissioner of Personnel shall submit the plan to the Personnel Board for its approval. The Personnel Board shall present the plan, through the Secretary of the Finance and Administration Cabinet, to the Governor for his final approval.

Section 2. Appointments. Initial appointments to state service shall be made at the minimum rate of the pay grade established for the class unless the Commissioner of Personnel authorizes appointment of a highly qualified applicant at a rate above the minimum, not to exceed the midpoint of the pay grade. Such exceptions shall be based on the outstanding and unusual nature of the applicant's education and/or experience over and above the minimum requirements set for the class. Such additional qualifications must be in the same or related area of the job duties of the class to which the appointment is to be made. Employees possessing similar qualifications employed in the same class, by the same agency, in the same locality shall have their salaries adjusted to the same rate granted in the in-range appointment if that rate is higher than their current salaries.

Section 3. Re-entrance to State Service. Appointing authorities, with the approval of the Commissioner of Personnel, may place re-employed, reinstated, and probationally appointed former employees at a salary determined by one (1) of the following methods:

(1) Reinstatement to a class having the same or lower pay grade that is currently assigned to the employee's former class:

(a) Request the same salary that was paid at the time of separation from the classified service if such salary is within the current pay grade;

(b) Request a salary higher than that paid at the time of separation from the classified service due to salary schedule or pay grade adjustments;

(c) Request a lower salary than that paid at the time of separation from the classified service if such a salary is within the current pay grade;

(d) Request a salary in accordance with the standards used for making new appointments.

(2) Re-employment or probationary appointment of former employees to the same, lower, or higher pay grade:

(a) Request the same salary that was paid at the time of separation from the classified service if such salary is within the current pay grade;

(b) Request a salary higher than that paid at the time of separation from the classified service due to salary schedule or pay grade adjustments;

(c) Request a lower salary than that paid at the time of separation from the classified service if such salary is within the current pay grade;

(d) Request a salary in accordance with the standards used for making new appointments.

(3) Former employees who were separated from state service by lay-off and who are reinstated or re-employed in the same or a similar class within one (1) year from the date of lay-off may receive the salary they were receiving at the time of lay-off, even if such salary is above the maximum of the new pay grade.

(4) Employees re-employed, reinstated or former employees probationally appointed to a salary:

(a) Below the midpoint of the pay grade at the time of completion of the probationary period shall be considered for a probationary increment;

(b) Which equals or exceeds the midpoint of the pay grade at the time of completion of the probationary period may be considered for a probationary increment. If such employee is not considered for an increment upon completion of the probationary period, he shall be considered for an increment at the beginning of the month following completion of twelve (12) months service from the date of re-employment, reinstatement or appointment.

Section 4. Salary Adjustments. (1) Promotion. An employee who is promoted shall receive a salary increase of five (5) percent upon promotion; if an employee's salary is above the maximum of the pay grade for the class to which he is promoted, the employee shall receive a lump-sum payment of five (5) percent of his annual base salary. An employee may receive a promotional increase of five (5) percent on the first of the month following successful completion of the probationary period; if an employee's salary is above the maximum of the pay grade he may receive a lump-sum payment of five (5) percent of his annual base salary. In no case shall the employee's salary be below the minimum of the higher grade following promotion. If the promotion is to a classification which constitutes an unusual increase in the level of responsibility, the appointing authority, with the prior written approval of the Commissioner of Personnel, may grant upon promotion a ten (10) percent or fifteen (15) percent salary increase over the employee's previous salary. If an employee's salary is above the maximum of the pay grade, a lump-sum payment of ten (10) percent or fifteen (15) percent of the employee's annual base salary may be granted. A promotional increase shall not change the employee's regular increment date.

(2) Demotion. An employee who is demoted may have his salary reduced to a rate which is in the pay grade for the new class; this rate shall not exceed the rate which the employee was receiving prior to the demotion.

(3) Transfer. An employee who is transferred to a job class having the same pay grade shall be paid the same salary that he received prior to the transfer.

(4) Reclassification. An employee who is advanced to a higher pay grade through a reclassification of his position shall receive a salary increase of five (5) percent except that in no case shall the employee's salary after such increase be below the minimum of the new pay grade. In those cases where the employee's salary is above the maximum of the pay grade for the new class, the employee shall receive a lump-sum payment of five (5) percent of his annual base salary rate. An employee whose position is placed in a lower pay grade through reclassification shall receive the same salary he was receiving prior to reclassification, even if that salary is above the maximum of the new pay grade.

(5) Reallocation. An employee who is advanced to a higher pay grade through a reallocation of his position may receive a salary increase of five (5) percent except that in no case shall the employee's salary after such increase be below the minimum of the higher pay grade. In those cases where the employee's salary is above the maximum of the pay grade for the new class, the employee may receive a lump-sum payment of five (5) percent of his annual base salary. An employee whose current salary exceeds the pay grade maximum assigned to his class following

reallocation of his position shall retain that current salary.

(6) Detail to special duty. An employee who is approved for detail to special duty as provided by 101 KAR 1:110, Section 4, may receive a five (5) percent increase upon detail to a higher class except that in no case shall the employee's salary after such increase be below the minimum of the higher pay grade.

(7) Reversion.

(a) An employee who is returned to his former class after failure to complete the probationary period following promotion or following detail assignment to a higher class shall have his salary reduced to a rate received prior to such promotion or detail assignment and is entitled to all salary advancements and adjustments he would have received had he not left the class even if these advancements place his salary above the maximum of the pay grade applicable to the class to which the employee is returning.

(b) An employee who is returned to a position in the classified service following transfer or promotion to the unclassified service shall have his salary reduced to the rate received prior to the promotion or transfer and is entitled to all salary advancements and adjustments he would have received had he not left the class even if these advancements place his salary above the maximum of the pay grade applicable to the class to which the employee is returning.

(c) The salary for employees who obtain merit status but later resign the classified position to accept appointment to an unclassified position shall have their salary determined, upon re-entry to the classified service, the same as employees who are reverted if there has been no break in service.

Section 5. Salary Advancements. (1) Probationary increments. Full-time and part-time employees who complete their probationary period with satisfactory performance shall be granted a probationary increment at the beginning of the month following completion of the probationary period, except as specified under Section 3(4) of this regulation. The service may be provisional or probationary. Employees completing a probationary period following promotion shall not be eligible for a probationary increment under this section.

(2) Service computation. In computing service for the purpose of determining annual increment eligibility, in those cases where an employee is changed from part-time to full-time, part-time service shall be counted in determining increment eligibility for a full-time employee; in those cases where an employee is changed from full-time to part-time, full-time service shall be counted in determining increment eligibility for a part-time employee.

(3) Annual increment dates will be established:

(a) Following completion of probation, except probation following promotion, with satisfactory performance, or following completion of twelve (12) months service from the date of appointment, reinstatement, or re-employment, pursuant to Section 3(4) of this regulation.

(b) When an employee returns from leave without pay pursuant to Section 7(2) of this regulation.

(4) Annual increment dates will not change when an employee:

(a) Is in a position which is assigned a new or different salary grade.

(b) Receives a salary adjustment as a result of his position being reallocated or reclassified.

(c) Is transferred.

(d) Receives a demotion.

(e) Is approved for detail to special duty.

(f) Receives an educational achievement increase.

(g) Returns from military leave.

(h) Has his salary advanced above the maximum of the pay grade or has his salary returned to the pay grade due to a salary schedule change or pay grade adjustment.

(i) Is promoted or receives a promotional increase after completion of probation following promotion.

(5) Annual increment. All employees shall receive statutory annual increments on the employee's regularly scheduled increment date. An employee whose annual increment places his salary above the maximum of the pay grade shall have his annual increment added to his annual base pay. For purposes of calculating the statutory annual increment:

(a) Educational achievement increases, employee suggestion systems awards and overtime and/or compensatory leave payments shall not be included in "gross annual salary or wages."

(b) A lump-sum payment made to an employee pursuant to Sections 4(1), 4(4), and 4(5) of this regulation, and previous regulatory provision providing for a continuous service award shall be included in "gross annual salary or wages."

Section 6. Educational Achievement Increase. Subject to the approval of the Commissioner of Personnel, any permanent, full-time employee who, after completion of his initial probationary period, satisfactorily completes 260 classroom hours (or the equivalent as determined by the Commissioner of Personnel) of job related instruction or receives a high school diploma or GED is eligible for a lump-sum educational achievement increase of ten (10) [five (5)] percent of his annual base salary the first of the month following the approval of the increase.

Section 7. Return from Leave. (1) Leave with pay. The appointing authority shall grant an employee on leave with pay or returning to duty from leave with pay an annual increment on the employee's regularly scheduled increment date.

(2) Leave without pay. Employees returning to duty from leave without pay shall receive an annual increment when they have completed twelve (12) months of service since the date they last received an annual increment pursuant to Section 5(2) of this regulation.

(3) Military Leave. An employee returning to duty from military leave without pay, or from military service in accordance with KRS 61.373, shall receive the same or similar pay (same salary plus grade changes) and all other increases he would have received.

Section 8. Salary Schedule Adjustment. When the Commissioner of Personnel authorizes an adjustment of all grades in the pay schedule, employees who are below the new minimum rates shall have their salaries adjusted at least to the minimum rates of their grades.

Section 9. Class Re-evaluation and Grade Adjustment. (1) Class re-evaluation is the assignment of a different pay grade to a class based upon a change in relation to other classes or to labor market conditions.

(2) Change in pay grade. Whenever it becomes necessary to assign a class a different pay grade due to changes defined in Section 9(1) of this regulation, the Commissioner of Personnel may make a new or different pay grade applicable to a class of positions. Persons employed in positions of that class at the effective date of the change in pay grade shall have their salary placed at least at the minimum salary of the higher grade. In no event shall an employee's salary be placed at a rate less than he received prior to the change in the pay grade. Employees whose salaries are already within the higher grade shall retain their current salaries following the adjustment. Employees in a class assigned to a lower pay grade through class re-evaluation shall retain their current salary even if that salary is above the maximum rate of the lower grade. The Commissioner of Personnel shall review the use of this provision for retaining employees' salaries above pay grade maximums and report to the Board July 1, 1984.

(3) Recruitment difficulties. Whenever the Commissioner of Personnel determines that it is not possible to recruit qualified employees at the established entrance salary in a specific area or for a specific class, he may, at the request of the appointing authority, authorize the recruitment for a class of position at a higher rate in the pay grade, provided that all other employees in the same class of position in the same agency in the same locality are adjusted in salary to the same rate. When the Commissioner of Personnel determines that it is not possible to relieve salary inadequacies using this provision, Section 9(2) of this regulation shall apply.

(4) Increases resulting from this section shall not affect an employee's annual increment date.

Section 10. Paid Overtime. Overtime for which pay is authorized shall have the approval of the Commissioner of Personnel and the Secretary of the Finance and Administration Cabinet.

Section 11. Maintenance and Maintenance Allowance. In each case where an employee or the employee and his family are provided with full or part maintenance, consisting of one (1) or more meals per day, lodging or living quarters, and domestic or other personal services, such compensation shall be treated as part payment. The value of these services shall be deducted from the appropriate salary rate in accordance with a maintenance schedule developed by the Commissioner of Personnel after consultation with the appointing authority and the Secretary of the Finance and Administration Cabinet.

Section 12. Supplemental Shift Premium. Upon request of the appointing authority, the Commissioner of Personnel may authorize the payment of a supplemental shift premium for those employees directed to work an evening or night shift. However, no employee shall receive a supplemental shift premium subsequent to a transfer to a position that is ineligible for a shift differential premium payment. The employee's loss of shift differential pay shall not be a basis for an appeal to the Personnel Board.

THOMAS C. GREENWELL, Commissioner
APPROVED BY AGENCY: October 29, 1985
FILED WITH LRC: October 29, 1985 at 2 p.m.

STATEMENT OF EMERGENCY

The Kentucky Board of Medical Licensure is charged with the responsibility of assuring that the physicians who become licensed in the Commonwealth are well-trained and competent to pursue their profession. This board, along with medical boards in other states, is confronted with applications from persons who are graduates of foreign medical schools, but who satisfied some of their clinical training requirements for graduation in the United States. Because the board has no mechanism for assuring the quality of this training, the board deems it essential that a regulation be implemented that requires a substantial amount of this training to be under circumstances substantially similar to those under which American medical students receive clinical training.

Because the board is regularly confronted with applications from foreign medical graduates who received some clinical training in the United States, it is essential that this regulation be made effective as soon as possible. Because of the time delay in approval of an ordinary regulation, the board would be forced to review credentials which they cannot adequately evaluate without this regulation. However, an ordinary regulation identical to this emergency regulation has been submitted and will replace the emergency regulation upon passage.

It is requested on behalf of the Kentucky Board of Medical Licensure that this emergency regulation be made effective immediately.

MARTHA LAYNE COLLINS, Governor
C. WILLIAM SCHMIDT, Secretary

FINANCE AND ADMINISTRATION CABINET
Board of Medical Licensure

201 KAR 9:021E. Medical and osteopathic schools approved by the board; denial or withdrawal of approval; application of KRS 311.271; postgraduate training requirements; approved programs; recognition of degrees.

RELATES TO: KRS 311.530 to 311.620, 311.990, 311.271
PURSUANT TO: KRS 311.565
EFFECTIVE: November 4, 1985
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 establish standards for approval of medical and osteopathic schools, colleges and universities in regard to the issuance and renewal of licenses and permits to practice medicine or osteopathy in the Commonwealth. The further purpose of this regulation is to assure that physicians obtain sufficient postgraduate training to enable them to practice with

competency within the Commonwealth.

Section 1. Approval Necessary for Licensure. An applicant shall not obtain or retain any license or permit issued by the board unless and until the applicant provides sufficient proof that he or she is a graduate of a medical or osteopathic school, college or university which has been approved by the board. An applicant for limited licensure-institutional practice pursuant to KRS 311.571(4) may, however, be granted such licensure without the board's prior approval of the medical or osteopathic school, college or university upon sufficient proof that the particular school does exist and the applicant is a graduate thereof. No other license or permit issued pursuant to any other statutory or regulatory provision shall be issued unless and until the applicant's medical or osteopathic school, college or university has been fully approved. The school approval requirement will not be excused because information concerning the school is not readily ascertainable.

Section 2. Medical and Osteopathic Schools Located Within the United States or Canada. Unless approval is denied or withdrawn pursuant to Section 4 of this regulation, all medical and osteopathic schools, colleges and universities located in the United States or Canada are approved in regard to the issuance and renewal of licenses and permits upon written proof that the particular institution is:

(1) Located in the United States, its territories and protectorates and approved/accredited by the Liaison Committee on Medical Education (LCME) or the American Osteopathic Association; or

(2) Located in Canada and approved/accredited by the Canadian Medical Association.

Section 3. Medical and Osteopathic Schools Located Outside the United States and Canada. Unless approval is denied or withdrawn pursuant to Section 4 of this regulation, all medical and osteopathic schools located outside the United States and Canada are approved in regard to the issuance and renewal of licenses and permits upon written proof that the particular institution is:

(1) Officially recognized in good standing by the country in which the school, college or university is located;

(2) Registered as a medical school, college or university in either the World Health Organization directory or the World Directory of Medical Schools; and

(3) Possesses a basic course of clinical and classroom medical instruction of not less than thirty-two (32) months in length that is conducted under the direct authority of the medical school, college or university.

Approval of an institution under this section should be considered in conjunction with the other requirements for licensure of graduates of medical schools, colleges and universities located outside the United States and Canada. Approval under this section should not be interpreted as a statement by the board that the particular institution is equivalent to institutions approved pursuant to Section 2 of this regulation.

Section 4. Denial or Withdrawal of Approval. The board, in its discretion, may deny or withdraw approval of any medical or osteopathic school if the particular school, college or university fails to meet the requirements for approval as established in the preceding sections or if, in the board's opinion, the approval of the particular school, college or university would not be in the best interests of the Commonwealth. If approval is denied or withdrawn the board shall issue an order delineating the grounds upon which denial or withdrawal of approval is based.

Section 5. Recognition of Degrees. The board hereby takes notice that there are medical schools located outside the United States and Canada which allow students to satisfy clinical requirements of the medical school's curriculum by performing clinical clerkships in the United States. Such clerkships shall be of a character and quality equal to those performed in the United States by students in American medical and osteopathic schools. In order to assure that the clerkships performed in this country by students enrolled in foreign medical schools are to a substantial degree equivalent to the clinical training being received by medical students in this country, the applicant must demonstrate that the clerkships meet the following standards:

(1) Each clerkship (begun after the effective date of this regulation) must have been evaluated and approved by the foreign medical school prior to commencing in accord with the foreign school's established standards for approval of clerkships performed in the United States.

(2) Seventy-five (75) percent of the clerkships performed in the United States must have been performed in hospitals that:

(a) Possess accreditation by the Joint Commission on Accreditation of Hospitals;

(b) Have residencies in the subject area of the clerkship approved by the Accreditation Council on Graduate Medical Education; and

(c) Have affiliation with a medical school located in the United States.

The board will not recognize the degree of any applicant who cannot demonstrate that the clerkships he performed in the United States met the above standards. <u>However, the board may waive the above requirement if the applicant commenced the unapproved clerkship prior to February 12, 1985, and can present verifiable proof of satisfactory completion of an approved three (3) year postgraduate training program, or proof of acceptance into or current enrollment in the second or third year of an approved postgraduate training program.</u> Licensure will not be granted unless the board recognizes the applicant's degree.

Section 6. Application of KRS 311.271. (1) An applicant shall not obtain any license or permit issued by the board unless and until the applicant provides written proof that he or she has been credited with not less than sixty (60) transferable units of study by a college or university accredited by the Southern Association of Colleges and Schools or an accrediting agency recognized by the Southern Association of Colleges and Schools; provided, however, that the executive director may determine the equivalency of premedical or

preosteopathic units of study credited by a college or university located outside the United States or Canada on an individual basis.

(2) It is the declared policy of the Commonwealth that a physician, who becomes initially enrolled in a school of medicine or osteopathy after June 13, 1968, should not be authorized to practice medicine or osteopathy in this state unless and until the physician can provide satisfactory evidence that he or she has fulfilled the premedical or preosteopathic undergraduate requirement delineated in subsection (1) of this section. Therefore, the board will not issue any license or permit to an applicant except upon the fulfillment of this requirement.

Section 7. Hearings. The board, in its discretion, may direct that formal or informal hearings be held in connection with the approval, denial of approval or withdrawal of approval of any medical or osteopathic school, college or university, or in the determination of qualification pursuant to KRS 311.271.

Section 8. Amount of Postgraduate Training Required. (1) All applicants for regular licensure who are graduates of medical and osteopathic schools located within the United States or Canada shall provide written proof of having completed one (1) full year of postgraduate training approved by the board.

(2) All applicants for regular licensure who are graduates of medical and osteopathic schools located outside the United States and Canada shall provide written proof of having completed three (3) full years of postgraduate training approved by the board.

(3) All applicants for limited licensure-institutional practice shall provide written proof of having completed one (1) full year of postgraduate training approved by the board.

Section 9. Postgraduate Training Programs Approved by the Board. (1) All postgraduate training programs in hospitals and institutions located in the United States and approved by the Accreditation Council for Graduate Medical Education (ACGME) are approved by the board in regard to the fulfillment of the postgraduate training requirement for licensure.

(2) All postgraduate training 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 regard to the fulfillment of the postgraduate training requirement for licensure.

(3) All postgraduate training programs in hospitals and institutions located in the United States or Canada and approved by the American Osteopathic Association are approved by the board in regard to the fulfillment of the postgraduate training requirement for licensure.

Section 10. Fellowship Training in the United States or Canada. The board will consider on an individual basis written proof of satisfactory completion of fellowship training recognized by the board to be of satisfactory quality as substitution for the second or third year of required postgraduate training approved by the board pursuant to this regulation.

C. WILLIAM SCHMIDT, Executive Director
APPROVED BY AGENCY: October 3, 1985
FILED WITH LRC: November 4, 1985 at 10 a.m.

STATEMENT OF EMERGENCY

KRS 217B.103, 217B.540 and 217B.545 allow the Department of Agriculture to conduct licensing hearings. This regulation sets out the procedure to be followed for licensing hearings pursuant to those statutes. An emergency regulation is needed as the department may need to conduct licensing hearings before an ordinary regulation can become effective. An emergency therefore exists. This emergency regulation will be followed by an ordinary regulation.

MARTHA LAYNE COLLINS, Governor
DAVID E. BOSWELL, Commissioner

DEPARTMENT OF AGRICULTURE

302 KAR 31:010E. Hearings upon denial, suspension, modification, or revocation of licenses.

RELATES TO: KRS Chapter 217B
PURSUANT TO: KRS Chapter 217B, 217B.050
EFFECTIVE: October 29, 1985
NECESSITY AND FUNCTION: To clarify procedures for the license hearings held pursuant to KRS 217B.103, 217B.540, or 217B.545.

Section 1. Hearings. (1) When conducting license hearings under KRS 217B.103, 217B.540 or 217B.545, the pest control advisory board shall have the authority to:

(a) Administer oaths according to law;

(b) Issue subpoenas authorized by law;

(c) Rule upon offers of proof and receive relevant evidence;

(d) Take or cause depositions to be taken whenever the ends of justice would be service thereby;

(e) Regulate the course of the hearing; and

(f) Make decisions and issue orders.

(2) The department, prior to a license hearing, will prepare a detailed report in the form of an administrative complaint concerning the denial, suspension, modification, or revocation. Copies of the report will be presented to the board prior to the actual hearing. A copy of the report will be sent to the licensee at least fifteen (15) days prior to the actual hearing so that he may be apprised of all the allegations therein. Every party shall have the right to present his case or defense by oral or documentary evidence, and to conduct such cross-examination as may be required for a full and true disclosure of the facts.

(3) The transcript of testimony and exhibits, together with all papers and requests filed in the proceeding, shall constitute the exclusive record for decision. Where the decision rests upon official notice of a material fact not appearing in the evidence in the record, any party shall on timely request be afforded an opportunity to show the contrary.

DAVID E. BOSWELL, Commissioner
APPROVED BY AGENCY: October 25, 1985
FILED WITH LRC: October 29, 1985 at 1 p.m.

STATEMENT OF EMERGENCY

Under KRS Chapter 13A the administrative body is required to implement this regulation or not have the authority to operate. Therefore, in order to continue to operate the Cabinet for Human Resources in accordance with KRS Chapter 194, the Cabinet for Human Resources needs to implement this emergency regulation. An ordinary administrative regulation cannot suffice because agency policy will not be accurately reflected in a timely manner. This emergency regulation will be replaced by an ordinary administrative regulation in accordance with House Bill 334.

MARTHA LAYNE COLLINS, Governor
E. AUSTIN, JR., Secretary

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

904 KAR 1:020E. Payment for drugs.

RELATES TO: KRS 205.550, 205.560
PURSUANT TO: KRS 194.050
EFFECTIVE: November 4, 1985
NECESSITY AND FUNCTION: The Department for Human Resources has responsibility to administer a program of Medical Assistance under Title XIX of the Social Security Act. KRS 205.550 and 205.560 require that the secretary prescribe the methods for determining costs for vendor payments for medical services. This regulation sets forth the method for determining amounts payable by the department for drugs.

Section 1. Maximum Allowable Cost Reimbursement Limits. (1) Reimbursement to pharmacists participating in the Medical Assistance Program for those drugs contained on the Kentucky Medical Assistance Program Outpatient Drug List and provided to eligible recipients is limited to the lowest of:

(a) The maximum allowable cost (MAC) of the drug, if any, plus a dispensing fee; or

(b) The estimated acquisition cost (EAC) of the drug plus a dispensing fee; or

(c) The provider's usual and customary charge to the public for a like product and service.

(2) Reimbursement to skilled nursing and intermediate care facilities for drugs provided to eligible recipients is allowable in accordance with the following:

(a) The Kentucky Medical Assistance Program Outpatient Drug List (with additions and deletions thereto) shall be provided by the program to each participating facility, and for the drugs contained therein, the limits specified in subsection (1) of this section are applicable;

(b) For drugs not on the drug list, the maximum reimbursement shall be the <u>same as set forth in subsection (1)(a) through (c) of this section. EAC's shall be determined in the same manner as for drugs included on the Outpatient Drug List</u> [lower of: for any drugs with a MAC set by the federal government, the MAC cost; and for all other drugs the published price of the drug as shown in the latest issue of the Drug Topics Red Book, including supplements, or the price shown in the appropriate Prescription Pricing Guide, depending on which is the latest available, plus a dispensing fee; or the provider's usual and customary charge to the public for a like product and service]. SNF/ICF facilities shall not impose an additional charge on medicaid eligible recipients for drugs because of the limitations set forth in Section 1(2) of this regulation;

(c) A packaging cost allowance of not more than six (6) cents per dose may be added to the drug cost (if not already included) for unit dose packaged drugs. The packaging cost (up to six (6) cents, plus the drug cost is added to the dispensing fee to determine the total reimbursement amount for a unit dose packaged prescription;

(d) There shall be no more than two (2) dispensing fees allowed per drug within a thirty (30) day period, except for Schedules II, III, and IV controlled substances and for non-solid dosage forms, including topical medication preparations, for which no more than four (4) dispensing fees per drug will be paid within a thirty (30) day period. Though dispensing fees are limited, this shall not be construed as placing a limit on the quantity of reimbursable drugs for which the program will pay for any patient, since the reasonable cost of the drug (as defined herein) is reimbursable as a covered service in whatever quantity is considered medically necessary for the patient. Non-solid dosage forms include all covered drug items other than oral tablets or capsule forms. Drug items or other related supplies purchased for routine use and which may be purchased without a prescription, including food supplements, are not reimbursable in SNFs or ICFs under the drug program, though the cost of such drug, supply item or food supplement, is an allowable cost for the facility with the cost computed in accordance with the state regulation covering medicaid reimbursement for the facility;

(e) Whenever possible, unused drugs paid for by the department shall be returned to the pharmacy with the credit for the cost of the drug and the unit dose packaging cost (if applicable) accruing to the department as an offset against allowable ancillary cost; and

(f) Interim payments made to participating facilities for allowable drug costs shall be settled at actual allowable costs computed in accordance with the upper limits shown herein at the end of the facilities' fiscal year.

(3) Reimbursement to hospitals for drugs provided to eligible recipients is on the basis of reasonable cost pursuant to 904 KAR 1:013.

Section 2. Physician Maximum Allowable Cost (MAC) Override. The MAC price limitation in Section 1 of this regulation shall not apply in any case where a physician certifies in his own handwriting that in his medical judgment, a specific covered brand is medically necessary for a particular patient. In such instances, reimbursement shall be based on the lower of the EAC plus a professional dispensing fee or the provider's usual and customary charge to the public for the drug.

Section 3. Dispensing Fees. Effective July 1, 1984, the dispensing fee shall be no more than three (3) dollars and twenty-five (25) cents per prescription for drugs reimbursed through the outpatient drug program, as shown in Section 1(1) of this regulation, where the covered drugs are limited to those contained on the Kentucky Medical Assistance Program Outpatient Drug List. The allowable dispensing fee shall be no more

than three (3) dollars and twenty-five (25) cents (except for the additional amount for unit dose packaging as shown in Section 1(2)(c) of this regulation) for drugs reimbursed as part of the covered services of skilled nursing and intermediate care facilities, as shown in Section 1(2) of this regulation.

Section 4. Reimbursement to Dispensing Physicians. Participating dispensing physicians who practice in counties where no pharmacies are located are reimbursed for the cost of the drug only, with the cost computed as the maximum allowable cost or estimated acquisition cost as shown in Section 1(1) of this regulation, or the physician's usual and customary charge to the general public for the drug if less.

Section 5. Implementation. The provisions of this regulation as amended shall be effective with regard to services provided on or after October 1, 1985.

E. AUSTIN, JR., Secretary
JACK F. WADDELL, Commissioner
APPROVED BY AGENCY: October 8, 1985
FILED WITH LRC: November 4, 1985 at 10 a.m.

STATEMENT OF EMERGENCY

Under KRS Chapter 13A the administrative body is required to implement this regulation or not have the authority to operate. Therefore, in order to continue to operate the Cabinet for Human Resources in accordance with KRS Chapter 194, the Cabinet for Human Resources needs to implement this emergency regulation. An ordinary administrative regulation cannot because agency policy will not be accurately reflected in a timely manner. This emergency regulation will be replaced by an ordinary administrative regulation in accordance with KRS Chapter 13A.

MARTHA LAYNE COLLINS, Governor
E. AUSTIN, JR., Secretary

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

904 KAR 1:250E. Incorporation by reference of materials relating to the Medical Assistance Program.

RELATES TO: KRS 194.030(6), 205.520
PURSUANT TO: KRS 194.050
EFFECTIVE: November 12, 1985
NECESSITY AND FUNCTION: The Cabinet for Human Resources has responsibility to administer the program of Medical Assistance in accordance with Title XIX of the Social Security Act. KRS 205.520 empowers the cabinet, by regulation, to comply with any requirement that may be imposed, or opportunity presented, by federal law for the provision of medical assistance to Kentucky's indigent citizenry. This regulation incorporates into regulatory form, by reference, materials used by the cabinet in the implementation of the Medical Assistance Program and is applicable for both the categorically and medically needy.

Section 1. Incorporation by Reference. The cabinet shall incorporate by reference materials used in the implementation of the Medical Assistance Program, subject to the provisions contained in 904 KAR 2:140, Section 1, Supplementary policies for programs administered by the Department for Social Insurance.

Section 2. Listing of Incorporated Material. The following listed materials are hereby incorporated by reference, effective on the date shown:

(1) Federal Medicaid regulations at 42 CFR Parts 430-456, and interim final regulations at 42 CFR Parts 430-456, effective November [July] 1, 1985. The regulations contain federal supplementary policies, interpretations and implementing instructions for the Medical Assistance Program as authorized by Title XIX of the Social Security Act.

(2) Federal "State Medicaid Manual," effective November [July] 1, 1985. The "State Medicaid Manual" contains federal interpretations and clarifications of policy relating to implementation of the Medical Assistance Program.

(3) Federal action transmittals and program memoranda issued by the Health Care Financing Administration as follows: HCFA-AT-79-63, 79-72, 79-98, 80-9, 80-59, 81-23, 81-33, 81-35, 82-1, 82-2, 82-20, 83-1, 83-4, 83-7, 83-8, 83-11, 84-1, 84-2, 84-4, 84-5, 84-10, 84-16, 85-1, and HCFA PM-85-4, 85-10, and 85-13, effective October [July] 1, 1985. Action transmittals and program memoranda contain federal instructions relating to implementation of the Medical Assistance Program.

(4) Federal transmittal notices issued by the Health Care Financing Administration as follows: DQC-1-82, 10-82; DPO-76-81, 77-81, 78-81; MCD-46-81, 48-81, 55-81, 61-81, 62-81, 64-81, 67-81, 82-81, 86-81, 87-81, 89-81, 92-81, 1-82, 2-82, 6-82, 7-82, 10-82, 14-82, 16-82, 17-82, 18-82, 19-82, 25-82, 26-82, 28-82, 30-82, 33-82, 34-82, 35-82, 38-82, 41-82, 42-82, 50-82, 52-82, 2-83, 5-83, 9-83, 11-83, 12-83, 13-83, 14-83, 15-83, 19-83, 20-83, 26-83, 28-83, 29-83, 30-83, 35-83, 39-83, 40-83, 42-83, 1-84, 6-84, 7-84, 8-84, 9-84, 11-84, 13-84, 14-84, 15-84, 16-84, 18-84, 20-84, 23-84, 24-84, 25-84, 26-84, 27-84, 29-84, 34-84, 35-84, 36-84, 39-84, 48-84, 50-84, 51-84, 55-84, 2-85, 4-85, 5-85, 6-85, 8-85, 10-85, 11-85, 14-85, 18-85, 19-85, 21-85, 22-85, 23-85, 24-85, [and] 25-85, 27-85, 28-85, 29-85, 30-85, 31-85, 32-85, 33-85, 34-85, 36-85, 37-85, 38-85, 39-85, 41-85, 42-85, 43-85, 44-85, 46-85, and 47-85 effective November [July] 1, 1985. Transmittal notices contain federal clarifications of policy relating to implementation of the Medical Assistance Program.

(5) Medicare and Medicaid Guide, Volumes I, II, III, and IV, as published by the Commerce Clearing House, Inc., with the following related new developments transfer binders: 1981-1, 1981-2, 1982, 1983-1, 1983-2, and 1984-1, effective November [July] 1, 1985. The Medicare and Medicaid Guide contains reprints of federal laws and regulations relating to the Medicare and Medicaid programs; reprints of Medicare/Medicaid related court decisions; Medicare principles of reimbursement; summaries of state plan characteristics; and other items of general information relating to the Medicare and Medicaid programs. Although the cabinet is bound by federal Medicaid law and regulations in the implementation of the Medical Assistance Program, the Guide is used principally as supplementary material for reimbursement issues in situations where the cabinet's vendor

reimbursement system uses the Medicare cost principles in unaddressed areas.

(6) State Medicaid Program policies and procedures manuals and letters issued by the cabinet, and which contain benefit descriptions and operating instructions used by agency staff and participating vendors in the provision of, and billing for, Medical Assistance benefits provided eligible program recipients, as follows:

(a) Home and Community Based Services Waiver Project Adult Day Health Care Services, effective October [July] 1, 1985;

(b) Alternative Intermediate Services/Mental Retardation Project, effective October [July] 1, 1985;

(c) Birthing Center Services, effective October [January] 1, 1985;

(d) Community Mental Health Benefits, effective July 1, 1985;

(e) Dental Benefits, effective October [July] 1, 1985;

(f) Early and Periodic Screening, Diagnosis and Treatment Benefits, effective July 1, 1985;

(g) Family Planning Benefits, effective October [July] 1, 1985;

(h) Hearing Services Benefits, effective October [July] 1, 1985;

(i) Home and Community Based Services Waiver Project, effective October [July] 1, 1985;

(j) Home Health Benefits, effective October [July] 1, 1985;

(k) Hospital Services Benefits, effective October [July] 1, 1985;

(l) Independent Laboratory Services Benefits, effective October [July] 1, 1985;

(m) Intermediate Care Facility Benefits, effective October [January] 1, 1985;

(n) Mental Hospital Services Benefits, effective October [July] 1, 1985;

(o) Nurse Anesthetist Services, effective July 1, 1985;

(p) Nurse Midwife, effective October [July] 1, 1985;

(q) Pharmacy Services, effective November [July] 1, 1985;

(r) Physician Services Benefits, effective October [July] 1, 1985;

(s) Primary Care Benefits, effective October [July] 1, 1985;

(t) Rural Health Clinic Benefits, effective October [July] 1, 1985;

(u) Skilled Nursing Facility Benefits, effective October [January] 1, 1985;

(v) Ambulance Transportation Benefits, effective May 16, 1984, as revised;

(w) Vision Services Benefits, effective November [July] 1, 1985;

(x) Podiatry Services, effective October [July] 1, 1985;

(y) Ambulatory Surgical Center Benefits, effective July 1, 1985;

(z) Renal Dialysis Center Benefits, effective October [July] 1, 1985;

(aa) General Provider Letter A-8, effective July 1, 1985;

(bb) Medical Director's Letter dated April 26, 1985, effective July 1, 1985; and

(cc) EDS Federal Hospital Letter (as fiscal agent for the Medicaid Program) dated April 1, 1985, effective July 1, 1985.

Section 3. All documents included by reference herein may be reviewed during regular working hours in the Division of Management and Development, Department for Social Insurance, 275 East Main Street, Frankfort, Kentucky. Copies may be obtained from that office upon payment of an appropriate fee which will not exceed approximate cost.

JACK F. WADDELL, Commissioner
E. AUSTIN, JR., Secretary
APPROVED BY AGENCY: November 4, 1985
FILED WITH LRC: November 12, 1985 at 3 p.m.

AS AMENDED

REVENUE CABINET
(As Amended)

103 KAR 28:051. Leases and rentals.

RELATES TO: KRS 139.050, 139.090, 139.100, 139.110, 139.120, 139.210, 139.290, 139.310, 139.320, 139.330, 139.340, 139.430, 139.490, 139.600, 139.620
PURSUANT TO: KRS Chapter 13A
EFFECTIVE: November 12, 1985
NECESSITY AND FUNCTION: To interpret the sales and use tax law as it relates to leases and rentals of tangible personal property.

Section 1. (1) General rules. On and after August 1, 1985, the lease or rental of tangible personal property for a consideration in Kentucky is treated as a sale or purchase the receipts of which are subject to the sales or use tax. The term "lease or rental" means the grant to another of the right to use or possess tangible personal property for a period of time for a consideration. The term includes financing transactions by a financial institution or leasing affiliate of a financial institution although title is transferred principally for the purpose of securing the lessor's financial interest. The term does not include the lease or rental of real property or a transaction which provides a service. The providing of a service is any transaction which includes both services and tangible personal property for a consideration where the performance of the service is the essence of the transaction. [The term does not include the lease or rental of real property or agreements which represent contracts for providing services. A service contract is any agreement which provides both services and tangible personal property for consideration where the performance of a service is the essence of the transaction.] Persons engaged in leasing or renting tangible personal property for use in Kentucky are retailers who must register with the Revenue Cabinet to obtain a retail sales and use tax permit and report and pay the applicable tax derived from the gross lease or rental receipts. Lessors not registered with the Revenue Cabinet for sales and use tax purposes as of August 1, 1985, or who enter into business subsequent to this date, must register by filing a Kentucky Tax Registration

Application, Revenue Form 10A100.

(2) Transitional rules. Lease or rental agreements involving tangible personal property executed on and after August 1, 1985 are subject to the sales and use tax. Receipts from lease or rental agreements for tangible personal property entered into prior to August 1, 1985 are subject to the tax effective August 1, 1985 unless the appropriate amount of tax was paid on the property on or before August 20, 1985, the due date of the July sales and use tax return. Persons claiming that receipts from lease or rental agreements are not taxable must retain documentary evidence to substantiate their exclusion from the measure of the tax. Receipts from lease or rental agreements entered into prior to August 1, 1985 which have qualified for this exclusion will become taxable when it is necessary to acquire tangible personal property after August 1, 1985 to replace the original leased or rented property to fulfill the terms of the agreement. Renewals or new lease or rental agreements executed subsequent to July 31, 1985 that involve property which was the subject of a lease or rental agreement executed prior to August 1, 1985 are subject to the tax regardless of whether or not tax was paid on the purchase price of the property on or before August 20, 1985. Lease or rental receipts based upon unwritten agreements are considered renewals or new lease or rental agreements subject to tax effective August 1, 1985. Lease or rental agreements which become effective on or after August 1, 1985 because of the exercise of a continuation option contained in a lease or rental agreement executed prior to August 1, 1985 are subject to tax. The tax applicable to the purchase price of tangible personal property, which is the subject of a lease or rental agreement entered into prior to August 1, 1985, that has not been remitted to the Commonwealth remains the liability of the lessor under prior law. This debt will not be relieved until payment of the tax and related charges or expiration of the period provided by law for timely assessment of unpaid liabilities.

(3) Resale. Tangible personal property purchased exclusively for lease or rental may be purchased for resale without payment of the tax at the time of purchase. Lessors must execute Revenue Form 51A105, Resale Certificate, to their suppliers. The purchase by lessors of parts and accessories which become part of the leased or rented property may also be purchased under a resale certificate. However, property purchased by a lessee to maintain leased or rented property of a lessor is subject to the tax. Tangible personal property purchased for resale without payment of the tax and to be utilized exclusively for lease or rental, and so used, but subsequently used by the retailer/lessor for some purpose other than lease or rental becomes subject to tax upon such use. The tax is the responsibility of the retailer/lessor and is measured by the purchase price of the property and is in addition to the tax due on the lease or rental receipts. When tangible personal property is purchased in part for lease or rental and in part for use, such property may not be purchased from a vendor under a resale certificate and is subject to tax. Receipts from the lease or rental of such property by the purchaser are also taxable. Retailers who purchase tangible personal property for outright sale, but, while holding such property in their inventory, make use of the property in their business through lease or rental, are responsible for the tax applicable to such lease or rental receipts. When tangible personal property is purchased by a person for use in conducting a retail activity and has not been acquired for resale, the tax applies at the time of purchase. If during the course of ownership of the property, lease or rental of the property occurs, such leases or rentals are subject to tax. The amount charged for any rooms, lodgings or accommodations furnished to transients by the operator of any apartment house, hotel, inn, motel, tourist camp or any place in which rooms, lodgings or accommodations are furnished to transients for a consideration is subject to the sales tax. However, persons who rent such accommodations to transients for a consideration may not issue a resale certificate for the lease or rental of items such as beds, bedding, other furniture and equipment. Business enterprises which furnish accommodations to transients are the consumers of such leased or rented tangible personal property. When tangible personal property has been purchased on or after August 1, 1985, by a retailer engaged exclusively in leasing or renting such property and the retailer has paid the sales or use tax applicable to the purchase price of the property, a deduction may be taken from the retailer's gross lease or rental receipts for an amount equal to the purchase price of the property. The deduction is contingent upon the retailer using the property exclusively for lease or rental.

(4) Gross receipts. Gross receipts from the lease or rental of tangible personal property shall include the total amount of payment or payments received by the lessor from the lessee as well as payments paid by the lessee to a third party for the benefit of the lessor which are required by the terms of the agreement. Gross receipts from the lease or rental of tangible personal property include amounts designated by the lease or rental agreement as finance or interest charges, and all other itemized charges with the sole exception being separately stated property tax and insurance charges. [For example, gross receipts paid to third parties may include insurance charges paid to insure the property of the lessor or to insure the lessor against liability for damages to the property or person of others and amounts paid for property taxes of the lessor. However,] Charges by a lessor to a lessee for a separately executed maintenance agreement which is not a part of the lease or rental agreement are not subject to tax. Each period for which a lease or rental is payable shall be considered a complete transaction in determining a "retailer" responsible for the tax in accordance with KRS 139.110(1)(c).

(5) Tax responsibility. Every retailer leasing or renting tangible personal property within this state is responsible for the sales tax applicable to gross lease or rental receipts. The retailer/lessor is permitted, but not required, to collect the sales tax from the customer/lessee. Every out-of-state retailer leasing or renting tangible personal property for storage, use or other consumption in this state is required to collect the use tax from the purchaser and remit the tax on gross lease or rental receipts to the Revenue Cabinet. The lessee's responsibility for the use tax is not

relieved until payment of the amount due has been made to the Revenue Cabinet or to a retailer/lessor authorized to collect the Kentucky tax.

Section 2. Taxable Leases or Rentals. Leases and rentals of all kinds of tangible personal property, except motor vehicles and that property qualifying for exemptions provided in the sales and use tax law, are subject to the sales and use tax measured by the gross receipts derived from the lease or rental charge.

(1) Taxable leases or rentals include the following types of tangible personal property:

(a) Aircraft;
(b) Audio visual equipment;
(c) Beverage and food dispensing equipment;
(d) Bicycles;
(e) Boats, canoes, houseboats and sailboats;
(f) Bowling pinsetting equipment;
(g) Campers that are not registered motor vehicles;
(h) Camping equipment;
(i) Carpet and rug cleaning equipment;
(j) Construction equipment;
(k) Communications equipment;
(l) Computer hardware and software [(includes timesharing)];
(m) Costumes;
(n) Formal wear;
(o) Garden and lawn equipment;
(p) Golf carts and clubs;
(q) Hospital equipment;
(r) Household appliances and furniture;
(s) Industrial equipment;
(t) Microphone and stage equipment;
(u) Musical instruments;
(v) Office machinery and equipment;
(w) Office trailers;
(x) Oxygen equipment;
(y) Party supplies;
(z) Physical therapy equipment;
(aa) Plants;
(bb) Portable buildings and sheds;
(cc) Portable toilets;
(dd) Riding horses, apparel and equipment;
(ee) Scaffolding;
(ff) Ski equipment;
(gg) Spraying equipment;
[(hh) Tanning beds;]
(hh) [(ii)] Telephones;
(ii) [(jj)] Televisions;
(jj) [(kk)] Tents;
(kk) [(ll)] Tools;
(ll) [(mm)] Video recorders and players;
(mm) [(nn)] Video tapes, cassettes and related items.

(2) The foregoing examples are for illustration and are not intended to be all inclusive. When lease or rental activity involves the lease or rental of real, tangible and intangible personal property, such as the lease or rental of a business operation or establishment, the total amount of the lease or rental receipts is subject to tax unless the amount applicable to the tangible personal property is separately stated. The amount separately stated for the tangible personal property cannot be less than the fair market lease or rental value for similar property for a similar rental or lease period. The lease or rental of tangible personal property between separate entities owned by the same or similar stockholders is subject to the tax unless otherwise exempted by the sales and use tax law. The tax is to be levied on the lease or rental amount charged or the fair market lease or rental amount, whichever is greater.

Section 3. Nontaxable Rentals or Leases. (1) The lease or rental of real property and the performance of a service do not represent the lease or rental of tangible personal property. Nontaxable receipts include but are not limited to the following:

(a) Charges made for the use of a miniature golf course or golf driving range;
(b) Charges made for the rental of safety deposit boxes;
(c) Charges made for laundering or dry cleaning of apparel owned by customers;
(d) Charges made for the use by individuals of coin operated laundry equipment;
(e) Charges made for the use of docks and docking facilities furnished for boats;
(f) Charges made for storage space in mini-warehouses;
(g) Charges made for the rental of parking spaces in parking lots or garages;
(h) Charges made for the lease or rental of office space or an office building;
(i) Charges made for the lease or rental [for a continuous period of ninety (90) days or more] of furnished and unfurnished apartments;
(j) Charges made for the rental of linens, uniforms, towels and diapers where recurring cleaning is the essence of the rental agreement;
(k) Charges made for the cleaning of wall-to-wall carpet;
(l) Charges made for lawn care service;
(m) Charges made for a construction contract for erecting, remodeling, or repairing a building or other structure;
(n) Charges made for equipment and an operator to perform certain work specified by the customer where the customer does not take possession or have any direction or control over the physical operation of the work to be performed;
(o) Charges made for aircraft charters available to the general public;
(p) Charges made for use by individuals of amusement machines such as video games, pinball machines, etc.;
(q) Charges made for the use of lockers;
(r) Charges made for the use of tanning beds;
(s) Charges made for computer timesharing;
(t) Charges made for the furnishing of space on utility poles for the attachment of cable television, telephone and utility lines.

(2) The foregoing partial list of nontaxable receipts must not be construed to have application beyond the circumstances presented. For example, if an individual enters a business establishment and makes use of a video game machine by inserting twenty-five (25) cents, the receipts from the charge are not taxable. However, the person who is utilizing the video machine in the business operation may lease or rent outright the machine from another person engaged in the business of leasing or renting such property. In this example, the amount or amounts paid to the video game machine owner/lessor by the business enterprise which made the machine available for use by the individual would represent taxable receipts from the lease or rental of tangible personal property.

Section 4. Exemptions. A lessor of tangible personal property should not include within the measure of the tax gross receipts from a lease or rental if the lessor takes from the purchaser a certificate of exemption as evidence that the property purchased will be used in an exempt manner under the sales and use tax law. Sales and use tax exemptions for which the lessee may qualify include, for example, machinery for new and expanded industry, farm machinery, and tangible personal property leased for use by certain religious, charitable, and educational institutions, historical sites, and units of the federal government, Kentucky state government and local governments within this state. When an out-of-state lessee leases tangible personal property from a Kentucky lessor for the purpose of using such property outside this state, and the property is, in fact, used outside this state, the initial lease payment will be subject to the Kentucky sales tax if the property is delivered to the lessee in this state and immediately taken outside this state for use. The initial lease payment may not be for an amount that is less than a proportionate amount of the total lease or rental payments to be made during the term of the agreement. In such cases, the lessor's records must clearly reflect the nature of the transaction. Should the property be returned to Kentucky, the receipts from use of the property in Kentucky are taxable. In the event the total amount of the lease is paid in a lump sum, the total amount would be subject to the Kentucky sales tax. The sales tax does not apply to gross receipts from leases or rentals in which the Kentucky lessor is obligated under the terms of the agreement with the lessee to make physical delivery of the property leased or rented from a point in this state to a point outside this state not to be returned to a point within this state for use provided that such delivery is actually made. The delivery may be made by the lessor's facilities or by common carrier. In the case of bona fide common carriers, the lease or rental of equipment which enters this state in actual use in interstate commerce and which is used exclusively in interstate commerce thereafter is not subject to tax. Nominal use in intrastate commerce will not affect this exception.

Section 5. Motor Vehicles. The lease or rental of motor vehicles which are registered for use on the public highways and upon which any applicable tax levied under KRS 138.460 has been paid, is not subject to the sales or use tax. The applicable tax is the motor vehicle usage tax administered by the Motor Vehicle Usage Tax Section of the Revenue Cabinet. Motor vehicles which are not subject to the motor vehicle usage tax are subject to the sales and use tax.

Section 6. Reciprocity. The sales and use tax law provides for credit against the five (5) percent Kentucky use tax for state sales tax paid in another state which imposes a sales tax substantially identical to Kentucky's, provided the other state has a sales and use tax reciprocity statute similar to Kentucky's. In the past, credit for sales and use tax paid in a state having a reciprocity statute similar to Kentucky's has been allowable when evidence was presented that the state sales or use tax was actually paid. In addition to this requirement, the taxing of lease and rental receipts necessitates additional requirements which have application only to lease and rental receipts. Reciprocity will apply to use tax due Kentucky on lease or rental receipts only if the reciprocal state has levied and is legally due the sales or use tax paid on lease or rental receipts derived from the storage, use of other consumption of property in Kentucky.

Section 7. Construction Machinery and Equipment. Persons engaged in the business of leasing or renting construction machinery and equipment are retailers responsible for reporting and remitting the sales and use tax. However, should the lessor's receipts from the lease or rental of construction machinery and equipment be nontaxable, the provisions of KRS 139.320 will apply to lessees of construction machinery and equipment brought into Kentucky for use. KRS 139.320 levies a use tax on construction machinery and equipment brought into Kentucky for use in construction projects. This use tax, which is separate and distinct from the normal use tax (KRS 139.310), is levied, in the case of leased and rented machinery and equipment, upon the lessee based upon the lease or rental payments made to an out-of-town lessor. While the law change effective August 1, 1985 provides for an exemption for gross receipts from lease or rental agreements entered into prior to August 1, 1985 when the applicable sales or use tax was paid on the purchase price of the property on or before August 20, 1985, the provisions of KRS 139.320 will still apply to any lease or rental of construction machinery and equipment and is the responsibility of the lessee. When reciprocity requires the recognition of a tax credit against the tax levied under KRS 139.310 as set forth in Section 6 of this regulation, the provisions of KRS 139.320 will apply to rental or lease payments made for construction machinery and equipment and is the responsibility of the lessee. Kentucky law does not permit reciprocity against the use tax levied under KRS 139.320.

Section 8. 103 KAR 28:050, Rentals and leases, is hereby repealed.

GARY W. GILLIS, Secretary
APPROVED BY AGENCY: September 13, 1985
FILED WITH LRC: September 13, 1985 at Noon

AMENDED AFTER HEARING

EDUCATION AND HUMANITIES CABINET
Department of Education
Office of Local Services
(Amended After Hearing)

702 KAR 1:010. Facilities surveys and plans.

RELATES TO: KRS 157.420 [(3)], 157.622
PURSUANT TO: KRS 156.070 [, 156.160]
NECESSITY AND FUNCTION: KRS 157.420(3) requires that the capital outlay portion of Foundation Program funds be used by school districts for capital outlay projects approved by the Superintendent of Public Instruction in accordance with requirements of law and based on a survey made in accordance with regulations of the State Board of Education; and KRS 157.622 sets forth certain requirements for school facilities plans relative to participation in funding by the School Facilities Construction Commission. This regulation provides for the development and adoption of [To provide] a written plan describing construction and use of school facilities to guide school administrators in meeting the needs of the district.

Section 1. The Superintendent of Public Instruction shall conduct or cause to be conducted a facilities survey of each school district at least every five (5) years, and shall deliver to the local board of education a report which contains an assessment of existing conditions, and a recommended facilities plan which designates an organizational pattern, classification of school centers, and a priority schedule for construction and[/or] renovation needs. This survey shall be done in conjunction with the accreditation program **except as provided in Section 4 of this regulation**, and shall be subject to the public hearing procedures required therefor by 704 KAR 10:022.

Section 2. A facilities survey report upon adoption by the local board of education and the State Board of Education shall become the facilities plan for the district unless an appeal, in lieu of adoption by the local board, is submitted to the Superintendent of Public Instruction in accordance with the accreditation process appeal provisions set forth in 704 KAR 10:022 [within sixty (60) days following receipt of the facilities survey report]. Each appeal shall include a proposed full facilities plan with the local board's requested priority listing of construction needs.

Section 3. [The Superintendent of Public Instruction shall review and report to the local board of education within a period of thirty (30) days the results of the appeal.] The facilities plan shall remain in effect until any changes have been approved by the State Board of Education [Superintendent of Public Instruction].

Section 4. A local board of education may at any time request the Superintendent of Public Instruction to conduct a review of a facilities plan for the district. Upon the presentation of written evidence that circumstances exist which necessitate temporary or permanent suspension or alteration of the adopted plan, the State Board of Education shall, at its next regular meeting, schedule a public hearing and designate a hearing officer to conduct the public hearing. The Superintendent of Public Instruction shall present at the public hearing such data as is appropriate to provide the hearing officer objective information upon which to make a recommendation. Members of the local school board, the general public, and interested individuals and parties shall be provided an opportunity to testify at the hearing. The hearing officer, whenever practicable, shall present his or her report at the next regularly scheduled meeting of the State Board of Education after the public hearing, at which time the State Board of Education shall make a final decision relative to the requested facility plan amendment. The Superintendent of Public Instruction shall make a recommendation to the State Board of Education relative to the requested revision of the facility plan at the time the hearing officer makes his or her report [Superintendent of Public Instruction shall within fifteen (15) days of the receipt of the request determine whether a review is justified and so advise the local board of education. If a review is deemed to be justified, such review shall be within ninety (90) days from date of authorization by the Superintendent of Public Instruction. If a review is deemed unjustified, the local board of education may without request to the Superintendent of Public Instruction employ at local expense a reputable agency to conduct a facilities survey and submit same within ninety (90) days as an appeal pursuant to Section 2].

Section 5. The adopted facilities plan shall become the facilities plan of the local school district and shall be implemented to the extent that the financial ability of the district will permit as determined by the Superintendent of Public Instruction. The scope of any construction project recommended in the facilities plan shall not be changed unless the plan is amended.

ALICE MCDONALD, Superintendent
APPROVED BY AGENCY: November 6, 1985
FILED WITH LRC: November 7, 1985 at noon

EDUCATION AND HUMANITIES CABINET
Department of Education
Office of Instruction
(Amended After Hearing)

704 KAR 3:005. Educational Improvement Act.

RELATES TO: KRS 158.650 to 158.740
PURSUANT TO: KRS 156.070, 158.650, 158.670, 158.700
NECESSITY AND FUNCTION: KRS 158.650 to 158.740, as amended by Senate Bill 202, the Educational Improvement Act, mandate a program of assessment, testing, annual performance reports, educational improvement plans and various sanctions to insure the right of public

school students to acquire the competencies in the essential skills necessary to complete high school, pursue post secondary education, or enter the work force; and to assure such students access to programs and services appropriate to their educational needs in the areas of competencies in the essential skills, with the Department of Education to administer the act pursuant to regulations of the State Board of Education and to develop a comprehensive implementation plan. This regulation implements the duties and functions of the Educational Improvement Act of 1978, as amended by Senate Bill 202, by adopting the Department of Education's revised implementation plan.

Section 1. Each local district board of education shall prepare an Annual Performance Report which shall include local district data for the following factors: annual transportation cost per pupil transported; annual current expenses per pupil in average daily attendance; cost per pupil for instruction; cost per pupil for administration; percent of district revenue received from local, state and federal sources; local revenue per child in average daily attendance; assessed property value per child in average daily attendance; results of the state-mandated testing program; results of Scholastic Aptitude Test and American College Board Test; dropout rate; retention rate; percent average daily attendance; number and percent of students going to college or other post-secondary training; number and percent of students enrolled in special education and completing Individual Education Plans; percent of enrollment classified as economically deprived; percent attendance by professional staff; student/teacher ratio; teacher/administrator ratio; salary data by rank; the number of teachers teaching out of their field of specialty and the number of classes taught by teachers out of their field of specialty; expenditures for staff in-service; courses exceeding the state Program of Studies requirements; and an executive summary of the Master Educational Improvement Plan Progress Report. This report shall be submitted to the State Board of Education by December 15, 1984 for the 1983-84 school year, and by September 15 of each succeeding school year and shall be published in the newspaper with the largest circulation in the county by October 1.

Section 2. Each local district board of education shall identify program and service deficiencies and student achievement deficiencies based upon the Annual Performance Report, the results of the most current review of the factors listed hereinafter and such other state-mandated performance reports as deemed appropriate. Deficiencies shall be determined as follows:

(1) The local school district shall be declared deficient in program and service offerings when one (1) or more of the following accreditation standards are not met.

(a) STANDARD - Legal responsibility:

1. Indicator - The local school district is in compliance with current applicable statutes of the Commonwealth of Kentucky and Kentucky administrative regulations and state board policies.

2. Indicator - The local school district is in compliance with current applicable federal laws and regulations.

(b) STANDARD - Curriculum and learning environment:

1. Indicator - Each school provides a minimum of 175 days of instruction.

2. Indicator - Each school provides a minimum of six (6) hours of instructional time per day.

3. Indicator - Each school is in compliance with the requirements in the Program of Studies in Kentucky Schools, K-12, pursuant to 704 KAR 3:304.

4. Indicator - Each school has a written plan for implementing the program of instruction for grades K-12.

5. Indicator - Opportunities are provided for citizens' groups to participate in the following:

a. Curriculum study;

b. Budget planning;

c. Co-operative evaluation; and

d. Accreditation study.

6. Indicator - The school has developed specific plans and procedures assuring accountability to the local board and to the public.

7. Indicator - Quality textbooks with current content and provided in adequate quantities to meet classroom needs.

8. Indicator - The school has sufficient materials and equipment available to implement the curriculum.

(c) STANDARD - School staff and administration:

1. Indicator - All professional personnel hold appropriate certificates for positions and/or assignments. (Each vocational staff member has the required work experience specific to the program being taught.)

2. Indicator - All teachers are teaching in their major or minor field or specific areas of concentration.

3. Indicator - The local district has established and implemented procedures for evaluating all certified personnel based on the quality of their performance.

(d) STANDARD - Responsible pupil conduct: Indicator - Pupils, parents, teachers, administrators, and school board members are involved in the development of a code of pupil conduct and attendance based on assessed needs which is approved by the local school board; which is in compliance with state and federal law; and which contains a system by which all pupils, parents, and faculty members are informed annually of the pupil code and its provisions.

(e) STANDARD - Financial support and budget: Indicator - The budget provides for adequate funding of all required accrediting standards.

(2) The local district shall be declared deficient in program and service offerings when one (1) or more of the following planning and reporting standards are not met;

(a) STANDARD - Master Educational Improvement Plan. Indicator - The local school district shall prepare and implement the Master Educational Improvement Plan established jointly by the district and the Kentucky Department of Education and approved by the local board of education.

(b) STANDARD - Annual Performance Report.

1. Indicator - The local district shall prepare and submit each year as herein required, the Annual Performance Report to the State Board of Education.

2. Indicator - The local district shall

publish the Annual Performance Report in the newspaper with the largest circulation in the county by October 1.

(3) The local school district shall be declared deficient in academic achievement when one (1) or more of the following standards of attainment of competencies are not met: STANDARD - Student Academic Performance.

(a) Indicator - Students in grades 3, 5, 7, and 10 shall score at or above the national average of fifty (50) normal curve equivalency on the total battery of the Comprehensive Test of Basic Skills.

(b) Indicator - Local school districts shall achieve an academic performance level at which eighty-five (85) percent of the students enrolled in each grade shall master the essential skills in the skills areas of reading and mathematics in the 1984-85 school year and in the additional skills areas of spelling, writing and library research reference skills each year thereafter. Districts achieving a performance level at which the percent of students in each grade mastering the essential skills is more than five (5) percentage points below eighty-five (85) percent shall [be deemed to have a deficiency in that grade and skills area and shall] develop and implement plans at the local level to improve [correct] the performance level [deficiency] by two and five-tenths (2.5) percentage points each year [Students in grades K-12 shall achieve on the Kentucky Essential Skills Test an academic performance level to be established by the State Board of Education and filed as an amendment to this regulation in the five (5) essential skills areas on the Kentucky Essential Skills Test].

Local school districts achieving an academic performance level at which the percent of students in any [each] grade mastering the essential skills is more than five (5) percentage points below eighty-five (85) percent in three (3) or more grade levels in any one (1) skills area, or that fail to demonstrate in two (2) consecutive years the previously required rate of improvement [toward correcting a deficiency] in a grade or skills area shall be deemed to have a deficiency in the applicable skills area and shall include in the Master Educational Improvement Plan a specific goal focused on improving the percent of students mastering the essential skills by at least two and five-tenths (2.5) percentage points each year. The goal shall include both process and product objectives which establish specific action, time frames, and outcomes that systematically move the district toward achieving an eighty-five (85) percent performance level in each grade and skills area.

(4) The local school district shall be declared deficient in product goals when one (1) or more of the following school district outcome standards are not met:

(a) STANDARD - Student Attendance.

1. Indicator - The percentage of attendance shall be calculated by dividing the aggregate days attendance by the aggregate days membership. Local school districts achieving a percent of attendance of more than ninety-three and five-tenths (93.5) but less than ninety-six (96) shall be deemed in a satisfactory range and shall include in the Master Educational Improvement Plan a specific goal focused on improving student attendance. The goal shall include both process and product objectives which establish specific action, time frames, and outcomes that systematically move the district toward achieving ninety-six (96) percent or better student attendance.

Local school districts achieving less than ninety-three and five-tenths (93.5) percent attendance shall be deemed deficient and shall include in the Master Educational Improvement Plan a specific goal focused on improving student attendance. The goal shall include both process and product objectives which establish specific actions, time frames, and outcome that systematically move the district toward achieving ninety-six (96) percent or better student attendance. In addition local school districts achieving less than ninety-three and five-tenths (93.5) percent attendance shall as a minimum achieve the following percentage improvements in attendance each year by range groupings in which they fall for that year:

Below ninety (90) percent - the difference between ninety (90) percent and the district's current percent of attendance;

Over ninety (90) percent but less than ninety-two (92) percent - two (2) percent;

Over ninety-two (92) percent but less than ninety-three and five-tenths percent - one (1) percent.

Any local school district failing to implement the Master Educational Improvement Plan shall be deemed deficient in accordance with subsection (2) of this section.

(b) STANDARD - Student Dropout.

1. Indicator - The dropout rate shall be defined as the annual percentages of students leaving school prior to graduation in grades 7-12 and include withdrawals in attendance accounting codes W6, W7, W10, and W11.

Local school districts with a dropout percentage of more than three and five-tenths (3.5) percent but less than five and five tenths (5.5) percent shall be deemed in a satisfactory range and shall include in the Master Educational Implementation Plan a specific goal focused on reducing the dropout rate. The goal shall include both process and product objectives which establish specific actions, time frames, and outcomes that systematically move the district toward reducing the dropout percentage to three and five-tenths (3.5) percent or less.

Local districts with a dropout percentage greater than five and five-tenths (5.5) percent shall be deemed deficient and shall include in the Master Educational Improvement Plan a specific goal focused on reducing the dropout rate. The goal shall include both process and product objectives which establish specific actions, time frames, and outcomes that systematically move the district toward reducing the dropout percentage to three and five-tenths (3.5) percent or less. In addition, local districts with a dropout percent in excess of five and five-tenths (5.5) percent shall as a minimum achieve the following percentage improvements in reducing dropouts each year by the range groupings in which they fall for that year:

Over eight and five-tenths (8.5) percent - the difference between eight and five-tenths (8.5) percent and the district's current dropout percentage;

Less than eight and five-tenths (8.5) percent but more than seven (7) percent - one (1)

percent;

Less than seven (7) percent but more than five and five-tenths (5.5) percent - .75 percent.

A local school district failing to implement the Master Educational Improvement Plan shall be deemed deficient in accordance with Section 2(2) of this regulation.

Section 3. (1) To correct deficiencies as defined by this regulation and meet other statutory requirements, each local board of education shall prepare and submit to the State Board of Education for approval, by October 15, 1985, a Master Educational Improvement Plan. The Master Educational Improvement Plan shall include as separate components the following: Part I, a plan for addressing accreditation deficiencies; Part II, a plan for addressing deficiencies in academic performance on state mandated tests; Part III, a plan for addressing the district personnel in-service needs (to be submitted by July 15 annually); Part IV, a plan for addressing the deficiencies identified as a result of the district's financial analysis; and Part V, such other components as necessary to correct deficiencies identified in other program and performance areas. The Master Educational Improvement Plan shall include specific time lines for correcting each deficiency and shall designate the individuals responsible for correcting each deficiency. The Master Educational Improvement Plan shall be established jointly by the district and the Kentucky Department of Education and shall be approved by the local board of education and the State Board of Education.

(2) Upon the initial filing and approval of a Master Educational Improvement Plan, the contents thereof shall supersede the separate component reports then on file.

Section 4. (1) Each district shall report to the Kentucky Department of Education by September 15 of each school year, its progress in correcting the deficiencies addressed in its Master Educational Improvement Plan. The Kentucky Department of Education shall identify those districts failing to make satisfactory progress in correcting deficiencies. The progress reports of the identified districts and such other reports as may be requested shall be reviewed by the Educational Improvement Advisory Committee which shall recommend to the Superintendent of Public Instruction for State Board action, those districts which are "educationally deficient" and which should be provided with technical assistance by the Kentucky Department of Education. Satisfactory progress shall be defined relative to "educationally deficient," as the district's compliance with and adherence to the time lines established in the approved Master Educational Improvement Plan which shall be submitted on an annual basis until the district is cleared of deficiencies.

(2) Where time lines established in a Master Educational Improvement Plan require remedial action by a district prior to the submission of a following year's progress report, the Superintendent of Public Instruction shall monitor such compliance and may recommend declarations of educational deficiency to the State Board of Education, where compliance is not accomplished, without recommendation or consideration by the Educational Improvement Advisory Committee.

Section 5. Local school districts failing to meet or make satisfactory progress toward correcting deficiencies in program and service standards and product standards, after having received technical assistance from the Kentucky Department of Education, shall be subject to direct management intervention by the State Board of Education, as defined by KRS 158.584(4). Satisfactory progress shall be defined as the district's compliance with and adherence to the time lines established in the approved Master Educational Improvement Plan.

Section 6. Subsequent to direct management intervention by the State Board of Education, if the local district still does not meet established time lines for correcting deficiencies, removal from office of a member or members of the local board or the superintendent or other school district personnel, pursuant to KRS 156.132 to 156.136, may be pursued by the state board.

Section 7. A district that has been declared an educationally deficient district by the state board shall be notified of such declaration in writing. At such time as an educationally deficient district shall be cleared by the Kentucky Department of Education of all deficiencies contributing to the declaration of educational deficiency, the Superintendent of Public Instruction, with the approval of the State Board of Education, shall notify such a district in writing.

ALICE MCDONALD, Superintendent
APPROVED BY AGENCY: November 6, 1985
FILED WITH LRC: November 7, 1985 at noon

CABINET FOR HUMAN RESOURCES
Department for Health Services
(Amended After Hearing)

902 KAR 17:010. State health plan.

RELATES TO: KRS Chapters 194, 216B
PURSUANT TO: KRS 194.050
NECESSITY AND FUNCTION: The Health Planning and Resources Development Act, 42 USC 300 M-3 requires participating states to adopt by procedures set out in the United States Code, a state health plan. The Cabinet for Human Resources is authorized by KRS 194.050 to adopt such rules and regulations as are necessary to implement programs mandated by federal law, or to qualify for the proper administration of the cabinet and its programs. The Kentucky [Health Facilities and Health Services] Certificate of Need Authority [and Licensure Board] utilizes the state health plan in review of applications for certificates of need to establish and modify health services and health facilities in the Commonwealth. The function of this regulation is to assist in the inventory of existing health resources and to set planning goals and guidelines.

Section 1. The Proposed Kentucky State Health Plan 1986-1988 [1983-1986], was approved for public review [adopted] by the State Health Planning Council on September 11, 1985 and will be considered [approved] by Governor Martha

Layne Collins [on November 5, 1984] as the document that sets out planning policies and guidelines for use by the Kentucky [Health Facilities and Health Services] Certificate of Need **Authority** [and Licensure Board]. A copy of the Proposed Kentucky State Health Plan 1986-1988 is on file in the Office of the Commissioner for Health Services, 275 East Main Street, Frankfort, Kentucky 40621 and is open and available for public inspection during normal business hours.

Section 2. The Review Criteria and Standards Section, pages 167 through 190 [165 through 188], [following portions] of the Proposed Kentucky State Health Plan 1986-1988 is [are] hereby adopted by reference as regulations of the Cabinet for Human Resources as if fully set out herein. [:]

[(1) Acute care policies p. 25-32, with the exception of the following:]

[(a) Policies relating to excess capacity and utilization, p. 28.]

[(b) Policies relating to the containment of capital expenditures, p. 30.]

[(c) Policies relating to regionalization, p. 30.]

[(2) Long term care policies, p. 32-35.]

[(3) Planning criteria and review standards, p. 42-62 with the exception of the following:]

[(a) Acute care review standards numbers 8, 9, 10, and 14, page 43.]

[(b) Delicensure of excess capacity, p. 47.]

[(c) Hospital capital expenditure limit, p. 48.]

[(d) Tertiary and medical service centers designation, p. 49.]

[(4) Glossary.]

C HERNANDEZ, M.D., M.P.H., Commissioner
E. AUSTIN, JR., Secretary
APPROVED BY AGENCY: November 12, 1985
FILED WITH LRC: November 13, 1985 at 11 a.m.

PROPOSED AMENDMENTS

KENTUCKY HIGHER EDUCATION ASSISTANCE AUTHORITY
(Proposed Amendment)

11 KAR 4:050. Set off of authority claims.

RELATES TO: KRS 164.740 to 164.785
PURSUANT TO: KRS 13A.100, 164.748(4), (9), (10), (14)
NECESSITY AND FUNCTION: In accordance with KRS 131.565 and the Federal Deficit Reduction Act of 1984, the authority may enter agreements [has entered an agreement] with the Kentucky Revenue Cabinet and with the federal government to provide for the withholding of income tax refunds owed to individuals indebted to the authority to satisfy claims established by the authority. This regulation sets forth the process for notification and appeal afforded to individuals in implementing a set off of authority claims through the Kentucky Revenue Cabinet or the Internal Revenue Service.

Section 1. Notification. The authority shall send written notification by U.S. First Class Mail to the last known address of a person against whom the authority has a claim of any indebtedness to the authority for a sum certain for which set off is sought pursuant to KRS 131.560 or federal law. Said notification shall contain information sufficient to identify the person and to inform the person of the amount of the claim to be set off, the authority's intention to set off the claim, and the right to dispute the claim. The notification may contain such additional information as the authority may prescribe. Notification shall be sent not less than thirty (30) days prior to referring the claim to the Kentucky Revenue Cabinet or federal government for set off, and shall be deemed effective when placed with the Postal Service for delivery.

Section 2. Disputed Claims. (1) Any person notified pursuant to the Section 1 of this regulation may petition the authority in writing within thirty (30) days after notification to dispute the claim of the authority. This written statement of appeal shall specify the basis on which the authority's claim is disputed, including any legal or equitable defense the petitioner may have against recovery by the authority. The petitioner may supplement the written statement of appeal at any time prior to a final determination with any additional documentation. The petitioner shall submit such additional documentation as the authority may require.

(2) Upon receipt of a written statement of appeal on a timely basis, the authority, or its designated representative, shall refrain from referring the authority's claim to the Kentucky Revenue Cabinet or federal government, and shall make a final written determination of the validity of the claim. The final determination shall be based on any documentation submitted by the petitioner and relevant records of the authority, which shall be made available to the petitioner upon requests. Such documentation shall constitute the record of the appeal.

(3) Upon a final determination upholding, in part or in whole, the claim of the authority, the claim may be referred to the Kentucky Revenue Cabinet in accordance with KRS 131.565 or to the federal government in accordance with federal law and regulations.

Section 3. (1) State income tax set off - Any person, notified by the Kentucky Revenue Cabinet that an income tax refund is being withheld because of a claim of the authority, who disputes the validity of the authority's claim, may petition the authority within thirty (30) days following said notification for a hearing in accordance with subsection (3) of this section.

(2) Federal income tax set off - Any person who disputes the validity of the authority's claim, as determined in accordance with Section 2 of this regulation, may, within thirty (30) days following the authority's written determination, petition the authority for a hearing in accordance with subsection (3) of

this section.

(3) A hearing requested pursuant to this section may be conducted by a hearing officer or committee appointed by the authority's Board of Directors. At such a hearing, the petitioner may appear in person and may, at his/her expense, be represented by counsel. Evidence may be presented by testimony and/or written documentation. The hearing officer or committee shall prepare written findings of fact and conclusions. The decision shall be issued in the name of the authority, and shall be final and conclusive as to all parties.

PAUL P. BORDEN, Executive Director
APPROVED BY AGENCY: October 22, 1985
FILED WITH LRC: November 15, 1985 at noon.
PUBLIC HEARING SCHEDULED: A public hearing regarding this regulation is scheduled to be held at 1050 U.S. 127 South, Frankfort, Kentucky, on Friday, December 27, 1985 at 10 a.m. Any interested persons wishing to comment or attend the hearing pursuant to KRS Chapter 13A must submit their written comments or statement of intent to attend to: The Executive Director, Kentucky Higher Education Assistance Authority, 1050 U.S. 127 South, Frankfort, Kentucky 40601, no later than Monday, December 23, 1985. Absent such response from the public, the hearing may be cancelled.

REGULATORY IMPACT ANALYSIS

Agency Contact Person: Richard F. Casey
(1) Type and number of entities affected: Approximately 3500 individuals who have defaulted on KHEAA insured student loans and subject to tax refund offset.
(a) Direct and indirect costs or savings to those affected: None
1. First year:
2. Continuing costs or savings:
3. Additional factors increasing or decreasing costs (note any effects upon competition):
(b) Reporting and paperwork requirements:
(2) Effects on the promulgating administrative body: None
(a) Direct and indirect costs or savings:
1. First year:
2. Continuing costs or savings:
3. Additional factors increasing or decreasing costs:
(b) Reporting and paperwork requirements:
(3) Assessment of anticipated effect on state and local revenues: None
(4) Assessment of alternative methods; reasons why alternatives were rejected: N/A
(5) Identify any statute, administrative regulation or government policy which may be in conflict, overlapping, or duplication: None
(a) Necessity of proposed regulation if in conflict:
(b) If in conflict, was effort made to harmonize the proposed administrative regulation with conflicting provisions:
(6) Any additional information or comments: Amendment effects a procedural change in regulation prescribing appeal procedures, it assures due process by affording in-person hearing and expanding applicability to participation in a federal tax refund offset program.
Tiering:
Was tiering applied? No. Concept of tiering is not applicable.

KENTUCKY HIGHER EDUCATION ASSISTANCE AUTHORITY (Proposed Amendment)

11 KAR 5:080. Disbursement procedures.

RELATES TO: KRS 164.740 to 164.764, 164.780, 164.785
PURSUANT TO: KRS 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 disbursement procedures for KHEAA grant programs.

Section 1. Eligibility verification. (1) The KHEAA grant program eligibility verification roster will be forwarded to the KGPO at each educational institution prior to the beginning of each semester.
(2) The KGPO shall certify the eligibility of KHEAA grant recipients according to instructions attached to the roster and return it to the authority at least three (3) weeks prior to the date on which receipt of the KHEAA grant checks is requested.

Section 2. Checks, Check Register. (1) Upon receipt of the properly certified eligibility verification roster, the authority will issue to the KGPO individual checks made payable to each award recipient.
(2) The checks will be accompanied by two (2) copies of a KHEAA grant check register, one (1) copy of which shall be retained by the institution and the other returned to the authority in accordance with instructions attached thereto. The instructions will specify:
(a) Conditions under which a check shall be disbursed to the KHEAA grant recipient;
[(b) That each recipient shall sign the check register indicating receipt of the check;]
(b) [(c)] Conditions under which a check shall be returned to the authority; and
(c) [(d)] The date on which the register and any undisbursed checks shall be returned to the authority.
(3) An institution which has not returned a previous check register or completed it according to instructions may not receive another check register and additional checks until it has satisfied the requirements in subsection (2) of this section.

Section 3. Alternative Disbursement. In lieu of the processes respecting the disbursement of checks pursuant to Section 2 of this regulation, the authority, in its sole discretion, may enter agreements on such terms as the authority deems appropriate to provide alternative methods for economical and efficient disbursement of KHEAA grants.

PAUL P. BORDEN, Executive Director
APPROVED BY AGENCY: October 22, 1985
FILED WITH LRC: November 15, 1985 at noon.
PUBLIC HEARING SCHEDULED: A public hearing regarding this regulation is scheduled to be held at 1050 U.S. 127 South, Frankfort, Kentucky, on Friday, December 27, 1985 at 10 a.m. Any interested persons wishing to comment or attend the hearing pursuant to KRS Chapter 13A must submit their written comments or statement of intent to attend to: The Executive Director, Kentucky Higher Education Assistance

Authority, 1050 U.S. 127 South, Frankfort, Kentucky 40601, no later than Monday, December 23, 1985. Absent such response from the public, the hearing may be cancelled.

REGULATORY IMPACT ANALYSIS

Agency Contact Person: Richard F. Casey
(1) Type and number of entities affected: 54 postsecondary educational institutions participating in KHEAA grant programs.
(a) Direct and indirect costs or savings to those affected:
1. First year: None
2. Continuing costs or savings: None
3. Additional factors increasing or decreasing costs (note any effects upon competition): None
(b) Reporting and paperwork requirements: None
(2) Effects on the promulgating administrative body: None
(a) Direct and indirect costs or savings:
1. First year:
2. Continuing costs or savings:
3. Additional factors increasing or decreasing costs:
(b) Reporting and paperwork requirements:
(3) Assessment of anticipated effect on state and local revenues: None
(4) Assessment of alternative methods; reasons why alternatives were rejected: There are no viable alternatives.
(5) Identify any statute, administrative regulation or government policy which may be in conflict, overlapping, or duplication: None
(a) Necessity of proposed regulation if in conflict:
(b) If in conflict, was effort made to harmonize the proposed administrative regulation with conflicting provisions:
(6) Any additional information or comments: This amendment merely eliminates a procedural step no longer necessary to disbursement of grants.

Tiering:
Was tiering applied? No. Concept of tiering is not applicable to this situation.

KENTUCKY HIGHER EDUCATION ASSISTANCE AUTHORITY
(Proposed Amendment)

11 KAR 5:090. Refund and repayment policy.

RELATES TO: KRS 164.748(4), (8), (12), (14), 164.753(4)(a), 164.780, 164.785
PURSUANT TO: KRS 164.748(4)
NECESSITY AND FUNCTION: The Kentucky Higher Education Assistance Authority administers grant programs to provide financial assistance to students to attend Kentucky postsecondary institutions. This regulation sets forth the apportionment of financial aid refunds from institutions and repayment from students due to the KHEAA grant programs. It is necessary to amend this regulation for the purpose of consistency with applicable federal regulations promulgated at 45 CFR 168.21.

Section 1. A student who fails to enroll, withdraws or changes enrollment status may be due a refund of monies paid to the institution or may owe a repayment of cash disbursements made to the student for educationally related expenses. If the student received financial aid, a portion of the refund and/or repayment is due to the financial aid programs.

Section 2. The amount of the refund and/or repayment shall be determined in accordance with the institution's refund and/or repayment policies relative to financial aid funds, except as provided in Section 3. These policies must be published and consistently administered. Such policies must be on file with the authority. The authority must be notified in writing of any changes in such policies.

Section 3. When a KHEAA grant recipient officially or unofficially withdraws from or is expelled by an institution before the first day of classes of the award period, the award shall be deemed an overaward and a full refund or repayment of the KHEAA grant shall be required, notwithstanding any institutional policy to the contrary. In cases of unofficial withdrawal, the institution shall use the last recorded date of class attendance by the student as the end of the student's enrollment. If the institution is unable to document the student's last date of attendance, any KHEAA grant disbursement for that award period shall be subject to full refund and/or repayment. <u>If, at any time, a student's enrollment is terminated with no assessment of tuition and fees by the institution, then the full KHEAA grant shall be subject to repayment by the student.</u>

Section 4. If a refund is due under the institution's financial aid refund policy, the KHEAA grant or a portion thereof shall be refunded by the institution by check <u>or journal voucher</u> made payable to KHEAA grants. The institution shall multiply the total financial aid refund amount by the following fraction to determine the portion of the refund to be returned to the authority:

$$\frac{\text{KHEAA state grant for the term}}{\text{Total aid awarded for the term (minus work earnings)}}$$

Section 5. (1) If, under the institution's financial aid repayment policy, the student owes a repayment, the KHEAA grant or a portion thereof must be repaid to the authority by the student. The institution must calculate the amount of repayment due to the authority and notify the student and the authority in a timely fashion regarding the amount due to the authority. Students are required to make such repayments by certified check or money order payable to KHEAA Grants, Frankfort, Kentucky 40601. The institution shall multiply the total financial aid repayment amount by the following fraction to determine the portion of the repayment to be paid to the authority by the student:

$$\frac{\text{KHEAA state grant for the term}}{\text{Total aid awarded for the term (minus work earnings)}}$$

(2) The authority shall notify the student and the institution when such are received.

Section 6. Refunds by institutions and notifications of student repayments due transmitted to the authority shall be accompanied by student's name and social

security number, the reason for the refund and/or repayment, date of enrollment status change, the semester and year, and the calculation used for determining each refund and/or repayment.

PAUL P. BORDEN, Executive Director
APPROVED BY AGENCY: October 22, 1985
FILED WITH LRC: November 15, 1985 at noon.
PUBLIC HEARING SCHEDULED: A public hearing regarding this regulation is scheduled to be held at 1050 U.S. 127 South, Frankfort, Kentucky, on Friday, December 27, 1985 at 10 a.m. Any interested persons wishing to comment or attend the hearing pursuant to KRS Chapter 13A must submit their written comments or statement of intent to attend to: The Executive Director, Kentucky Higher Education Assistance Authority, 1050 U.S. 127 South, Frankfort, Kentucky 40601, no later than Monday, December 23, 1985. Absent such response from the public, the hearing may be cancelled.

REGULATORY IMPACT ANALYSIS

Agency Contact Person: Richard F. Casey
(1) Type and number of entities affected: 54 postsecondary educational institutions participating in the KHEAA grant programs.
(a) Direct and indirect costs or savings to those affected: None.
1. First year:
2. Continuing costs or savings:
3. Additional factors increasing or decreasing costs (note any effects upon competition):
(b) Reporting and paperwork requirements: No change.
(2) Effects on the promulgating administrative body:
(a) Direct and indirect costs or savings:
1. First year: $400 maximum grant per student per year saved when student's enrollment is terminated without charge for tuition and fees.
2. Continuing costs or savings: Same as above.
3. Additional factors increasing or decreasing costs: None
(b) Reporting and paperwork requirements: No change.
(3) Assessment of anticipated effect on state and local revenues: None
(4) Assessment of alternative methods; reasons why alternatives were rejected: No reasonable alternatives available.
(5) Identify any statute, administrative regulation or government policy which may be in conflict, overlapping, or duplication: None
(a) Necessity of proposed regulation if in conflict:
(b) If in conflict, was effort made to harmonize the proposed administrative regulation with conflicting provisions:
(6) Any additional information or comments: Purpose of amendment is to clarify an existing policy regarding refunds of grants.

Tiering:
Was tiering applied? No. Refund/repayment obligation applies equally to all KHEAA grant recipients. No tiering is practical.

KENTUCKY HIGHER EDUCATION ASSISTANCE AUTHORITY (Proposed Amendment)

11 KAR 5:100. Records and reports.

RELATES TO: KRS 164.740 to 164.764, 164.780, 164.785
PURSUANT TO: KRS 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 requires that educational institutions maintain and provide upon request records and reports to the authority.

Section 1. Records and Reports. Any educational institution shall, upon written request, make available to the authority:
(1) All records relied upon by that institution to certify that any recipient of funds from the authority is an eligible student pursuing an eligible course of study. Any institution which requires a student to execute a contract providing for payment of tuition and fees shall include on the face of that contract:
(a) Date the student signed the contract;
(b) Date student began or will begin classes;
(c) Expected graduation date;
(d) Major field of study;
(e) Minor field of study;
(f) Full or part-time enrollment status; and
(g) All degrees previously earned.
A copy of the contract for the academic period for which the KHEAA grant is awarded for each applicant certified as eligible shall be submitted with the Eligibility Verification Roster.
(2) Such other reports and information as are necessary to determine that the institution has complied with these regulations and with the certifications and declarations contained in the contract.

Section 2. Maintenance and Retention of Records. All educational institutions shall establish and maintain records consisting of information necessary to determine whether grant recipients were eligible to receive KHEAA grants.
(1) For each of its KHEAA grant recipients an institution shall maintain records which are:
(a) Systematically organized;
(b) Maintained for five (5) years after the award year in which the recipient ceased enrollment; and
(c) Readily available for review by the authority or its designated official.
(2) An institution may substitute micro-file copies for original records in meeting the requirements of this section.
(3) An institution must maintain the records of all KHEAA grant recipients at a location in Kentucky at which records pertaining to federal student financial assistance programs are maintained.

PAUL P. BORDEN, Executive Director
APPROVED BY AGENCY: October 22, 1985
FILED WITH LRC: November 15, 1985 at noon.
PUBLIC HEARING SCHEDULED: A public hearing regarding this regulation is scheduled to be held at 1050 U.S. 127 South, Frankfort, Kentucky, on Friday, December 27, 1985 at 10 a.m. Any interested persons wishing to comment

or attend the hearing pursuant to KRS Chapter 13A must submit their written comments or statement of intent to attend to: The Executive Director, Kentucky Higher Education Assistance Authority, 1050 U.S. 127 South, Frankfort, Kentucky 40601, no later than Monday, December 23, 1985. Absent such response from the public, the hearing may be cancelled.

REGULATORY IMPACT ANALYSIS

Agency Contact Person: Richard F. Casey
(1) Type and number of entities affected: 54 postsecondary educational institutions participating in KHEAA grant programs.
(a) Direct and indirect costs or savings to those affected: None
1. First year:
2. Continuing costs or savings:
3. Additional factors increasing or decreasing costs (note any effects upon competition):
(b) Reporting and paperwork requirements: This amendment does not impose additional recordkeeping requirements. Rather, it merely conforms the KHEAA requirements to those imposed already by federal regulations.
(2) Effects on the promulgating administrative body: None
(a) Direct and indirect costs or savings:
1. First year:
2. Continuing costs or savings:
3. Additional factors increasing or decreasing costs:
(b) Reporting and paperwork requirements:
(3) Assessment of anticipated effect on state and local revenues: None
(4) Assessment of alternative methods; reasons why alternatives were rejected: N/A
(5) Identify any statute, administrative regulation or government policy which may be in conflict, overlapping, or duplication: None
(a) Necessity of proposed regulation if in conflict:
(b) If in conflict, was effort made to harmonize the proposed administrative regulation with conflicting provisions:
(6) Any additional information or comments:

Tiering:
Was tiering applied? No. Concept of tiering is not applicable.

DEPARTMENT OF PERSONNEL
(Proposed Amendment)

101 KAR 1:051. Compensation plan.

RELATES TO: KRS 18A.030, 18A.075, 18A.110, 18A.165
PURSUANT TO: KRS 13A.100, 18A.075, 18A.110
NECESSITY AND FUNCTION: KRS 18A.110 requires the Commissioner of Personnel to prepare and submit to the Personnel Board rules which provide for a pay plan for all employees in the classified service, taking into account such factors as the relative level of duties and responsibilities of various classes, rates paid for comparable positions elsewhere, and the state's financial resources. This rule is to assure uniformity and equity in administration of the pay plan in accordance with statutory requirements.

Section 1. Preparation, Approval, and Maintenance of the Plan. (1) After consultation with appointing authorities, the Secretary of the Finance and Administration Cabinet, and after conducting an annual wage and salary survey of relevant labor markets, the Commissioner of Personnel shall prepare a compensation plan for all classes of positions based on the concepts of internal job equity and external market competitiveness. The plan shall provide pay grades or specific salary rates as appropriate for the various classes. Each job class shall be assigned an appropriate pay grade or rate with consideration given to internal job evaluation data and external market conditions. All rates of pay for classes shall be consistent with the functions outlined in the classification plan.
(2) When the Commissioner of Personnel determines through relevant salary surveys that the state's overall compensation plan is inadequate in relation to that of other employers, he may authorize, upon certification of the State Budget Director and the Office for Policy and Management as to the availability of funds, a general adjustment of all pay grades in the pay structure to provide salary rates which are comparable to the external market. Additional surveys may be conducted as necessary to determine market conditions for specific classes.
(3) The Commissioner of Personnel shall submit the plan to the Personnel Board for its approval. The Personnel Board shall present the plan, through the Secretary of the Finance and Administration Cabinet, to the Governor for his final approval.

Section 2. Appointments. Initial appointments to state service shall be made at the minimum rate of the pay grade established for the class unless the Commissioner of Personnel authorizes appointment of a highly qualified applicant at a rate above the minimum, not to exceed the midpoint of the pay grade. Such exceptions shall be based on the outstanding and unusual nature of the applicant's education and/or experience over and above the minimum requirements set for the class. Such additional qualifications must be in the same or related area of the job duties of the class to which the appointment is to be made. Employees possessing similar qualifications employed in the same class, by the same agency, in the same locality shall have their salaries adjusted to the same rate granted in the in-range appointment if that rate is higher than their current salaries.

Section 3. Re-entrance to State Service. Appointing authorities, with the approval of the Commissioner of Personnel, may place re-employed, reinstated, and probationally appointed former employees at a salary determined by one (1) of the following methods:
(1) Reinstatement to a class having the same or lower pay grade that is currently assigned to the employee's former class:
(a) Request the same salary that was paid at the time of separation from the classified service if such salary is within the current pay grade;
(b) Request a salary higher than that paid at the time of separation from the classified service due to salary schedule or pay grade adjustments;
(c) Request a lower salary than that paid at

the time of separation from the classified service if such a salary is within the current pay grade;

(d) Request a salary in accordance with the standards used for making new appointments.

(2) Re-employment or probationary appointment of former employees to the same, lower, or higher pay grade:

(a) Request the same salary that was paid at the time of separation from the classified service if such salary is within the current pay grade;

(b) Request a salary higher than that paid at the time of separation from the classified service due to salary schedule or pay grade adjustments;

(c) Request a lower salary than that paid at the time of separation from the classified service if such salary is within the current pay grade;

(d) Request a salary in accordance with the standards used for making new appointments.

(3) Former employees who were separated from state service by lay-off and who are reinstated or re-employed in the same or a similar class within one (1) year from the date of lay-off may receive the salary they were receiving at the time of lay-off, even if such salary is above the maximum of the new pay grade.

(4) Employees re-employed, reinstated or former employees probationally appointed to a salary:

(a) Below the midpoint of the pay grade at the time of completion of the probationary period shall be considered for a probationary increment;

(b) Which equals or exceeds the midpoint of the pay grade at the time of completion of the probationary period may be considered for a probationary increment. If such employee is not considered for an increment upon completion of the probationary period, he shall be considered for an increment at the beginning of the month following completion of twelve (12) months service from the date of re-employment, reinstatement or appointment.

Section 4. Salary Adjustments. (1) Promotion. An employee who is promoted shall receive a salary increase of five (5) percent upon promotion; if an employee's salary is above the maximum of the pay grade for the class to which he is promoted, the employee shall receive a lump-sum payment of five (5) percent of his annual base salary. An employee may receive a promotional increase of five (5) percent on the first of the month following successful completion of the probationary period; if an employee's salary is above the maximum of the pay grade he may receive a lump-sum payment of five (5) percent of his annual base salary. In no case shall the employee's salary be below the minimum of the higher grade following promotion. If the promotion is to a classification which constitutes an unusual increase in the level of responsibility, the appointing authority, with the prior written approval of the Commissioner of Personnel, may grant upon promotion a ten (10) percent or fifteen (15) percent salary increase over the employee's previous salary. If an employee's salary is above the maximum of the pay grade, a lump-sum payment of ten (10) percent or fifteen (15) percent of the employee's annual base salary may be granted. A promotional increase shall not change the employee's regular increment date.

(2) Demotion. An employee who is demoted may have his salary reduced to a rate which is in the pay grade for the new class; this rate shall not exceed the rate which the employee was receiving prior to the demotion.

(3) Transfer. An employee who is transferred to a job class having the same pay grade shall be paid the same salary that he received prior to the transfer.

(4) Reclassification. An employee who is advanced to a higher pay grade through a reclassification of his position shall receive a salary increase of five (5) percent except that in no case shall the employee's salary after such increase be below the minimum of the new pay grade. In those cases where the employee's salary is above the maximum of the pay grade for the new class, the employee shall receive a lump-sum payment of five (5) percent of his annual base salary rate. An employee whose position is placed in a lower pay grade through reclassification shall receive the same salary he was receiving prior to reclassification, even if that salary is above the maximum of the new pay grade.

(5) Reallocation. An employee who is advanced to a higher pay grade through a reallocation of his position may receive a salary increase of five (5) percent except that in no case shall the employee's salary after such increase be below the minimum of the higher pay grade. In those cases where the employee's salary is above the maximum of the pay grade for the new class, the employee may receive a lump-sum payment of five (5) percent of his annual base salary. An employee whose current salary exceeds the pay grade maximum assigned to his class following reallocation of his position shall retain that current salary.

(6) Detail to special duty. An employee who is approved for detail to special duty as provided by 101 KAR 1:110, Section 4, may receive a five (5) percent increase upon detail to a higher class except that in no case shall the employee's salary after such increase be below the minimum of the higher pay grade.

(7) Reversion.

(a) An employee who is returned to his former class after failure to complete the probationary period following promotion or following detail assignment to a higher class shall have his salary reduced to a rate received prior to such promotion or detail assignment and is entitled to all salary advancements and adjustments he would have received had he not left the class even if these advancements place his salary above the maximum of the pay grade applicable to the class to which the employee is returning.

(b) An employee who is returned to a position in the classified service following transfer or promotion to the unclassified service shall have his salary reduced to the rate received prior to the promotion or transfer and is entitled to all salary advancements and adjustments he would have received had he not left the class even if these advancements place his salary above the maximum of the pay grade applicable to the class to which the employee is returning.

(c) The salary for employees who obtain merit status but later resign the classified position to accept appointment to an unclassified position shall have their salary determined, upon re-entry to the classified service, the same as employees who are reverted if there has been no break in service.

Section 5. Salary Advancements. (1) Probationary increments. Full-time and part-time employees who complete their probationary period with satisfactory performance shall be granted a probationary increment at the beginning of the month following completion of the probationary period, except as specified under Section 3(4) of this regulation. The service may be provisional or probationary. Employees completing a probationary period following promotion shall not be eligible for a probationary increment under this section.

(2) Service computation. In computing service for the purpose of determining annual increment eligibility, in those cases where an employee is changed from part-time to full-time, part-time service shall be counted in determining increment eligibility for a full-time employee; in those cases where an employee is changed from full-time to part-time, full-time service shall be counted in determining increment eligibility for a part-time employee.

(3) Annual increment dates will be established:

(a) Following completion of probation, except probation following promotion, with satisfactory performance, or following completion of twelve (12) months service from the date of appointment, reinstatement, or re-employment, pursuant to Section 3(4) of this regulation.

(b) When an employee returns from leave without pay pursuant to Section 7(2) of this regulation.

(4) Annual increment dates will not change when an employee:

(a) Is in a position which is assigned a new or different salary grade.

(b) Receives a salary adjustment as a result of his position being reallocated or reclassified.

(c) Is transferred.

(d) Receives a demotion.

(e) Is approved for detail to special duty.

(f) Receives an educational achievement increase.

(g) Returns from military leave.

(h) Has his salary advanced above the maximum of the pay grade or has his salary returned to the pay grade due to a salary schedule change or pay grade adjustment.

(i) Is promoted or receives a promotional increase after completion of probation following promotion.

(5) Annual increment. All employees shall receive statutory annual increments on the employee's regularly scheduled increment date. An employee whose annual increment places his salary above the maximum of the pay grade shall have his annual increment added to his annual base pay. For purposes of calculating the statutory annual increment:

(a) Educational achievement increases, employee suggestion systems awards and overtime and/or compensatory leave payments shall not be included in "gross annual salary or wages."

(b) A lump-sum payment made to an employee pursuant to Sections 4(1), 4(4), and 4(5) of this regulation, and previous regulatory provision providing for a continuous service award shall be included in "gross annual salary or wages."

Section 6. Educational Achievement Increase. Subject to the approval of the Commissioner of Personnel, any permanent, full-time employee who, after completion of his initial probationary period, satisfactorily completes 260 classroom hours (or the equivalent as determined by the Commissioner of Personnel) of job related instruction or receives a high school diploma or GED is eligible for a lump-sum educational achievement increase of ten (10) [five (5)] percent of his annual base salary the first of the month following the approval of the increase.

Section 7. Return from Leave. (1) Leave with pay. The appointing authority shall grant an employee on leave with pay or returning to duty from leave with pay an annual increment on the employee's regularly scheduled increment date.

(2) Leave without pay. Employees returning to duty from leave without pay shall receive an annual increment when they have completed twelve (12) months of service since the date they last received an annual increment pursuant to Section 5(2) of this regulation.

(3) Military Leave. An employee returning to duty from military leave without pay, or from military service in accordance with KRS 61.373, shall receive the same or similar pay (same salary plus grade changes) and all other increases he would have received.

Section 8. Salary Schedule Adjustment. When the Commissioner of Personnel authorizes an adjustment of all grades in the pay schedule, employees who are below the new minimum rates shall have their salaries adjusted at least to the minimum rates of their grades.

Section 9. Class Re-evaluation and Grade Adjustment. (1) Class re-evaluation is the assignment of a different pay grade to a class based upon a change in relation to other classes or to labor market conditions.

(2) Change in pay grade. Whenever it becomes necessary to assign a class a different pay grade due to changes defined in Section 9(1) of this regulation, the Commissioner of Personnel may make a new or different pay grade applicable to a class of positions. Persons employed in positions of that class at the effective date of the change in pay grade shall have their salary placed at least at the minimum salary of the higher grade. In no event shall an employee's salary be placed at a rate less than he received prior to the change in the pay grade. Employees whose salaries are already within the higher grade shall retain their current salaries following the adjustment. Employees in a class assigned to a lower pay grade through class re-evaluation shall retain their current salary even if that salary is above the maximum rate of the lower grade. The Commissioner of Personnel shall review the use of this provision for retaining employees' salaries above pay grade maximums and report to the Board July 1, 1984.

(3) Recruitment difficulties. Whenever the Commissioner of Personnel determines that it is not possible to recruit qualified employees at the established entrance salary in a specific area or for a specific class, he may, at the request of the appointing authority, authorize the recruitment for a class of position at a higher rate in the pay grade, provided that all other employees in the same class of position in the same agency in the same locality are adjusted in salary to the same rate. When the Commissioner of Personnel determines that it is not possible to relieve salary inadequacies

using this provision, Section 9(2) of this regulation shall apply.

(4) Increases resulting from this section shall not affect an employee's annual increment date.

Section 10. Paid Overtime. Overtime for which pay is authorized shall have the approval of the Commissioner of Personnel and the Secretary of the Finance and Administration Cabinet.

Section 11. Maintenance and Maintenance Allowance. In each case where an employee or the employee and his family are provided with full or part maintenance, consisting of one (1) or more meals per day, lodging or living quarters, and domestic or other personal services, such compensation shall be treated as part payment. The value of these services shall be deducted from the appropriate salary rate in accordance with a maintenance schedule developed by the Commissioner of Personnel after consultation with the appointing authority and the Secretary of the Finance and Administration Cabinet.

Section 12. Supplemental Shift Premium. Upon request of the appointing authority, the Commissioner of Personnel may authorize the payment of a supplemental shift premium for those employees directed to work an evening or night shift. However, no employee shall receive a supplemental shift premium subsequent to a transfer to a position that is ineligible for a shift differential premium payment. The employee's loss of shift differential pay shall not be a basis for an appeal to the Personnel Board.

THOMAS C. GREENWELL, Commissioner
APPROVED BY AGENCY: October 29, 1985
FILED WITH LRC: October 29, 1985 at 2 p.m.
PUBLIC HEARING SCHEDULED: A public hearing on this regulation will be held on Monday, December 23, 1985, at 9:30 a.m. Room 360 of the Capitol Annex in Frankfort, Kentucky. However, this hearing will be cancelled unless interested persons notify the following office in writing by December 18, 1985 of their desire to appear and testify at the hearing: Thomas C. Greenwell, Commissioner, Department of Personnel, Room 373, Capitol Annex, Frankfort, Kentucky 40601.

REGULATORY IMPACT ANALYSIS

Agency Contact Person: Anne E. Keating
(1) Type and number of entities affected: All state agencies that employ classified employees.
(a) Direct and indirect costs or savings to those affected: Direct cost will depend on the number of employees who qualify for educational increases.
1. First year:
2. Continuing costs or savings:
3. Additional factors increasing or decreasing costs (note any effects upon competition):
(b) Reporting and paperwork requirements: No new requirements.
(2) Effects on the promulgating administrative body:
(a) Direct and indirect costs or savings: Direct cost will depend on the number of employees who qualify for educational increases.
1. First year:
2. Continuing costs or savings:
3. Additional factors increasing or decreasing costs:
(b) Reporting and paperwork requirements: No new requirements.
(3) Assessment of anticipated effect on state and local revenues: While some employees' salaries will increase, their level of education will also increase.
(4) Assessment of alternative methods; reasons why alternatives were rejected: The goal is to increase employees' level of education.
(5) Identify any statute, administrative regulation or government policy which may be in conflict, overlapping, or duplication: None
(a) Necessity of proposed regulation if in conflict:
(b) If in conflict, was effort made to harmonize the proposed administrative regulation with conflicting provisions:
(6) Any additional information or comments:

Tiering:
Was tiering applied? No. All state agencies employing classified employees will be subject to the regulation.

REVENUE CABINET
Department of Professional & Support Services
(Proposed Amendment)

103 KAR 7:020. Release of funds by financial institutions.

RELATES TO: KRS 140.250, 140.990
PURSUANT TO: KRS Chapter 13A
NECESSITY AND FUNCTION: KRS 140.250 requires financial institutions to notify the Revenue Cabinet at least thirty (30) days in advance of releasing to a personal representative, surviving cotenant or beneficiary any portion of a decedent's account and to withhold a sufficient amount to pay any applicable inheritance tax. The Revenue Cabinet may relieve the institution of this obligation by giving written consent for the release or transfer of the property. This regulation provides a procedure whereby a personal representative, surviving cotenant or beneficiary may obtain a limited portion of the funds in such account(s) for the purpose of maintaining a standard of living or to pay creditors without the necessity of obtaining prior written consent from the cabinet or requiring the financial institution to provide advance notice of the release of such funds in each instance. An exception is provided for the surviving spouse who may obtain all funds held in the joint name of the decedent and the surviving spouse with the right of survivorship. This procedure will relieve the person who is entitled to the funds of undue expenditure of time and expense [help beneficiaries who are in need of immediate cash for current expenses] and will benefit financial institutions through improved customer relations without significantly affecting the cabinet's ability to collect any inheritance tax owed on such property.

Section 1. Financial institutions having in possession, control or custody an account(s) belonging to or standing [, either individually or jointly held,] in the name of a decedent or in trust for a decedent or in the joint name of a decedent and another person or persons, are hereby authorized to tranfer or release, at any

time [during the first three (3) months] after the decedent's date of death, up to $2,500 of the amount in the account(s) to a person(s) entitled to such account(s) without the necessity of providing thirty (30) days advance notice to the Revenue Cabinet and without withholding a sufficient amount to pay any applicable inheritance tax or obtaining a written consent from the cabinet. The provisions of this section can apply to more than one (1) account.

Section 2. Financial institutions having in possession, control or custody an account(s) held in the joint name of a decedent and the surviving spouse with the right of survivorship are hereby authorized to transfer or release at any time after the decedent's date of death the amount in the account(s) to the surviving spouse without the necessity of providing thirty (30) days advance notice to the Revenue Cabinet and withholding a sufficient amount to pay any applicable inheritance tax or obtaining a written consent from the cabinet. The provisions of this section can apply to more than one (1) account.

Section 3. [2.] As a condition for the release of funds under Sections 1 and 2 of this regulation, financial institutions must provide written notice of the release to the Revenue Cabinet on a form provided by the cabinet within thirty (30) days after release of such funds. The notice shall contain:

(1) The name of the decedent, date of death, name and address of person(s) to whom the account(s) is released, name of joint surviving co-owner(s), if any, the amount released, and total amount of [in] such account(s) collectively at the date of death.

(2) Signature and relationship, if any, of the person to whom the funds are released. [Certification on the notice by the person to whom the funds are released that neither he nor any other representative of the deceased has received from any other financial institution, together with the funds released by the named institution, an amount which exceeds $2,500.]

Section 4. [3.] Upon issuance of the properly executed written notice, as provided in Section 3 [2] of this regulation, the financial institution shall be relieved of the inheritance tax liability and penalties imposed by KRS 140.250 and 140.990.

GARY W. GILLIS, Secretary

APPROVED BY AGENCY: November 15, 1985

FILED WITH LRC: November 15, 1985 at 11 a.m.

PUBLIC HEARING SCHEDULED: A public hearing on this regulation will be held on December 27, 1985, at 10 a.m. in Room 406 of the Capitol Annex, Frankfort, Kentucky. If no written notice of intent to attend the public hearing is received within five days before the scheduled hearing, the hearing will be cancelled. Those interested in attending shall notify in writing: Scott Akers, Revenue Cabinet, Division of Tax Policy and Legal Services, New Capitol Annex Building, Frankfort, Kentucky 40620.

REGULATORY IMPACT ANALYSIS

Agency Contact Person: Scott Akers

(1) Type and number of entities affected: This amended regulation can affect all personal representatives, surviving cotenants and beneficiaries who need access to funds, either individually or jointly owned by the decedent, held by Kentucky financial institutions. Also affected are all surviving spouses of estates who owned survivorship accounts with the deceased spouse as of the decedent's date of death. Approximately 1/3 of all decedents leave surviving spouses and most of these will involve accounts held with survivorship. All financial institutions located in Kentucky will be affected if they elect to follow the terms and conditions of the regulation, i.e., by executing the notice form within the guidelines of the regulation.

(a) Direct and indirect costs or savings to those affected:

1. First year: There is no direct fiscal loss or gain to a personal representative, surviving cotenant or beneficiary, however, the efforts expended in obtaining an inheritance tax lien release (waiver) is somewhat time consuming. Financial institutions will incur some minor additional costs due to time consumed in completing the notice form.

2. Continuing costs or savings: Same as first year.

3. Additional factors increasing or decreasing costs (note any effects upon competition): None

(b) Reporting and paperwork requirements: All financial institutions in Kentucky which elect to follow the terms of the regulation will be required to execute and file the notice form furnished by the Revenue Cabinet for all accounts transferred or released, standing either in the name of the decedent or the decedent and another person. A single form will suffice except where several accounts pass to different persons.

(2) Effects on the promulgating administrative body:

(a) Direct and indirect costs or savings:

1. First year: Almost without exception, financial institutions have chosen in the past to require the person seeking the funds to obtain a written consent (release) from the cabinet for the particular account involved versus giving the cabinet a thirty (30) day advance notice prior to the release of an account partially or wholly owned by the decedent. If the financial institutions elect to follow the terms of this amended regulation, considerable man hours will be saved at the Revenue Cabinet's offices (including field) and at local property valuation administrators' offices.

2. Continuing costs or savings: Same as first year.

3. Additional factors increasing or decreasing costs: None

(b) Reporting and paperwork requirements: The effects of this amended regulation will reduce paperwork normally required of the cabinet and property valuation administrators' offices. A tax release will not be required from the cabinet in each situation where the financial institution elects to complete and mail the notice to the cabinet.

(3) Assessment of anticipated effect on state and local revenues: None

(4) Assessment of alternative methods; reasons why alternatives were rejected: In addition to granting financial institutions the authority to transfer or release an unlimited amount of funds

held in the joint name of a decedent and the surviving spouse with survivorship, this amended regulation expands the authorization granted to financial institutions of releasing a total of $2,500 from all accounts to that of releasing up to $2,500 of each account with the exception of spousal accounts. It further removes the three month limitation in which the terms of the regulation may be utilized. One alternative would be to establish an amount lower or higher than the selected amount of $2,500. Since the typical inheritance tax release (waiver) is used as a collection tool, the cabinet would not be comfortable with granting financial institutions the authority to release a greater sum than $2,500 without a tax release issued by the cabinet. The only other alternative to the normal requirement of a tax release and the provisions of this regulation would be to not require a written consent (release) from the cabinet or to give notice as provided in the regulation. However, a policy or regulation authorizing no notice or written consent violates the strict terms and purposes of KRS 140.250(3). While it is evident that no inheritance tax will be due on any account passing as survivorship property to a surviving spouse, KRS 140.250(3) still requires thirty days advance notice unless the cabinet gives written consent for the release of the account. KRS 140.990(4) provides that a $20,000 penalty must be imposed upon any person who fails to comply with the provisions of KRS 140.250. The cabinet wishes to maintain knowledge of the affected accounts via the notice or tax release. Lastly, most financial institutions will not likely release an account without a tax release and be in violation of KRS 140.250. Therefore, the alternative of permitting a financial institution permission to release accounts without a tax release or notice was rejected.

(5) Identify any statute, administrative regulation or government policy which may be in conflict, overlapping, or duplication: None

(a) Necessity of proposed regulation if in conflict: N/A

(b) If in conflict, was effort made to harmonize the proposed administrative regulation with conflicting provisions: N/A

(6) Any additional information or comments:

Tiering:
Was tiering applied? No. Tiering is not applicable to this amended regulation since the terms and conditions of the regulation apply equally to all financial institutions and persons entitled to the accounts.

The effect of this amended regulation will be to create a minor reduction in the workload of the local property valuation administrator, however, no fiscal effects will likely occur in any PVA office.

FINANCE AND ADMINISTRATION CABINET
Board of Medical Licensure
(Proposed Amendment)

201 KAR 9:021. Medical and osteopathic schools approved by the board; denial or withdrawal of approval; application of KRS 311.271; postgraduate training requirements; approved programs; recognition of degrees.

RELATES TO: KRS 311.530 to 311.620, 311.990, 311.271

PURSUANT TO: KRS 311.565

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 establish standards for approval of medical and osteopathic schools, colleges and universities in regard to the issuance and renewal of licenses and permits to practice medicine or osteopathy in the Commonwealth. The further purpose of this regulation is to assure that physicians obtain sufficient postgraduate training to enable them to practice with competency within the Commonwealth.

Section 1. Approval Necessary for Licensure. An applicant shall not obtain or retain any license or permit issued by the board unless and until the applicant provides sufficient proof that he or she is a graduate of a medical or osteopathic school, college or university which has been approved by the board. An applicant for limited licensure-institutional practice pursuant to KRS 311.571(4) may, however, be granted such licensure without the board's prior approval of the medical or osteopathic school, college or university upon sufficient proof that the particular school does exist and the applicant is a graduate thereof. No other license or permit issued pursuant to any other statutory or regulatory provision shall be issued unless and until the applicant's medical or osteopathic school, college or university has been fully approved. The school approval requirement will not be excused because information concerning the school is not readily ascertainable.

Section 2. Medical and Osteopathic Schools Located Within the United States or Canada. Unless approval is denied or withdrawn pursuant to Section 4 of this regulation, all medical and osteopathic schools, colleges and universities located in the United States or Canada are approved in regard to the issuance and renewal of licenses and permits upon written proof that the particular institution is:

(1) Located in the United States, its territories and protectorates and approved/accredited by the Liaison Committee on Medical Education (LCME) or the American Osteopathic Association; or

(2) Located in Canada and approved/accredited by the Canadian Medical Association.

Section 3. Medical and Osteopathic Schools Located Outside the United States and Canada. Unless approval is denied or withdrawn pursuant to Section 4 of this regulation, all medical and

osteopathic schools located outside the United States and Canada are approved in regard to the issuance and renewal of licenses and permits upon written proof that the particular institution is:

(1) Officially recognized in good standing by the country in which the school, college or university is located;

(2) Registered as a medical school, college or university in either the World Health Organization directory or the World Directory of Medical Schools; and

(3) Possesses a basic course of clinical and classroom medical instruction of not less than thirty-two (32) months in length that is conducted under the direct authority of the medical school, college or university.

Approval of an institution under this section should be considered in conjunction with the other requirements for licensure of graduates of medical schools, colleges and universities located outside the United States and Canada. Approval under this section should not be interpreted as a statement by the board that the particular institution is equivalent to institutions approved pursuant to Section 2 of this regulation.

Section 4. Denial or Withdrawal of Approval. The board, in its discretion, may deny or withdraw approval of any medical or osteopathic school if the particular school, college or university fails to meet the requirements for approval as established in the preceding sections or if, in the board's opinion, the approval of the particular school, college or university would not be in the best interests of the Commonwealth. If approval is denied or withdrawn the board shall issue an order delineating the grounds upon which denial or withdrawal of approval is based.

Section 5. Recognition of Degrees. The board hereby takes notice that there are medical schools located outside the United States and Canada which allow students to satisfy clinical requirements of the medical school's curriculum by performing clinical clerkships in the United States. Such clerkships shall be of a character and quality equal to those performed in the United States by students in American medical and osteopathic schools. In order to assure that the clerkships performed in this country by students enrolled in foreign medical schools are to a substantial degree equivalent to the clinical training being received by medical students in this country, the applicant must demonstrate that the clerkships meet the following standards:

(1) Each clerkship (begun after the effective date of this regulation) must have been evaluated and approved by the foreign medical school prior to commencing in accord with the foreign school's established standards for approval of clerkships performed in the United States.

(2) Seventy-five (75) percent of the clerkships performed in the United States must have been performed in hospitals that:

(a) Possess accreditation by the Joint Commission on Accreditation of Hospitals;

(b) Have residencies in the subject area of the clerkship approved by the Accreditation Council on Graduate Medical Education; and

(c) Have affiliation with a medical school located in the United States.

The board will not recognize the degree of any applicant who cannot demonstrate that the clerkships he performed in the United States met the above standards. <u>However, the board may waive the above requirement if the applicant commenced the unapproved clerkship prior to February 12, 1985, and can present verifiable proof of satisfactory completion of an approved three (3) year postgraduate training program, or proof of acceptance into or current enrollment in the second or third year of an approved postgraduate training program.</u> Licensure will not be granted unless the board recognizes the applicant's degree.

Section 6. Application of KRS 311.271. (1) An applicant shall not obtain any license or permit issued by the board unless and until the applicant provides written proof that he or she has been credited with not less than sixty (60) transferable units of study by a college or university accredited by the Southern Association of Colleges and Schools or an accrediting agency recognized by the Southern Association of Colleges and Schools; provided, however, that the executive director may determine the equivalency of premedical or preosteopathic units of study credited by a college or university located outside the United States or Canada on an individual basis.

(2) It is the declared policy of the Commonwealth that a physician, who becomes initially enrolled in a school of medicine or osteopathy after June 13, 1968, should not be authorized to practice medicine or osteopathy in this state unless and until the physician can provide satisfactory evidence that he or she has fulfilled the premedical or preosteopathic undergraduate requirement delineated in subsection (1) of this section. Therefore, the board will not issue any license or permit to an applicant except upon the fulfillment of this requirement.

Section 7. Hearings. The board, in its discretion, may direct that formal or informal hearings be held in connection with the approval, denial of approval or withdrawal of approval of any medical or osteopathic school, college or university, or in the determination of qualification pursuant to KRS 311.271.

Section 8. Amount of Postgraduate Training Required. (1) All applicants for regular licensure who are graduates of medical and osteopathic schools located within the United States or Canada shall provide written proof of having completed one (1) full year of postgraduate training approved by the board.

(2) All applicants for regular licensure who are graduates of medical and osteopathic schools located outside the United States and Canada shall provide written proof of having completed three (3) full years of postgraduate training approved by the board.

(3) All applicants for limited licensure-institutional practice shall provide written proof of having completed one (1) full year of postgraduate training approved by the board.

Section 9. Postgraduate Training Programs Approved by the Board. (1) All postgraduate training programs in hospitals and institutions

located in the United States and approved by the Accreditation Council for Graduate Medical Education (ACGME) are approved by the board in regard to the fulfillment of the postgraduate training requirement for licensure.

(2) All postgraduate training programs in hospitals and institutions located in Canada and approved by the National Joint Committee on Accreditation of Preregistration Physician Training Programs in the United States or Canada are approved by the board in regard to the fulfillment of the postgraduate training requirement for licensure.

(3) All postgraduate training programs in hospitals and institutions located in the United States or Canada and approved by the American Osteopathic Association are approved by the board in regard to the fulfillment of the postgraduate training requirement for licensure.

Section 10. Fellowship Training in the United States or Canada. The board will consider on an individual basis written proof of satisfactory completion of fellowship training recognized by the board to be of satisfactory quality as substitution for the second or third year of required postgraduate training approved by the board pursuant to this regulation.

C. WILLIAM SCHMIDT, Executive Director
APPROVED BY AGENCY: October 3, 1985
FILED WITH LRC: November 4, 1985 at 10 a.m.
PUBLIC HEARING SCHEDULED: A public hearing on this regulation will be held on Monday, December 23, 1985, at 10 a.m. EST, at the office of the Kentucky Board of Medical Licensure, 400 Sherburn Lane, Suite 222, Louisville, Kentucky, 40207. Those interested in attending this hearing shall contact in writing: Mr. C. William Schmidt, Executive Director, Kentucky Board of Medical Licensure, 400 Sherburn Lane, Suite 222, Louisville, Kentucky 40207.

REGULATORY IMPACT ANALYSIS

Agency Contact Person: C. William Schmidt

The proposed amendment to 201 KAR 9:021 is designed to give some leeway to applicants from foreign medical schools who began clinical clerkships in the United States prior to the effective date of the regulation. The board believes that previous standards which had been imposed perhaps gave applicants insufficient, although not unconstitutional, notice of the requirement that their clinical clerkships performed in the United States meet certain standards.

The amendment will effect those persons who attend medical schools outside the United States but obtain clinical training in their third and fourth year of medical school in the United States.

The amendment will have no effect on board revenues or the revenues of the state generally.

Other alternative measures were evaluated, however, the particular amendment best resolves the issue which is being addressed.

This amendment does not conflict with, overlap or duplicate any other regulation or statute of the Commonwealth.

Tiering: Yes. The proposed amendment to 201 KAR 9:021 affects only a small number of applicants. It will only affect those foreign medical graduates who obtain in the United States some clinical training in their third and fourth year of medical school. These persons have foreign medical degrees even though some of their training occurs in the United States. The purpose of the regulation is to establish standards of qualification for persons who obtain such training in the United States, based on what is fair notice of the standards for such training which the Board has previously established.

FINANCE AND ADMINISTRATION CABINET
Board of Hairdressers and Cosmetologists
(Proposed Amendment)

201 KAR 12:050. Reciprocity for valid licensee.

RELATES TO: KRS 317A.100
PURSUANT TO: KRS 317A.060
NECESSITY AND FUNCTION: KRS Chapter 317A authorizes the Kentucky State Board of Hairdressers and Cosmetologists to prescribe rules and regulations governing health and safety of the public; governing the training and supervision of cosmetologists; and governing the examinations for applicants for licenses. This regulation is to allow applicants from other states with less than 1,800 hours to qualify for examination in order to obtain licenses.

Section 1. Any applicant from out-of-state, who holds a valid license and who can show proof of two (2) years current experience, can come before the state board for examination (practical only) by paying the fee as set forth in KRS 317A.050 plus the fee set forth in KRS 317A.050 for first license.

Section 2. Applicants must provide a certification from state board granting original license and proof of <u>two (2)</u> [four (4)] years high school education or its equivalent.

CARROLL ROBERTS, Administrator
APPROVED BY AGENCY: November 6, 1985
FILED WITH LRC: November 14, 1985 at 4:30 p.m.
PUBLIC HEARING SCHEDULED: A public hearing has been scheduled for December 27, 1985 at 10 a.m. Please respond to Carroll Roberts, Administrator, Board of Hairdressers and Cosmetologists, 314 West Second Street, Frankfort, Kentucky 40601.

REGULATORY IMPACT ANALYSIS

Agency Contact Person: Carroll Roberts
(1) Type and number of entities affected: None
(a) Direct and indirect costs or savings to those affected:
1. First year:
2. Continuing costs or savings:
3. Additional factors increasing or decreasing costs (note any effects upon competition):
(b) Reporting and paperwork requirements:
(2) Effects on the promulgating administrative body: None
(a) Direct and indirect costs or savings:
1. First year:
2. Continuing costs or savings:
3. Additional factors increasing or decreasing costs:
(b) Reporting and paperwork requirements:

(3) Assessment of anticipated effect on state and local revenues: None
(4) Assessment of alternative methods; reasons why alternatives were rejected: N/A
(5) Identify any statute, administrative regulation or government policy which may be in conflict, overlapping, or duplication: None
(a) Necessity of proposed regulation if in conflict:
(b) If in conflict, was effort made to harmonize the proposed administrative regulation with conflicting provisions:
(6) Any additional information or comments:

Tiering:
Was tiering applied? No. Tiering was not applied as it was not necessary.

FINANCE AND ADMINISTRATION CABINET
Board of Hairdressers and Cosmetologists
(Proposed Amendment)

201 KAR 12:105. School districts.

RELATES TO: KRS 317A.060
PURSUANT TO: KRS 317A.050
NECESSITY AND FUNCTION: The seven (7) Congressional Districts provide an equal division for the location of beauty schools. The number of eight (8) per Congressional District would allow all districts to have an equal number of schools.

Section 1. To protect the public and implement the provisions of KRS Chapter 317A, the state is hereby divided into seven (7) districts the same as the United States Congressional Districts and shall change when the Congressional Districts are properly changed. At all times these districts shall remain in conformity with these Congressional Districts.
(1) District 1. Fulton, Hickman, Carlisle, Ballard, McCracken, Graves, Marshall, Calloway, Livingston, Crittenden, Lyon, Trigg, Caldwell, Union, Webster, Hopkins, Christian, Henderson, McLean, Muhlenberg, Todd, Logan, Butler and [that portion of] Ohio [not in District 2].
(2) District 2. Daviess, Warren, Simpson, Allen, Barren, Edmonson, Hart, Grayson, Hancock, Breckinridge, Meade, Hardin, Larue, Marion, Washington, Nelson, Bullitt, and Spencer [, Anderson and that portion of Ohio not in District 1].
(3) District 3. Louisville and Jefferson County precincts presently constituting United States Third Congressional District of Kentucky.
(4) District 4. Jefferson County exclusive of District 3, Oldham, Trimble, Carroll, Gallatin, Boone, Kenton, [exclusive of that portion in District 6,] Campbell, [exclusive of that portion in District 6] Grant, Henry, Owen, and Pendleton.
(5) District 5. Taylor, Greene, Metcalfe, Monroe, Adair, Cumberland, Casey, Russell, Clinton, Lincoln, Pulaski, Wayne, Rockcastle, McCreary, Estill, Lee, Jackson, Laurel, Whitley, Owsley, Clay, Knox, Bell, Leslie, Harlan, Garrard, [Madison and that portion of] and Jessamine [not in District 6].
(6) District 6. [Henry,] Shelby, [Owen,] Franklin, Scott, Woodford, Mercer, Boyle, Harrison, Bourbon, Fayette, [Jessamine,] Clark, [Grant, Pendleton, Kenton and Campbell] Bracken, Anderson, Madison, Montgomery, Nicholas, and Robertson.
(7) District 7. Fleming, Bath, Menifee, Wolfe, Lewis, Rowan, Morgan, Breathitt, Perry, Greenup, Carter, Elliott, Magoffin, Knott, Letcher, Boyd, Lawrence, Johnson, Floyd, Martin, Pike, [Bracken,] Mason, [Robertson, Nicholas, Montgomery,] and Powell.

Section 2. For the protection of the public good and welfare, for the public's protection against misrepresentation, deceit or fraud in the teaching of beauty culture, no new license for a school of cosmetology shall be issued which would cause any district, as defined in Section 1 of this regulation, to have more than eight (8) such schools of cosmetology.

Section 3. (1) No school of cosmetology presently existing and licensed or hereafter licensed, shall be permitted to move or transfer from one district to another district, as defined in Section 1 of this regulation, without application being made to and approval received from the board.
(2) No school of cosmetology presently existing and licensed, or hereafter licensed, shall be permitted to move or transfer from one district to another district, as defined in Section 1 of this regulation, if such move or transfer would cause such district to have more than eight (8) such schools of cosmetology as provided in Section 2 of this regulation.

Section 4. Nothing in the above sections shall be construed to prevent the issuance or the re-issuance of license to an existing beauty school.

Section 5. This regulation controls the location of private schools only.

CARROLL ROBERTS, Administrator
APPROVED BY AGENCY: November 6, 1985
FILED WITH LRC: November 14, 1985 at 4:30 p.m.
PUBLIC HEARING SCHEDULED: A public hearing has been scheduled for December 27, 1985 at 10 a.m. Please respond to Carroll Roberts, Administrator, Board of Hairdressers and Cosmetologists, 314 West Second Street, Frankfort, Kentucky 40601.

REGULATORY IMPACT ANALYSIS

Agency Contact Person: Carroll Roberts
(1) Type and number of entities affected: None
(a) Direct and indirect costs or savings to those affected:
1. First year:
2. Continuing costs or savings:
3. Additional factors increasing or decreasing costs (note any effects upon competition):
(b) Reporting and paperwork requirements:
(2) Effects on the promulgating administrative body: None
(a) Direct and indirect costs or savings:
1. First year:
2. Continuing costs or savings:
3. Additional factors increasing or decreasing costs:
(b) Reporting and paperwork requirements:
(3) Assessment of anticipated effect on state and local revenues: None
(4) Assessment of alternative methods; reasons why alternatives were rejected: N/A
(5) Identify any statute, administrative

regulation or government policy which may be in conflict, overlapping, or duplication: None
(a) Necessity of proposed regulation if in conflict:
(b) If in conflict, was effort made to harmonize the proposed administrative regulation with conflicting provisions:
(6) Any additional information or comments:

Tiering:
Was tiering applied? No. Tiering was not applied as it was not necessary.

FINANCE AND ADMINISTRATION CABINET
Board of Hairdressers and Cosmetologists
(Proposed Amendment)

201 KAR 12:120. School faculty.

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

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

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

Section 3. No licensed cosmetologist shall render services in a school. Instructors and apprentice instructors shall render services only incidental to and for the purpose of instruction.

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

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

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

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

[Section 8. Only one (1) apprentice instructor shall be enrolled in any school of cosmetology during a six (6) month period.]

Section 8. [9.] Each school of cosmetology shall, within five (5) days after the termination, employment or other change in faculty personnel, notify the board of such change.

CARROLL ROBERTS, Administrator
APPROVED BY AGENCY: November 6, 1985
FILED WITH LRC: November 14, 1985 at 4:30 p.m.
PUBLIC HEARING SCHEDULED: A public hearing has been scheduled for December 27, 1985 at 10 a.m. Please respond to Carroll Roberts, Administrator, Board of Hairdressers and Cosmetologists, 314 West Second Street, Frankfort, Kentucky 40601.

REGULATORY IMPACT ANALYSIS

Agency Contact Person: Carroll Roberts
(1) Type and number of entities affected: None
(a) Direct and indirect costs or savings to those affected:
1. First year:
2. Continuing costs or savings:
3. Additional factors increasing or decreasing costs (note any effects upon competition):
(b) Reporting and paperwork requirements:
(2) Effects on the promulgating administrative body: None
(a) Direct and indirect costs or savings:
1. First year:
2. Continuing costs or savings:
3. Additional factors increasing or decreasing costs:
(b) Reporting and paperwork requirements:
(3) Assessment of anticipated effect on state and local revenues: None
(4) Assessment of alternative methods; reasons why alternatives were rejected: N/A
(5) Identify any statute, administrative regulation or government policy which may be in conflict, overlapping, or duplication: None
(a) Necessity of proposed regulation if in conflict:
(b) If in conflict, was effort made to harmonize the proposed administrative regulation with conflicting provisions:
(6) Any additional information or comments:

Tiering:
Was tiering applied? No. Tiering was not applied as it was not necessary.

TOURISM CABINET
Department of Fish and Wildlife Resources
(Proposed Amendment)

301 KAR 2:140. Seasons for wild turkey [Spring gun and archery season for wild turkey].

RELATES TO: KRS 150.010, 150.025, 150.170, 150.175, 150.176, 150.305, 150.320, 150.330, 150.360, 150.365, 150.390
PURSUANT TO: KRS 13A.350, 150.025
NECESSITY AND FUNCTION: This regulation pertains to [the spring gun and archery] seasons and limits for wild turkey. The commissioner with the concurrence of the commission finds this regulation necessary for the continued protection and conservation of wild turkey

populations and to insure a permanent and continued supply for present and future residents of the state. The function of this regulation is to provide for the prudent taking of wild turkeys within reasonable limits based upon an adequate supply. This amendment is necessary to designate currently appropriate turkey hunting seasons for specific counties and wildlife management areas.

Section 1. Seasons and Counties Open to Wild Turkey Hunting. (1) Seasons and counties. April 16 [20] through April 29 [May 3] in Ballard, Bath, Pike, Letcher, [that portion of] Menifee north of Highway 460, Harlan, [that portion of] Butler east [north] of the Green River Parkway, [Crittenden,] Boyle, Casey, [that portion of] Marion east of Highway 55, [that portion of] McCreary north of Highway 92, and Pulaski. April 19 [20] through April 22 [26 in that portion of] in Adair north of the Cumberland Parkway, Bell south of Highway 119 and east of Highway 25E, Breckinridge south of Highway 60, Carter north of I-64, [that portion of] Christian east of Highway 41, Crittenden north of Highway 60, Franklin west of the Kentucky River, Greenup, Henry south of Highway 22, Lewis east of Highway 59, Nelson north of the Bluegrass Parkway, Taylor south of Highway 70 Webster east of Highway 41A, Hancock, and Ohio Counties.

(2) All other counties and portions of counties are closed to wild turkey hunting except as specified in Section 4 of this regulation.

Section 2. Bag and Possession Limits. Only one (1) turkey [gobbler] with visible beard per hunter per calendar year may be taken, except that two (2) turkeys may be taken if one (1) is taken on Fort Knox, Fort Campbell, or Land Between the Lakes. A second Kentucky wild turkey permit must be obtained before hunting a second turkey.

Section 3. Requirements and Restrictions. (1) The use of dogs is prohibited.

(2) All turkey hunters must have in their possession a valid wild turkey permit and a valid annual Kentucky hunting license, unless exempted by KRS 150.170(3), (5), (6) or (7).

(3) Turkey may be taken from one-half (1/2) hour before sunrise until 12 noon.

(4) Turkey may be taken with the aid of hand or mouth operated calls. Electronic calls are prohibited.

(5) Permitted and prohibited weapons.

(a) Firearms: Turkey may be taken with shotguns only. Shotguns must be no larger than 10 gauge or no smaller than 20 gauge. Only Number 2 shot or smaller may be used. Buckshot and slugs may not be possessed while turkey hunting.

(b) Archery: Turkey may be taken with any longbows and compound bows which do not have devices to hold an arrow at full draw without human aid. Only barbless arrows without chemical treatment or chemical attachments, with broadhead points at least seven-eighths (7/8) inch wide are permitted.

(6) Any hunter harvesting a wild turkey must have it checked at the nearest check station or by the nearest available conservation officer no later than 5:00 p.m. on the day the turkey is taken except as required on specified wildlife management areas. The hunter must complete the wild turkey permit and attach the tag portion to the turkey immediately after taking.

(7) Turkeys may be taken with the aid of decoys. Live turkeys may not be used as decoys.

(8) Turkeys may not be hunted on any baited area. A baited area means any area where feed, grains or any other substances capable of luring wild turkeys have been placed. Such areas shall be considered baited for ten (10) days following the complete removal of all bait. This does not prohibit hunting wild turkeys on any areas where grains, feed or other substances exist as the result of bona fide agricultural practices, or as the result of manipulating a crop for wildlife management purposes, provided that manipulation for wildlife management purposes does not include the placing or scattering of grain, feed or other substances once removed from or stored on the field where grown.

(9) Turkeys may not be hunted from [a] boats.

Section 4. Seasons and Exceptions on Wildlife Management Areas. All provisions of this regulation apply unless otherwise specified in this section.

(1) Fort Knox Wildlife Management Area located in Hardin, Bullitt and Meade Counties.

(a) Season: All Saturdays and Sundays in March and April [, unless precluded by military training priorities].

(b) Weapons: Muzzle-loading rifles .32 caliber or larger are permitted and 10 gauge shotguns are prohibited. Archery equipment may be used in designated areas only.

(c) Hunters must check turkeys at building 7334 by 2:00 p.m. on the day harvested.

(2) Land Between the Lakes Wildlife Management Area located in Trigg and Lyon Counties.

(a) Season: April 16 [17] through May 4 [5].

(b) Wild turkey may be taken only in designated areas.

(c) All hunters must check in and out, must check any turkey before leaving Land Between the Lakes and affix an LBL tag to the carcass. [Before leaving Land Between the Lakes, hunters must check in any turkey harvested and affix a Land Between the Lakes tag to the carcass.]

(d) Shooting hours: One-half (1/2) hour before sunrise to one-half (1/2) hour after sunset.

(3) Pioneer Weapons Wildlife Management Area located in Bath and Menifee Counties.

[(a) Season: April 20 through May 3.]

[(b) Weapons:] Muzzle-loading rifles and muzzle-loading handguns are permitted. Breech-loading shotguns are prohibited. Crossbows of at least 100 pounds pull with a working safety are permitted. Bolts must be barbless with broadhead points at least seven-eighths (7/8) inch wide.

[(4) Pine Mountain Wildlife Management Area located in Letcher County. April 20 through May 3.]

(4) [(5)] Fort Campbell Wildlife Management Area located in Christian and Trigg Counties.

(a) Season: April 5 [6] through April 27 [28] with no hunting permitted on Mondays and Tuesdays.

(b)Permit: A post combination hunting-fishing permit is required.

(c) Shooting hours: One-half (1/2) hour before sunrise to one-half (1/2) after sunset.

[(6) Beaver Creek Wildlife Management Area located in McCreary and Pulaski Counties. April 20 through May 3.]

(5) [(7)] Blue Grass Ordnance Depot Activity

located in Madison County. April 16 [20] through April 29 [May 3].

[(8) Cranks Creek Wildlife Management Area located in Harlan County. April 20 through May 3.]

(6) [(9)] Ballard Wildlife Management Area in Ballard County is closed to turkey hunting, except that portion south of Terrell Landing Road. [All other wildlife management areas are closed to wild turkey hunting.]

DON R. McCORMICK, Commissioner
CHARLES E. PALMER, JR., Chairman
G. WENDELL COMBS, Secretary
APPROVED BY AGENCY: October 15, 1985
FILED WITH LRC: October 15, 1985 at 2 p.m.
PUBLIC HEARING SCHEDULED: A public hearing on this regulation will be held on December 23, 1985 at 9 a.m. in the meeting room of the Arnold L. Mitchell Building, #1 Game Farm Road, Frankfort, KY. Those interested in attending this hearing shall contact: William D. Graves, Director, Wildlife Division, Department of Fish and Wildlife Resources, Arnold L. Mitchell Building, #1 Game Farm Road, Frankfort, Kentucky 40601.

REGULATORY IMPACT ANALYSIS

Agency Contact Person: Don R. McCormick
(1) Type and number of entities affected: Approximately 4,000 persons will participate in the wild turkey hunting proposed by this regulation.
(a) Direct and indirect costs or savings to those affected: Direct costs involve the purchase of a state hunting license and a wild turkey permit. Indirect costs are determined by the individual hunter, depending upon his level of participation.
1. First year: Persons participating in the hunting proposed for authorization by this regulation would be required to possess a valid hunting license ($7.50 for residents) and wild turkey permit ($6.50) unless exempt by regulations.
2. Continuing costs or savings: Same as first year.
3. Additional factors increasing or decreasing costs (note any effects upon competition): None
(b) Reporting and paperwork requirements: None
(2) Effects on the promulgating administrative body: Requires time and effort in developing, publishing, reporting on, and enforcing the proposed regulation.
(a) Direct and indirect costs or savings: Primary costs are associated with enforcing the regulation.
1. First year: The estimated cost associated with establishing and carrying out the provisions of this regulation is $80,000.
2. Continuing costs or savings: Same as first year.
3. Additional factors increasing or decreasing costs: None
(b) Reporting and paperwork requirements: None
(3) Assessment of anticipated effect on state and local revenues: Approxiamtely 4,000 turkey hunters say be expected to expend money for equipment, transportation, food, and lodging. The annual expenditure for these items averages $25 per day of hunting according to the 1980 National Hunting and Fishing Survey. State and local revenues can be expected to be positively affected due to the necessary expenditures for the required licenses and taxes levied upon items purchased by hunters.
(4) Assessment of alternative methods; reasons why alternatives were rejected: The only available alternative to regulated hunting is closure of the season. This alternative was rejected as contrary to the conservation ethic which is based upon the wise use of renewable resources and the fact that wild turkey populations are to levels which can sustain a regulated harvest by Kentucky sportsmen.
(5) Identify any statute, administrative regulation or government policy which may be in conflict, overlapping, or duplication: None known
(a) Necessity of proposed regulation if in conflict:
(b) If in conflict, was effort made to harmonize the proposed administrative regulation with conflicting provisions:
(6) Any additional information or comments: None

Tiering: No
Was tiering applied? This type of regulation does not appear to be adaptable to the tiering process since it is specific to turkey hunters.

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, 224.830 through [224.835, 224.846, 224.855 to] 224.889, 224.994
PURSUANT TO: KRS Chapter 13A [224.017], 224.033 [(24)]
NECESSITY AND FUNCTION: KRS 224.033 [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) "Accumulated speculatively" see Section 1 of 401 KAR 31:010.
(2) [(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.
(3) [(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.
(4) [(3)] "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.

(5) [(4)] "Administrator" means the administrator of the United States Environmental Protection Agency, or his designee.

(6) [(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.

(7) [(6)] "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.

(8) [(7)] "Ampule" means a small sealed glass container for one (1) dose of sterile medicine.

(9) [(8)] "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.

(10) [(9)] "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.

(11) [(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.

(12) [(11)] "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.

(13) [(12)] "Board" means the Kentucky regional integrated waste treatment and disposal facility siting board (KRS 224.2201[(1)]).

(14) "Boiler" see "hazardous waste site or facility-boiler."

(15) "By-product" see Section 1 of 401 KAR 31:010.

(16) [(13)] "Cabinet" means the Natural Resources and Environmental Protection Cabinet (KRS 224.005[(7)]).

(17) [(14)] "Cation exchange capacity" means the sum of exchangeable cations a soil can absorb expressed in milli-equivalents 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.

(18) [(15)] "Cell" means a portion of a landfill which is isolated, usually by means of an approved barrier.

(19) [(16)] "Certificate" means a certificate of environmental safety and public necessity (KRS 224.2201[(2)]).

(20) [(17)] "Certification" means a statement of professional opinion based upon knowledge and belief.

(21) [(18)] "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.

(22) [(19)] "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)]).

(23) [(20)] "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.

(24) [(21)] "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.

(25) [(22)] "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.

(26) [(23)] "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 Section 5(3) of 401 KAR 31:030.

(27) [(24)] "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.

(28) [(25)] "Contained landfill" see "solid waste site or facility - contained landfill."

(29) [(26)] "Container" means any portable enclosure in which a material is stored,

transported, treated, disposed, or otherwise handled.

(30) [(27)] "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 and 401 KAR 34:060, Section 8.

(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 401 KAR 30:030, Section 2 or [and] 401 KAR 34:060, Section 8.

(31) [(28)] "Contamination" means the degradation of naturally occurring water, air, or soil quality either directly or indirectly as a result of human activities.

(32) [(29)] "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.

(33) [(30)] "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.

(34) "Designated facility" means a hazardous waste treatment, storage, or disposal facility which has received a hazardous waste site or facility permit (or a facility with interim status) in accordance with the requirements of 401 KAR Chapter 38, a permit from a state authorized in accordance with 40 CFR Part 271, and EPA permit (or a facility with interim status) in accordance with 40 CFR Parts 270 and 124, or that is regulated under Section 6(3)(b) of 401 KAR 31:010 or 401 KAR Chapter 36, 40 CFR 261.6(c)(2) or 40 CFR Part 266, and that has been designated on the manifest by the generator pursuant to Section 1 of 401 KAR 32:020.

(35) [(31)] "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.

(36) [(32)] "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.

(37) [(33)] "Director" means the director of the cabinet's division of waste management.

(38) [(34)] "Discharge" means but is not limited to spilling, leaking, pumping, pouring, emitting, emptying, or dumping (KRS 224.877(a)).

(39) [(35)] "Disease vector" means all insects, birds or gnawing animals such as rats, mice or ground squirrels, which are capable of transmitting pathogens.

(40) [(36)] "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)]).

(41) [(37)] "Disposal facility" see "hazardous waste site or facility - disposal facility."

(42) [(38)] "Elementary neutralization unit" see "hazardous waste site or facility - elementary neutralization unit."

(43) [(39)] "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.

(44) [(40)] "Environmental emergency" includes any release or threatened release of materials into the environment in such quantities or concentrations as to 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).

(45) [(41)] "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.

(46) [(42)] "EPA identification number" means the number assigned by EPA or the cabinet to each generator, transporter, and treatment, storage, or disposal facility.

(47) [(43)] "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.

(48) [(44)] "Equivalent method" means any testing or analytical method, approved jointly by the administrator and 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.

(49) [(45)] "Existing hazardous waste site or 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 commenced construction if:

(a) The owner or operator had obtained the federal, state and local 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.

(50) [(46)] "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.

(51) [(47)] "Explosive gas" means methane (CH_4) in 401 KAR 30:030, Section 1(1).

(52) [(48)] "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).

(53) [(49)] "Facility structures" means any buildings and sheds or utility or drainage lines on the solid waste site or facility.

(54) [(50)] "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.

(55) [(51)] "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.

(56) [(52)] "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.

(57) [(53)] "Flood plain" means areas adjoining inland waters which are inundated by the base flood, unless othewise specified in 401 KAR 47:040.

(58) [(54)] "Food chain crops" means tobacco, crops grown for human consumption, and crops grown for feed for animals whose products are consumed by humans.

(59) [(55)] "Freeboard" means the vertical distance between the top of a tank or surface impoundment dike and the surface of the waste contained therein.

(60) [(56)] "Free liquids" means liquids which readily separate from the solid portion of a waste under ambient temperature and pressure.

(61) [(57)] "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.

(62) [(58)] "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."

(63) [(59)] "Groundwater table" means the upper boundary of the saturated zone in which the hydrostatic pressure of the groundwater is equal to the atmospheric pressure.

(64) [(60)] "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)).

(65) [(61)] "Hazardous waste constituent" means a constituent that caused the cabinet to list the hazardous waste in 401 KAR 31:040, or a constituent listed in Section 5(3) of 401 KAR 31:030.

(66) [(62)] "Hazardous waste management" means the systematic control of the collection, source separation, storage, transportation, processing, treatment, recovery, and disposal of hazardous waste.

(67) [(63)] "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) "Boiler" means an enclosed device using control flame combustion and having the following characteristics:

1.a. The unit must have physical provisions for recovering and exporting thermal energy in the form of steam, heated fluids, or heated gases; and

b. The unit's combustion chamber and primary energy recovery section(s) must be of integral design. To be of integral design, the combustion chamber and the primary energy recovery section(s) (such as waterwalls and superheaters) must be physically formed into one (1) manufactured or assembled unit. A unit in which the combustion chamber and the primary energy recovery section(s) are joined only by ducts or connections carrying flue gas is not integrally design, however, secondary energy recovery equipment (such as economizers or air preheaters) need not be physically formed into the same unit as the combustion chamber and the primary energy recovery section. The following units are not precluded from being boilers solely because they are not of integral design: process heaters (units that transfer energy directly to a process stream), and fluidized bed combustion units; and

c. While in operation, the unit must maintain a thermal energy recovery efficiency of at least sixty (60) percent, calculated in terms of the recovered energy compared with the thermal value of the fuel; and

d. The unit must export and utilize at least seventy-five (75) percent of the recovered energy, calculated on an annual basis. In this calculation, no credit shall be given for recovered heat used internally in the same unit. (Examples of internal use are the preheating of fuel or combustion air, and the driving of induced or forced draft fans or feedwater pumps); or

2. The unit is one (1) which the cabinet has determined, on a case-by-case basis, to be a boiler, after considering the standards in 401 KAR 30:080.

(b) [(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.

(c) [(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.

(d) [(c)] "Incinerator" means any enclosed device using controlled flame combustion that neither meets the criteria for classification as a boiler nor is listed as an industrial furnace [, the primary purpose of which is to thermally break down hazardous waste. Examples of incinerators are rotary kiln, fluidized bed, and liquid injection incinerators].

(e) "Industrial furnace" means any of the following enclosed devices that are integral components of manufacturing processes and that use controlled flame devices to accomplish recovery of materials or energy:

1. Cement kilns.
2. Lime kilns.
3. Aggregate kilns.
4. Phosphate kilns.
5. Coke ovens.
6. Blast furnaces.
7. Smelting, melting, and refining furnaces (including pyrometallurgical devices such as cupolas, reverberator furnaces, sintering machines, roasters, and foundry furnaces).
8. Titanium dioxide chloride process oxidation reactors.
9. Methane reforming furnaces.
10. Pulping liquor recovery furnaces.
11. Combustion devices used in the recovery of sulfur values from spent sulfuric acid.
12. Such other devices as the cabinet may, after notice and comment, add to this list on the basis of criteria and Section 5 of 401 KAR 30:080.

(f) [(d)] "Injection well" means a well into which fluids are injected to achieve subsurface emplacement.

(g) [(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.

(h) [(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.

(i) [(g)] "Pile" or "waste pile" means any non-containerized accumulation of solid, nonflowing hazardous waste that is used for treatment or storage.

(j) [(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.

(k) [(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.

(l) [(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.

(m) [(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.

(n) [(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.

(o) [(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.

(p) [(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.

(68) [(64)] "Holocene" means the most recent epoch of the quartenary period, extending from the end of the pleistocene to the present.

(69) [(65)] "Inactive portion" means that portion of a hazardous waste site or facility which is not operated after November 19, 1980.

(70) [(66)] "Incinerator" see "hazardous waste site or facility - incinerator."

(71) [(67)] "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.

(72) [(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.

(73) "Industrial furnace" see "hazardous waste site or facility - industrial furnace."

(74) [(69)] "Inert landfill" see "solid waste

site or facility - inert landfill."

(75) [(70)] "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.

(76) [(71)] "Injection well" see "hazardous waste site or facility - injection well."

(77) [(72)] "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.

(78) [(73)] "In operation" refers to a facility which is treating, storing, or disposing of hazardous waste.

(79) [(74)] "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 and is treated as having a permit until such time as final administrative disposition of such application is made.

(80) [(75)] "International shipment" means the transportation of hazardous waste into or out of the jurisdiction of the United States.

(81) [(76)] "KPDES" means Kentucky Pollutant Discharge Elimination System.

(82) [(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.

(83) [(78)] "Landfarming facility" see "solid waste site or facility - landfarming facility."

(84) [(79)] "Landfill" see "hazardous waste site or facility - landfill."

(85) [(80)] "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.

(86) [(81)] "Land treatment facility" see "hazardous waste site or facility-land treatment facility."

(87) [(82)] "Leachate" means any liquid including any suspended components in the liquid, that has percolated through or drained from waste.

(88) [(83)] "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.

(89) [(84)] "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.

(90) [(85)] "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 of 401 KAR 38:040.)

(91) [(86)] "Manifest" means the shipping document form contained in Appendix A of 401 KAR 32:100, and if necessary the form contained in Appendix B of 401 KAR 32:100, originated and signed by the generator in accordance with the instructions included in 401 KAR 32:100.

(92) [(87)] "Manifest document number" means the U.S. EPA twelve (12) digit identification number assigned to the generator plus a unique, serially increasing, five (5) digit document number assigned to the manifest by the generator for recordkeeping and reporting purposes.

(93) [(88)] "Mining overburden returned to the mine site" means any material overlying an economic mineral deposit which is removed to gain access to that deposit and is then used for reclamation of a surface mine.

(94) [(89)] "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.

(95) [(90)] "Monitoring well" means a well used to obtain water samples for water quality and quantity analysis and groundwater levels.

(96) [(91)] "Movement" means that hazardous waste transported to a facility in an individual vehicle.

(97) [(92)] "NPDES" means National Pollutant Discharge Elimination System (KRS 224.005(29)).

(98) [(93)] "New" means any hazardous waste site or facility that commenced construction after November 19, 1980.

(99) [(94)] "Off-site" means properties non-contiguous to the generation site.

(100) [(95)] "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.

(101) [(96)] "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.

(102) [(97)] "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.

(103) [(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 cabinet 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)]).

(104) [(99)] "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.

(105) [(100)] "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.

(106) [(101)] "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.

(107) [(102)] "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. Specifically, Part B consists of submitting all of the information required in 401 KAR 38:090 through 401 KAR 38:210; there are no official forms for the submission.

(108) [(103)] "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.

(109) [(104)] "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.

(110) [(105)] "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 38:060, Section 2.

(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 or the maximum groundwater contaminant levels specified in Section 5 of 401 KAR 34:060. Both hazardous and solid waste sites or facilities may be considered to hold a permit by rule.

1. Examples of hazardous waste sites or facilities which are permitted by rule include facilities operating under an interim status permit and facilities identified in Section 1 of 401 KAR 38:060.

2. Examples of solid waste sites or facilities which are permitted by rule include facilities identified in Section 1(4) of 401 KAR 47:020 and Section 1(2) of 401 KAR 47:050.

(111) [(106)] "Permittee" means any person holding a valid permit issued by the cabinet to manage, treat, store, and/or dispose of waste.

(112) [(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)]).

(113) [(108)] "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.

(114) [(109)] "Pile" see subsection (63)(g) of this section.

(115) [(110)] "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 polluants are or may be discharged. This term does not include return flows from irrigated agriculture.

(116) [(111)] "Post-closure care" means the manner in which a facility must be maintained when it no longer accepts hazardous waste for disposal.

(117) [(112)] "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.

(118) [(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)).

(119) [(114)] "Publicly owned treatment works" or "POTW" means any device or system used in the treatment (including recycling and recovery) of any municipal sewage or industrial wastes of a liquid nature which is owned by the Commonwealth or a political subdivision of the Commonwealth (KRS 224.005[(14)]).

(120) [(115)] "Putrescible" means susceptible to rapid decomposition by bacteria, fungi, or oxidation sufficient to cause nuisances such as odors, gases, or other offensive conditions.

(121) [(116)] "Recharge zone" means an area supplying the water which enters an underground drinking water source.

(122) "Reclaimed" see Section 1 of 401 KAR 31:010.

(123) [(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)]).

(124) [(118)] "Recycling" means any treatment process for the reclamation of material or energy from waste (KRS 224.005[(16)]). See also Section 1 of 401 KAR 31:010.

(125) [(119)] "Regional Administrator" means the regional administrator for the EPA region in which the facility is located, or his designee.

(126) [(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)).

(127) [(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.

(128) [(122)] "Residential landfill" see "solid waste site or facility - residential landfill."

(129) [(123)] "Residual landfill" see "solid waste site or facility - residual landfill."

(130) [(124)] "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.

(131) [(125)] "Resource recovery" means the recovery of material or energy from waste [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].

(132) [(126)] "Run-off" means any rainwater, leachate, or other liquid that drains overland from any part of a facility.

(133) [(127)] "Run-on" means any rainwater, leachate, or other liquid that drains overland onto any part of a facility.

(134) [(128)] "Salvaging" means the controlled removal of waste materials for utilization in a manner approved by the cabinet.

(135) [(129)] "Sanitary landfill" means a facility for the disposal of solid waste which complies with the "environmental performance standards" specified in 401 KAR 30:030.

(136) [(130)] "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.

(137) [(131)] "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.

(138) "Scrap metal" see Section 1 of 401 KAR 31:010.

(139) [(132)] "Secretary" means the secretary of the Natural Resources and Environmental Protection Cabinet (KRS 224.005[(17)]).

(140) [(133)] "Sludge" means any solid, semi-solid, 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.

(141) [(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)]).

(142) [(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)]).

(143) [(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)]).

(144) [(137)] "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 trimmings, 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" in 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.

(145) [(138)] "Special wastes" means those wastes of high volume and low hazard which include, but are not limited to, mining waste, utility wastes (fly ash, bottom ash, scrubber sludge), sludge from water treatment facilities and waste water treatment facilities, cement kiln dust, gas and oil drilling muds and oil production brines (KRS 224.868(1)(a)).

(146) "Spent material" see Section 1 of 401 KAR 31:010.

(147) [(139)] "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.

(148) [(140)] "State" means any of the fifty (50) states, the District of Columbia, the

Commonwealth of Puerto Rico, the Virgin Islands, American Samoa, the Northern Mariana Islands or Guam but does not include any foreign country.

(149) [(141)] "Storage facility" see "hazardous waste site or facility - storage facility."

(150) [(142)] "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.

(151) [(143)] "Surface impoundment" see "hazardous waste site or facility - surface impoundment."

(152) [(144)] "Tank" see "hazardous waste site or facility - tank."

(153) [(145)] "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)]).

(154) [(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").

(155) [(147)] "Thermal treatment facility" see "hazardous waste site or facility - thermal treatment facility."

(156) [(148)] "Totally enclosed treatment facility" see "hazardous waste site or facility - totally enclosed treatment facility."

(157) [(149)] "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.

(158) [(150)] "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.

(159) [(151)] "Transportation" means any off-site movement of waste by any mode, and any loading, unloading, or storage incidental thereto (KRS 224.005[(22)]).

(160) [(152)] "Transporter" means a person engaged in the off-site transportation of hazardous waste by air, rail, highway or water.

(161) [(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)]).

(162) [(154)] "Treatment facility" see "hazardous waste site or facility - treatment facility."

(163) [(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.

(164) [(156)] "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.

(165) [(157)] "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.

(166) [(158)] "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.")

(167) [(159)] "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.

(168) [(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.

(169) "Used or reused" see Section 1 of 401 KAR 31:010.

(170) [(161)] "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.

(171) [(162)] "Vessel" includes every description of watercraft used or capable of being used as a means of transportation on the water.

(172) [(163)] "Washout" means the carrying away of waste by waters of the base flood.

(173) [(164)] "Waste" means:

(a) "Solid waste" means any garbage, refuse, sludge and other discarded material, including solid, liquid, semi-solid, 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)]).

(174) [(165)] "Waste boundary" means:

(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 solid waste disposal 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.

(175) [(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 Conservation and Recovery Act of 1976, as amended (P.L. 94-580) (KRS 224.005[(25)]).

(176) [(167)] "Wastewater treatment unit" see "hazardous waste site or facility - wastewater treatment unit."

(177) [(168)] "Water (bulk shipment)" means the bulk transportation of hazardous waste which is loaded or carried on board a vessel without containers or labels.

(178) [(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)]).

(179) [(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.

(180) [(171)] "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.

(181) [(172)] "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
cm^2	Centimeter squared
CO	Carbon monoxide
CO_2	Carbon dioxide
CWA	Clean Water Act
DOT	United States 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 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 Air Pollutants
NPDES	National Pollutant 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
ppm	parts per million
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 (P.L. 94-580)
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	Undergound 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 Chapters 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, available 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 Evaluating Solid Waste, Physical/Chemical Methods," EPA Publication SW-846 (Second Edition, 1982 as amended by Update I (April 1984), and Update II (April 1985)). The second edition of SW-846 and Updates I and II [copies] are available from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20401, (202) 783-3238, on a subscription basis[, and future updates will automatically be mailed to this subscriber].

(4) Appendix X of 40 CFR 261 on the method of analysis for chlorinated dibenzo-p-dioxins and dibenzofurans is adopted by reference and included in "The Test Methods for Evaluating Solid Waste, Physical/Chemical Methods." (See 401 KAR 31:190.)

CHARLOTTE E. BALDWIN, Secretary

APPROVED BY AGENCY: November 12, 1985

FILED WITH LRC: November 13, 1985 at 3 p.m.

PUBLIC HEARING SCHEDULED: A public hearing on this regulation will be held on December 30, 1985, at 1 p.m. EST, in the Capital Plaza Tower. Any persons interested in attending this hearing shall submit by December 26, 1985, a written statement of such interest to: J. Alex Barber, Director, Division of Waste Management, 18 Reilly Road, Frankfort, Kentucky 40601. If no statement of interest is received by close of business on December 26, 1985, the hearing on this regulation may be cancelled. Written comments may also be submitted to the address above. Written comments will be accepted until the end of the comment period, which will be close of business on December 30, 1985.

REGULATORY IMPACT ANALYSIS

Agency Contact Person: J. Alex Barber, Director

(1) Type and number of entities affected: This regulation affects all persons, counties or urban-county governments who manage hazardous or solid wastes. There are approximately 155 solid waste facilities. For management of hazardous waste there are 3 landfills, 24 surface impoundments, 3 waste piles, 5 incinerators, 282 generators, 28 treatment facilities and 52 storage facilities.

(a) Direct and indirect costs or savings to those affected:

1. First year: This regulation has no economic effect. It is for informational purposes only.

2. Continuing costs or savings: None

3. Additional factors increasing or decreasing costs (note any effects upon competition): None

(b) Reporting and paperwork requirements: None

(2) Effects on the promulgating administrative body:

(a) Direct and indirect costs or savings:

1. First year: None

2. Continuing costs or savings: None

3. Additional factors increasing or decreasing costs: None

(b) Reporting and paperwork requirements:

(3) Assessment of anticipated effect on state and local revenues: There will be no effect on state or local revenues from promulgation of this regulation.

(4) Assessment of alternative methods; reasons why alternatives were rejected: Not applicable. This regulation defines terms essential in interpreting the waste management regulations. Alternative: none.

(5) Identify any statute, administrative regulation or government policy which may be in conflict, overlapping, or duplication: None

(a) Necessity of proposed regulation if in conflict: Not applicable.

(b) If in conflict, was effort mmade to harmonize the proposed administrative regulation with conflicting provisions: Not applicable.

(6) Any additional information or comments: Not applicable.

Tiering:

Was tiering applied? Yes. The definitions are tiered by identifying waste management entities, compliance dates, etc. These definitions are used throughout the waste management regulations to tier the regulatory requirements according to the type of facility.

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 through [to 224.846, 224.855 to] 224.889, 224.994

PURSUANT TO: KRS Chapter 13A, [224.017,] 224.033[(24)]

NECESSITY AND FUNCTION: KRS [224.017,] 224.033 and the waste management provisions of KRS Chapter 224 require the 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 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 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) of this section or granted a variance under the conditions of 401 KAR 30:080, or Sections 8 and 9 of 401 KAR 31:010, and which is not subject to subsection (2) of this regulation 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, 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. Variances may be granted for recycling operations in accordance with the standards contained in 401 KAR 30:080.

(1) The cabinet may grant a variance or permit modification from the requirements of the waste management regulations if a waste [or] permit requirement, or the process and equipment used 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 method of operation used; 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 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.

Section 7. Applicability of Regulations. (1) At the time of permit issuance, the applicable regulations shall be those waste management regulations which are in effect upon the date of permit issuance.

(2) For permit modifications, revocation and reissuance, or termination, the applicable regulations shall be those regulatory provisions which are in effect upon the date that the cabinet makes a final determination (i.e.,

approval of a permit modification) upon the permit action and are applicable to those specific permit conditions being modified or revoked and reissued. The procedures which shall be used for permit modifications, revocation and reissuance, or termination shall be those regulatory procedures which are in effect upon the date of the cabinet's final determination.

CHARLOTTE E. BALDWIN, Secretary
APPROVED BY AGENCY: November 12, 1985
FILED WITH LRC: November 13, 1985 at 3 p.m.
PUBLIC HEARING SCHEDULED: A public hearing on this regulation will be held on December 30, 1985, at 1 p.m. EST, in the Capital Plaza Tower. Any persons interested in attending this hearing shall submit by December 26, 1985, a written statement of such interest to: J. Alex Barber, Director, Division of Waste Management, 18 Reilly Road, Frankfort, Kentucky 40601. If no statement of interest is received by close of business on December 26, 1985, the hearing on this regulation may be cancelled. Written comments may also be submitted to the address above. Written comments will be accepted until the end of the comment period, which will be close of business on December 30, 1985.

REGULATORY IMPACT ANALYSIS

Agency Contact Person: J. Alex Barber, Director
(1) Type and number of entities affected: This regulation contains general requirements which affect all persons and facilities who are regulated under the provisions of 401 KAR Chapters 30-49. This includes 282 hazardous waste generators, 28 hazardous waste treatment facilities, 52 hazardous waste storage facilities, 8 hazardous waste disposal facilities, and 199 solid waste disposal facilities.
(a) Direct and indirect costs or savings to those affected:
1. First year: There will be no costs or savings incurred by the promulgation of this amendment because it clarifies the intent of the previously existing standards.
2. Continuing costs or savings: None. See note in (1)(a)1 above.
3. Additional factors increasing or decreasing costs (note any effects upon competition): None. See note in (1)(a)1 above.
(b) Reporting and paperwork requirements: None. See note in (1)(a)1 above.
(2) Effects on the promulgating administrative body:
(a) Direct and indirect costs or savings:
1. First year: None. See note in (1)(a)1 above.
2. Continuing costs or savings: None. See note in (1)(a)1 above.
3. Additional factors increasing or decreasing costs: None. See note in (1)(a)1 above.
(b) Reporting and paperwork requirements:
(3) Assessment of anticipated effect on state and local revenues: There will be no effect on state or local revenues from promulgation of this regulation.
(4) Assessment of alternative methods; reasons why alternatives were rejected: Less stringent and more strigent alternatives are not applicable because this regulation is being amended for clarification purposes only.
(5) Identify any statute, administrative regulation or government policy which may be in conflict, overlapping, or duplication: None
(a) Necessity of proposed regulation if in conflict: Not applicable.
(b) If in conflict, was effort mmade to harmonize the proposed administrative regulation with conflicting provisions: Not applicable.
(6) Any additional information or comments: None

Tiering:
Was tiering applied? Yes. This regulation is tiered to apply only to those persons and facilities which manage solid or hazardous waste.

NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION CABINET
Department for Environmental Protection
Division of Waste Management
(Proposed Amendment)

401 KAR 30:070. Reference documents.

RELATES TO: KRS 13A.130, 13A.190, 224.005, 224.033, 224.830 through 224.889, 224.994
PURSUANT TO: KRS 13A.210, 224.033
NECESSITY AND FUNCTION: KRS 224.033 and the waste management provisions of KRS Chapter 224 require the Natural Resources and Environmental Protection Cabinet to promulgate regulations for the management of solid and hazardous wastes. This chapter establishes the general administrative procedures which are applicable to 401 KAR Chapters 30 through 49. This regulation incorporates by reference as provided under 1 KAR 1:010 essential documents used in connection with the waste management regulations.

Section 1. Documents Incorporated by Reference. The documents listed in subsections (1) through (8) of this section are adopted and filed herein by reference. Copies of these documents may be obtained from the Natural Resources and Environmental Protection Cabinet, Department for Environmental Protection, Division of Waste Management, 18 Reilly Road, Frankfort, Kentucky 40601.
(1) Waste Management Policy I.2.a., "Closure of Permitted Solid Waste Sites," (July 29, 1983).
(2) Waste Management Policy IV.1.a., "Sampling Procedure-Splitting Samples," (September 15, 1983).
[(3) Waste Management Policy VI.1.a., "Definition of Waste-Fuel Exemption," (October 26, 1983).]
(3) [(4)] Waste Management Policy VI.1.b., "Regulatory Interpretation: Sham Recycling," (November 8, 1985) [(April 6, 1984)].
(4) [(5)] Waste Management Policy VI.1.c., "Regulatory Interpretation: Mixture of "F" Listed Solvents," (April 6, 1984).
(5) [(6)] Waste Management Policy VI.1.c., "Regulatory Interpretation: EPA Guidance on K061 Listing," (April 6, 1984).
(6) [(7)] Waste Management Policy VI.1.e., "Regulatory Interpretation: Plating Waste Generators," (April 6, 1984).
(7) [(8)] Waste Management Policy VI.1.f. (AMENDMENT), "Regulatory Interpretation: Empty Containers," (July 9, 1984).

CHARLOTTE E. BALDWIN, Secretary
APPROVED BY AGENCY: November 12, 1985
FILED WITH LRC: November 13, 1985 at 3 p.m.
PUBLIC HEARING SCHEDULED: A public hearing on this regulation will be held on December 30,

1985, at 1 p.m. EST, in the Capital Plaza Tower. Any persons interested in attending this hearing shall submit by December 26, 1985, a written statement of such interest to: J. Alex Barber, Director, Division of Waste Management, 18 Reilly Road, Frankfort, Kentucky 40601. If no statement of interest is received by close of business on December 26, 1985, the hearing on this regulation may be cancelled. Written comments may also be submitted to the address above. Written comments will be accepted until the end of the comment period, which will be close of business on December 30, 1985.

REGULATORY IMPACT ANALYSIS

Agency Contact Person: J. Alex Barber, Director

(1) Type and number of entities affected: The proposed amendments will affect individuals or companies who use hazardous waste exclusively or blended with other fuel for energy recovery purposes. There are fewer than five companies currently in Kentucky who may find the amendments made to this regulation applicable.

(a) Direct and indirect costs or savings to those affected:

1. First year: None. The amendments made to this regulation interpret the requirements proposed in 401 KAR 31:010, Section 6 and 401 KAR 36:040 (see RIA) but do not impose additional requirements.

2. Continuing costs or savings: None. See note in (1)(a)1 above.

3. Additional factors increasing or decreasing costs (note any effects upon competition): None. See note in (1)(a)1 above.

(b) Reporting and paperwork requirements: None

(2) Effects on the promulgating administrative body:

(a) Direct and indirect costs or savings:

1. First year: None. The proposed amendments in this regulation interpret requirements in 401 KAR 31:010, Section 6 and 401 KAR 36:040 (see RIA), but do not impose additional requirements.

2. Continuing costs or savings: None. See note in (2)(a)1.

3. Additional factors increasing or decreasing costs: None. See note in (2)(a)1.

(b) Reporting and paperwork requirements:

(3) Assessment of anticipated effect on state and local revenues: There will be no effect on state or local revenues from promulgation of this regulation.

(4) Assessment of alternative methods; reasons why alternatives were rejected:

(a) The amendments delete a regulatory interpretation policy on the definition of waste-fuel.

Alternative:

1. Less stringent: The division could have chosen not to repeal the policy. However, this would have made this regulation inconsistent with proposed changes to 401 KAR 31:010, Section 6 and 401 KAR 36:040.

2. More stringent: The cabinet could have chosen to amend this policy to include the new waste-fuel definition. However, this would have been redundant and unnecessary because waste-fuel has been defined clearly in 401 KAR 36:040.

3. Present proposal: The present proposal repeals the policy on the definition of waste-fuel to achieve consistency between this regulation and 401 KAR 36:040 and 401 KAR 31:010, Section 6.

(b) The amendments revise the policy on sham recycling to reflect the March 16, 1983 enforcement guidance from the U.S. EPA and the July 15, 1985 federal regulations on recycling.

Alternatives:

1. Less stringent: The cabinet could have chosen not to amend this policy. However, this would have made the regulation inconsistent with amendments to 401 KAR 36:040 and 401 KAR 31:010, Section 6.

2. More stringent: The cabinet could have adopted a more stringent interpretation of what constitutes sham recycling. However, this would have made this regulation inconsistent with amendments made to 401 KAR 36:040 and 401 KAR 31:010, Section 6.

3. Present proposal: The cabinet chose to amend the policy on sham recycling to achieve consistency between the regulations.

(5) Identify any statute, administrative regulation or government policy which may be in conflict, overlapping, or duplication: None

(a) Necessity of proposed regulation if in conflict: Not applicable.

(b) If in conflict, was effort made to harmonize the proposed administrative regulation with conflicting provisions: Not applicable.

(6) Any additional information or comments: The impact of this regulation has not been analyzed for those requirements which are the result of changes made to 401 KAR 36:040 and 401 KAR 31:010 (see RIA for these two regulations).

Tiering:
Was tiering applied? Yes. The amendments made to this regulation affect only those individuals engaged in recycling hazardous waste for energy recovery.

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

PURSUANT TO: KRS Chapter 13A, 224.033, 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 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 wastes 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)(a) The definition of waste contained in this chapter applies only to wastes that are also hazardous for purposes of the regulations implementing those provisions of KRS Chapter 224 relating to hazardous waste management [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, and 224.877. For example, it does not apply to materials (such as non-hazardous scrap, paper, textiles, or rubber) that are not otherwise hazardous wastes and that are recycled.

(b) This chapter identifies only some of the materials which are wastes and hazardous wastes under KRS 224.033(10), 224.071, and 224.877. A material which is not defined as a waste in this chapter, or is not a hazardous waste identified or listed in this chapter is still a waste and a hazardous waste for purposes of this regulation if: [A material which is not a hazardous waste identified in this chapter is still a hazardous waste for purposes of those sections if:]

1. [(a)] In the case of KRS 224.033(10), the cabinet has reason to believe that the material may be a waste within the meaning of KRS 224.005 and a hazardous waste within the meaning of KRS 224.005 ; or [(24)(b).]

2. [(b)] In the case of KRS 224.071, the statutory elements are established.

(3) For the purposes of Sections 2, 6, 8 and 9 of this regulation:

(a) A "spent material" is any material that has been used and as a result of contamination can no longer serve the purpose for which it was produced without processing;

(b) "Sludge" has the same meaning used in Section 1 of 401 KAR 30:010;

(c) A "by-product" is a material that is not one (1) of the primary products of a production process and is not solely or separately produced by the production process. Examples are process residues such as slags or distillation column bottoms. The term does not include a co-product that is produced for the general public's use and is ordinarily used in the form it is produced by the process.

(d) A material is "reclaimed" if it is processed to recover a usable product, or if it is regenerated. Examples are recovery of lead values from spent batteries and regeneration of spent solvents.

(e) A material is "used or reused" if it is either:

1. Employed as an ingredient (including use as an intermediate) in an industrial process to make a product (for example, distillation bottoms from one (1) process used as feedstock in another process). However, a material will not satisfy this condition if distinct components of the material are recovered as separate end products (as when metals are recovered from metal-containing secondary materials); or

2. Employed in a particular function or application as an effective substitute for a commercial product (for example, spent pickle liquor used as phosphorous precipitant and sludge conditioner in wastewater treatment).

(f) "Scrap metal" is bits and pieces of metal parts (e.g., bars, turnings, rods, sheets, wire) or metal pieces that may be combined together with bolts or soldering (e.g., radiators, scrap automobiles, railroad boxcars), which when worn or superfluous can be recycled.

(g) A material is "recycled" if it is used, reused, or reclaimed.

(h) A material is "accumulated speculatively" if it is accumulated before being recycled.

1. A material is not accumulated speculatively, if the person accumulating it can show:

a. That the material is potentially recyclable and has a feasible means of being recycled; and

b. That - during the calendar year (commencing on January 1) - the amount of material that is recycled, or transferred to a different site for recycling, equals at least seventy-five (75) percent by weight or volume of the amount of that material accumulated at the beginning of the calendar year (including any material accumulated from previous years).

2. In calculating the percentage of turnover, the seventy-five (75) percent requirement is to be applied to each material of the same type that is recycled in the same way. Materials accumulating in units that would be exempt from regulation under Section 4(3) of this regulation are not to be included in making the calculation. (Materials that are already defined as wastes also are not to be included in making the calculation.) Materials are no longer in this category once they are removed from accumulation for recycling.

Section 2. Definition of a Waste. (1)(a) A "waste" is any discarded [garbage, refuse, sludge or any other waste] material that [which] is not excluded by [under] Section 4(1) of this regulation or that is not excluded by a variance granted under Section 1 or 2 of 401 KAR 30:080, or Section 8 or 9 of this regulation.

(b) A "discarded material" is any material which is:

1. "Abandoned," as explained in subsection (2) of this section; or

2. "Recycled," as explained in subsection (3) of this section; or

3. Listed in subsection (4) of this section.

(2) Materials are waste if they are "abandoned" by being: [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) Accumulated, stored, or treated (but not

recycled) before or in lieu of being abandoned by being disposed of, burned, or incinerated. [Physically, chemically, or biologically treated (other than burned or incinerated) in lieu of or prior to being disposed.]

(3) The following materials are wastes if they are "recycled" - or accumulated, stored, or treated before recycling - as specified in paragraphs (a) through (d) of this subsection.

(a) "Used in a manner constituting disposal."

1. Materials noted with a "(waste)" in column (1) of Table 1 in paragraph (e) of this subsection are wastes when they are:

a. Applied to or placed on the land in a manner that constitutes disposal; or

b. Used to produce products that are applied to or placed on the land or are otherwise contained in products that are applied to or placed on the land (in which case the product itself remains a waste).

2. However, commercial chemical products listed in Section 4 of 401 KAR 31:040 are not wastes if they are applied to the land and that is their ordinary manner of use.

(b) The following materials are "burned for energy recovery:"

1. Materials noted with a "(waste)" in column (2) of Table 1 in paragraph (e) of this subsection are wastes when they are:

a. Burned to recover energy;

b. Used to produce a fuel or are otherwise contained in fuels (in which cases the fuel itself remains a solid waste).

2. However, commercial chemical products listed in Section 4 of 401 KAR 31:040 are not wastes if they are themselves fuels.

(c) The following materials are "reclaimed." Materials noted with a "(waste)" in column (3) of Table 1 in paragraph (e) of this subsection are wastes when reclaimed.

(d) The following materials are "accumulated speculatively." Materials noted with a "(waste)" in column (4) of Table 1 in paragraph (e) of this subsection are wastes when accumulated speculatively.

(e) The following Table 1 identifies materials which are wastes when "used in a manner constituting disposal," "burned for energy recovery," "reclaimed," or "accumulated speculatively." Materials noted with the word "(waste)" in Table 1 are considered to be wastes for the purposes of 401 KAR Chapters 32 through 40 and KRS Chapter 224. Materials noted with a dash "-" in Table 1 are not considered to be a waste for the purposes of 401 KAR Chapters 32 through 40 and KRS Chapter 224.

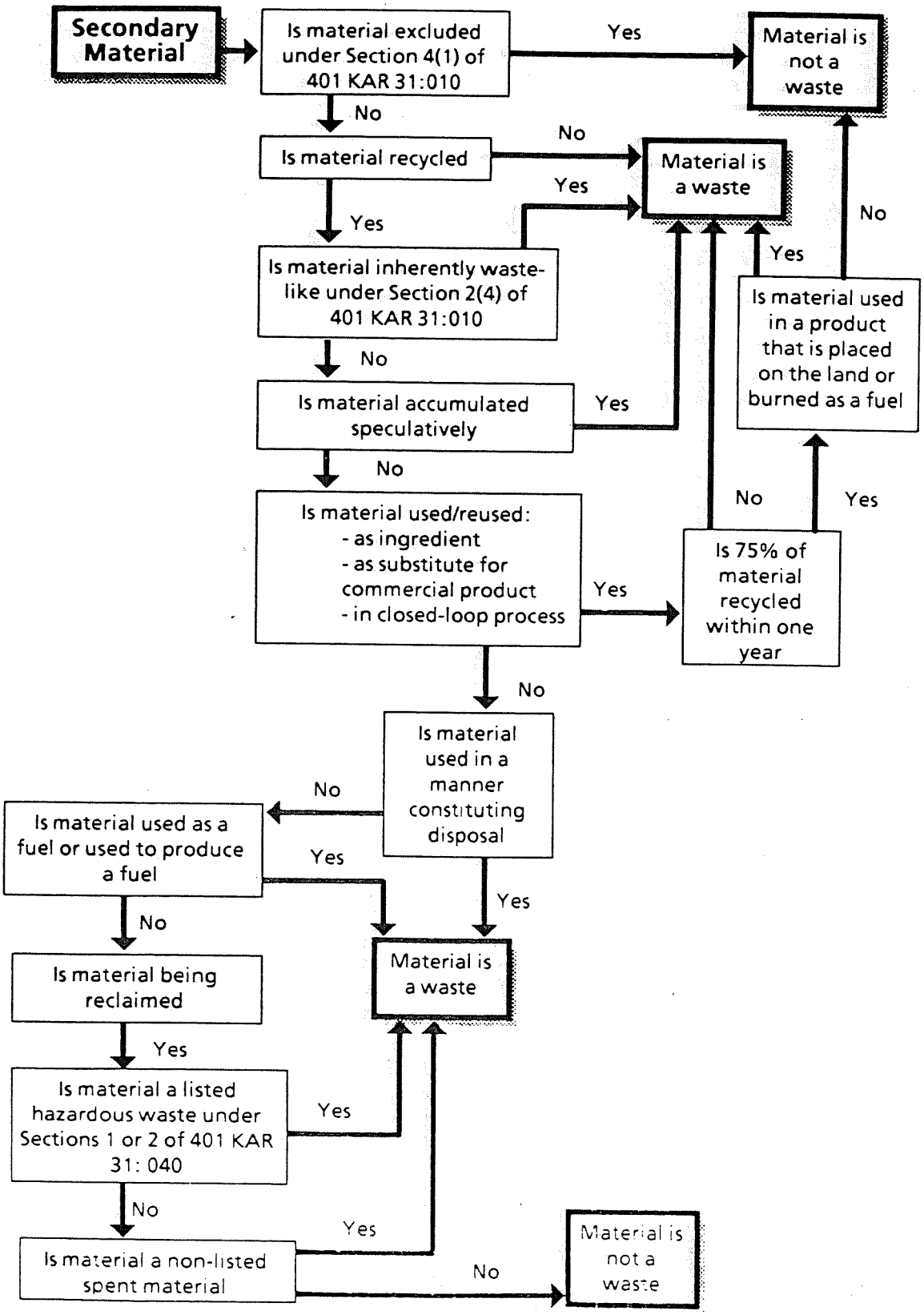
TABLE 1

	Use constituting disposal 401 KAR 31:010 Section 2(3)(a) (1)	Energy recovery/ fuel 401 KAR 31:010 Section 2(3)(b) (2)	Reclamation 401 KAR 31:010 Section 2(3)(c) (3)	Speculative accumulation 401 KAR 31:010 Section 2(3)(d) (4)
Spent materials	(waste)	(waste)	(waste)	(waste)
Sludges (listed in Sections 2 or 3 of 401 KAR 31:040)	(waste)	(waste)	(waste)	(waste)
Sludges exhibiting a characteristic of hazardous waste	(waste)	(waste)	-	(waste)
By-products (listed in Sections 2 or 3 of 401 KAR 31:040)	(waste)	(waste)	(waste)	(waste)
By-products exhibiting a characteristic of hazardous waste	(waste)	(waste)	-	(waste)
Commercial chemical products listed in Section 4 of 401 KAR 31:040	(waste)	(waste)	-	-
Scrap metal	(waste)	(waste)	(waste)	(waste)

NOTE - The terms "spent materials," "sludges," "by-products," and "scrap metal" are defined in Section 1 of this regulation.

(f) The following Table 2 is a decision tree for deciding which secondary materials are wastes when recycled.

TABLE 2. DECISION TREE FOR DECIDING WHICH SECONDARY MATERIALS ARE WASTES WHEN RECYCLED



(4) The following materials are wastes when they are recycled in any manner: [A 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.]

(a) Hazardous Waste Numbers F020, F021 (unless used as an ingredient to make a product at the site of generation), F022, F023, F026, and F028 (chlorinated dioxins, chlorinated dibenzofurans and chlorinated phenols).

(b) The cabinet will use the following criteria to add wastes to the list in paragraph (a) of this subsection:

1.a. The materials are ordinarily disposed of, burned, or incinerated; or

b. The materials contain toxic constituents listed in Section 1 of 401 KAR 31:170 and these constituents are not ordinarily found in raw materials or products for which the material substitute (or are found in raw materials or products in smaller concentrations) and are not used or reused during the recyclying process; and

2. The material may pose a substantial hazard to human health and the environment when recycled.

(5) "Materials that are not wastes when recycled." (a) Materials are not wastes when they can be shown to be recycled by being: [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.]

1. Used or reused as ingredients in an industrial process to make a product, provided the materials are not being reclaimed; or

2. Used or reused as effective substitutes for commercial products; or

3. Returned to the original process from which they are generated, without first being reclaimed. The material must be returned as a substitute for raw material feedstock, and the process must use raw materials as principal feedstocks.

(b) The following materials are wastes, even if the recycling involves use, reuse, or return to the original process (described in paragraph (a)1 through 3 of this subsection):

1. Materials used in a manner constituting disposal, or used to produce products that are applied to the land; or

2. Materials burned for energy recovery, used to produce a fuel, or contained in fuels; or

3. Materials accumulated speculatively; or

4. Materials listed in subsection (4)(a) of this section.

(6) "Documentation of claims that materials are not wastes or are conditionally exempt from regulation." Respondents in actions to enforce regulations implementing the provisions in KRS Chapter 224 relating to hazardous waste management who raise a claim that a certain material is not waste, or is conditionally exempt from regulation, must demonstrate that there is a known market or disposition for the material, and that they meet the terms of the exclusion or exemption. In doing so, they must provide appropriate documentation (such as contracts showing that a second person uses the material as an ingredient in a production process) to demonstrate that the material is not a waste, or is exempt from regulation. In addition, owners or operators of facilities claiming that they actually are recycling materials must show that they have the necessary equipment to do so.

Section 3. Definition of a Hazardous Waste. (1) A waste, as defined in Section 2 of this 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 under [in Section 1(2) of] 401 KAR 31:060 and 401 KAR 31:070 [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)1. Except as otherwise provided in subparagraph 2 of this paragraph, any waste generated from the treatment, storage, or disposal of a hazardous waste, including any sludge, spill residue, ash, emission control dust, or leachate (but not including precipitation run-off) is a hazardous waste. (However, materials that are reclaimed from wastes and that are used beneficially are not wastes and hence are not hazardous wastes under this provision unless the reclaimed material is burned for energy recovery or used in a manner constituting disposal.)

2. The following wastes are not hazardous even though they are generated from the treatment, storage, or disposal of hazardous waste, unless they exhibit one (1) or more of the characteristics of hazardous waste: Waste pickle liquor sludge generated by lime stabilization of spent pickle liquor from the iron and steel industry (SIC Codes 331 and 332). [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(3) [(2)] of 401 KAR 31:060 and 401 KAR 31:070 [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) Pulping liquors (i.e., black liquor) that are reclaimed in a pulping liquor recovery furnace and then reused in the pulping process, unless they are accumulated speculatively as defined in Section 1(3) of this regulation.

(g) Spent sulfuric acid used to produce virgin sulfuric acid, unless it is accumulated speculatively as defined in Section 1(3) of this regulation.

(h) [(f)] Mining overburden returned to the mine site; and

(i) [(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, bunkhouses, ranger stations, crew quarters, campgrounds, picnic grounds, and day-use recreation areas). A resource recover facility managing municipal solid waste shall not be deemed to be treating, storing, disposing of, or

otherwise managing hazardous wastes for the purposes of regulation under the waste management regulations, if such facility:

1. Receives and burns only:

a. Household waste (from single and multiple dwellings, hotels, motels, and other residential sources); or

b. Waste from commercial or industrial sources that does not contain hazardous waste; and

2. Such facility does not accept hazardous wastes and the owner or operator of such facility has established contractual requirements or other appropriate notification or inspection procedures to assure that hazardous wastes are not received at or burned in such facility.

(b) Agricultural wastes generated by any of the following and which are returned to the soils as fertilizers:

1. The growing and harvesting of agricultural crops.

2. The raising of animals, including animal manures.

(c) Mining overburden returned to the mine site.

(d) Fly ash waste, bottom ash waste, slag waste, and flue gas emission control waste generated primarily from the combustion of coal or other fossil fuels.

(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 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 TiO2 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) 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 example, until conclusion of a court case or enforcement action where further

testing of the sample may be necessary).

(b) In order to qualify for the exemption in paragraphs (a)1 and 2 of this subsection, a sample collector shipping samples to a laboratory and a laboratory returning samples to a sample collector 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 100 [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 39 provided the generator complies with the requirements of subsection (7) of this section.

(3) Hazardous waste that is [beneficially used or re-used or legitimately] recycled [or reclaimed] and that is excluded from [certain] regulation under Sections 6(1)(b)3 and 6(1)(b)5, or 6(1)(c) of this regulation or Section 7 of 401 KAR 36:040 [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 Sections 6(2) and (3) of this regulation and 401 KAR 36:030, 401 KAR 36:040, and 401 KAR 36:060 is included in the quantity determination 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 39, and the notification and permitting requirements of KRS 224.855 and 224.864 through 224.877:

(a) A total of one (1) kilogram of acute hazardous wastes [commercial chemical products and manufacturing chemical intermediates having the generic names listed in Section 4(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 Sections 2, 3, and 4(5) of 401 KAR 31:040.

(b) A total of 100 kilograms of any residue or contaminated soil, waste [water] or other debris resulting from the clean-up of a spill, into or on any land or water, of any acute hazardous wastes [commercial chemical products or manufacturing chemical intermediates having the generic names] listed in Sections 2, 3 and 4(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 subsection (5)(a) or (b) 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 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;

4. Located outside of Kentucky and is authorized to manage hazardous waste by a state with a hazardous waste management program approved under 40 CFR Part 271;

5. Permitted to manage municipal or industrial solid waste and is specifically approved for that waste; or

6. A facility which:

a. Beneficially uses or reuses, or legitimately recycles or reclaims 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 Recyclable Materials [Hazardous Waste Which is Used, Re-used, Recycled or Reclaimed].

(1)(a) Hazardous wastes that are recycled are subject to the requirements for generators, transporters, and storage facilities of subsections (2) and (3) of this section, except for the materials listed in paragraphs (b) and (c) of this subsection. Hazardous wastes that are recycled will be known as "recyclable materials." [Except as otherwise provided in subsection (2) of this section, a hazardous waste which meets any 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) The following recyclable materials are not subject to the requirements of this section but are regulated under 401 KAR Chapter 36 and all applicable provisions in 401 KAR Chapter 38: [It is being accumulated, stored or physically, chemically or biologically treated prior to beneficial use or re-use or legitimate recycling or reclamation.]

1. Recyclable materials used in a manner constituting disposal (see 401 KAR 36:030);

2. Hazardous wastes burned for energy recovery in boilers and industrial furnaces that are not regulated under 401 KAR 34:240 or 401 KAR 35:240 (see 401 KAR 36:040);

3. Recyclable materials from which precious metals are reclaimed (see 401 KAR 36:060); and

4. Spent lead-acid batteries that are being reclaimed (see 401 KAR 36:070).

(c) The following recyclable materials are not subject to regulation under 401 KAR Chapters 32 through 38, and are not subject to the notification requirements of KRS 224.864(3): [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.]

1. Industrial ethyl alcohol that is reclaimed;

2. Used batteries (or used battery cells) returned to a battery manufacturer for regeneration;

3. Used oil that exhibits one (1) or more of the characteristics of hazardous waste;

4. Scrap metal;

5. Fuels produced from the refining of oil-bearing hazardous wastes along with normal process streams at a petroleum refining facility if such wastes result from normal petroleum refining, production, and transportation practices;

6. Oil reclaimed from hazardous waste resulting from normal petroleum refining, production, and transportation practices, which oil is to be refined along with normal process streams at a petroleum refining facility; or

7. Coke from the iron and steel industry that contains hazardous waste from the iron and steel production process.

(2) Generators and transporters of recyclable materials are subject to the applicable requirements of 401 KAR Chapters 32 and 33 and the notification requirements under KRS 224.864(3) and 224.873, except as provided in subsection (1) of this section. [Except for those wastes listed in subsection (1)(c) of this section, a hazardous waste that is a sludge, or that is listed in Section 2 or 3 of 401 KAR 31:040, or that contains one (1) or more hazardous wastes listed in Section 2 or 3 of 401 KAR 31:040, and that 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:]

[(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.]

(3)(a) Owners or operators of facilities that store recyclable materials before they are recycled are regulated under all applicable provisions of 401 KAR 34:010 through 34:210; 401 KAR 35:010 through 35:210; and 401 KAR Chapter 38 and the notification requirements under KRS 224.864(3) and 224.866, except as provided in subsection (1) of this section. (The recycling process itself is exempt from regulation.)

(b) Owners or operators of facilities that recycle recyclable materials without storing them before they are recycled are subject to the following requirements, except as provided in subsection (1) of this section:

1. The owner or operator shall submit a notification to the cabinet; and

2. Sections 2 and 3 of 401 KAR 35:050 (dealing with the use of the manifest and manifest discrepancies).

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 as an acute hazardous waste listed in Sections 2, 3, or 4(5) [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 an acute [a] hazardous waste listed [identified] in Sections 2, 3, or 4(5) [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.

Section 8. Additional Regulation of Certain Hazardous Waste Recycling Activities on a Case-by-case Basis. (1) The cabinet may decide on a case-by-case basis that persons accumulating or storing the recyclable materials described in Section 6(1)(b)3 of 401 KAR 31:010 should be regulated under Section 6(2) and (3) of this regulation. The basis for this decision is that the materials are being accumulated or stored in a manner that does not protect human health and the environment because the materials or their toxic constituents have not been adequately contained or because the materials being accumulated or stored together are incompatible. In making this decision, the cabinet will consider the following factors:

(a) The types of materials accumulated or stored and the amounts accumulated or stored;

(b) The method of accumulation or storage;

(c) The length of time the materials have been accumulated or stored before being reclaimed;

(d) Whether any contaminants are being released into the environment, or are likely to be so released; and

(e) Other relevant factors.

(2) The procedures for this decision are set forth in Section 9 of this regulation.

Section 9. Procedures for Case-by-case Regulation of Hazardous Waste Recycling Activities. The cabinet will use the following procedures when determining whether to regulate hazardous waste recycling activities described in Section 6(1)(b)3 of 401 KAR 31:010 under the provisions of Section 6(2) and (3) of 401 KAR 31:010 rather than under the provisions of 401 KAR 36:060 (spent lead-acid batteries being reclaimed).

(1) If a generator is accumulating the waste, the cabinet will issue a notice setting forth the factual basis for the decision and stating that the person must comply with the applicable requirements of 401 KAR 32:010, 32:030, 32:040, and 32:050. The notice will become final within thirty (30) days, unless the person served requests a public hearing to challenge the decision. Upon receiving such a request, the cabinet will hold a public hearing. The cabinet will provide notice of the hearing to the public and allow public participation at the hearing. The cabinet will issue a determination after the hearing stating whether or not compliance with 401 KAR Chapter 32 is required. The order becomes effective thirty (30) days after service of the determination unless the cabinet specifies a later date.

(2) If the person is accumulating the recyclable material as a storage facility, the notice will state that the person must obtain a permit in accordance with all applicable provisions of 401 KAR Chapter 38. The owner or operator of the facility must apply for a permit within no more than six (6) months of notice. If the owner or operator of the facility wishes to challenge the cabinet's decision, he may do so in his permit application, in a public hearing held on the draft permit, or in comments filed on the draft permit or on the notice of intent to deny the permit. The fact sheet accompanying the permit will specify the reasons for the cabinet's determination. The question of whether the cabinet's decision was proper will remain open for consideration during the public comment period discussed under Section 8 of 401 KAR 38:050 and in any subsequent hearing.

CHARLOTTE E. BALDWIN, Secretary

APPROVED BY AGENCY: November 12, 1985

FILED WITH LRC: November 13, 1985 at 3 p.m.

PUBLIC HEARING SCHEDULED: A public hearing on this regulation will be held on December 30, 1985, at 1 p.m. EST, in the Capital Plaza Tower. Any persons interested in attending this hearing shall submit by December 26, 1985, a written statement of such interest to: J. Alex Barber, Director, Division of Waste Management, 18 Reilly Road, Frankfort, Kentucky 40601. If no statement of interest is received by close of business on December 26, 1985, the hearing on this regulation may be cancelled. Written comments may also be submitted to the address above. Written comments will be accepted until the end of the comment period, which will be close of business on December 30, 1985.

REGULATORY IMPACT ANALYSIS

Agency Contact Person: J. Alex Barber, Director

(1) Type and number of entities affected: The proposed amendments will affect a portion of the generators and facilities which store, treat or dispose of hazardous waste. There are 282 generators and 90 storage, treatment and disposal facilities in Kentucky. In addition, small quantity generators will be affected. The cabinet has no estimate of the exact number of small quantity generators.

(a) Direct and indirect costs or savings to those affected:

1. First year: Most of the amendments made to this regulation incorporate changes which are identical to those promulgated by the U.S. Environmental Protection Agency on November 13, 1984; January 4, 1985; January 14, 1985; April 11, 1985; July 15, 1985; and August 20, 1985. Changes which are not identical to the federal are those relating to small quantity generators of hazardous waste. The cabinet estimates that

registration and manifest copy retention will result in a small cost to those individuals producing between 100-1,000 kg/mo of hazardous waste. However, the savings these generators will realize should outweight the costs. Savings will result from proper management of their hazardous waste and thus a reduced liability from the potential of environmental damage. In addition, see note in item (6) Any Additional Information or Comments.

2. Continuing costs or savings: See note (1)(a)1 above.

3. Additional factors increasing or decreasing costs (note any effects upon competition): See note (1)(a)1 above.

(b) Reporting and paperwork requirements: Generators who produce more than 100 kg/month will be required to register as generators and will be required to adhere to all reporting and paperwork requirements employed by generators of over 1,000 kg per month. This will result in a small cost which is outweighted by the savings to be realized from recordkeeping as proof of compliance.

(2) Effects on the promulgating administrative body:

(a) Direct and indirect costs or savings:

1. First year: The cabinet proposes to apply all regulations for full generators to persons who generate from 100 to 1,000 kg/month. This will result in an increased workload and an undetermined cost for compliance monitoring.

2. Continuing costs or savings: See note in (2)(a)1 above.

3. Additional factors increasing or decreasing costs: See note in (2)(a)1 above.

(b) Reporting and paperwork requirements:

(3) Assessment of anticipated effect on state and local revenues: There will be no effect on state or local revenues from promulgation of this regulation.

(4) Assessment of alternative methods; reasons why alternatives were rejected:

(a) The proposed amendments are equivalent to federal regulations at 40 CFR 260.40, 260.41, 261.1, 261.2, 261.3, 261.4, 261.5, 261.6, and 261.7 promulgated January 14, 1984; November 13, 1984; January 4, 1985; July 15, 1985; and August 20, 1985. The definition of what constitutes a waste was redefined; new exclusions for materials as hazardous wastes were incorporated; new requirements and actions regulating recycling were included. These requirements were already incorporated in the federal program. The differences between the proposed amendments and the federal program involve the definition of small quantity generators. The cabinet decided to define small quantity generators as those who produce less than 100 kilograms per month. This will require generators from 100 to 1,000 kilograms per month to comply with all requirements for generators. However, special storage requirements from the federal law were included in 401 KAR 32:050.

ALTERNATIVE:

1. Less stringent: The cabinet could have chosen to be less stringent by adopting the federal standards for small quantity generators. However, this would have made the state's regulations in violation of federal law (HSWA of 1984) in March 1986 when additional "hammer" provisions go into effect for generators between 100-1,000 kg/mo. The U.S. Environmental Protection Agency did not adopt as regulation all of the provisions from the federal law. The cabinet felt it would be more appropriate to include the additional requirements to minimize the confusion which the newly regulated generators will experience. Additionally, the cabinet could have chosen not to adopt the full generator standards for these generators between 100-1,000 kg/mo. However, without registering these generators, the cabinet would be unable to monitor their compliance with the requirements. Other requirements are necessary to protect public health and the environment. Finally, all small quantity generators will be required to send their waste to a hazardous waste facility. Existing regulations allow them to send their wastes to solid waste facilities with a permit modification approved by the cabinet. This option was eliminated because solid waste facilities do not routinely monitor for hazardous waste constituents nor do they maintain financial responsibility for liability as required for hazardous waste facilities ($12,000,000 sudden accidental liability and $10,000,000 non-sudden accidental liability). The cabinet eliminated this option because allowing hazardous waste to be placed in a solid waste facility could be detrimental to public health and the environment.

2. More stringent: The cabinet could have chosen to adopt more stringent standards however, KRS 224.864(3) requires the cabinet to adopt a list and criteria which are identical to the federal list and criteria. In addition, the standards for small quantity generators are adequate to protect public health and the environment.

3. Present proposal: The cabinet chose to adopt the provisions identified above for small quantity generators and the requirements from the federal regulations at Subpart A of 40 CFR Part 261.

(5) Identify any statute, administrative regulation or government policy which may be in conflict, overlapping, or duplication: None

(a) Necessity of proposed regulation if in conflict: Not applicable.

(b) If in conflict, was effort made to harmonize the proposed administrative regulation with conflicting provisions: Not applicable.

(6) Any additional information or comments: The impact of this regulation has not been analyzed for those requirements which are equivalent to those found in the corresponding federal regulations, 40 CFR 260.40, 260.41, 261.1, 261.2, 261.3, 261.4, 261.5, 261.6, and 261.7. The impact of the federal program was analyzed in 49 FR 44978-44979, November 13, 1984; 50 FR 614-668, January 4, 1985; 50 FR 1978-1999, January 14, 1985; 50 FR 28702-28742, July 15, 1985; and 50 FR 33541-33543, August 20, 1985. Copies of the November 14, 1984, January 4, 1985, January 14, 1985, July 15, 1985, and August 20, 1985 federal registers have been filed with the regulations compiler of the Legislative Research Commission.

Tiering:
Was tiering applied? Yes. This regulation applies only to those individuals who manage hazardous wastes.

NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION CABINET
Department for Environmental Protection
Division of Waste Management
(Proposed Amendment)

401 KAR 31:040. Lists of hazardous wastes.

RELATES TO: KRS 224.830 through 224.877, 224.994
PURSUANT TO: KRS Chapter 13A, 224.033, 224.864(3)
NECESSITY AND FUNCTION: KRS 224.864(3) requires the 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.

(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:

Hazard Code	Class or Type of Waste
(I)	Ignitable waste
(C)	Corrosive waste
(R)	Reactive waste
(E)	EP toxic waste
(H)	Acute hazardous waste
(T)	Toxic waste

401 KAR 31:160 identifies the constituent which caused the cabinet to list the waste as an EP toxic waste (E) or toxic waste (T) in Sections 2 and 3 of this regulation.

(3) 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.

(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: EPA Hazardous Waste Nos. F020, F021, F022, F023, F026, and F027.

Section 2. Hazardous Wastes from Non-Specific Sources. Hazardous wastes from non-specific sources are:

Industry and EPA Hazardous Waste No.	Hazardous Waste	Hazard Code
Generic:		
F001	The following spent halogenated solvents used in degreasing: tetrachloroethylene, trichloroethylene, methylene chloride, 1,1,1-trichloroethane, carbon tetrachloride, and chlorinated fluorocarbons; and sludges from the recovery of these solvents in degreasing operations.	(T)
F002	The following spent halogenated solvents: tetrachloroethylene, methylene chloride, trichloroethylene, 1,1,1-trichloroethane [1,2,1-trichoroethane,] chlorobenzene, 1,1,2-trichloro-1,2,2-trifluoroethane, ortho-dichlorobenzene, 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)
[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 residues [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 residues [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)
F019	Wastewater treatment sludges from the chemical conversion coating of aluminum.	(T)
F020	Wastes (except wastewater and spent carbon from hydrogen chloride purification) from the production or manufacturing use (as a reactant, chemical intermediate, or component in a formulating process) of tri- or tetrachlorophenol, or of intermediates used to produce their pesticide derivatives. (This listing does not include wastes from the production of Hexachlorophene from highly purified 2,4,5-trichlorophenol.)	(H)
F021	Wastes (except wastewater and spent carbon from hydrogen chloride purification) from the production or manufacturing use (as a reactant, chemical intermediate, or component in a formulating process) of pentachlorophenol, or of intermediates used to produce its derivatives.	(H)
F022	Wastes (except wastewater and spent carbon from hydrogen chloride purification) from the manufacturing use (as a reactant, chemical intermediate, or component in a formulating process) of tetra-, penta-, or hexachlorobenzenes under alkaline conditions.	(H)
F023	Wastes (except wastewater and spent carbon from hydrogen chloride purification) from the production of materials on equipment previously used for the production or manufacturing use (as a reactant, chemical intermediate, or component in a formulating process) of tri- or tetrachlorophenols. (This listing does not include wastes from equipment used only for the production or use of Hexachlorophene from highly pruified 2,4,5-trichlorophenol.)	(H)
F024	Wastes, including but not limited to distillation residues, heavy ends, tars, and reactor clean-out wastes from the production of chlorinated aliphatic hydrocarbons, having carbon content from one (1) to five (5), utilizing free radical catalyzed processes. (This listing does not include light ends, spent filters and filter aids, spent dessicants, wastewater, wastewater treatment sludges, spent catalysts, and wastes listed in Section 2 of this regulation.)	(T)
F026	Wastes (except wastewater and spent carbon from hydrogen chloride purification) from the production of materials on equipment previously used for the manufacturing use (as a reactant, chemical intermediate, or component in a formulating process) of tetra-, penta-, or hexachlorobenzene under alkaline conditions.	(H)
F027	Discarded unused formulations containing tri-, tetra-, or pentachlorophenol or discarded unused formulations containing compounds derived from these chlorophenols. (This listing does not include formulations containing Hexachlorophene sythesized from prepurified 2,4,5-trichlorophenol as the sole component.)	(H)
F028	Residues resulting from the incineration or thermal treatment of soil contaminated with EPA Hazardous Waste Nos. F020, F021, F022, F023, F026, and F027.	(T)

Section 3. Hazardous Wastes from Specific Sources. Hazardous wastes from specific sources are:

Industry and EPA Hazardous Waste No.	Hazardous Waste	Hazard Code
Wood Preservation:		
K001	Bottom sediment sludge from the treatment of wastewaters from wood preserving processes that use creosote 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)
K111	Product washwaters from the production of dinitrotoluene via nitration of toluene.	(C,T)
K112	Reaction by-product water from the drying column in the production of toluenediamine via hydrogenation of dinitrotoluene.	(T)
K113	Condensed liquid light ends from the purification of toluenediamine in the production of toluenediamine via hydrogenation of dinitrotoluene.	(T)
K114	Vicinals from the purification of toluenediamine in the production of toluenediamine via hydrogenation of dinitrotoluene.	(T)
K115	Heavy ends from the purification of toluenediamine in the production of toluenediamine via hydrogenation of dinitrotoluene.	(T)
K116	Organic condensate from the solvent recovery column in the production of toluene diisocyanate via phosgenation of toluenediamine.	(T)

Inorganic Chemicals:

K071	Brine purification muds from the mercury cell process in chlorine production, where separately prepurified brine is not used.	(T)
K073	Chlorinated hydrocarbon waste from the purification step of the diaphragm cell process using graphite anodes in chlorine production.	(T)
K106	Wastewater treatment sludge from the mercury cell process in chlorine production.	(T)

Pesticides:

K031	By-product salts generated in the production of MSMA and cacodylic acid.	(T)
K032	Wastewater treatment sludge from the production of chlordane.	(T)
K033	Wastewater and scrub water from the chlorination of cyclopentadiene in the production of 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. 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, when they are mixed with waste oil or used oil or other material and applied to the land for dust suppression or road treatment, or when in lieu of their original intended use, they are produced for use as (or as a component of) a fuel, distributed for use as a fuel, or burned as a fuel. [:]

(1) Any commercial chemical product or manufacturing chemical intermediate having the generic name listed in subsection (5) or (6) of this section.

(2) Any off-specification commercial chemical product or manufacturing chemical intermediate which, if it met specifications, would have the generic name listed in subsection (5) or (6) of this section.

(3) Any 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.

(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, when present at concentrations greater than 0.3%
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-Chlorophenyl)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	0,0-Diethyl S-(2-(ethylthio)ethyl) phosphorothioate
P041	Diethyl-p-nitrophenyl phosphate
P040	0,0-Diethyl 0-pyrazinyl phosphorothioate
P043	Diisopropyl fluorophosphate
P044	Dimethoate
P045	3,3-Dimethyl-1-(methylthio)-2-butanone, 0-((methylamino)carbonyl) oxime
P071	0,0-Dimethyl 0-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-0) 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, 0, 0-dimethyl S-(2(methylamino)-2-oxoethyl) ester
P043	Phosphorofluoric acid, bis (1-methylethyl) ester
P094	Phosphorothioic acid, 0, 0-diethyl S-(ethylthio) methyl ester
P089	Phosphorothioic acid, 0, 0-diethyl 0-(p-nitrophenyl) ester
P040	Phosphorothioic acid, 0, 0-diethyl 0-pyrazinyl ester
P097	Phosphorothioic acid, 0, 0-dimethyl 0-(p((dimethylamino)-sulfonyl)phenyl) ester
P110	Plumbane, tetraethyl-
P098	Potassium cyanide
P099	Potassium silver cyanide
P070	Propanal, 2-methyl-2-(methylthio)-, 0-((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-ol
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, when present at concentrations greater than 0.3%
P121	Zinc cyanide
P122	Zinc phosphide, when present at concentrations greater than ten (10) percent

(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.

(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-
U248	3-(alpha-Acentonylbenzyl)-4-hydroxycoumarin and salts, when present at concentrations of 0.3% or less
U328	2-Amino-1-methylbenzene
U353	4-Amino-1-methylbenzene
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-ethylhexyl)) 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-Benzenedicarboxylic acid, di-n-octyl ester
U070	Benzene, 1,2-dichloro-
U071	Benzene, 1,3-dichloro-
U072	Benzene, 1,4-dichloro-
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-chloroethoxy) 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-hexachloro-
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 Furfural (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
See F027
[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-
See F027
[U242] Phenol, pentachloro-
See F027
[U212] Phenol,2,3,4,6-tetrachloro-
See F027
[U230] Phenol,2,4,5-trichloro-
See F027
[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)
See F027
[U233] Propionic acid, 2-(2,4,5,-trichlorophen-oxy)-
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)
See F027
[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)
See F027
[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
See F027
[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)
U328 o-Toluidine
U353 p-Toluidine
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

See F027
[U230] 2,4,5-Trichlorophenol
See F027
[U231] 2,4,6-Trichlorophenol
See F027
[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
U248 Warfarin, when present at concentrations of 0.3% or less
U239 Xylene (I)
U200 Yohimban-16-carboxylic acid, 11, 17-dimethoxy-18((3,4,5-trimethoxy-benzoyl)oxy)-, methyl ester
U249 Zinc phosphide, when present at concentrations of 10% or less

CHARLOTTE E. BALDWIN, Secretary
APPROVED BY AGENCY: November 12, 1985
FILED WITH LRC: November 13, 1985 at 3 p.m.
PUBLIC HEARING SCHEDULED: A public hearing on this regulation will be held on December 30, 1985, at 1 p.m. EST, in the Capital Plaza Tower. Any persons interested in attending this hearing shall submit by December 26, 1985, a written statement of such interest to: J. Alex Barber, Director, Division of Waste Management, 18 Reilly Road, Frankfort, Kentucky 40601. If no statement of interest is received by close of business on December 26, 1985, the hearing on this regulation may be cancelled. Written comments may also be submitted to the address above. Written comments will be accepted until the end of the comment period, which will be close of business on December 30, 1985.

REGULATORY IMPACT ANALYSIS

Agency Contact Person: J. Alex Barber, Director
(1) Type and number of entities affected: Changes in Sections 1, 2, and 3 are proposed to ensure regulation of chlorinated dibenzo-p-dioxins, dibenzofurans, and phenols.
Section 2 is also being changed to revise the EPA hazardous waste numbers F007, F008, F009, F010, F011, and F012 (electroplating and metal heat treating operations). The exclusion of processes using precious metals is being deleted.
Section 3 is being amended by listing as hazardous six wastes generated during the production of dinitrotoluene (DNT), toluenediamine (TDA), and toluene diisocyanate (TDI), (EPA hazardous waste numbers K111, K112, K113, K114, K115, and K116.)
Section 4 is being amended to include as hazardous waste, EPA hazardous waste listed in Section 4 which are mixed with waste oil or used oil for dust suppression or road treatement or burned as fuels.
The Cabinet does not have an estimate of the number of persons who will be affected by these changes.
(a) Direct and indirect costs or savings to those affected:
1. First year: Negligible. See note (6) Any Additional Information or Comments.
2. Continuing costs or savings: Negligible
3. Additional factors increasing or decreasing costs (note any effects upon competition): Negligible
(b) Reporting and paperwork requirements: None
(2) Effects on the promulgating administrative body:
(a) Direct and indirect costs or savings:
1. First year: None. This regulation is for informational purposes only.
2. Continuing costs or savings: None
3. Additional factors increasing or decreasing costs: None
(b) Reporting and paperwork requirements:
(3) Assessment of anticipated effect on state and local revenues: There will be no effect on state or local revenues from promulgation of this regulation.
(4) Assessment of alternative methods; reasons why alternatives were rejected: (a) KRS 224.864(3) requires that the criteria for determining if wastes are hazardous and lists of hazardous wastes be identical to such lists and criteria promulgated by the U.S. Environmental Protection Agency; therefore the cabinet did not assess alternatives.
(5) Identify any statute, administrative regulation or government policy which may be in conflict, overlapping, or duplication: None
(a) Necessity of proposed regulation if in conflict: Not applicable.
(b) If in conflict, was effort made to harmonize the proposed administrative regulation with conflicting provisions: Not applicable.
(6) Any additional information or comments: The impact of this regulation has not been analyzed for those requirements which are equivalent to those found in the corresponding federal regulation, 40 CFR 261.30, 261.31, 261.32, 261.33. The impact of the federal program was analyzed in 50 FR 1997, 1998, 656, 657, 42942, 28739, 1985. A copy of the January 4, 14, July 15, and October 23, 1985 federal registers have been filed with the regulations compiler of the Legislative Research Commission.

Tiering:
Was tiering applied? Yes. The wastes are grouped into categories which will determine whether waste generators will be regulated under hazardous waste regulations or solid waste regulations.

NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION CABINET
Department for Environmental Protection
Division of Waste Management
(Proposed Amendment)

401 KAR 31:060. Rulemaking petitions for hazardous waste.

RELATES TO: KRS 224.033, 224.830 through 224.877, 224.994 [224.864(3), 224.868, 224.876]
PURSUANT TO: KRS Chapter 13A, [224.017,] 224.033, 224.864(3)
NECESSITY AND FUNCTION: KRS 224.864(3) requires the 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 13A.270 [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: [,]

(a) 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 or an acutely 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.]

(b) Based on a complete application the cabinet must determine, where it has a reasonable basis to believe that factors (including additional constituents) other than those for which the waste was listed could cause the waste to be a hazardous waste, that such factors do not warrant retaining the waste as a hazardous waste. A waste which is so excluded, however, still may be a hazardous waste by operation of 401 KAR 31:030.

(2) The procedures in this section and Section 1 of this 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,

(a) The petitioner must show that [demonstration samples of] the waste does [do] not exhibit the relevant characteristic for which the waste was listed as defined in Sections 2, 3, 4, or 5 of 401 KAR 31:030 [by] using any applicable [test] methods prescribed therein. The petitioner also must show that the waste does not exhibit any of the other characteristics defined in Sections 2, 3, 4, or 5 of 401 KAR 31:030 using any applicable methods prescribed therein; and

(b) Based on a complete application, the cabinet must determine where it has a reasonable basis to believe that factors (including additional constituents) other than those for which the waste was listed could cause the waste to be hazardous waste, that such factors do not warrant retaining the waste as a hazardous waste. A waste which is so excluded, however, still may be a hazardous waste by operation of 401 KAR 31:030.

(4) If the waste is listed with code "T" in 401 KAR 31:040,

(a) The petitioner must demonstrate that the waste:

1. [(a)] Does [Demonstration samples of the waste do] not contain the constituent or constituents (as defined in 401 KAR 31:160) that caused the cabinet to list the waste, using the appropriate test methods prescribed in 401 KAR 31:120; or

2. [(b)] Although containing one (1) or more of the hazardous constituents (as defined in 401 KAR 31:160) that caused the cabinet to list the waste, [The waste] does not meet the criterion of Section 2(1)(c) of 401 KAR 31:020 when considering the factors used by the cabinet in Section 2(1)(c)1 through 11 of 401 KAR 31:020 under which the waste was listed as hazardous; and

(b) Based on a complete application, the cabinet must determine, where it has a reasonable basis to believe that factors (including additional constituents) other than those for which the waste was listed could cause the waste to be a hazardous waste, that such factors do not warrant retaining the waste as a hazardous waste;

(c) The petitioner must demonstrate that the characteristics defined in Sections 2, 3, 4 and 5 of 401 KAR 31:030 using any applicable methods prescribed therein; and

(d) A waste which is so excluded, however, still may be a hazardous waste by operation of 401 KAR 31:030.

(5) If the waste is listed with the code "H" in 401 KAR 31:040,

(a) The petitioner must demonstrate that the waste does not meet criterion of subsection (1)(b) of 401 KAR 31:020; [both of the following criteria:]

(b) Based on a complete application, the cabinet must determine, where it has a reasonable basis to believe that additional factors (including additional constituents)

other than those for which the waste was listed could cause the waste to be a hazardous waste, that such factors do not warrant retaining the waste as a hazardous waste;

(c) The petitioner must demonstrate that the waste does not exhibit any of the characteristics defined in Sections 2, 3, 4 and 5 of 401 KAR 31:030 using any applicable methods prescribed therein; and

(d) A waste which is so excluded, however, still may be a hazardous waste by operation of 401 KAR 31:030.

[(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 solid waste and be subject to the requirements for solid waste disposal in 401 KAR Chapter 47 and the conditions as specified in the approved exclusion.

Section 4. Repeal or Modification of an Exclusion. The cabinet shall repeal or modify an exclusion granted to any generator or petitioner for a waste 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 (including PL 98-616, the 1984 Hazardous and Solid Waste Amendments), and pursuant to KRS Chapter 224.

Section 5. Requirements for Approval [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.

CHARLOTTE E. BALDWIN, Secretary

APPROVED BY AGENCY: November 12, 1985

FILED WITH LRC: November 13, 1985 at 3 p.m.

PUBLIC HEARING SCHEDULED: A public hearing on this regulation will be held on December 30, 1985, at 1 p.m. EST, in the Capital Plaza Tower. Any persons interested in attending this hearing shall submit by December 26, 1985, a written statement of such interest to: J. Alex Barber,

Director, Division of Waste Management, 18 Reilly Road, Frankfort, Kentucky 40601. If no statement of interest is received by close of business on December 26, 1985, the hearing on this regulation may be cancelled. Written comments may also be submitted to the address above. Written comments will be accepted until the end of the comment period, which will be close of business on December 30, 1985.

REGULATORY IMPACT ANALYSIS

Agency Contact Person: J. Alex Barber, Director

(1) Type and number of entities affected: The proposed amendment will affect facilities at which delisting of a waste stream is requested. There are 4 facilities with delisted waste streams in Kentucky.

(a) Direct and indirect costs or savings to those affected:

1. First year: None. See note (6) Any Additional Information or Comments.

2. Continuing costs or savings: None. See note (1)(a)1 above.

3. Additional factors increasing or decreasing costs (note any effects upon competition): None. See note (1)(a)1 above.

(b) Reporting and paperwork requirements: Additional information must be reported on additional constituents other than those for which a waste was originally listed.

(2) Effects on the promulgating administrative body:

(a) Direct and indirect costs or savings:

1. First year: Delisting petitions are currently reviewed. The additional items to be reviewed will affect the cost of review of these petitions, however, these costs have been analyzed in the RIA for 401 KAR 39:020.

2. Continuing costs or savings: None. See note (2)(a)1 above.

3. Additional factors increasing or decreasing costs: None. See note (2)(a)1 above.

(b) Reporting and paperwork requirements:

(3) Assessment of anticipated effect on state and local revenues: The effect on state revenues has been analyzed in the RIA for 401 KAR 30:020. There will be not effect on local revenues from promulgation of this regulation.

(4) Assessment of alternative methods; reasons why alternatives were rejected: (a) KRS 224.864(3) requires that the criteria for determining whether wastes are hazardous and lists of hazardous wastes be identical to such lists and criteria promulgated by the U.S. Environmental Protection Agency; therefore, the cabinet did not assess alternatives.

(5) Identify any statute, administrative regulation or government policy which may be in conflict, overlapping, or duplication: None

(a) Necessity of proposed regulation if in conflict: Not applicable.

(b) If in conflict, was effort made to harmonize the proposed administrative regulation with conflicting provisions: Not applicable.

(6) Any additional information or comments: The impact of this regulation has not been analyzed for those requirements which are equivalent to those found in the corresponding federal regulation, 40 CFR 260.22. The impact of the federal program was analyzed in 50 FR 28702-28742, July 15, 1985. A copy of the July 15, 1985 federal register has been filed with the regulations compiler of the Legislative Research Commission.

Tiering:
Was tiering applied? Yes. This regulation applies only to those hazardous waste facilities seeking delisting of a waste stream.

NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION CABINET
Department for Environmental Protection
Division of Waste Management
(Proposed Amendment)

401 KAR 31:070. Delisted hazardous waste streams.

RELATES TO: KRS 224.033, 224.830 through 224.877, 224.994 [224.864(3), 224.868, 224.876]
PURSUANT TO: KRS Chapter 13A, [224.017], 224.033, 224.864
NECESSITY AND FUNCTION: KRS 224.864(3) requires the 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. (1) The cabinet may (but shall not be required to) grant an [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.

(2) 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 3 of this regulation.

Section 2. List of Granted Exclusions. Each petition has claimed that the samples are representative of any variation of the constituent level in the waste stream. Samples have been analyzed for those constituents which caused the cabinet to list the waste under 401 KAR Chapter 31 and all other factors (including additional constituents) other than those for which the waste was listed which the cabinet has determined could cause the waste to be a hazardous waste. Copies of the petitions listed in this section have been filed with the Legislative Research Commission, Regulation Compiler's Office, The Capitol, Frankfort, Kentucky 40601. Each petition is also on file with the Natural Resources and Environmental Protection Cabinet, Department for Environmental Protection, Division of Waste Management, 18 Reilly Road, Frankfort, Kentucky 40601. As of the effective date of this regulation, no waste stream exclusion petition has been approved in accordance with 401 KAR 31:060.

Section 3. [2.] List of Granted Temporary Exclusions. (1) Temporary exclusions shall remain in effect from the date the exclusion is

published in this regulation until November 8, 1986 or until a final determination is issued under Section 2 of this regulation, whichever occurs first.

(2) List of Granted Temporary Exclusions. Each petitioner has claimed that the samples are representative of any variation of the constituent level in the waste stream(s). Copies [A copy] of the petitions listed in this section have [has] been filed with the Legislative Research Commission, Regulation Compiler's Office, The Capitol, Frankfort, Kentucky 40601. Each [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.

1. 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 sludge resulting from lime treatment of metal finishing wastewaters, considered [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.

2. [(b)] In the petition submitted to the secretary [cabinet], the test results found in this paragraph were contained. EP toxicity tests of the sludge revealed maximum [total] chromium and lead concentrations [levels in the waste extract] of 0.09 and 0.15 [0.074 and 0.175] mg/l, respectively.

(b) [(2)(a)] General Electric Company.

1. The General Electric Company-Appliance Park located in Louisville, involved in the manufacturing of various kitchen and home appliances, has petitioned the secretary [cabinet] to exclude its sludge from the lists of hazardous wastes:

a. [1.] EPA Hazardous Waste No. F006 - Wastewater treatment sludges from electroplating operations except for the following processes:

(i) [a.] Sulfuric acid anodizing of aluminum;

(ii) [b.] Tin plating on carbon steel;

(iii) [c.] Zinc plating (segregated basis) on carbon steel;

(iv) [d.] Aluminum or zinc - aluminum plating on carbon steel;

(v) [e.] Cleaning or stripping associated with tin, zinc and aluminum plating on carbon steel; and

(vi) [f.] Chemical etching and milling of aluminum;

b. [2.] EPA Hazardous Waste No. F019--Wastewater treatment sludges from the chemical conversion coating of aluminum; and

c. [3.] EPA Hazardous Waste No. K062--Spent pickle liquor from steel finishing operations.

2. [(b)] In the petition submitted to the secretary [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

(c) [(3)(a)] The Ladish Company of Cynthiana.

1. The Ladish Company of Cynthiana, involved in the production of stainless steel valves, fittings, and forged steel fittings, has petitioned the secretary to exclude its lime-treated sulfuric acid sludge and its lime-treated and chemically-fixed nitric/hydrofluoric acid sludge, both considered EPA Hazardous Waste No. K062 (spent pickle liquor from steel finishing operations), from the list of hazardous wastes contained in 401 KAR 31:040.

2. [(b)] In the petition submitted to the cabinet, the test results found in this paragraph were contained. EP toxicity tests of the final treatment sulfuric acid sludge revealed maximum chromium and lead concentration of 0.038 and 0.012 mg/l, respectively. EP toxicity tests of the final treatment nitric/hydrofluoric acid sludge revealed maximum chromium, hexavalent chromium, and lead concentrations of 4.24, 1.52, and 0.006 mg/l respectively.

(d) [(4)(a)] Production Plating, Inc. of Lexington.

1. Production Plating, Inc. of Lexington, involved in electroplating, vibratory finishing of, and etching on metals, has petitioned the secretary to exclude its zinc-cyanide contaminated soil listed as EPA Hazardous Waste No. F007, spent cyanide plating bath solutions from electroplating operations (except for precious metals electroplating spent cyanide plating bath solutions) from the lists of hazardous wastes contained in 401 KAR 31:040.

2. [(b)] The test results found in this paragraph were contained in the petition submitted to the cabinet. Distilled water leachate tests revealed a maximum concentration of free cyanide of 0.02 mg/l. Total constituent analysis of the soil revealed a maximum concentration of free cyanide at a concentration of 7.99 ppm.

(e) Faultless Hardware Division of Hopkinsville.

1. The Faultless Hardware Division of Hopkinsville, involved in the finishing of zinc die castings into hardware trim, has petitioned the secretary to exclude its wastewater treatment sludges from electroplating operations listed as EPA Hazardous Waste No. F006 from the list of hazardous wastes contained in 401 KAR 31:040, Section 2.

2. In the petition submitted to the secretary, the test results found in this paragraph were contained. EP toxicity tests of the sludge revealed maximum cadmium, chromium, and nickel concentrations of 0.019, 0.006, and 0.536 mg/l, respectively. The maximum total and distilled water EP analysis for cyanide amendable to chlorination was 4.5 ug/gm and 0.035 mg/l, respectively.

CHARLOTTE E. BALDWIN, Secretary

APPROVED BY AGENCY: November 12, 1985

FILED WITH LRC: November 13, 1985 at 3 p.m.

PUBLIC HEARING SCHEDULED: A public hearing on this regulation will be held on December 30, 1985, at 1 p.m. EST, in the Capital Plaza Tower. Any persons interested in attending this hearing shall submit by December 26, 1985, a written statement of such interest to: J. Alex Barber, Director, Division of Waste Management, 18

Reilly Road, Frankfort, Kentucky 40601. If no statement of interest is received by close of business on December 26, 1985, the hearing on this regulation may be cancelled. Written comments may also be submitted to the address above. Written comments will be accepted until the end of the comment period, which will be close of business on December 30, 1985.

REGULATORY IMPACT ANALYSIS

Agency Contact Person: J. Alex Barber, Director

(1) Type and number of entities affected: The proposed amendments to this regulation will affect at least five companies with granted temporary exclusion.

(a) Direct and indirect costs or savings to those affected:

1. First year: For the five companies which have already been granted temporary exclusions, a substantial cost will be incurred from the requirement that constituents other than those for which the waste was originally listed must be considered before granting a final exclusion. In addition, because these companies must either submit the additional information or lose the temporary exclusion on November 8, 1986, the cabinet assumes that an additional financial burden will be borne by the five companies with granted temporary exclusions due to the imminent deadline. However, these companies will realize a long-term savings from the two courses of action they will have available:

1. The company will be required to manage their temporarily delisted wastes as hazardous wastes based on the cabinet's determination that constituents other than those for which the waste was originally listed render the waste truely hazardous; or

2. The company will petition for and receive a final exclusion to manage their delisted hazardous waste in accordance with the specifications in their approved exclusion and the solid waste management regulations.

The savings will result in the first case from proper management of hazardous waste and the reduced possibility that the hazardous waste will enter and damage the environment through the use of solid waste management practices. In the second case, the company will realize a savings from the reduced cost of following solid waste management practices for a waste that was originally listed a hazardous, but which does not present "hazardous waste threats" to the environment or public health.

Because these requirements are directly from the new federal law (Hazardous and Solid Waste Amendments of 1984) incorporation of these standards into the state regulations will not result in a new cost or savings to those individuals affected. See note in item (6) Any Additional Information or Comments.

In addition, companies will be required to pay a review fee as specified in 401 KAR 39:020. (See RIA for 401 KAR 39:020).

2. Continuing costs or savings: None. See note (1)(a)1 above.

3. Additional factors increasing or decreasing costs (note any effects upon competition): None. See note (1)(a)1 above.

(b) Reporting and paperwork requirements: None. See note (1)(a)1 above.

(2) Effects on the promulgating administrative body:

(a) Direct and indirect costs or savings:

1. First year: The amendments to this regulation will result in a significant cost to the promulgating agency. However, a review fee has been established in 401 KAR 39:020 which should alleviate any cost to the state (see RIA for 401 KAR 39:020).

2. Continuing costs or savings: None. See note (2)(a)1 above.

3. Additional factors increasing or decreasing costs: None. See note (2)(a)1 above.

(b) Reporting and paperwork requirements:

(3) Assessment of anticipated effect on state and local revenues: The effect on state revenues from promulgation of this regulation has been analyzed in the RIA for 401 KAR 39:020. There will be no effect on local revenues from promulgation of this regulation.

(4) Assessment of alternative methods; reasons why alternatives were rejected: (a) The proposed amendments to this regulation: (1) incorporate a deadline for temporary exclusions to cease in effect and (2) provide criteria for a full exclusion from the list of hazardous wastes.

Alternative:

1. Less stringent: The cabinet could have chosen to be less stringent by not adopting the provisions. However, this would make the Kentucky program in violation of federal law (HSWA of 1984).

2. More stringent: The cabinet could have chosen to adopt more criteria for delisting than that enacted under federal law. However, KRS 224.864(3) requires the cabinet to adopt criteria and lists which are identical to the federal criteria and lists.

3. Present proposal: The present proposal complies with federal law and KRS 224.864(3).

(b) The proposed amendments adopt a temporary delisting for Faultless Hardware of Hopkinsville, Kentucky.

Alternatives:

1. Less stringent: The cabinet could have granted a final exclusion to this waste stream. However, new federal standards and criteria (HSWA of 1984) would have been violated.

2. More stringent: The cabinet could have chosen not to grant a temporary exclusion. However, the petition for exclusion was received and reviewed by the cabinet under the existing regulations and the waste stream is qualified for delisting.

3. Present proposal: The present proposal grants a temporary exclusion to the waste stream identified at Faultless Hardware of Hopkinsville, Kentucky.

(5) Identify any statute, administrative regulation or government policy which may be in conflict, overlapping, or duplication: None

(a) Necessity of proposed regulation if in conflict: Not applicable.

(b) If in conflict, was effort made to harmonize the proposed administrative regulation with conflicting provisions: Not applicable.

(6) Any additional information or comments: None

Tiering:

Was tiering applied? Yes. This regulation applies only to those individuals who are granted an exclusion from the list of hazardous wastes.

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
PURSUANT TO: KRS Chapter 13A, 224.033, 224.864(3)
NECESSITY AND FUNCTION: KRS 224.864(3) requires the 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.

(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-chloroethyl)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
Chlorinated dibenzo-p-dioxins	8280
Chlorinated dibenzofurans	8280
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
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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	7190 [7090]
Chromium, Furnace AAS	7.0	7191
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Nickel, Furnace AAS	7.0	7521
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CHARLOTTE E. BALDWIN, Secretary
APPROVED BY AGENCY: November 12, 1985
FILED WITH LRC: November 13, 1985 at 3 p.m.
PUBLIC HEARING SCHEDULED: A public hearing on this regulation will be held on December 30, 1985, at 1 p.m. EST, in the Capital Plaza Tower. Any persons interested in attending this hearing shall submit by December 26, 1985, a written statement of such interest to: J. Alex Barber, Director, Division of Waste Management, 18 Reilly Road, Frankfort, Kentucky 40601. If no statement of interest is received by close of business on December 26, 1985, the hearing on this regulation may be cancelled. Written comments may also be submitted to the address above. Written comments will be accepted until the end of the comment period, which will be close of business on December 30, 1985.

REGULATORY IMPACT ANALYSIS

Agency Contact Person: J. Alex Barber, Director
(1) Type and number of entities affected: The proposed changes to this regulation affect all persons who manage chlorinated dioxins, dibenzo-p-furans, and phenols. The cabinet has no estimate of the number of persons affected.
(a) Direct and indirect costs or savings to those affected:
1. First year: None. This regulation is for informational purposes only.
2. Continuing costs or savings: None
3. Additional factors increasing or decreasing costs (note any effects upon competition): None
(b) Reporting and paperwork requirements: None
(2) Effects on the promulgating administrative body:
(a) Direct and indirect costs or savings:
1. First year: None
2. Continuing costs or savings: None
3. Additional factors increasing or decreasing costs: None
(b) Reporting and paperwork requirements:
(3) Assessment of anticipated effect on state and local revenues: There will be no effect on state or local revenues from promulgation of this regulation.
(4) Assessment of alternative methods; reasons why alternatives were rejected: (a) The following concerns the proposed adoption of chemical analysis test methods for chlorinated dibenzo-p-dioxins or chlorinated dibenzo-p-furans.
Alternative:
1. Less stringent: The cabinet could have chosen not to require this test procedure. However, this would have been less stringent than the federal program. Since the standards would be applicable in Kentucky under the federal program, the Cabinet chose to adopt the test method.
2. More stringent: The cabinet could have chosen additional testing requirements. However, the test method required is sufficient to protect public health and the environment with respect to chlorinated dibenzo-p-dioxins and dibenzofurans.
3. Present proposal: The present proposed test is identical to the federal test requirement for chlorinated dibenzo-p-dioxins and dibenzofurans.
(5) Identify any statute, administrative regulation or government policy which may be in conflict, overlapping, or duplication: None
(a) Necessity of proposed regulation if in conflict: Not applicable.
(b) If in conflict, was effort made to harmonize the proposed administrative regulation with conflicting provisions: Not applicable.
(6) Any additional information or comments: The impact of this regulation has not been analyzed for those requirements which are equivalent to those found in the corresponding federal regulation, 40 CFR Appendix III of Part 261. The impact of the federal program was analyzed in 50 FR 1997-1998, January 14, 1985. A copy of the January 14, 1985 federal register has been filed with the regulations compiler of the Legislative Research Commission.

Tiering:
Was tiering applied? Yes. This regulation applies only to persons who manage chlorinated dibenzo-p-dioxins and dibenzofurans.

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
PURSUANT TO: KRS Chapter 13A, 224.033, 224.864(3)
NECESSITY AND FUNCTION: KRS 224.864(3) requires the 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 hazardous waste.

Section 1. Basis for Listing Hazardous Waste. The basis for listing hazardous waste 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	Cresols 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)
F020	Tetra- and pentachlorodibenzo-p-dioxins; tetra and pentachlorodibenzofurans; tri- and tetrachlorophenols and their chlorophenoxy derivative acids, esters, ethers, amines, and other salts.
F021	Penta- and hexachlorodibenzo-p-dioxins; penta- and hexachlorodibenzofurans; pentachlorophenol and its derivatives.
F022	Tetra-, penta-, and hexachlorodibenzo-p-dioxins; tetra-, penta-, and hexachlorodibenzofurans.
F023	Tetra-, and pentachlorodibenzo-p-dioxins; tetra- and pentachlorodibenzofurans; tri- and tetra-chlorophenols and their chlorophenoxy derivative acids, esters, ethers, amines and other salts.
F024	Chloromethane, dichloromethane, tri-chloromethane, carbon tetrachloride, chloroethylene, 1,1-dichloroethane, 1,2-dichloroethane, trans-1,2-dichloroethylene,1,1-dichloroethylene, 1,1,1-trichloroethane,1,1,2-trichloroethane, trichloroethylene, 1,1,1,2-tetrachloroethane, 1,1,2,2-tetrachloroethane, tetrachloroethylene,pentachloroethane, hexachloroethane, allylchloride (3-chloropropene), dichloro-propane, dichloropropene, 2-chloro-1,3-butadiene, hexachloro-1,3-butadiene, hexachlorocyclopentadiene, hexachlorocyclohexane, benzene, chlorobenzene, dichlorobenzenes, 1,2,4-trichlorobenzene, tetrachlorobenzene, pentachlorobenzene, hexachlorobenzene, toluene, naphthalene.
F026	Tetra-, penta-, and hexachlorodibenzo-p-dioxins; tetra-, penta-, and hexachlorodibenzofurans.
F027	Tetra-, penta-, and hexachlorodibenzo-p-dioxins; tetra-, penta-, and hexachlorodibenzofurans; tri-, tetra-, and pentachlorophenols and their chlorophenoxy derivative acids, esters, ethers, amines and other salts.
F028	Tetra-, penta-, and hexachlorodibenzo-p-dioxins; tetra-, penta-, and hexachlorodibenzofurans; tri-, tetra-, and pentachlorophenols and their chlorophenoxy derivative acids, esters, ethers, amines and other salts.
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, methylchloride,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, vinyl 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-trichloroethane, vinyl chloride, vinylidene chloride, chloroform.
K030	Hexachlorobenzene, hexachlorobutadiene, hexachloroethane,1,1,1,2-tetrachloro-ethane, 1,1,2,2-tetrachloroethane, ethylene dichloride.
K031	Arsenic.
K032	Hexachlorocyclopentadiene.
K033	Hexachlorocyclopentadiene.
K034	Hexachlorocyclopentadiene.
K035	Creosote, chrysene, naphthalene, fluoranthene benzo(b)fluor-anthene, 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-trichloro-phenol.
K106	Mercury.
K111	2,4-Dinitrotoluene.
K112	2,4-Toluenediamine, o-toluidine, p-toluidine, aniline.
K113	2,4-Toluenediamine, o-toluidine, p-toluidine, aniline.
K114	2,4-Toluenediamine, o-toluidine, p-toluidine.
K115	2,4-Toluenediamine.
K116	Carbon tetrachloride, tetrachloroethylene, chloroform, phosgene.

CHARLOTTE E. BALDWIN, Secretary
APPROVED BY AGENCY: November 12, 1985
FILED WITH LRC: November 13, 1985 at 3 p.m.
PUBLIC HEARING SCHEDULED: A public hearing on this regulation will be held on December 30, 1985, at 1 p.m. EST, in the Capital Plaza Tower. Any persons interested in attending this hearing shall submit by December 26, 1985, a written statement of such interest to: J. Alex Barber, Director, Division of Waste Management, 18 Reilly Road, Frankfort, Kentucky 40601. If no statement of interest is received by close of business on December 26, 1985, the hearing on this regulation may be cancelled. Written comments may also be submitted to the address above. Written comments will be accepted until the end of the comment period, which will be close of business on December 30, 1985.

REGULATORY IMPACT ANALYSIS

Agency Contact Person: J. Alex Barber, Director
(1) Type and number of entities affected: Only a small number of manufacturers of chlorophenols and their chlorophenoxy derivatives and of wastes generated during the production of dinitrotoluene (DNT) toluenediamine (TDA) and toluene diisocyanate (TDI) will be affected by these proposed changes to this regulation. The cabinet has no estimate of the number of manufacturers affected.
(a) Direct and indirect costs or savings to those affected:
1. First year: None. See item (6) Any Additional Information or Comments.
2. Continuing costs or savings: None. See item (6) Any Additional Information or Comments.
3. Additional factors increasing or decreasing costs (note any effects upon competition): None. See item (6) Any Additional Information or Comments.
(b) Reporting and paperwork requirements: The proposed changes in this regulation will require that EPA hazardous waste numbers F020, F021, F023, F026, F027 (chlorinated dioxins, dibenzofurans, and phenols) and K111, K112, K113, K114, K115, and K116 (wastes generated during the production of dinitrotoluene (DNT), toluenediamine (TDA), and diisocyanate (TDI)) be considered as hazardous constituents for which hazardous wastes are listed. A small number of persons will be required to comply with

regulations pertaining to the generation, storage, treatment, or disposal of these wastes. However, because this is a federal requirement, there will be no additional impact to Kentucky facilities. See item (6) Any Additional Information or Comments.

(2) Effects on the promulgating administrative body:

(a) Direct and indirect costs or savings:

1. First year: None

2. Continuing costs or savings: None

3. Additional factors increasing or decreasing costs: None

(b) Reporting and paperwork requirements:

(3) Assessment of anticipated effect on state and local revenues: There will be no effect on state or local revenues from promulgation of this regulation.

(4) Assessment of alternative methods; reasons why alternatives were rejected: (a) The following concerns the inclusion of chlorinated dioxins, dibenzofurans, and phenols as hazardous constituents for which hazardous wastes are listed.

Alternative:

1. Less Stringent: The cabinet could have chosen not to include chlorinated dioxins, dibenzofurans, phenols, and wastes generated during the production of dinitrotoluene (DNT), toluenediamine (TDA), and toluene diisocyanate (TDI) as hazardous constituents for which hazardous wastes are listed. However, this would have made the state program less stringent than the federal program. Since the standards would be applicable in Kentucky under the federal program, the Cabinet chose to adopt the requirement. The cabinet's list and criteria for identifying hazardous wastes must be identical to the federal list and criteria in accordance with KRS 224.864(3).

2. More stringent: The cabinet could have chosen to include additional compounds. However, this would have been more stringent than the federal requirements.

3. Present proposal: The present proposal is identical to the federal requirement for listing wastes which contain chlorinated dioxins, dibenzofurans, and phenols and for wastes generated during the production of dinitrotoluene, toluenediamine, and toluene diisocyanate as a hazardous waste.

(5) Identify any statute, administrative regulation or government policy which may be in conflict, overlapping, or duplication: None

(a) Necessity of proposed regulation if in conflict: Not applicable.

(b) If in conflict, was effort made to harmonize the proposed administrative regulation with conflicting provisions: Not applicable.

(6) Any additional information or comments: The impact of this regulation has not been analyzed for those requirements which are equivalent to those found in the corresponding federal regulation, 40 CFR Appendix VII of Part 261 and 40 CFR 261.32. The impact of the federal program was analyzed in 50 FR 1997-1998, January 14, 1985 and 50 FR 42936-42942, October 23, 1985. A copy of the January 14, 1985 and October 23, 1985 federal registers have been filed with the regulations compiler of the Legislative Research Commission.

Tiering:

Was tiering applied? Yes. This regulation applies only to those facilities which employ the listed hazardous wastes.

NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION CABINET
Department for Environmental Protection
Division of Waste Management
(Proposed Amendment)

401 KAR 31:170. Appendix on hazardous waste constituents.

RELATES TO: KRS 224.830 through 224.877, 224.994

PURSUANT TO: KRS Chapter 13A, 224.033, 224.864(3)

NECESSITY AND FUNCTION: KRS 224.864(3) requires the cabinet to identify the characteristics of and to list hazardous wastes. This chapter identifies and lists hazardous wastes. This regulation contains the appendix to this chapter concerning the hazardous waste constituents.

Section 1. Hazardous Waste Constituents. The list of hazardous waste constituents 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-(aminothioxo methyl)-)
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-(hydroxy methyl)-8a-methoxy-5-methyl-carba-mate 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, 2-amino-1-methyl(o-toluidine)
Benzene, 4-amino-1-methyl(p-toluidine)
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'-(methyl enebis(oxy))bis(2-chloro-))
Bis(2-chlorethyl) ether (Ethane,1,1'-oxybis(2-chloro-))
N,N-Bis(2-chloroethyl)-2-naphthylamine (Chlor naphazine)
Bis(2-chloroisopropyl) ether (Propane,2,2'-oxybis(2-chloro-)
Bis(chloromethyl) ether (Methane, oxybis (chloro-))
Bis(2-ethylhexyl) phthalate (1,2-Benzenedicarbo xylic 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, perox ide)
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-chloro ethyl)amino)benzene-)
Chlordane (alpha and gamma isomers) (4,7-Methano indan,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)
2-Chloro-1,3-butadiene (chloroprene)
p-Chloro-in-cresol (Phenol, 4-chloro-3-methyl)
1-Chloro-2,3-epoxypropane (Oxirane,2-chloro ethoxy)-)
2-Chloroethyl vinyl ether (Ethene, (2-chloro ethyoxy)-)
Chloroform (Methane, trichloro-)
Chloromethane (Methyl chloride)
Chloromethyl methyl ether (Methane, chlorom ethoxy-)
2-Chloronaphthalene (Naphthalene, betachloro-)
2-Chlorophenol (Phenol,o-chloro-)
1-(o-Chlorophenyl)thiourea (Thiourea, (2-chloro phenyl)-)
3-Chloropropene (allyl chloride)
3-Chloropropionitrile (Propanenitrile, 3-chloro-)
Chromium and compounds, N.O.S.*
Chrysene (1,2-Benzphenanthrene)
Citrus red No. 2 (2-Naphthol, 1-((2,5-dimethoxy phenyl)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-cyclo hexyl-4,6-dinitro-)
Cyclophosphamide (2H-1,3,2,-Oxazaphosphorine, (bis(2- chloroethyl)amino)-tetrahydro-,2-oxide)
Daunomycin (5,12-Naphthacenedione, (8s-cis)-8-acetyl-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-chloro phenyl)-)
DDT (Dichlorodiphenyltrichloroethane) (Ethane, 1,1,1-trichloro-2,2-bis(p-chlorophenyl)-)
Diallate (S-(2,3-dichloroallyl) diisopropyl thiocarbamate
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-Dibenzcar bazole)
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, dichlorodi fluoro-)
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)
0,0-diethyl S-methyl ester of phosphorodithioic acid (Phosphorodithioic acid, 0,0-diethyl S-methyl ester
0,0-Diethylphosphoric acid, 0-p-nitrophenyl ester (Phosphoric acid, diethyl p-nitrophenyl ester)
Diethyl phthlate (1,2-Benzenedicarboxylic acid, diethyl ester)
0,0-Diethyl 0-2-pyrazinyl phosphorothioate (Phosphorothioic acid, 0,0-diethyl 0-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) (Phosphoro fluoridic acid, bis(1-methylethyl) ester)
Dimethoate (Phosphorodithioic acid, 0,0-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, 0-((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-propyl amine)
Disulfoton (0,0-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-)
Hexachlorodibenzo-p-dioxins
Hexachlorodibenzofurans
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-dimethanonaphthalene)
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-0) 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-naph thalenyl-)
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-)
Pentachlorodibenzo-p-dioxins
Pentachlorodibenzofurans
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-di-carboxylic 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-)
Tetrachlorodibenzo-p-dioxins
Tetrachlorodibenzofurans

Tetrachloroethane, N.O.S.* (Ethane, tetrachloro-, N.O.S.*)
1,1,1,2-Tetrachlorethane (Ethane, 1,1,1,2-tetra chloro-)
1,1,2,2-Tetrachlorethane (Ethane, 1,1,1-2-tetra chloro-)
Tetrachloroethylene (Ethene, 1,1,2,2-tetra chloro-)
Tetrachloromethane (Carbon tetrachloride)
2,3,4,6-Tetrachlorophenol (Phenol, 2,3,4,6-tetra chloro-)
Tetraethyldithiopyrophosphate (Dithiopyro phosphoric 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, N.O.S. [(Diaminotoluene)]
2,4-Toluenediamine
2,6-Toluenediamine
3,4-Toluenediamine
o-Toluidine hydrochloride (Benzenamine, 2-methyl-, hydrochloride)
Tolylene diisocyanate (Benzene, 1,3-diisocyanato methyl-)
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, trichloro fluoro-)
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-trichloro-phenoxy)-)
Trichloropropane, N.O.S.* (Propane, trichloro-, N.O.S.*)
1,2,3-Trichloropropane (Propane, 1,2,3-tri-chloro-)
0,0,0-Triethyl phosphorothioate (Phosphorothioic acid, 0,0,0-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.

CHARLOTTE E. BALDWIN, Secretary
APPROVED BY AGENCY: November 12, 1985
FILED WITH LRC: November 13, 1985 at 3 p.m.
PUBLIC HEARING SCHEDULED: A public hearing on this regulation will be held on December 30, 1985, at 1 p.m. EST, in the Capital Plaza Tower. Any persons interested in attending this hearing shall submit by December 26, 1985, a written statement of such interest to: J. Alex Barber, Director, Division of Waste Management, 18 Reilly Road, Frankfort, Kentucky 40601. If no statement of interest is received by close of business on December 26, 1985, the hearing on this regulation may be cancelled. Written comments may also be submitted to the address above. Written comments will be accepted until the end of the comment period, which will be close of business on December 30, 1985.

REGULATORY IMPACT ANALYSIS

Agency Contact Person: J. Alex Barber, Director
(1) Type and number of entities affected: Only a small number of persons who generate, store, treat, or dispose of chlorinated dibenzo-p-dioxins, dibenzofurans, toluenediamines and toluidines will be affected by this proposed regulation.
(a) Direct and indirect costs or savings to those affected:
1. First year: None. This proposed amendment is for informational purposes only.
2. Continuing costs or savings: None
3. Additional factors increasing or decreasing costs (note any effects upon competition): None
(b) Reporting and paperwork requirements: None
(2) Effects on the promulgating administrative body:
(a) Direct and indirect costs or savings:
1. First year: None
2. Continuing costs or savings: None
3. Additional factors increasing or decreasing costs: None
(b) Reporting and paperwork requirements:
(3) Assessment of anticipated effect on state and local revenues: There will be no effect on state or local revenues from promulgation of this regulation.
(4) Assessment of alternative methods; reasons why alternatives were rejected: (a) The cabinet is proposing to add eleven new hazardous constituents to the list of hazardous constituents used to determine whether a waste is hazardous.
Alternative: Not applicable. This regulation lists hazardous constituents for identifying hazardous wastes, which by statute KRS 224.864(3) must be identical to the federal list and criteria for identifying hazardous waste.
(5) Identify any statute, administrative regulation or government policy which may be in conflict, overlapping, or duplication: None
(a) Necessity of proposed regulation if in conflict: Not applicable.
(b) If in conflict, was effort made to

harmonize the proposed administrative regulation with conflicting provisions: Not applicable.

(6) Any additional information or comments: The impact of this regulation has not been analyzed for those requirements which are equivalent to those found in the corresponding federal regulation, 40 CFR, Part 261 Appendix VIII. The impact of the federal program was analyzed in 50 FR 1977-1998, January 14, and 50 FR 42936-42942, October 23, 1985. A copy of the January 14 and October 23, 1985 federal registers have been filed with the regulations compiler of the Legislative Research Commission.

Tiering:
Was tiering applied? Yes. This regulation applies only to persons who generate, store, treat, or dispose of chlorinated dibenzo-p-dioxins, chlorinated dibenzofurans, toluidines and toluenediamines.

NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION CABINET
Department for Environmental Protection
Division of Waste Management
(Proposed Amendment)

401 KAR 32:010. General provisions for generators.

RELATES TO: KRS 224.071, 224.830 through 224.877, 224.994 [224.835, 224.864]
PURSUANT TO: KRS Chapter 13A [224.017], 224.033, 224.864
NECESSITY AND FUNCTION: KRS 224.864 requires the Natural Resources and Environmental Protection Cabinet to promgulate regulations to establish standards for the generation of hazardous waste. This chapter establishes standards for the generators of hazardous waste. This regulations establishes the applicable general provisions for generators.

Section 1. Purpose, Scope, and Applicability. (1) These regulations establish standards for generators of hazardous waste.

(2) A generator who treats, stores, or disposes of hazardous waste on-site must only comply with the following sections of this regulation with respect to that waste; Section 2 of this regulation for determining whether or not he has a hazardous waste, Section 3 of this regulation for obtaining an identification number; 401 KAR 32:030, Section 5, for accumulation of hazardous waste; 401 KAR 32:040, Section 1(3) and (4), for recordkeeping; 401 KAR 32:040, Section 4, for additional reporting; and, if applicable, 401 KAR 32:050, Section 2, for farmers.

(3) Any person who imports hazardous waste from outside the United States into Kentucky must comply with the standards applicable to generators established in this chapter.

(4) A farmer who generates waste pesticides which are hazardous waste and who complies with all of the requirements of 401 KAR 32:050, Section 2 is not required to comply with other standards in this chapter or 401 KAR Chapters 34, 35, and 38[, or 401 KAR 35:010] with respect to such pesticides.

(5) A person who generates a hazardous waste as defined by 401 KAR Chapter 31 is subject to the compliance requirements and penalties prescribed in KRS Chapter 224 if he does not comply with the requirements of this chapter.

(6) An owner or operator who initiates a shipment of hazardous waste from a treatment, storage, or disposal facility must comply with the generator standards established in this chapter.

Section 2. Hazardous Waste Determination. A person who generates a waste, as defined in 401 KAR 31:010, Section 2, must determine if that waste is a hazardous waste using the following method:

(1) He should first determine if the waste is excluded from regulation under 401 KAR 31:010, Section 4.

(2) He must then determine if the waste is listed as a hazardous waste in 401 KAR 31:040.

(3) If the waste is not listed as a hazardous waste in 401 KAR 31:040 he must determine whether the waste is identified in 401 KAR 31:030, by either:

(a) Testing the waste according to the methods set forth in 401 KAR 31:030, or according to an equivalent method approved by the secretary [(see Section 1(3) of 401 KAR 31:040)]; or

(b) Applying knowledge of the hazard characteristic of the waste in light of the materials or the processes used.

Section 3. Registration and Identification Number. (1) A generator must not treat, store, dispose [of], transport, or offer for transportation, hazardous waste without having registered with the cabinet and received an EPA identification number. Such registration shall be filed within ninety (90) days after promulgation or revision of regulations under 401 KAR Chapter 31 identifying by its characteristics or listing any substance as a hazardous waste. Not more than one (1) such registration shall be required to be filed with respect to the same substance. The registration shall include:

(a) Known or anticipated types, potential sources, general characteristics, and weights or volumes of hazardous wastes generated annually;

(b) The place of generation and the name and address of a contact agent; and

(c) If the waste is a special waste, generators shall, either individually or collectively as a categorical group, within ninety (90) days after promulgation or revision of regulations under 401 KAR Chapter 31, file a report, according to procedures previously approved by the cabinet, which details, by geographic area, the known or anticipated types, potential sources, general characteristics, and weights or volumes of special wastes generated annually. Not more than one (1) registration shall be required to be filed with respect to the same substance.

(2) A generator who has not received an EPA identification number may obtain one by registering with the cabinet as described above, using forms provided by the cabinet. Upon receiving the request and reviewing the information the cabinet will assign an EPA identification number to the generator.

(3) A generator must not offer his hazardous waste to transporters or to treatment, storage, or disposal facilities that have not received an EPA identification number.

(4) If a registrant requires a modification to his registration to add an additional waste stream, or change the name of the company or the

contact person, he must submit a fee to the cabinet in accordance with Section 3 of 401 KAR 39:010.

CHARLOTTE E. BALDWIN, Secretary
APPROVED BY AGENCY: November 12, 1985
FILED WITH LRC: November 13, 1985 at 3 p.m.
PUBLIC HEARING SCHEDULED: A public hearing on this regulation will be held on December 30, 1985, at 1 p.m. EST, in the Capital Plaza Tower. Any persons interested in attending this hearing shall submit by December 26, 1985, a written statement of such interest to: J. Alex Barber, Director, Division of Waste Management, 18 Reilly Road, Frankfort, Kentucky 40601. If no statement of interest is received by close of business on December 26, 1985, the hearing on this regulation may be cancelled. Written comments may also be submitted to the address above. Written comments will be accepted until the end of the comment period, which will be close of business on December 30, 1985.

REGULATORY IMPACT ANALYSIS

Agency Contact Person: J. Alex Barber, Director
(1) Type and number of entities affected: This regulation affects 282 hazardous waste generators in Kentucky.
(a) Direct and indirect costs or savings to those affected:
1. First year: There are no added costs incurred by this amendment. The change simply references the section and regulation where the existing fee information can be found.
2. Continuing costs or savings: Not applicable
3. Additional factors increasing or decreasing costs (note any effects upon competition): None
(b) Reporting and paperwork requirements: None
(2) Effects on the promulgating administrative body:
(a) Direct and indirect costs or savings:
1. First year: None. See note (1)(a)1.
2. Continuing costs or savings: None
3. Additional factors increasing or decreasing costs: None
(b) Reporting and paperwork requirements:
(3) Assessment of anticipated effect on state and local revenues: There will be no effect on state or local revenues from promulgation of this regulation.
(4) Assessment of alternative methods; reasons why alternatives were rejected: The amendments to this regulation inserts references to previously existing requirements and therefore, more stringent and less stringent alternatives do not apply.
(5) Identify any statute, administrative regulation or government policy which may be in conflict, overlapping, or duplication: None
(a) Necessity of proposed regulation if in conflict: Not applicable.
(b) If in conflict, was effort made to harmonize the proposed administrative regulation with conflicting provisions: Not applicable.
(6) Any additional information or comments: None

Tiering:
Was tiering applied? Yes. This regulation is tiered to apply only to hazardous waste generators.

NATURAL RESOURCES AND
ENVIRONMENTAL PROTECTION CABINET
Department for Environmental Protection
Division of Waste Management
(Proposed Amendment)

401 KAR 32:020. Manifest system.

RELATES TO: KRS 224.071, 224.033, 224.830 through 224.877, 224.994
PURSUANT TO: KRS Chapter 13A, 224.033, 224.864
NECESSITY AND FUNCTION: KRS 224.864 requires the cabinet to promulgate regulations to establish standards for the generation of hazardous wastes. This chapter establishes standards applicable to generators of hazardous waste. This regulation establishes the general requirement and procedures involving the use of the manifest system by generators of hazardous waste.

Section 1. General Requirements. (1) A generator who transports, or offers for transportation, hazardous waste for off-site treatment, storage, or disposal must prepare a manifest, contained in Appendix A of 401 KAR 32:100, and if necessary, Appendix B of 401 KAR 32:100, according to the instructions included in 401 KAR 32:100.
(2) A generator must designate on the manifest the facility which is permitted to handle the waste described on the manifest.
(3) A generator may also designate on the manifest one (1) alternate facility which is permitted to handle his waste in the event an emergency prevents delivery of the waste to the primary designated facility.
(4) If the transporter is unable to deliver the hazardous waste to the designated facility or the alternate facility, the generator must either designate another facility or instruct the transporter to return the waste.

Section 2. Acquisition of Manifests. (1) If the state to which the shipment is manifested (consignment state) supplies the manifest and requires its use, then the generator must use that manifest and include all information required in 401 KAR 32:100.
(2) If the consignment state does not supply the manifest, but the state in which the generator is located (generator state) supplies the manifest and requires its use, then the generator must use that state's manifest and include all information required in 401 KAR 32:100.
(3) If neither the generator state nor the consignment state supplies the manifest, then the manifest must be filled out in accordance with the requirements of 401 KAR 32:100 and the generator may obtain the manifest from any source.

Section 3. Number of Copies. The manifest consists of at least the number of copies which will provide the generator, each transporter, and the owner or operator of the designated facility with one (1) copy each for their records and another copy to be returned by the operator of the designated facility to the generator.

Section 4. Use of the Manifest. (1) The generator must:
(a) Sign the manifest certification by hand;

and
(b) Obtain the handwritten signature of the initial transporter and date of acceptance on the manifest; and
(c) Retain one (1) copy, in accordance with Section 1(1) of 401 KAR 32:040.
(2) The generator must give the transporter the remaining copies of the manifest.
(3) For shipment of hazardous waste within the United States solely by water (bulk shipments only), the generator must send three (3) copies of the manifest dated and signed in accordance with this section to the owner or operator of the designated facility or the last water (bulk shipment) transporter to handle the waste in the United States if exported by water. Copies of the manifest are not required for each transporter.
(4) For rail shipments of hazardous waste within the United States which originate at the site of generation in Kentucky, the generator must send at least three (3) copies of the manifest dated and signed in accordance with this section to:
(a) The next non-rail transporter, if any; or
(b) The designated facility if transported solely by rail; or
(c) The last rail transporter to handle the waste in the United States if exported by rail.

CHARLOTTE E. BALDWIN, Secretary
APPROVED BY AGENCY: November 12, 1985
FILED WITH LRC: November 13, 1985 at 3 p.m.
PUBLIC HEARING SCHEDULED: A public hearing on this regulation will be held on December 30, 1985, at 1 p.m. EST, in the Capital Plaza Tower. Any persons interested in attending this hearing shall submit by December 26, 1985, a written statement of such interest to: J. Alex Barber, Director, Division of Waste Management, 18 Reilly Road, Frankfort, Kentucky 40601. If no statement of interest is received by close of business on December 26, 1985, the hearing on this regulation may be cancelled. Written comments may also be submitted to the address above. Written comments will be accepted until the end of the comment period, which will be close of business on December 30, 1985.

REGULATORY IMPACT ANALYSIS

Agency Contact Person: J. Alex Barber, Director
(1) Type and number of entities affected: This regulation affects 282 hazardous waste generators in Kentucky.
(a) Direct and indirect costs or savings to those affected:
1. First year: None. The amendment to this regulation merely clarifies requirements that already existed in state regulation.
2. Continuing costs or savings: None
3. Additional factors increasing or decreasing costs (note any effects upon competition): None
(b) Reporting and paperwork requirements: None. See note in (1)(a)1.
(2) Effects on the promulgating administrative body:
(a) Direct and indirect costs or savings:
1. First year: None. See note in (1)(a)1.
2. Continuing costs or savings: None
3. Additional factors increasing or decreasing costs: None
(b) Reporting and paperwork requirements:
(3) Assessment of anticipated effect on state and local revenues: There will be no effect on state revenues from promulgation of this regulation. However, implementation of the entire series of waste management regulations will affect state revenues (see Regulatory Impact Analysis for 401 KAR 39:010 through 39:070). There will be no effect on local revenues from promulgation of this regulation.
(4) Assessment of alternative methods; reasons why alternatives were rejected: The amendments to this regulation clarify previously existing requirements and therefore it was unnecessary to consider more stringent or less stringent alternatives.
(5) Identify any statute, administrative regulation or government policy which may be in conflict, overlapping, or duplication: None
(a) Necessity of proposed regulation if in conflict: Not applicable.
(b) If in conflict, was effort made to harmonize the proposed administrative regulation with conflicting provisions: Not applicable.
(6) Any additional information or comments: None.

Tiering:
Was tiering applied? Yes. This regulation applies to hazardous waste generators who are required to use the uniform manifest when shipping waste.

NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION CABINET
Department for Environmental Protection
Division of Waste Management
(Proposed Amendment)

401 KAR 32:030. Pre-transport requirements.

RELATES TO: KRS 224.071, 224.830 through 224.877, 224.994 [224.835, 224.864]
PURSUANT TO: KRS Chapter 13A, [224.017,] 224.033, 224.864
NECESSITY AND FUNCTION: KRS 224.864 requires the cabinet to promgulate regulations to establish standards for the generation of hazardous waste. The chapter establishes standards applicable to generators of hazardous waste. This regulation establishes the requirements for labeling, marking, placarding, and accumulation time.

Section 1. Packaging. Before transporting hazardous waste or offering hazardous waste for transportation off-site, a generator must package the waste in accordance with the applicable U.S. Department of Transportation regulations on packaging under 49 CFR Parts 173, 178, and 179.

Section 2. Labeling. Before transporting or offering hazardous waste for transportation off-site, a generator must label each package in accordance with the applicable U. S. Department of Transportation regulations on hazardous materials, under 49 CFR 172.

Section 3. Marking. (1) Before transporting or offering hazardous waste for transportation off-site, a generator must mark each package of hazardous waste in accordance with the applicable U.S. Department of Transportation regulations on hazardous materials under 49 CFR 172.
(2) Before transporting hazardous waste or

offering hazardous waste for transportation off-site, a generator must mark each container of 110 gallons or less used in such transportation in accordance with the requirements of 49 CFR 172.304. The following words and information shall be displayed: "Hazardous Waste - Federal Law Prohibits Improper Disposal. If found, contact the nearest police or public safety authority or the U.S. Environmental Protection Agency.
Generator's Name and Address_____.
Manifest Document Number_____."

Section 4. Placarding. Before transporting hazardous waste or offering hazardous waste for transportation off-site, a generator must offer the initial transporter the appropriate placards according to U.S. Department of Transportation regulations for hazardous materials under 49 CFR Part 172, Subpart F.

Section 5. Accumulation Time. (1) Except as subsection 4 of this section provides otherwise, a generator may accumulate hazardous waste on-site for ninety (90) days or less without a permit or without having interim status provided that:

(a) The waste is placed in containers which meet the standards of Section 1 of this regulation and are managed in accordance with 401 KAR 35:180, or in tanks, provided the generator complies with the requirements of 401 KAR 35:190, except those provisions in Section 3 of 401 KAR 35:190;

(b) The date upon which each period of accumulation begins is clearly marked and visible for inspection on each container;

(c) While being accumulated on-site, each container and tank is labeled or marked clearly with the words "Hazardous Waste;" and

(d) The generator complies with the requirements specified in 401 KAR 35:030, and 401 KAR 35:040, and Sections 6 and 7 of 401 KAR 35:020.

(2) A generator who accumulates hazardous waste for more than ninety (90) days is an operator of a storage facility and is subject to the requirements of 401 KAR Chapter 34, 401 KAR Chapter 35 and the permit requirements of 401 KAR Chapter 38, unless he has been granted an extension to the ninety (90) day period. Such extensions may be granted by the cabinet if hazardous wastes must remain on-site for longer than ninety (90) days due to unforeseen, temporary, and uncontrolled circumstances. An extension of up to thirty (30) days may be granted at the discretion of the cabinet on a case-by-case basis.

(3)(a) A generator may accumulate as much as fifty-five (55) gallons of hazardous waste or one (1) quart of acutely hazardous waste listed in Section 4 of 401 KAR 31:040 in containers at or near any point of generation where wastes initially accumulate, which is under the control of the operator of the process generating the waste, without a permit or interim status and without complying with subsection (1) of this section provided that upon commencement of accumulation, he:

1. Complies with Sections 2, 3, and 4(1) of 401 KAR 35:180; and

2. Marks his containers with the words "Hazardous Waste."

(b) A generator who accumulates either hazardous waste or acutely hazardous waste listed in Section 4 of 401 KAR 31:040 in excess of the amounts listed in paragraph (a) of this subsection at or near any point of generation must, with respect to that amount of excess waste, comply with subsection (1) of this section or other applicable provisions of this chapter and continue to comply with paragraph (a)1 and 2 of this subsection. The generator must mark the container holding the excess accumulation of hazardous waste with the date the excess amount began accumulating. The date must be placed on the container on the day that excess accumulation began.

(4) A generator generating a total quantity of hazardous waste greater than 100 kilograms, but less than 1,000 kilograms during a calendar month for every month in a calendar year, may store without a permit for up to 180 days. Such on-site storage may occur without a permit for not more than 6,000 kilograms for up to 270 days if such generator must ship or haul such waste over 200 miles.

CHARLOTTE E. BALDWIN, Secretary
APPROVED BY AGENCY: November 12, 1985
FILED WITH LRC: November 13, 1985 at 3 p.m.

PUBLIC HEARING SCHEDULED: A public hearing on this regulation will be held on December 30, 1985, at 1 p.m. EST, in the Capital Plaza Tower. Any persons interested in attending this hearing shall submit by December 26, 1985, a written statement of such interest to: J. Alex Barber, Director, Division of Waste Management, 18 Reilly Road, Frankfort, Kentucky 40601. If no statement of interest is received by close of business on December 26, 1985, the hearing on this regulation may be cancelled. Written comments may also be submitted to the address above. Written comments will be accepted until the end of the comment period, which will be close of business on December 30, 1985.

REGULATORY IMPACT ANALYSIS

Agency Contact Person: J. Alex Barber, Director

(1) Type and number of entities affected: The amendment to this regulation affects small quantity hazardous waste generators in Kentucky.

(a) Direct and indirect costs or savings to those affected:

1. First year: The cost for implementing the amendment to this regulation will be the same as the cost of implementing the federal requirements found in 40 CFR 262.34. The affected entities are already required to comply with the federal requirements and therefore, the cost was not analyzed for compliance with federal requirements.

2. Continuing costs or savings: Not Applicable

3. Additional factors increasing or decreasing costs (note any effects upon competition): Not Applicable

(b) Reporting and paperwork requirements: There are no additional reporting requirements imposed by this amendment. Generators will have to mark their containers with the words "Hazardous Waste" and the date that accumulation exceeded listed amounts.

(2) Effects on the promulgating administrative body:

(a) Direct and indirect costs or savings:

1. First year: Not Applicable, see note (1)(a)1.

2. Continuing costs or savings: Not Applicable

3. Additional factors increasing or decreasing costs: Not Applicable

(b) Reporting and paperwork requirements:

(3) Assessment of anticipated effect on state and local revenues: There will be no effect on state or local revenues from promulgation of this regulation.

(4) Assessment of alternative methods; reasons why alternatives were rejected:

(a) Marking requirements.

Alternative:

1. Less Stringent: If the cabinet had chosen to not incorporate the marking requirements, the Kentucky program would be less stringent than the federal.

2. More Stringent: If the cabinet had chosen more stringent markings and recordkeeping requirements, it would have put excessive burden on the regulated entities.

3. Present Proposal: The proposed amendment which requires marking containers with the words "Hazardous Waste" immediately upon accumulation was chosen to eliminate confusion as to whether material is a waste or not and to ensure that all containers are always adequately marked.

(b) The amendments to this regulation include provisions for storing waste on-site.

1. Less Stringent: The cabinet could have allowed storage for longer than 270 days and in quantities greater than 6,000 kilograms, however this would allow too large of a volume of hazardous waste to accumulate.

2. More Stringent: The cabinet could have allowed a smaller volume or a shorter storage time, however this would have put undue strain on facilities shipping great distances.

3. Present Proposals: The present proposal, adopted from RCRA, allows generators who must ship waste great distances to accumulate sufficient volume to make shipping more economically feasible.

(5) Identify any statute, administrative regulation or government policy which may be in conflict, overlapping, or duplication: None

(a) Necessity of proposed regulation if in conflict: Not applicable.

(b) If in conflict, was effort made to harmonize the proposed administrative regulation with conflicting provisions: Not applicable.

(6) Any additional information or comments: The impact of this regulation has not been analyzed for those requirements which are equivalent to those found in the corresponding federal regulations 40 CFR 262.34. The impact of the federal program was analyzed in 49 FR 49568-49571, December 1984. A copy of the December 20, 1984 federal register has been filed with the regulations compiler of the Legislative Research Commission.

Tiering:

Was tiering applied? Yes. The amendment to this regulation is tiered to apply to hazardous waste generators who generate up to 55 gallons of hazardous waste or one quart of acutely hazardous waste per month.

NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION CABINET
Department for Environmental Protection
Division of Waste Management
(Proposed Amendment)

401 KAR 32:040. Recordkeeping and reporting.

RELATES TO: KRS 224.071, 224.830 through 224.877, 224.994 [224.835, 224.864]

PURSUANT TO: KRS Chapter 13A [224.017], 224.033, 224.864

NECESSITY AND FUNCTION: KRS 224.864 requires the cabinet to promgulate regulations to establish standards for the generation of hazardous waste. This chapter establishes standards applicable to generators of hazardous waste. This regulation establishes recordkeeping and reporting standards.

Section 1. Recordkeeping. (1) A generator must keep a copy of each manifest signed in accordance with Section 4(3) of 401 KAR 32:020 in addition to the [for three (3) years or until he receives a] signed copy returned from the designated facility which received the waste. Both copies [This signed copy] must be retained on [as a] record for at least three (3) years from the date the waste was accepted by the initial transporter.

(2) A generator must keep a copy of each annual report and exception report for a period of at least three (3) years from the due date of the report (March 1).

(3) A generator must keep records of any test results, waste analyses, or other determinations made in accordance with Section 2 of 401 KAR 32:010 for at least three (3) years from the date that the waste was last sent to on-site or off-site treatment, storage, or disposal.

(4) A generator must keep a log showing all facility and equipment inspections as required in Section 6 of 401 KAR 35:020.

(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 secretary.

Section 2. Annual Reporting. (1) A generator who ships his hazardous waste off-site must submit annual reports on a form approved by the cabinet according to the instructions on the form. The annual report must be submitted to the cabinet no later than March 1 for the preceeding calendar year and must, at a minimum, include the following information:

[(a) on a form approved by the cabinet according to the instructions on the form;]

[(b) To the cabinet;]

[(c) No later that March 1 for the preceding calendar year.]

(a) A description of the efforts undertaken during the year to reduce the volume and toxicity of waste generated.

(b) A description of the changes in volume and toxicity of waste actually achieved during the year in comparison to previous years to the extent such information is available for years prior to 1984.

(c) The certification signed by the generator or authorized representative.

(2) Any generator who treats, stores, or disposes of hazardous waste on-site must submit an annual report covering those wastes in

accordance with the provisions of 401 KAR Chapters 34, 35 and 38.

Section 3. Exception Reporting. (1) A generator who does not receive a copy of the manifest with the handwritten signature of the owner or operator of the designated facility within thirty-five (35) days of the date the waste was accepted by the initial transporter must contact the transporter and/or the owner or operator of the designated facility to determine the status of the hazardous waste.

(2) A generator must submit an exception report to the cabinet if he has not received a copy of the manifest with the handwritten signature of the owner or operator of the designated facility within forty-five (45) days of the date the waste was accepted by the initial transporter. The exception report must include:

(a) A legible copy of the manifest for which the generator does not have confirmation of delivery;

(b) A cover letter signed by the generator or his authorized representative explaining the efforts taken to locate the hazardous waste and the results of those efforts.

Section 4. Additional Reporting. The secretary may require generators to furnish additional reports concerning the quantities and disposition of wastes identified or listed in 401 KAR Chapter 31.

CHARLOTTE E. BALDWIN, Secretary

APPROVED BY AGENCY: November 12, 1985

FILED WITH LRC: November 13, 1985 at 3 p.m.

PUBLIC HEARING SCHEDULED: A public hearing on this regulation will be held on December 30, 1985, at 1 p.m. EST, in the Capital Plaza Tower. Any persons interested in attending this hearing shall submit by December 26, 1985, a written statement of such interest to: J. Alex Barber, Director, Division of Waste Management, 18 Reilly Road, Frankfort, Kentucky 40601. If no statement of interest is received by close of business on December 26, 1985, the hearing on this regulation may be cancelled. Written comments may also be submitted to the address above. Written comments will be accepted until the end of the comment period, which will be close of business on December 30, 1985.

REGULATORY IMPACT ANALYSIS

Agency Contact Person: J. Alex Barber, Director

(1) Type and number of entities affected: This regulation affects 282 hazardous waste generators in the state of Kentucky.

(a) Direct and indirect costs or savings to those affected:

1. First year: The cost of complying with the amendments to this regulation have not been analyzed because the additional requirements to the annual report are the same as those required by federal regulation. Generators would be required to comply under the federal program regardless of whether or not Kentucky adopted these provisions.

2. Continuing costs or savings: See note (1)(a)1.

3. Additional factors increasing or decreasing costs (note any effects upon competition): None

(b) Reporting and paperwork requirements: Although extensive recordkeeping and reporting requirements are included in this amendment adoption of these requirements into Kentucky regulation will have no appreciable effect because these are previously existing federal standards.

(2) Effects on the promulgating administrative body:

(a) Direct and indirect costs or savings:

1. First year: See note (1)(a)1.

2. Continuing costs or savings: See note (1)(a)1.

3. Additional factors increasing or decreasing costs: None

(b) Reporting and paperwork requirements:

(3) Assessment of anticipated effect on state and local revenues: There will be no effect on state revenues from promulgation of this regulation. However, implementation of the entire series of waste management regulations will affect state revenues (see RIA for 401 KAR 39:010 through 39:070). There will be no effect on local revenues from promulgation of this regulation.

(4) Assessment of alternative methods; reasons why alternatives were rejected: (a) Certification and waste minimization.

Alternative:

1. Less stringent: Kentucky could not have chosen not to adopt these additional requirements and still have remained equivalent to the federal program.

2. More stringent: It is unnecessary for Kentucky to be more stringent than the federal requirements because the information required is adequate to determine waste minimization efforts.

3. Present proposal: The present proposal was chosen because it was identical to the federal standards contained in 40 CFR 262.41 and necessary to maintain authorization to manage the RCRA hazardous waste program in Kentucky.

(b) Requirement for generator to keep returned manifest.

Alternatives:

1. Less stringent: Previously, the generator was not required to keep the returned copy of the hazardous waste manifest. This made it impossible to check if the waste was handled and manifested properly from point of generation to disposal.

2. More stringent: It is not necessary and impractical to be more stringent on the keeping of the manifest form.

3. Present proposal: The present proposal makes it possible to show written records demonstrating the proper handling of the waste from point of generation to disposal. This should ensure better protection of the environment.

(5) Identify any statute, administrative regulation or government policy which may be in conflict, overlapping, or duplication: None

(a) Necessity of proposed regulation if in conflict: Not applicable.

(b) If in conflict, was effort made to harmonize the proposed administrative regulation with conflicting provisions: Not applicable.

(6) Any additional information or comments: The impact of this regulation has not been analyzed for those requirements which are equivalent to those found in the corresponding federal regulation, 40 CFR 262.41. The impact of the federal program was analyzed in 50 FR 28702-28742, July 15, 1985. A copy of the July 15, 1985 federal register has been filed with the regulations compiler of the Legislative

Research Commission.

Tiering:
Was tiering applied? Yes. This regulation only applies to generators of hazardous waste.

NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION CABINET
Department for Environmental Protection
Division of Waste Management
(Proposed Amendment)

401 KAR 32:050. Special conditions.

RELATES TO: KRS 224.071, 224.830 through 224.877, 224.994
PURSUANT TO: KRS Chapter 13A, 224.017, 224.033, 224.864
NECESSITY AND FUNCTION: KRS 224.864 requires the cabinet to promgulate regulations to establish standards for the generation of hazardous waste. This chapter establishes standards applicable to generators of hazardous waste. This regulation establishes special conditions for generators who export or import hazardous waste. This regulation exempts farmers from certain requirements.

Section 1. International Shipments. (1) Any person who exports hazardous waste to a foreign country or imports hazardous waste from a foreign country into the United States must comply with the requirements of this regulation.
(2) When shipping hazardous waste outside the United States the generator must:
(a) Notify the cabinet and the U.S. Environmental Protection Agency in writing four (4) weeks before the initial shipment of hazardous waste to each country in each calendar year.
1. The waste must be identified by its hazardous waste identification number and its U.S. Department of Transportation shipping description;
2. The name and address of the foreign consignee must be included in this notice;
3. These notices must be sent to: Hazardous Waste Export, Division for Oceans and Regulatory Affairs (A-107), United States Environmental Protection Agency, Washington, D.C. 20460, and the Natural Resources and Environmental Protection Cabinet, Frankfort, Kentucky 40601.
(b) Require the foreign consignee confirm the delivery of the waste in the foreign country. A copy of the manifest signed by the foreign consignee may be used for this purpose;
(c) Meet the requirements under Section 2(1) of 401 KAR 32:020 for the manifest, except that:
1. In place of the name, address, and identification number of the designated facility, the name and address of the foreign consignee must be used; and
2. The generator must identify the point of departure from the United States through which the waste must travel before entering a foreign country.
(d) The generator may obtain the manifest form from any source.
(3) A generator must file an exception report, if:
(a) He has not received a copy of the manifest signed by the transporter stating the date and place of departure from the United States within forty-five (45) days from the date it was accepted by the initial transporter; or
(b) Within ninety (90) days from the date the waste was accepted by the initial transporter, the generator has not received written confirmation from the foreign consignee that the hazardous waste was received.
(4) Any person exporting hazardous waste identified or listed under 401 KAR Chapter 31 shall file with the cabient no later than March 1 of each year, a report summarizing the types, quantities, frequency, and ultimate destination of all such hazardous waste exported during the previous calendar year.
(5) [(4)] When importing hazardous waste, a person must meet all requirements of Section 2(1) of 401 KAR 32:020 for the manifest except that:
(a) In place of the generator's name, address and identification number, the name and address of the foreign generator and the importer's name, address and identification number must be used; and
(b) In place of the generator's signature on the certification statement, the U.S. importer or his agent must sign and date the certification and obtain the signature of the initial transporter.
(6) [(5)] A person who imports hazardous waste may obtain the manifest form from any source.

Section 2. Farmers. A farmer disposing of waste pesticides from his own use which are hazardous wastes is not required to comply with the standards in this chapter or other standards in 401 KAR Chapters 34, 35 and 38 for those wastes provided he triple rinses each emptied pesticide container in accordance with 401 KAR 31:010, Section 7, and disposes of the pesticide residues on his own farm in a manner consistent with the disposal instructions on the pesticide label.

CHARLOTTE E. BALDWIN, Secretary
APPROVED BY AGENCY: November 12, 1985
FILED WITH LRC: November 13, 1985 at 3 p.m.
PUBLIC HEARING SCHEDULED: A public hearing on this regulation will be held on December 30, 1985, at 1 p.m. EST, in the Capital Plaza Tower. Any persons interested in attending this hearing shall submit by December 26, 1985, a written statement of such interest to: J. Alex Barber, Director, Division of Waste Management, 18 Reilly Road, Frankfort, Kentucky 40601. If no statement of interest is received by close of business on December 26, 1985, the hearing on this regulation may be cancelled. Written comments may also be submitted to the address above. Written comments will be accepted until the end of the comment period, which will be close of business on December 30, 1985.

REGULATORY IMPACT ANALYSIS

Agency Contact Person: J. Alex Barber, Director
(1) Type and number of entities affected: The amendment to this regulation affects one hazardous waste generator who exports hazardous wastes.
(a) Direct and indirect costs or savings to those affected:
1. First year: The only cost to the affected entity is the indirect cost of summarizing the data annually.
2. Continuing costs or savings: The indirect cost mentioned in Note (1)(a)1 will be incurred

each year that the company exports hazardous waste.

3. Additional factors increasing or decreasing costs (note any effects upon competition): None

(b) Reporting and paperwork requirements: Generators of hazardous waste who export it to foreign countries must submit a report to the cabinet no later than March 1 of each year summarizing data pertaining to the previous year's exports.

(2) Effects on the promulgating administrative body:

(a) Direct and indirect costs or savings:

1. First year: None

2. Continuing costs or savings: None

3. Additional factors increasing or decreasing costs: None

(b) Reporting and paperwork requirements:

(3) Assessment of anticipated effect on state and local revenues: There will be no effect on state or local revenues from promulgation of this regulation.

(4) Assessment of alternative methods; reasons why alternatives were rejected: (a) The present proposal was adopted identical to the federal requirements found in 40 CFR 262.50. This was done to keep the Kentucky program equivalent to the federal program. Kentucky could not be less stringent than the federal program and it was felt to be unnecessary to be more stringent on this requirement.

(5) Identify any statute, administrative regulation or government policy which may be in conflict, overlapping, or duplication: None

(a) Necessity of proposed regulation if in conflict: Not applicable.

(b) If in conflict, was effort made to harmonize the proposed administrative regulation with conflicting provisions: Not applicable.

(6) Any additional information or comments: The impact of this regulation has not been analyzed for those requirements which are equivalent to those found in the corresponding federal regulation, 40 CFR 262.50. The impact of the federal program was analyzed in 50 FR 28740, July 15, 1985. A copy of the July 15, 1985 federal register has been filed with the regulations compiler of the Legislative Research Commission.

Tiering:
Was tiering applied? Yes. This amendment applies only to hazardous waste generators who export their waste to a foreign country.

NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION CABINET
Department for Environmental Protection
Division of Waste Management
(Proposed Amendment)

401 KAR 32:100. Appendix on hazardous waste manifest and instructions.

RELATES TO: KRS 224.033, 224.830 through 224.877, 224.994

PURSUANT TO: KRS Chapter 13A, 224.033, 224.864

NECESSITY AND FUNCTION: KRS 224.864 requires the cabinet to promulgate regulations to establish standards for the generation of hazardous wastes. This chapter establishes standards applicable to generators of hazardous waste. This regulation establishes a uniform hazardous waste manifest and the Kentucky instructions for each form.

Section 1. Applicability. This regulation prescribes the manifest forms and the instructions which are required by the cabinet in accordance with the provisions of 401 KAR 32:020 and 401 KAR 32:050. When a generator or a hazardous waste site or facility prints copies of these forms, the following two (2) sentences may be printed on the top of the first page of the manifest form:

THE INFORMATION IN THE SHADED AREAS - D, F, H, I AND K - IS REQUIRED BY KENTUCKY LAW.
IN THE EVENT OF A SPILL INSIDE KENTUCKY, CALL (502) 564-2380 WITHIN TWO (2) HOURS OF THE SPILL.

When a generator or a hazardous waste site or facility prints copies of these forms, the following sentence may be printed on the top of the continuation sheet(s):

THE INFORMATION IN THE SHADED AREAS - O, Q, R AND T - IS REQUIRED BY KENTUCKY LAW.

Section 2. Manifest Form. The first page of the manifest form shall be as contained in Appendix A of this regulation.

Section 3. Kentucky Instructions for First Page of the Manifest Form. Read all instructions before completing this form.

This form has been designed for use on a 12-pitch (elite) typewriter; a firm point pen may also be used - press down hard.

KENTUCKY REGULATIONS REQUIRE GENERATORS AND TRANSPORTERS OF HAZARDOUS WASTE AND OWNERS OR OPERATORS OF HAZARDOUS WASTE TREATMENT, STORAGE AND DISPOSAL FACILITIES TO USE THIS FIRST PAGE OF THE FORM AND, IF NECESSARY, THE CONTINUATION SHEET(S).

KENTUCKY REGULATIONS ALSO REQUIRE GENERATORS AND TRANSPORTERS OF HAZARDOUS WASTE AND OWNERS OR OPERATORS OF HAZARDOUS WASTE TREATMENT, STORAGE AND DISPOSAL FACILITIES TO COMPLETE THE FOLLOWING INFORMATION:

GENERATORS

Item 1. Generator's U.S. EPA ID Number - Manifest Document Number. Enter the generator's U.S. EPA twelve digit identification number and the unique five digit number assigned to this Manifest (e.g., 00001) by the generator.

Item 2. Page 1 of ____. Enter the total number of pages used to complete this Manifest, i.e., the first page plus the number of Continuation Sheets, if any.

Item 3. Generator's Name and Mailing Address. Enter the name and mailing address of the generator. The address should be the location that will manage the returned Manifest forms.

Item 4. Generator's Phone Number. Enter a telephone number where an authorized agent of the generator may be reached in the event of an emergency.

Item 5. Transporter 1 Company Name. Enter the company name of the first transporter who will transport the waste.

Item 6. U.S. EPA ID Number. Enter the U.S. EPA twelve digit identification number of the first transporter identified in Item 5.

Item D. Transporter's Phone. Enter the telephone number of the transporter identified in Item 5.

Item 7. Transporter 2 Company Name. If applicable, enter the company name of the second transporter who will transport the waste. If more than two transporters are used to transport the waste, use a Continuation Sheet(s) and list the transporters in the order they will be transporting the waste.

Item 8. U.S. EPA ID Number. If applicable, enter the U.S. EPA twelve digit identification number of the second transporter identified in Item 7.

Item F. Transporter's Phone. Enter the telephone number of the transporter identified in Item 7.

NOTE: If more than two transporters are used, enter each additional transporter's company name and U.S. EPA twelve digit identification number in Items 24-27 on the Continuation Sheet. Each Continuation Sheet has space to record two additional transporters. Every transporter used between the generator and the designated facility must be listed.

Item 9. Designated Facility Name and Site Address. Enter the company name and site address of the facility designated to receive the waste listed on this Manifest. The address must be the site address, which may differ from the company mailing address.

Item 10. U.S. EPA ID Number. Enter the U.S. EPA twelve digit identification number of the designated facility identified in Item 9.

Item H. Facility's Phone. Enter the telephone number of the facility identified in Item 9.

Item 11. U.S. DOT Description Including Proper Shipping Name, Hazard Class, and ID Number (UN/NA). Enter the U.S. DOT Proper Shipping Name, Hazard Class, and ID Number (UN/NA) for each waste as identified in 49 CFR Parts 171 through 177.

NOTE: If additional space is needed for waste descriptions, enter these additional descriptions in Item 28 on the Continuation Sheet.

Item 12. Containers (No. and Type). Enter the number of containers for each waste and the appropriate abbreviation from Table I (below) for the type of container.

Table I - Types of Containers

DM = Metal drums, barrels, kegs
DW = Wooden drums, barrels, kegs
DF = Fiberboard or plastic drums, barrels, kegs
TP = Tanks portable
TT = Cargo tanks (tank trucks)
TC = Tank cars
DT = Dump truck
CY = Cylinders
CM = Metal boxes, cartons, cases (including roll-offs)
CW = Wooden boxes, cartons, cases
CF = Fiber or plastic boxes, cartons, cases
BA = Burlap, cloth, paper or plastic bags

Item 13. Total Quantity. Enter the total quantity of waste described on each line.

Item 14. Unit (Wt./Vol.). Enter the appropriate abbreviation from Table II (below) for the unit of measure.

Table II - Units of Measure

G = Gallons (liquids only)
P = Pounds
T = Tons (2000 lbs)
Y = Cubic yards
L = Liters (liquids only)
K = Kilograms
M = Metric tons (1000 kg)
N = Cubic meters

Item I. Waste Number. Enter the EPA hazardous waste number for each waste.

Item K. Handling Codes for Waste Listed Above. Enter the appropriate handling code(s) for the wastes listed in Item 11. Table III contains the handling codes.

Table III - 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	T11 Molten salt destructor
T07 Rotary kiln incinerator	T12 Pyrolysis
T08 Fluidized bed incinerator	T13 Wet air oxidation
T09 Multiple hearth incinerator	T14 Calcination
T10 Infrared furnace incinerator	T15 Microwave discharge
	T16 Cement kiln
	T17 Lime kiln
	T18 Other (specify)

(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
	T32 Ozonation
T24 Chemical reduction	T33 Photolysis
T25 Chlorination	T34 Other (specify)
T26 Chlorinolysis	

(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 Trickling filter
T70 Anaerobic lagoon	T76 Waste stabilization pond
T71 Composting	
T72 Septic tank	T77 Other (specify)

3. Disposal

D80 Underground injection	D84 Surface impoundment (to be closed as a landfill)
D81 Landfill	
D82 Land treatment	D85 Other (specify)
D83 Ocean disposal	

Item 15. Special Handling Instructions and Additional Information. Generators may use this space to indicate special transportation, treatment, storage, or disposal information or Bill of Lading information. States may not require additional, new, or different information in this space. For international shipments, generators must enter in this space the point of departure (City and State) for those shipments destined for treatment, storage, or disposal outside the jurisdiction of the United States.

Item 16. Generator's Certification. The generator must read, sign (by hand), and date the certification statement. If a mode other than highway is used, the word "highway" should be lined out and the appropriate mode (rail, water, or air) inserted in the space below. If another mode in addition to the highway mode is used, enter the appropriate additional mode (e.g., and rail) in the space below. In signing the waste minimization certification statement, those generators who have not been exempted by statute or regulation from the duty to make a waste minimization certification under KRS Chapter 224 are also certifying that they have complied with the waste minimization requirements.

NOTE: All of the above information except the handwritten signature required in Item 16 may be preprinted.

TRANSPORTERS

Item 17. Transporter 1 Acknowledgement of Receipt of Materials. Enter the name of the person accepting the waste on behalf of the first transporter. That person must acknowledge acceptance of the waste described on the Manifest by signing and entering the date of receipt.

Item 18. Transporter 2 Acknowledgement of Receipt of Materials. Enter, if applicable, the name of the person accepting the waste on behalf of the second transporter. That person must acknowledge acceptance of the waste described on the Manifest by signing and entering the date of receipt.

NOTE: International Shipments - Transporter Responsibilities.

Exports - Transporters must sign and enter the date the waste left the United States in Item 15 on the first page of the manifest form.

Imports - Shipments of hazardous waste regulated by RCRA and transported into the United States from another country must upon entry be accompanied by the U.S. EPA Uniform Hazardous Waste Manifest. Transporters who transport hazardous waste into the United States from another country are responsible for completing the Manifest (Section 1(3) of 401 KAR 32:010).

OWNERS AND OPERATORS OF TREATMENT, STORAGE, OR DISPOSAL FACILITIES

Item 19. Discrepancy Indication Space. The authorized representative of the designated (or alternate) facility's owner or operator must note in this space any significant discrepancy between the waste described on the Manifest and waste actually received at the facility.

Owners and operators of facilities located in Kentucky who cannot resolve significant discrepancies within 15 days of receiving the waste must submit to the Cabinet (Division of Waste Management, 18 Reilly Road, Frankfort, Ky. 40601) a letter with a copy of the Manifest at issue describing the discrepancy and attempts to reconcile it (Section 3 of 401 KAR 34:050 and Section 3 of 401 KAR 35:050).

Owners and operators of facilities located outside of Kentucky who cannot resolve significant discrepancies must submit to their Regional Administrator (if the U.S. EPA administers the hazardous waste management program), or to their State agency (if the State administers the hazardous waste management program), a letter with a copy of the Manifest at issue describing the discrepancy and attempts to reconcile it.

Item 20. Facility Owner or Operator: Certification of Receipt of Hazardous Materials Covered by This Manifest Except as Noted in Item 19. Print or type the name of the person accepting the waste on behalf of the owner or operator of the facility. That person must acknowledge acceptance of the waste described on the Manifest by signing and entering the date of receipt.

SHADED AREAS

Kentucky requires generators to complete Items D, F, H, I and K as part of Kentucky's manifest reporting requirements.

Section 4. Continuation Sheet. When all the required information cannot be entered on the first page of the manifest form, the generator shall use one (1) or more continuation sheets. The continuation sheet(s) of the manifest form shall be as contained in Appendix B of this regulation.

Section 5. Instructions for the Continuation Sheet. Read all instructions before completing this form.

This form has been designed for use on a 12-pitch (elite) typewriter; a firm point pen may also be used - press down hard.

The form must be used as a continuation sheet to the first page of the manifest if:

- More than two transporters are to be used to transport the waste;
- More space is required for the U.S. DOT description and related information in Item 11 of the first page of the manifest form.

Kentucky regulations require generators and transporters of hazardous waste and owners or operators of hazardous waste treatment, storage, or disposal facilities to use the Uniform Hazardous Waste Manifest (first page) and, if necessary, this Continuation Sheet.

GENERATORS

Item 21. Generator's U.S. EPA ID Number - Manifest Document Number. Enter the generator's U.S. EPA twelve digit identification number and the unique five digit number assigned to this Manifest (e.g., 00001) as it appears in Item 1 on the first page of the Manifest.

Item 22. Page _____. Enter the page number of this Continuation Sheet.

Item 23. Generator's Name. Enter the generator's name as it appears in Item 3 on the first page of the Manifest.

Item 24. Transporter _____ Company Name. If additional transporters are used to transport the waste described on this Manifest, enter the company name of each additional transporter in the order in which they will transport the waste. Enter after the word "Transporter" the order of the transporter. For example, Transporter 3 Company Name. Each Continuation Sheet will record the names of two additional transporters.

Item 25. U.S. EPA ID Number. Enter the U.S. EPA twelve digit identification number of the transporter described in Item 24.

Item O. Transporter's Phone. Enter the telephone number of the transporter identified in Item 24.

Item 26. Transporter _____ Company Name. If additional transporters are used to transport the waste described on this Manifest, enter the company name of each additional transporter in the order in which they will transport the waste. Enter after the word "Transporter" the order of the transporter. For example, Transporter 4 Company Name. Each Continuation Sheet will record the names of two additional transporters.

Item 27. U.S. EPA ID Number. Enter the U.S. EPA twelve digit identification number of the transporter described in Item 26.

Item Q. Transporter's Phone. Enter the telephone number of the transporter identified in Item 26.

Item 28. U.S. DOT Description including Proper Shipping Name, Hazard Class, and ID Number (UN/NA). Refer to Item 11.

Item 29. Containers (No. and Type). Refer to Item 12.

Item 30. Total Quantity. Refer to Item 13.

Item 31. Unit (Wt./Vol.). Refer to Item 14.

Item R. Waste Number. Enter the EPA hazardous waste number for each waste.

Item T. Handling Codes for Waste Listed Above. Enter the appropriate handling code(s) for the wastes listed in Item 28. Table III under Item K contains the handling codes.

Item 32. Special Handling Instructions. Generators may use this space to indicate special transportation, treatment, storage, or disposal information or Bill of Lading information. States are not authorized to require additional, new or different information in this space.

TRANSPORTERS

Item 33. Transporter _____ Acknowlegement of Receipt of Materials. Enter the same number of the Transporter as identified in Item 24. Enter also the name of the person accepting the waste on behalf of the Transporter (Company Name) identified in Item 24. That person must acknowledge acceptance of the waste described on the Manifest by signing and entering the date of receipt.

Item 34. Transporter _____ Acknowledgement of Receipt of Materials. Enter the same number as identified in Item 26. Enter also the name of the person accepting the waste on behalf of the Transporter (Company Name) identified in Item 26. That person must acknowledge acceptance of the waste described on the Manifest by signing and entering the date of receipt.

OWNERS AND OPERATORS OF TREATMENT, STORAGE, OR DISPOSAL FACILITIES

Item 35. Discrepancy Indication Space. Refer to Item 19.

SHADED AREAS

Kentucky does require generators to complete Items O, Q, R and T as part of Kentucky's manifest reporting requirements.

(See Appendices on following pages)

APPENDIX A TO 401 KAR 32:100.
FIRST PAGE OF THE MANIFEST FORM

Please print or type. *(Form designed for use on elite (12-pitch) typewriter.)* *Form Approved. OMB No. 2000-0404. Expires 7-31-86*

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. | Manifest Document No. | 2. Page 1 of | Information in the shaded areas is not required by Federal law.

3. Generator's Name and Mailing Address

4. Generator's Phone ( )

5. Transporter 1 Company Name | 6. US EPA ID Number

7. Transporter 2 Company Name | 8. US EPA ID Number

9. Designated Facility Name and Site Address | 10. US EPA ID Number

11. US DOT Description *(Including Proper Shipping Name, Hazard Class, and ID Number)*	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a.					
b.					
c.					
d.					

J. Additional Descriptions for Materials Listed Above | K. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information

16. **GENERATOR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations.

Unless I am a small quantity generator who has been exempted by statute or regulation from the duty to make a waste minimization certification under Section 3002(b) of RCRA, I also certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and I have selected the method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment.

Printed/Typed Name | Signature | Month Day Year

GENERATOR

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name | Signature | Month Day Year

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name | Signature | Month Day Year

TRANSPORTER

19. Discrepancy Indication Space

20. Facility Owner or Operator Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19

Printed/Typed Name | Signature | Month Day Year

FACILITY

EPA Form 8700-22 (Rev. 4-85) Previous edition is obsolete

APPENDIX B TO 401 KAR 32:100
CONTINUATION SHEET(S) OF THE MANIFEST

THE INFORMATION IN THE SHADED AREAS – O,Q,R AND T – IS REQUIRED BY KENTUCKY LAW.

Please print or type (Form designed for use on elite (12-pitch) typewriter)

Form Approved OMB No 2000-0404 Expires 7-31-86

GENERATOR

UNIFORM HAZARDOUS WASTE MANIFEST *(Continuation Sheet)*	21. Generator's US EPA ID No.	Manifest Document No.	22. Page	Information in the shaded areas is not required by Federal law.
23. Generator's Name				
24. Transporter ____ Company Name	25. US EPA ID Number			
26. Transporter ____ Company Name	27. US EPA ID Number			

28. US DOT Description *(Including Proper Shipping Name, Hazard Class, and ID Number)*	29 Containers No.	Type	30 Total Quantity	31 Unit Wt./Vol.	
a.					
b.					
c.					
d.					
e.					
f.					
g.					
h.					
i.					

J. Additional Descriptions for Materials Listed Above	K. Handling Codes for Wastes Listed Above

32 Special Handling Instructions and Additional Information

TRANSPORTER

33 Transporter ____ Acknowledgement of Receipt of Materials — Date

Printed Typed Name | Signature

34 Transporter ____ Acknowledgement of Receipt of Materials — Date

Printed Typed Name | Signature

FACILITY

35 Discrepancy Indication Space

EPA Form 8700-22A (3-84)

CHARLOTTE E. BALDWIN, Secretary
APPROVED BY AGENCY: November 12, 1985
FILED WITH LRC: November 13, 1985 at 3 p.m.
PUBLIC HEARING SCHEDULED: A public hearing on this regulation will be held on December 30, 1985, at 1 p.m. EST, in the Capital Plaza Tower. Any persons interested in attending this hearing shall submit by December 26, 1985, a written statement of such interest to: J. Alex Barber, Director, Division of Waste Management, 18 Reilly Road, Frankfort, Kentucky 40601. If no statement of interest is received by close of business on December 26, 1985, the hearing on this regulation may be cancelled. Written comments may also be submitted to the address above. Written comments will be accepted until the end of the comment period, which will be close of business on December 30, 1985.

REGULATORY IMPACT ANALYSIS

Agency Contact Person: J. Alex Barber, Director
(1) Type and number of entities affected: The amendment to this regulation affects 282 generators of hazardous waste in Kentucky.
(a) Direct and indirect costs or savings to those affected:
1. First year: The proposed amendment to this regulation has not been analyzed by the cabinet in terms of direct or indirect cost effects on affected entities. This is due to the fact that this amendment is already found in federal regulations and generators will be required to comply whether or not it is adopted in Kentucky's regulations.
2. Continuing costs or savings: Not applicable
3. Additional factors increasing or decreasing costs (note any effects upon competition): Not applicable
(b) Reporting and paperwork requirements: None
(2) Effects on the promulgating administrative body:
(a) Direct and indirect costs or savings:
1. First year: See note (1)(a)1.
2. Continuing costs or savings: Not applicable
3. Additional factors increasing or decreasing costs: Not applicable
(b) Reporting and paperwork requirements:
(3) Assessment of anticipated effect on state and local revenues: There will be no effect on state or local revenues from promulgation of this regulation.
(4) Assessment of alternative methods; reasons why alternatives were rejected: (a) Waste minimization certification.
Alternative:
1. Less stringent: Kentucky is required to be identical to federal regulation on this point. Failure to do so could result in Kentucky losing authorization.
2. More stringent: Kentucky is required to be identical to federal manifest requirements. Failure to do so could result in Kentucky losing authorization.
3. Present proposal: The present proposal is identical to federal regulation as required to maintain authorization.
(5) Identify any statute, administrative regulation or government policy which may be in conflict, overlapping, or duplication: None
(a) Necessity of proposed regulation if in conflict: Not applicable.
(b) If in conflict, was effort made to harmonize the proposed administrative regulation with conflicting provisions: Not applicable.
(6) Any additional information or comments: The impact of this regulation has not been analyzed for those requirements which are equivalent to those found in the corresponding federal regulation, 40 CFR Appendix 262. The impact of the federal program was analyzed in 50 FR 28740-28741, July 15, 1985. A copy of the July 15, 1985 federal register has been filed with the regulations compiler of the Legislative Research Commission.

Tiering:
Was tiering applied? Yes. The amendment to this regulation applies to hazardous waste generators and does not affect transporters and owners of disposal facilities who also use the manifest.

NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION CABINET
Department for Environmental Protection
Division of Waste Management
(Proposed Amendment)

401 KAR 34:010. General provisions for facilities.

RELATES TO: KRS 224.033, 224.060, 224.071, 224.830 through 224.877, 224.994 [224.835, 224.842, 224.855, 224.860, 224.866]
PURSUANT TO: KRS Chapter 13A, 224.033, [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 purpose, scope and applicability of the standards in this chapter and the relationship to the interim status standards for 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.
(2) The standards in this chapter apply to owners and operators of all hazardous waste sites or facilities which treat, store, or dispose of hazardous waste, except as specifically provided otherwise in this chapter or in 401 KAR Chapter 31.
(3) The requirements of this chapter apply to a person disposing of hazardous waste by means of ocean disposal subject to a permit issued under the Marine Protection, Research, and Sanctuaries Act only to the extent they are included in a permit by rule granted to such a person under 401 KAR Chapter 38.
(4) The requirements of this chapter apply to 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 only to the extent they are required by Section 5 of 401 KAR 38:060.
(5) The requirements of this chapter apply to the owner or operator of a POTW which treats,

stores, or disposes of hazardous waste only to the extent they are included in a hazardous waste permit by rule granted to such a person under 401 KAR Chapter 38.

(6) The requirements of this chapter do not apply to:

(a) The owner or operator of a facility permitted by the cabinet to manage solid waste, if the only hazardous waste the facility treats, stores, or disposes of is excluded from regulation under Section 5 of 401 KAR 31:010.

(b) The owner or operator of a facility managing recyclable materials described in Section 6(1)(b) and (c) of 401 KAR 31:010 (except to the extent that requirements of this chapter are referred to in 401 KAR Chapter 36) [The owner or operator of a facility which treats or stores hazardous waste, which treatment or storage meets the criteria in 401 KAR 31:010, Section 6(1) except to the extent that 401 KAR 31:010, Section 6(2) provides otherwise];

(c) A generator accumulating waste on-site in compliance with Section 5 of 401 KAR 32:030;

(d) A farmer disposing of waste pesticides from his own use in compliance with Section 2 of 401 KAR 32:050;

(e) The owner or operator of a totally enclosed treatment facility, as defined in 401 KAR 30:010;

(f) The owner or operator of an elementary neutralization unit or a wastewater treatment unit as defined in 401 KAR 30:010;

(g)1. Except as provided in subparagraph 2 of this paragraph, a person engaged in treatment or containment activities during immediate response to any of the following situations:

a. A discharge of hazardous waste;

b. An imminent and substantial threat of a discharge of hazardous waste; or

c. A discharge of a material which, when discharged, becomes a hazardous waste.

2. An owner or operator of a facility otherwise regulated by this chapter must comply with all applicable requirements of 401 KAR 34:030 and 401 KAR 34:040.

3. Any person who is covered by subparagraph 1 of this paragraph and 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 and 401 KAR Chapter 38 for those activities. [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 34:030 and 34:040 are applicable to owners and operators of treatment, storage and disposal facilities otherwise subject to this regulation;]

(h) A transporter storing manifested shipments of hazardous waste in containers meeting the requirements of Section 1 of 401 KAR 34:030 at a transfer facility for a period of ten (10) days or less; or

(i) The addition of absorbent material to waste in a container or the addition of waste to absorbent material in a container, provided that these actions occur at the time waste is first placed in the container; and Section 2 of 401 KAR 34:020, and Sections 2 and 3 of 401 KAR 34:180 are complied with.

Section 2. Relationship to Interim Status Standards. A facility owner or operator who has fully complied with the requirements for interim status, as defined in 401 KAR 30:010 and is regulated under 401 KAR 38:020, must comply with the regulations specified in 401 KAR Chapter 35 in lieu of this chapter until final administrative disposition of his permit application is made.

Section 3. Imminent Hazard Action. Notwithstanding any other provisions of these regulations, enforcement actions may be brought pursuant to KRS 224.071.

CHARLOTTE E. BALDWIN, Secretary

APPROVED BY AGENCY: November 12, 1985

FILED WITH LRC: November 13, 1985 at 3 p.m.

PUBLIC HEARING SCHEDULED: A public hearing on this regulation will be held on December 30, 1985, at 1 p.m. EST, in the Capital Plaza Tower. Any persons interested in attending this hearing shall submit by December 26, 1985, a written statement of such interest to: J. Alex Barber, Director, Division of Waste Management, 18 Reilly Road, Frankfort, Kentucky 40601. If no statement of interest is received by close of business on December 26, 1985, the hearing on this regulation may be cancelled. Written comments may also be submitted to the address above. Written comments will be accepted until the end of the comment period, which will be close of business on December 30, 1985.

REGULATORY IMPACT ANALYSIS

Agency Contact Person: J. Alex Barber, Director

(1) Type and number of entities affected: There are 90 hazardous waste facilities in Kentucky which may be affected by the proposed amendments to this regulation.

(a) Direct and indirect costs or savings to those affected:

1. First year: None. See note in item (6) Any Additional Information or Comments.

2. Continuing costs or savings: None. See note in item (6) Any Additional Information or Comments.

3. Additional factors increasing or decreasing costs (note any effects upon competition): None. See note in item (6) Any Additional Information or Comments.

(b) Reporting and paperwork requirements: None. See note in item (6) Any Additional Information or Comments.

(2) Effects on the promulgating administrative body:

(a) Direct and indirect costs or savings:

1. First year: None. The changes to this regulation will not increase or decrease the workload of the promulgating agency.

2. Continuing costs or savings: None. See note in (2)(a)1 above.

3. Additional factors increasing or decreasing costs: None. See note in (2)(a)1 above.

(b) Reporting and paperwork requirements:

(3) Assessment of anticipated effect on state and local revenues: There will be no effect on state or local revenues from promulgation of this regulation.

(4) Assessment of alternative methods; reasons why alternatives were rejected:

(a) The proposed amendments adopt requirements for activities to control a spill and recycling activities which are identical to those

promulgated by the U.S. Environmental Protection Agency on January 19, 1983 and January 4, 1985.

Alternative:

1. Less stringent: The cabinet could have chosen to be less stringent by not adopting the federal provisions. However, this would have afforded less protection to Kentucky's public health and environment than that provided by the federal program.

2. More stringent: The cabinet could have chosen to adopt provisions which are more stringent than the federal requirements. However, the current proposal is adequate to protect public health and the environment.

3. Present proposal: The present proposal adopts the federal amendments made to 40 CFR 264.1 on January 19, 1983 and January 4, 1985 verbatim.

(5) Identify any statute, administrative regulation or government policy which may be in conflict, overlapping, or duplication: None

(a) Necessity of proposed regulation if in conflict: Not applicable.

(b) If in conflict, was effort made to harmonize the proposed administrative regulation with conflicting provisions: Not applicable.

(6) Any additional information or comments: The impact of this regulation has not been analyzed for those requirements which are equivalent to those found in the corresponding federal regulation, 40 CFR 264.1. The impact of the federal program was analyzed in 48 FR 2514-2516, January 19, 1983 and 50 FR 614-668, January 4, 1985. A copy of the January 19, 1983 and January 4, 1985 federal registers have been filed with the regulations compiler of the Legislative Research Commission.

Tiering:
Was tiering applied? Yes. This regulation applies only to hazardous waste facilities

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, 224.060, 224.071, 224.830 through 224.877, 224.994 [224.835, 224.842, 224.855, 224.860, 224.866]

PURSUANT TO: KRS Chapter 13A, 224.033, [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 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 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 one (1) of the sampling methods described in 401 KAR 31:100.

(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 9 of 401 KAR 34:230, 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 identified, 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 chapter.

(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 in a 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. Facilities that have closed and removed all hazardous waste, waste constituents, contaminated soil, debris or other material contaminated with hazardous constituents, are not required to protect the closed portion of the facility from washout of waste or inundation by waters of the 100-year flood. Prevention of washout and protection from inundation shall be accomplished by one (1) of the following:

1. Using a structure or device such as a dike or floodwall which has been designed:

a. To provide adequate freeboard to prevent overtopping of the structure during a 100-year flood due to wind and wave action;

b. To provide sufficient structural integrity to prevent massive failure due to the force and erosive tendencies of the 100-year floodwaters;

c. To accommodate such other characteristics of the facility's location, such as special geologic or hydrological features, as necessary to accomplish the requirements of this subsection.

2. Providing procedures which 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) No hazardous waste site or facility shall restrict the flow of the 100-year flood or reduce the temporary water storage capacity of the 100-year floodplain so as to pose a hazard to human life, wildlife or land or water resources.

(e) 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 or closed 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.

(3) Salt dome formations, salt bed formations, underground mines and caves. The placement of any noncontainerized or bulk liquid hazardous waste in any salt dome formation, salt bed formation, underground mine or cave is prohibited.

CHARLOTTE E. BALDWIN, Secretary

APPROVED BY AGENCY: November 12, 1985

FILED WITH LRC: November 13, 1985 at 3 p.m.

PUBLIC HEARING SCHEDULED: A public hearing on this regulation will be held on December 30, 1985, at 1 p.m. EST, in the Capital Plaza Tower. Any persons interested in attending this hearing shall submit by December 26, 1985, a written statement of such interest to: J. Alex Barber, Director, Division of Waste Management, 18 Reilly Road, Frankfort, Kentucky 40601. If no statement of interest is received by close of business on December 26, 1985, the hearing on this regulation may be cancelled. Written comments may also be submitted to the address above. Written comments will be accepted until the end of the comment period, which will be close of business on December 30, 1985.

REGULATORY IMPACT ANALYSIS

Agency Contact Person: J. Alex Barber, Director

(1) Type and number of entities affected: There are approximately 90 hazardous waste management facilities in Kentucky who may be affected by the new requirements.

(a) Direct and indirect costs or savings to those affected:

1. First year: None. A technical clarification has been inserted for the requirements to prevent washout of waste for facilities in the 100-year floodplain. However, this is an existing requirement. In addition, see note in item (6) Any Additional Information or Comments.

2. Continuing costs or savings: None. See note in (1)(a)1.

3. Additional factors increasing or decreasing costs (note any effects upon competition): None. See note in (1)(a)1.

(b) Reporting and paperwork requirements: Waste analysis requirements have been added for landfills. See note in item (6) Any Additional Information or Comments.

(2) Effects on the promulgating administrative body:

(a) Direct and indirect costs or savings:

1. First year: None. The amendments made to this regulation will not affect the activities performed by the promulgating administrative body for compliance monitoring.

2. Continuing costs or savings: None. See note in (2)(a)1 above.

3. Additional factors increasing or decreasing costs: None. See note in (2)(a)1 above.

(b) Reporting and paperwork requirements:

(3) Assessment of anticipated effect on state and local revenues: There will be no effect on state or local revenues from promulgation of this regulation.

(4) Assessment of alternative methods; reasons why alternatives were rejected:

(a) Provisions for waste analysis by landfills and a ban on placement of hazardous wastes in salt domes, underground mines, and caves have been adopted identical to provisions promulgated by the U.S. EPA on April 30, 1984 and July 15, 1985.

Alternative:

1. Less stringent: The cabinet could have chosen to be less stringent by not incorporating the federal provisions. However, this would have afforded Kentucky's public health and environment less protection than that provided under the national program.

2. More stringent: The cabinet could have

chosen to be more stringent by requiring additional provisions for waste analysis and location criteria. However, the present proposal is adequate to protect public health and the environment.

3. Present proposal: The present proposal adopts the federal standards for waste analysis at landfills and prohibits placement of hazardous waste in salt domes, underground caves, and mines.

(b) Technical amendments have been made to clarify that the provisions regarding washout of wastes apply to closed portions of facilities where waste remains after closure.

Alternatives:

1. Less stringent: The cabinet could have chosen to be less stringent by not adopting the clarifying information. However, this would have been inconsistent with the intent of the existing requirements to prevent floodwaters from washing out hazardous constituents into the environment.

2. More stringent: The cabinet could have chosen to require protection from washout at facilities when waste was removed at closure. However, this would have required protection that exceeds requirements for other land uses in floodprone areas, and this would have been unnecessary to protect public health and the environment.

3. Present proposal: The present proposal requires protection of closed portions of facilities where waste remains after closure from washout of waste and inundation by water of the 100-year flood. (5) Identify any statute, administrative regulation or government policy which may be in conflict, overlapping, or duplication: None

(a) Necessity of proposed regulation if in conflict: Not applicable.

(b) If in conflict, was effort made to armonize the proposed administrative regulation with conflicting provisions: Not applicable.

(6) Any additional information or comments: The impact of this regulation has not been analyzed for those requirements which are equivalent to those found in the corresponding federal regulation, 40 CFR 264.13 and 264.18. The impact of the federal program was analyzed in 50 FR 18370-18375, 28702-28755, April 30, 1985, and July 15, 1985. A copy of the April 30, 1985 and July 15, 1985, federal registers have been filed with the regulations compiler of the Legislative Research Commission.

Tiering:
Was tiering applied? Yes. This regulation applies only to hazardous waste management facilities.

NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION CABINET
Department for Environmental Protection
Division of Waste Management
(Proposed Amendment)

401 KAR 34:030. Preparedness and prevention.

RELATES TO: KRS 224.033, 224.060, 224.071, 224.830 through 224.877, 224.994 [224.835, 224.842, 224.855, 224.860, 224.866]
PURSUANT TO: KRS Chapter 13A, 224.033, [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 procedures and standards for preparedness and prevention of hazardous waste releases.

Section 1. Applicability. These regulations apply to owners and operators of all hazardous waste sites or facilities, except as Section 1 of 401 KAR 34:010 provides otherwise.

Section 2. Design and Operation of Facility. Facilities must be designed, constructed, maintained, and operated to minimize the possibility of a fire, explosion, or any unplanned sudden or non-sudden release of hazardous waste or hazardous waste constituents to air, soil, or surface water or ground water which could threaten human health or the environment.

Section 3. Required Equipment. All facilities must be equipped with the following, unless it can be demonstrated to the cabinet that none of the hazards posed by waste handled at the 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 the cabinet has ruled that 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 the cabinet has ruled that 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 it can be demonstrated to the cabinet that 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 any 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.

CHARLOTTE E. BALDWIN, Secretary

APPROVED BY AGENCY: November 12, 1985

FILED WITH LRC: November 13, 1985 at 3 p.m.

PUBLIC HEARING SCHEDULED: A public hearing on this regulation will be held on December 30, 1985, at 1 p.m. EST, in the Capital Plaza Tower. Any persons interested in attending this hearing shall submit by December 26, 1985, a written statement of such interest to: J. Alex Barber, Director, Division of Waste Management, 18 Reilly Road, Frankfort, Kentucky 40601. If no statement of interest is received by close of business on December 26, 1985, the hearing on this regulation may be cancelled. Written comments may also be submitted to the address above. Written comments will be accepted until the end of the comment period, which will be close of business on December 30, 1985.

REGULATORY IMPACT ANALYSIS

Agency Contact Person: J. Alex Barber, Director

(1) Type and number of entities affected: This regulation affects all hazardous waste management facilities in Kentucky. Currently there are 52 storage facilities and 28 treatment facilities in Kentucky.

(a) Direct and indirect costs or savings to those affected:

1. First year: None. The amendments being made will make this regulation consistent with the requirements in 401 KAR Chapter 34 regarding ground water protection.

2. Continuing costs or savings: None. See note in (1)(a)1.

3. Additional factors increasing or decreasing costs (note any effects upon competition): None. See note in (1)(a)1.

(b) Reporting and paperwork requirements: None.

(2) Effects on the promulgating administrative body:

(a) Direct and indirect costs or savings:

1. First year: None. The proposed requirements in this regulation are already required to be addressed in accordance with 401 KAR Chapters 34 and 38.

2. Continuing costs or savings: None. See note in (2)(a)1 above.

3. Additional factors increasing or decreasing costs: None. See note in (2)(a)1 above.

(b) Reporting and paperwork requirements:

(3) Assessment of anticipated effect on state and local revenues: There will be no effect on state or local revenues from promulgation of this regulation.

(4) Assessment of alternative methods; reasons why alternatives were rejected:

(a) The proposal requires that ground water (in addition to surface water) be protected from unplanned sudden or non-sudden releases of hazardous wastes or hazardous waste constituents.

Alternative:

1. Less stringent: The cabinet could have chosen not to amend this regulation and protect only surface waters from releases. However, this would not have been consistent with the requirements contained in 401 KAR Chapters 34 and 38 which require protection of the state's ground water.

2. More stringent: The cabinet could not have required more protection than that afforded by the proposal.

3. Present proposal: The present proposal requires design, construction, maintenance, and operation of the facility to prevent releases of hazardous waste or hazardous waste constituents to both ground water and surface water. The cabinet feels that this proposal meets the intentions of KRS 224.060.

(5) Identify any statute, administrative regulation or government policy which may be in conflict, overlapping, or duplication: None

(a) Necessity of proposed regulation if in conflict: Not applicable.

(b) If in conflict, was effort made to armonize the proposed administrative regulation with conflicting provisions: Not applicable.

(6) Any additional information or comments: None

Tiering:

Was tiering applied? Yes. This regulation applies only to hazardous waste facilities.

NATURAL RESOURCES AND
ENVIRONMENTAL PROTECTION CABINET
Department for Environmental Protection
Division of Waste Management
(Proposed Amendment)

401 KAR 34:040. Contingency plan and emergency procedures.

RELATES TO: KRS 224.033, 224.060, 224.071, 224.830 through 224.877, 224.994 [224.835, 224.842, 224.855, 224.860, 224.866]
PURSUANT TO: KRS Chapter 13A, 224.033, [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 contingency planning and emergency procedures for facilities.

Section 1. Applicability. This regulation applies to owners and operators of all hazardous waste sites or facilities, except as Section 1 of 401 KAR 34:010 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 non-sudden release of hazardous waste or hazardous waste constituents to air, soil, or surface water or ground 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 non-sudden release of hazardous waste or hazardous waste constituents to air, soil, or surface water or ground 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 112 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 34:030.
(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. For new facilities, this information must be supplied to the cabinet prior to the issuance of the operating permit rather than at the time of permit application.
(5) The plan must include a list of all emergency equipment at the facility (such as fire extinguishing systems, spill control equipment, communications and 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) The facility permit is revised;
(2) The plan fails in an emergency;
(3) The facility changes (e.g., 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 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 reporter;
2. Name and address of 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 ground water, or 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 (8) 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.

CHARLOTTE E. BALDWIN, Secretary

APPROVED BY AGENCY: November 12, 1985

FILED WITH LRC: November 13, 1985 at 3 p.m.

PUBLIC HEARING SCHEDULED: A public hearing on this regulation will be held on December 30, 1985, at 1 p.m. EST, in the Capital Plaza Tower. Any persons interested in attending this hearing shall submit by December 26, 1985, a written statement of such interest to: J. Alex Barber, Director, Division of Waste Management, 18 Reilly Road, Frankfort, Kentucky 40601. If no statement of interest is received by close of business on December 26, 1985, the hearing on this regulation may be cancelled. Written comments may also be submitted to the address above. Written comments will be accepted until the end of the comment period, which will be close of business on December 30, 1985.

REGULATORY IMPACT ANALYSIS

Agency Contact Person: J. Alex Barber, Director

(1) Type and number of entities affected:

(a) Direct and indirect costs or savings to those affected:

1. First year: Minimal. In accordance with 401 KAR 34:060, facilities are required to protect ground water from hazardous waste releases. The amendments made to this regulation will require consideration of releases to the ground water as part of the contingency (emergency) procedures. The costs of including ground water in the contingency plan will be outweighed by the savings accrued from prompt cleanup of an emergency incident which includes a release to ground water.

2. Continuing costs or savings: Continued savings will be realized by prompt cleanup of ground water releases since cleanup costs rise disproportionately as ground water contamination increases.

3. Additional factors increasing or decreasing costs (note any effects upon competition): None. See notes in (1)(a)1 and 2 above.

(b) Reporting and paperwork requirements: Facilities will be required to include ground water protection measures in the contingency plan.

(2) Effects on the promulgating administrative body:

(a) Direct and indirect costs or savings:

1. First year: None. The additional requirements will not require a significant increase in review time or compliance monitoring by the promulgating administrative body.

2. Continuing costs or savings: None. See note in (2)(a)1 above.

3. Additional factors increasing or decreasing costs: None. See note in (2)(a)1 above.

(b) Reporting and paperwork requirements:

(3) Assessment of anticipated effect on state and local revenues: There will be no effect on state or local revenues from promulgation of this regulation.

(4) Assessment of alternative methods; reasons why alternatives were rejected:

(a) The proposed amendments require ground water protection to be addressed in the contingency plan and emergency procedures at hazardous waste management facilities.

Alternative:

1. Less stringent: The cabinet could have chosen to be less stringent by not requiring the contingency plan and emergency procedures to address ground water. However, this would have been inconsistent with the provisions in KRS 224.060 to protect all the waters of the Commonwealth. In addition, the cabinet believes it is prudent to address ground water protection as part of the contingency plan and it is consistent with the intent of 401 KAR 34:060 to protect ground water.

2. More stringent: The cabinet could have chosen to require additional contingency plan requirements. However, the present proposal is adequate to protect public health and the environment.

3. Present proposal: The cabinet chose to require facilities to address ground water protection as part of the contingency plan and emergency procedures.

(5) Identify any statute, administrative regulation or government policy which may be in conflict, overlapping, or duplication: None

(a) Necessity of proposed regulation if in conflict: Not applicable.

(b) If in conflict, was effort made to armonize the proposed administrative regulation with conflicting provisions: Not applicable.

(6) Any additional information or comments: None.

Tiering:
Was tiering applied? Yes. This regulation applies only to hazardous waste management facilities.

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, 224.060, 224.071, 224.830 through 224.877, 224.994 [224.835, 224.842, 224.855, 224.860, 224.866]

PURSUANT TO: KRS Chapter 13A, 224.033, [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. This regulation applies 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, 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 after 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, Section 9 of 401 KAR 34:230, 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;

(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; and

(i) A certification by the permittee no less often than annually, that the permittee has a program in place to reduce the volume and toxicity of hazardous waste that he generates to the degree determined by the permittee to be economically practicable and the proposed method of treatment, storage or disposal is that practicable method currently available to the permittee which minimizes the present and future threat to human health and environment.

(j) [(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 at a minimum 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 name and 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) Information on transportation, the use of the manifest, and other information from the manifest, as applicable; and [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;

(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.

CHARLOTTE E. BALDWIN, Secretary

APPROVED BY AGENCY: November 12, 1985

FILED WITH LRC: November 13, 1985 at 3 p.m.

PUBLIC HEARING SCHEDULED: A public hearing on this regulation will be held on December 30, 1985, at 1 p.m. EST, in the Capital Plaza Tower. Any persons interested in attending this hearing shall submit by December 26, 1985, a written statement of such interest to: J. Alex Barber, Director, Division of Waste Management, 18 Reilly Road, Frankfort, Kentucky 40601. If no statement of interest is received by close of business on December 26, 1985, the hearing on this regulation may be cancelled. Written comments may also be submitted to the address above. Written comments will be accepted until the end of the comment period, which will be close of business on December 30, 1985.

REGULATORY IMPACT ANALYSIS

Agency Contact Person: J. Alex Barber, Director

(1) Type and number of entities affected: The proposed amendments to this regulation will affect all owners or operators of hazardous waste treatment, storage and disposal facilities in Kentucky. There are approximately 90 facilities in Kentucky.

(a) Direct and indirect costs or savings to those affected:

1. First year: Negligible. The only costs or savings will be realized from the changes made to the Annual Report requirements. Small costs will be incurred from requiring facilities to report additional data from the manifest forms. However, a small savings will be realized from deletion of requirements to report closure and post-closure cost estimates. Also, see note in item (6) Any Additional Information or Comments.

2. Continuing costs or savings: Negligible. See note in (1)(a)1.

3. Additional factors increasing or decreasing costs (note any effects upon competition): Negligible. See note in (1)(a)1.

(b) Reporting and paperwork requirements: Requirements have been added to the Annual Report which will mean that facilities will need to compile and report data from the manifest. However, the additional requirements are not anticipated to be burdensome or time consuming to prepare.

(2) Effects on the promulgating administrative body:

(a) Direct and indirect costs or savings:

1. First year: None. The amendments to this regulation alter existing requirements for facilities but will not significantly change the amount of time expended for review or compliance monitoring by the promulgating agency.

2. Continuing costs or savings: None. See note in (2)(a)1 above.

3. Additional factors increasing or decreasing costs: None. See note in (2)(a)1 above.

(b) Reporting and paperwork requirements:

(3) Assessment of anticipated effect on state and local revenues: There will be no effect on state or local revenues from promulgation of this regulation.

(4) Assessment of alternative methods; reasons why alternatives were rejected:

(a) Provisions for the operating record were adopted identical to those provisions promulgated by the U.S. EPA on April 30, 1985, and July 15, 1985.

Alternative:

1. Less stringent: The cabinet could have chosen to be less stringent by not adopting the federal provisions. However, this would have afforded Kentucky's public health and environment less protection than that afforded by the national program.

2. More stringent: The cabinet could have chosen to be more stringent by requiring additional operating record provisions. However, the present proposal is adequate to protect public health and the environment.

3. Present proposal: The present proposal adopts the federal requirements for the operating record as promulgated on April 30, 1985, and July 15, 1985.

(b) The cabinet proposes to delete information on closure and post-closure cost estimates from the Annual Report and to add information from the manifest forms collected by a facility.

Alternatives:

1. Less stringent: The cabinet could have been less stringent by not requiring additional information from the manifest to be reported on the Annual Report. However, the cabinet felt that the additional information was necessary to adequately compile the information required by KRS 224.033(24).

2. More stringent: The cabinet could have chosen to be more stringent by requiring more information to be submitted on the Annual Report and by retaining the information on closure and post-closure cost estimates. However, the cabinet felt that additional information would be unnecessary and burdensome to the regulated

community, and that submittal of the closure and post-closure cost estimates was duplicative.

3. Present proposal: The present proposal requires information from the manifest to be submitted on the Annual Report and deletes information on closure and post-closure cost estimates.

(5) Identify any statute, administrative regulation or government policy which may be in conflict, overlapping, or duplication: None

(a) Necessity of proposed regulation if in conflict: Not applicable.

(b) If in conflict, was effort made to armonize the proposed administrative regulation with conflicting provisions: Not applicable.

(6) Any additional information or comments: The impact of this regulation has not been analyzed for those requirements which are equivalent to those found in the corresponding federal regulation, 40 CFR 264.73. The impact of the federal program was analyzed in 50 FR 18370-18375, 28702-28755, April 30, 1985 and July 15, 1985. A copy of the April 30, 1985 and July 15, 1985 federal registers have been filed with the regulations compiler of the Legislative Research Commission.

Tiering:
Was tiering applied? Yes. This regulation applies only to hazardous waste management facilities.

NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION CABINET
Department for Environmental Protection
Division of Waste Management
(Proposed Amendment)

401 KAR 34:060. Ground water protection.

RELATES TO: KRS 224.033, 224.060, 224.071, 224.830 through 224.877, 224.994 [224.842, 224.855, 224.860, 224.866]

PURSUANT TO: KRS Chapter 13A, 224.033, [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 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 ground water protection standards for new hazardous waste sites or facilities.

Section 1. Applicability. (1)(a) 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 paragraph (b) of this subsection [this regulation] for all wastes (or constituents thereof) contained in [any such] waste management units at the facility regardless of the time at which waste was placed in such units [that receives hazardous waste after January 26, 1983 (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].

(b) All waste management units must comply with the requirements in Section 12 of this regulation. A surface impoundment, waste pile, land treatment unit or landfill that receives hazardous waste after July 26, 1982 (hereinafter referred to as a "regulated unit") must comply with the requirements of Sections 2 through 11 of this regulation in lieu of Section 12 of this regulation for purposes of detecting, characterizing and responding to releases to the uppermost aquifer. The financial responsibility requirements of Section 12 of this regulation apply to regulated units.

(2) The owner or operator's regulated unit or units are [is] not subject to [the requirements of this] regulation for releases into the uppermost aquifer under this regulation if:

(a) The owner or operator [He] is exempted under Section 1 of 401 KAR 34:010; or

(b) He [designs and] operates a unit which the cabinet finds:

1. Is an engineered structure;

2. Does not receive or contain liquid waste or wastes containing free liquids;

3. Is designed and operated to exclude liquid, precipitation, and other run-on and run-off;

4. Has both inner and outer layers of containment enclosing the waste;

5. Has a leak detection system built into each containment layer;

6. The owner or operator will provide continuing operation and maintenance of these leak detection systems during the active life of the unit and the closure and post-closure care periods; and

7. To a reasonable degree of certainty, will not allow hazardous constituents to migrate beyond the outer containment layer prior to the end of the post-closure care period. [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 401 KAR 34:220, Section 8(4) that the treatment zone of a land treatment unit that qualifies as a regulated unit does not contain levels of hazardous constituents that are above background levels of those constituents by an amount that is statistically significant, and if an unsaturated zone monitoring program meeting the requirements of 401 KAR 34:220, Section 6, has not shown a statistically significant increase in hazardous constituents below the treatment zone during the operating life of the unit. An exemption under this subsection can only relieve an owner or operator of responsibility to meet the requirements of this regulation during the post-closure care period; or [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.]

(d) The cabinet finds 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 401 KAR 34:070, Section 7. 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 paragraph on assumptions that maximize the rate of liquid migration; or

(e) He designs and operates a pile in compliance with 401 KAR 34:210, Section 1(3).

(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, contaminated 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 regulation 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 ground water 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 ground water 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. Ground water 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 ground water 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 ground water protection standard in the facility permit.

Section 4. Hazardous Constituents. (1) The cabinet will specify in the facility permit the hazardous constituents to which the ground water protection standard of Section 3 of this regulation applies. Hazardous constituents are constituents identified in 401 KAR 31:170 that have been detected in ground water 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, unless the secretary has excluded them under subsection (2) of this section.

(2) The secretary will exclude a 401 KAR 31:170 constituent from the list of hazardous constituents specified in the facility permit if he finds that the constituent is not capable of posing a substantial present or potential hazard to human health or the environment. In deciding whether to grant an exemption, the secretary will consider the following:

(a) Potential adverse effects on ground water quality, considering:

1. The physical and chemical characteristics of the waste in the regulated unit, including its potential for migration;

2. The hydrogeological characteristics of the facility and surrounding land;

3. The quantity of ground water and the direction of ground water flow;

4. The proximity and withdrawal rates of ground water users;

5. The current and future uses of ground water in the area;

6. The existing quality of ground water, including other sources of contamination and their cumulative impact on the ground water quality;

7. The potential for health risks caused by human exposure to waste constituents;

8. The potential damage to wildlife, crops, vegetation, and physical structures caused by exposure to waste constituents;

9. The persistence and permanence of the potential adverse effects; and

(b) Potential adverse effects of hydraulically connected surface water quality, considering:

1. The volume and physical and chemical characteristics of the waste in the regulated unit;

2. The hydrogeological characteristics of the facility and surrounding land;

3. The quantity and quality of ground water,

and the direction of ground water flow;
4. The patterns of rainfall in the region;
5. The proximity of the regulated unit to surface waters;
6. The current and future uses of surface waters in the area and any water quality standards established for those surface waters;
7. The existing quality of surface water, including other sources of contamination and the cumulative impact on surface water quality;
8. The potential for health risks caused by human exposure to waste constituents;
9. The potential damage to wildlife, crops, vegetation, and physical structures caused by exposure to waste constituents; and
10. The persistence and permanence of the potential adverse effects.
(3) In making any determination under subsection (2) of this section about the use of ground water in the area around the facility, the secretary will consider any identification of underground sources of drinking water and exempted aquifers made under 40 CFR 144.7 or as designated by the secretary.

Section 5. Concentration Limits. (1) The cabinet will specify in the facility permit concentration limits in the ground water for hazardous constituents established under Section 4 of this regulation. The concentration of a hazardous constituent:
(a) Must not exceed the background level of that constituent in the ground water at the time that limit is specified in the permit; or
(b) For any of the constituents listed in Table I, must not exceed the respective value given in that Table if the background level of the constituent is below the value given in Table I; or
(c) Must not exceed an alternate limit established by the secretary under subsection (2) of this section.
(2) The secretary will establish an alternate concentration limit for a hazardous constituent if he finds that the constituent will not pose a substantial present or potential hazard to human health or the environment as long as the alternate concentration limit is not exceeded. In establishing alternate concentration limts, the secretary will consider the following factors:
(a) Potential adverse effects on grounwater quality, considering:

TABLE I

MAXIMUM CONCENTRATION OF CONSTITUENTS FOR GROUNDWATER PROTECTION

Constituent	Maximum concentration	
Arsenic	0.05	mg/l
Barium	1.0	mg/l
Cadmium	0.01	mg/l
Chromium	0.05	mg/l
Lead	0.05	mg/l
Mercury	0.002	mg/l
Selenium	0.01	mg/l
Silver	0.05	mg/l
Endrin (1,2,3,4,10,10-hexachloro-1,7-epoxy-1,4,4a,5,6,7,8,9a-octahydro-1,4-endo, endo-5,8-dimethanonaphthalene)	0.0002	mg/l
Lindane (1,2,3,4,5,6,-hexachloro-cyclohexane, gamma isomer)	0.004	mg/l
Methoxychlor (1,1,1-Trichloro-2, 2,-bis (p-methoxyphenyl-ethane))	0.1	mg/l
Toxaphene ($C_{10}H_{10}Cl_8$, Technical chlorinated camphene, 67-69 percent chlorine)	0.005	mg/l
2,4-D(2,4-Dichlorophenoxyacetic acid)	0.1	mg/l
2,4,5-TP Silvex (2,4,5-Trichlorophenoxypropionic acid)	0.01	mg/l

1. The physical and chemical characteristics of the waste in the regulated unit, including its potential for migration;
2. The hydrogeological characteristics of the facility and surrounding land;
3. The quantity of ground water and the direction of ground water flow;
4. The proximity and withdrawal rates of ground water users;
5. The current and future uses of ground water in the area;
6. The existing quality of ground water, including other sources of contamination and their cumulative impact on the ground water quality;
7. The potential for health risks caused by human exposure to waste constituents;
8. The potential damage to wildlife, crops, vegetation, and physical structures caused by exposure to waste constituents;
9. The persistence and permanence of the potential adverse effects; and
(b) Potential adverse effects of hydraulically connected surface water quality, considering:
1. The volume and physical and chemical characteristics of the waste in the regulated unit;
2. The hydrogeological characteristics of the facility and surrounding land;
3. The quantity and quality of ground water, and the direction of ground water flow;
4. The patterns of rainfall in the region;
5. The proximity of the regulated unit to surface waters;
6. The current and future uses of surface waters in the area and any water quality standards established for those surface waters;
7. The existing quality of surface water, including other sources of contamination and the cumulative impact on surface water quality;
8. The potential for health risks caused by human exposure to waste constituents;
9. The potential damage to wildlife, crops, vegetation, and physical structures caused by exposure to waste constituents; and
10. The persistence and permanence of the potential adverse effects.
(3) In making any determination under subsection (2) of this section about the use of ground water in the area around the facility, the secretazry will consider any identification of underground sources of drinking water and exempted aquifers made under 40 CFR 144.7 or as designated by the secretary.

Section 6. Point of Compliance. (1) The cabinet will specify in the facility permit the point of compliance at which the ground water

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 placed 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 ground water 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 ground water 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 ground water monitoring program developed to satisfy Section 9, 10 or 11 of this regulation:

(1) The ground water monitoring system must consist of a sufficient number of wells, installed at appropriate locations and depths to yield ground water samples from the uppermost aquifer that:

(a) Represent the quality of background water that has not been affected by leakage from a regulated unit; and

(b) Represent the quality of ground water passing the point of compliance.

(2) If a facility contains more than one (1) regulated unit, separate ground water monitoring systems are not required for each regulated unit provided that provisions for sampling the ground water in the uppermost aquifer will enable detection and measurement at the compliance point of hazardous constituents from the regulated units that have entered the ground water 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 ground water 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 ground water.

(4) The ground water monitoring program must include consistent sampling and analysis procedures that are designed to ensure monitoring results that provide a reliable indication of ground water 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 ground water monitoring program must include sampling and analytical methods that are appropriate for ground water sampling and that accurately measure hazardous constituents in ground water samples.

(6) The ground water monitoring program must include a determination of the ground water surface elevation each time ground water is sampled.

(7) Where appropriate, the ground water monitoring program must establish background ground water 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 ground water 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 ground water 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 ground water 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 ground water 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 as 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 ground water 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 ground water. 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 ground water; and

(d) The concentrations or values and coefficients of variation of proposed monitoring parameters or constituents in the background ground water quality.

(2) The owner or operator must install a ground water monitoring system at the compliance point as specified under Section 6 of this regulation. The ground water monitoring system must comply with Section 8(1)(b), (2) and (3) of this regulation.

(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 regulation 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 ground water monitoring system that complies with Section 8(1)(a), (2) and (3) of this regulation.

(4) The owner or operator must determine ground water 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 ground water 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 ground water 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 ground water 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 ground water 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 ground water 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 ground water in all monitoring wells and determine the concentration of all constituents identified in 401 KAR 31:170 that are present in ground water.

(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 ground water 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 ground water at each monitoring well at the compliance point;

2. Any proposed changes to the ground water 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 Section 5(1) or (2) of this regulation, or a notice of intent to seek a variance under Section 5(2) of this regulation; and

(e) Within 180 days, submit to the cabinet:

1. All data necessary to justify any variance sought under Section 5(2) of this regulation; and

2. An engineering feasibility plan for a corrective action program necessary to meet the requirements of Section 11 of this regulation, unless all hazardous constituents identified under subsection (8)(b) of this section are listed in Table I of Section 5 of this regulation and their concentration do not exceed the respective values given in the table.

(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 ground water 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 ground water to determine whether all regulated units are in compliance with the ground water protection standard under Section 3 of this regulation. The cabinet will specify the ground water 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 ground water monitoring system at the compliance point as specified under Section 6 of this regulation. The ground water monitoring system

must comply with Section 8(1)(b), (2) and (3) of this regulation.

(3) Where a concentration limit established under subsection (1)(b) of this section is based on background ground water 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 ground water 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 5 of this regulation and the difference between the respective concentration limit in Section 5 of this regulation 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 ground water 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 ground water 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 ground water 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 ground water 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 ground water at the compliance point.

(a) In determining whether a statistically significant increase has occurred, the owner or operator must compare the ground water 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 ground water samples.

(9) If the owner or operator determines, pursuant to subsection (8) of this section, that the ground water 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 ground water protection standard specified in the permit under subsection (1) of this section; and

2. A plan for a ground water monitoring program that will demonstrate the effectiveness of the corrective action. Such a ground water 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 ground water 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 ground water 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 ground water protection standard under Section 3 of this regulation. The cabinet will specify the ground water 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 ground water 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 ground water 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 ground water 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 concentration limits under Section 5 of this regulation in ground water 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 ground water 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 ground water protection standard. The owner or operator may terminate corrective 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 ground water monitoring program under subsection (4) of this section, that the ground water 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.

Section 12. Corrective Action for Waste Management Units. (1) The owner or operator of a facility or any person seeking a permit or any person closing a facility for the treatment, storage or disposal of hazardous waste must institute corrective action as necessary to protect human health and the environment for all releases of hazardous waste or constituents from any waste management unit at the facility, regardless of the time at which waste was placed in such unit.

(2) Corrective action will be specified in the permit. The permit will contain schedules of compliance for such corrective action (where such corrective action cannot be completed prior to issuance of the permit or closure of the facility) and assurances of financial responsibility for completing such corrective action.

CHARLOTTE E. BALDWIN, Secretary
APPROVED BY AGENCY: November 12, 1985
FILED WITH LRC: November 13, 1985 at 3 p.m.
PUBLIC HEARING SCHEDULED: A public hearing on this regulation will be held on December 30, 1985, at 1 p.m. EST, in the Capital Plaza Tower. Any persons interested in attending this hearing shall submit by December 26, 1985, a written statement of such interest to: J. Alex Barber, Director, Division of Waste Management, 18 Reilly Road, Frankfort, Kentucky 40601. If no statement of interest is received by close of business on December 26, 1985, the hearing on this regulation may be cancelled. Written comments may also be submitted to the address above. Written comments will be accepted until the end of the comment period, which will be close of business on December 30, 1985.

REGULATORY IMPACT ANALYSIS

Agency Contact Person: J. Alex Barber, Director
(1) Type and number of entities affected: All hazardous waste facilities required to conduct ground water monitoring are affected by the proposal. Currently there are 30 hazardous waste management facilities in Kentucky which require ground water monitoring.
(a) Direct and indirect costs or savings to those affected:
1. First year: None. See note in item (6) Any Additional Information or Comments.
2. Continuing costs or savings: None. See note in item (6) Any Additional Information or Comments.
3. Additional factors increasing or decreasing costs (note any effects upon competition): None. See note in item (6) Any Additional Information or Comments.
(b) Reporting and paperwork requirements: None. See note in item (6) Any Additional Information or Comments.
(2) Effects on the promulgating administrative body:
(a) Direct and indirect costs or savings:
1. First year: None. This regulation proposes standards which differ from existing standards. However, no increase in costs or savings is anticipated.
2. Continuing costs or savings: None. See note in (2)(a)1 above.
3. Additional factors increasing or decreasing costs: None. See note in (2)(a)1 above.
(b) Reporting and paperwork requirements:
(3) Assessment of anticipated effect on state and local revenues: There will be no effect on state or local revenues from promulgation of this regulation.
(4) Assessment of alternative methods; reasons why alternatives were rejected:
(a) The cabinet adopted ground water protection requirements which are identical to the federal regulations promulgated on July 15, 1985.
Alternative:
1. Less stringent: The cabinet could have chosen to adopt less stringent provisions. However, this would have placed Kentucky's program in violation of federal law (Hazardous and Solid Waste Amendments of 1984).
2. More stringent: The cabinet could have chosen to adopt more stringent provisions. However, the current proposal is adequate to protect public health and the environment.
3. Present proposal: The cabinet chose to adopt ground water protection standards which are identical to the federal standards.
(5) Identify any statute, administrative regulation or government policy which may be in conflict, overlapping, or duplication: None
(a) Necessity of proposed regulation if in conflict: Not applicable.
(b) If in conflict, was effort made to armonize the proposed administrative regulation with conflicting provisions: Not applicable.
(6) Any additional information or comments: The impact of this regulation has not been analyzed for those requirements which are equivalent to those found in the corresponding federal regulation, 40 CFR 264.90 and 264.101. The impact of the federal program was analyzed in 50 FR 28702-28755, July 15, 1985. A copy of the July 15, 1985 federal register has been filed with the regulations compiler of the Legislative Research Commission.

Tiering:
Was tiering applied? Yes. This regulation applies only to hazardous waste facilities which are required to monitor ground water.

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, 224.060, 224.071, 224.830 through 224.877, 224.994 [224.835, 224.842, 224.855, 224.860, 224.866]
PURSUANT TO: KRS Chapter 13A, 224.033, [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) of 401 KAR 38:090 and approved by the cabinet as part of the permit issuance <u>procedures</u> [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 <u>6</u> [7] of 401 KAR 34:200, Section <u>8</u> [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 <u>intermediate</u> [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. 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; and

2. Maintenance and monitoring of waste containment systems in accordance with the requirements of 401 KAR 34:060, 34:200, 34:210, 34:220, and 34:230.

(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 or 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 and approved by the cabinet as part of the permit issuance <u>procedures</u> [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 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; 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. 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 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.

CHARLOTTE E. BALDWIN, Secretary
APPROVED BY AGENCY: November 12, 1985
FILED WITH LRC: November 13, 1985 at 3 p.m.
PUBLIC HEARING SCHEDULED: A public hearing on this regulation will be held on December 30, 1985, at 1 p.m. EST, in the Capital Plaza Tower. Any persons interested in attending this hearing shall submit by December 26, 1985, a written statement of such interest to: J. Alex Barber, Director, Division of Waste Management, 18 Reilly Road, Frankfort, Kentucky 40601. If no statement of interest is received by close of business on December 26, 1985, the hearing on this regulation may be cancelled. Written comments may also be submitted to the address above. Written comments will be accepted until the end of the comment period, which will be close of business on December 30, 1985.

REGULATORY IMPACT ANALYSIS

Agency Contact Person: J. Alex Barber, Director

(1) Type and number of entities affected: There are 90 facilities in Kentucky which may be affected by this regulation.

(a) Direct and indirect costs or savings to those affected:

1. First year: None. Changes to this regulation are only technical corrections.

2. Continuing costs or savings: None. See note in (1)(a)1 above.

3. Additional factors increasing or decreasing costs (note any effects upon competition): None. See note in (1)(a)1 above.

(b) Reporting and paperwork requirements: None. See note in (1)(a)1 above.

(2) Effects on the promulgating administrative body:

(a) Direct and indirect costs or savings:

1. First year: None. Changes in this regulation are only technical corrections.

2. Continuing costs or savings: None. See note in (2)(a)1 above.

3. Additional factors increasing or decreasing costs: None. See note in (2)(a)1 above.

(b) Reporting and paperwork requirements:

(3) Assessment of anticipated effect on state and local revenues: There will be no effect on state or local revenues from promulgation of this regulation.

(4) Assessment of alternative methods; reasons why alternatives were rejected: No alternatives were considered. Amendments proposed to this regulation are only technical corrections to improve the clarity of the phrasing or to correct invalid regulatory cites.

(5) Identify any statute, administrative regulation or government policy which may be in conflict, overlapping, or duplication: None

(a) Necessity of proposed regulation if in conflict: Not applicable.

(b) If in conflict, was effort made to

armonize the proposed administrative regulation with conflicting provisions: Not applicable.
(6) Any additional information or comments: None.

Tiering:
Was tiering applied? Yes. This regulation applies only to hazardous waste facilities.

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
PURSUANT TO: KRS Chapter 13A, [224.017,] 224.033, 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 (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 9 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. 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 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 of 401 KAR 35:090, and the value of that trust fund is less than the current closure cost estimate when a permit is awarded for the facility, the amount of the current closure cost estimate still to be paid into the trust fund must be paid in over the pay-in period as defined in this subsection. 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 this regulation or in 401 KAR 35:090, 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 of 401 KAR 35:090, as applicable.

(6) After the pay-in period is completed, whenever the current closure cost estimate changes, the owner or operator 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 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 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 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 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) 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 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 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 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. Surety Bond Guaranteeing Performance of Closure. (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 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 identical to the wording specified in 401 KAR 34:148.

(3) The owner or operator who uses a surety bond to satisfy the requirements of this 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 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 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 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 liabile 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 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 n 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.

(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 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 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 2 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 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 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 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 the 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 12 of this regulation.

Section 7. 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. 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. Except as KRS 304.11-030 provides otherwise. 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 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 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 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 12 of this regulation.

Section 8. 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 United States 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 United States 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) 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 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)(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 12 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 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

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 this regulation by submitting 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) 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 10 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 valuation of the cash accounts or the certificate(s) of deposit. If the value of the cash accounts or 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 accounts 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. [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 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) 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) [(6)] 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) [(7)] 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 this regulation.

(9) An owner or operator or any other person authorized to perform closure may request reimbursement for closure expenditures by submitting itemized bills to the 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 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 closure expenditures are in accordance with the closure plan or otherwise justified.

Section 10. Use of Multiple Financial Mechanisms. An owner or operator may satisfy the requirements of this regulation by establishing more than one (1) financial mechanism per facility. These mechanisms are limited to trust funds, surety bonds guaranteeing payment into a trust fund, letters of credit, insurance, certificates of deposit and cash. The mechanisms 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 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 12. 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 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 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.

CHARLOTTE E. BALDWIN, Secretary
APPROVED BY AGENCY: November 12, 1985
FILED WITH LRC: November 13, 1985 at 3 p.m.
PUBLIC HEARING SCHEDULED: A public hearing on this regulation will be held on December 30, 1985, at 1 p.m. EST, in the Capital Plaza Tower. Any persons interested in attending this hearing shall submit by December 26, 1985, a written statement of such interest to: J. Alex Barber, Director, Division of Waste Management, 18 Reilly Road, Frankfort, Kentucky 40601. If no statement of interest is received by close of business on December 26, 1985, the hearing on this regulation may be cancelled. Written comments may also be submitted to the address above. Written comments will be accepted until the end of the comment period, which will be close of business on December 30, 1985.

REGULATORY IMPACT ANALYSIS

Agency Contact Person: J. Alex Barber, Director
(1) Type and number of entities affected: The amendment to this regulation affects all hazardous waste facilities in Kentucky. At this time there are 28 treatment facilities, 52 storage facilities, and 8 disposal facilities in Kentucky.
(a) Direct and indirect costs or savings to those affected:
1. First year: The amendment to this regulation may actually result in a savings to facilities. At the end of each interest period the amount of the cash account or certificates of deposit may be adjusted downward if the value of the account is greater than the estimated closure cost.
2. Continuing costs or savings: See note (1)(a)1 above.
3. Additional factors increasing or decreasing costs (note any effects upon competition): None.
(b) Reporting and paperwork requirements: There are no new reporting or paperwork requirements unless the facility requests a release of a portion of their cash account or certificates of deposit.
(2) Effects on the promulgating administrative body:
(a) Direct and indirect costs or savings:
1. First year: None. The amendment to this regulation will not alter the workload of the promulgating agency.
2. Continuing costs or savings: None. See note in (2)(a)1 above.
3. Additional factors increasing or decreasing costs: None. See note in (2)(a)1 above.
(b) Reporting and paperwork requirements:
(3) Assessment of anticipated effect on state and local revenues: There will be no effect on state or local revenues from promulgation of this regulation.
(4) Assessment of alternative methods; reasons why alternatives were rejected:
(a) The amendment to this regulation provides a mechanism for release of excess funds.
Alternative:
1. Less stringent: The cabinet could have chosen to be less stringent, but this could mean that Kentucky would lose authorization to operate the federal hazardous waste program in the state.
2. More stringent: The cabinet could have been more stringent and required that the excess funds remain in the account. This would have unnecessarily tied up the facility's funds, without providing any additional protection to Kentucky's public health and environment.
3. Present proposal: The present proposal of releasing funds in excess of estimated closure costs would not tie up funds unnecessarily but would still ensure adequate funding for closure.
(5) Identify any statute, administrative regulation or government policy which may be in conflict, overlapping, or duplication: None
(a) Necessity of proposed regulation if in conflict: Not applicable.
(b) If in conflict, was effort made to armonize the proposed administrative regulation with conflicting provisions: Not applicable.
(6) Any additional information or comments: None.

Tiering:
Was tiering applied? Yes. This regulation is tiered to apply only to new hazardous waste facilities and not interim status facilities.

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
PURSUANT TO: KRS Chapter 13A, 224.033, 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 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 this regulation by establishing a post-closure trust fund which conforms to the requirements of this section 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 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 this regulation or in 401 KAR 35:100, 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 of 401 KAR 35:100, 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 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 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 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 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 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 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 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 this regulation.

Section 5. Surety Bond Guaranteeing Performance of Post-Closure. (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. 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 identical to the wording specified in 401 KAR 34:148.

(3) The owner or operator who uses a surety bond to satisfy the requirements of this 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 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 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 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 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.

(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 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 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 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 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 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 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 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 12 of this regulation.

Section 7. 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. 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 except as KRS 304.11-030 provides otherwise. 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 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 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 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 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 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 United States 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 United States 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) 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 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 12 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 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 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 <u>may</u> [must] 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. 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 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(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 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) 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 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) 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) [(6)] 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.

(8) [(7)] 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 this regulation.

(9) [(8)] 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 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 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 12. 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.

CHARLOTTE E. BALDWIN, Secretary
APPROVED BY AGENCY: November 12, 1985
FILED WITH LRC: November 13, 1985 at 3 p.m.
PUBLIC HEARING SCHEDULED: A public hearing on this regulation will be held on December 30, 1985, at 1 p.m. EST, in the Capital Plaza Tower.

Any persons interested in attending this hearing shall submit by December 26, 1985, a written statement of such interest to: J. Alex Barber, Director, Division of Waste Management, 18 Reilly Road, Frankfort, Kentucky 40601. If no statement of interest is received by close of business on December 26, 1985, the hearing on this regulation may be cancelled. Written comments may also be submitted to the address above. Written comments will be accepted until the end of the comment period, which will be close of business on December 30, 1985.

REGULATORY IMPACT ANALYSIS

Agency Contact Person: J. Alex Barber, Director

(1) Type and number of entities affected: The amendment to this regulation affects all hazardous waste facilities in Kentucky. At this time there are 28 treatment facilities, 52 storage facilities, and 8 disposal facilities in Kentucky.

(a) Direct and indirect costs or savings to those affected:

1. First year: The amendment to this regulation may actually result in a savings to facilities. At the end of each interest period the amount of the cash account or certificates of deposit may be adjusted downward if the value of the account is greater than the estimated closure cost.

2. Continuing costs or savings: See note in (1)(a)1 above.

3. Additional factors increasing or decreasing costs (note any effects upon competition): None.

(b) Reporting and paperwork requirements: There are no new reporting or paperwork requirements unless the facility requests a release of a portion of their cash account or certificates of deposit.

(2) Effects on the promulgating administrative body:

(a) Direct and indirect costs or savings:

1. First year: None. The amendment to this regulation will not alter the workload of the promulgating agency.

2. Continuing costs or savings: None. See note in (2)(a)1 above.

3. Additional factors increasing or decreasing costs: None. See note in (2)(a)1 above.

(b) Reporting and paperwork requirements:

(3) Assessment of anticipated effect on state and local revenues: There will be no effect on state or local revenues from promulgation of this regulation.

(4) Assessment of alternative methods; reasons why alternatives were rejected:

(a) The amendment to this regulation provides a mechanism for release of excess funds.

Alternative:

1. Less stringent: The cabinet could have chosen to be less stringent, but this could mean that Kentucky would lose authorization to operate the federal hazardous waste program in the state.

2. More stringent: The cabinet could have been more stringent and required that the excess funds remain in the account. This would have unnecessarily tied up the facility's funds, without providing any additional protection to Kentucky's public health and environment.

3. Present proposal: The present proposal of releasing funds in excess of estimated post-closure costs would not tie up funds unnecessarily but would still ensure adequate funding for post-closure monitoring and maintenance.

(5) Identify any statute, administrative regulation or government policy which may be in conflict, overlapping, or duplication: None

(a) Necessity of proposed regulation if in conflict: Not applicable.

(b) If in conflict, was effort made to armonize the proposed administrative regulation with conflicting provisions: Not applicable.

(6) Any additional information or comments: None.

Tiering:
Was tiering applied? Yes. This regulation is tiered to apply only to new hazardous waste facilities and not interm status facilities.

NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION CABINET
Department for Environmental Protection
Division of Waste Management
(Proposed Amendment)

401 KAR 34:180. Use and management of containers.

RELATES TO: KRS 224.033, 224.060, 224.071, 224.830 through 224.877, 224.994 [224.835, 224.842, 224.855, 224.860, 224.866]

PURSUANT TO: KRS Chapter 13A, 224.033, [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 the use and management of containers.

Section 1. Applicability. This regulation applies to owners and operators of all hazardous waste sites or facilities that store containers of hazardous waste, except as Section 1 of 401 KAR 34:010 provides otherwise.

Section 2. Condition of Containers. If a container holding hazardous waste is not in good condition (e.g., severe rusting, apparent structural defects) 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.

(3) A container holding hazardous waste shall be labeled "Hazardous Waste" upon the date that hazardous waste is first added to the container.

Section 5. Inspections. At least weekly, the owner or operator must inspect areas where containers are stored, looking for leaking containers and for deterioration of containers and the containment system caused by corrosion or other factors.

Section 6. Containment. (1) Container storage areas must have a containment system that is designed and operated in accordance with subsection (2) of this section except as otherwise provided in subsection (3) of this section.

(2) A containment system must be designed and operated as follows:

(a) A base must underlie the containers which is free of cracks or gaps and is sufficiently impervious to contain leaks, spills, and accumulated precipitation until the collected material is detected and removed;

(b) The base must be sloped or the containment system must be otherwise designed and operated to drain and remove liquids resulting from leaks, spills, or precipitation, unless the containers are elevated or are otherwise protected from contact with accumulated liquids;

(c) The containment system must have sufficient capacity to contain ten (10) percent of the volume of containers or the volume of the largest container, whichever is greater. Containers that do not contain free liquids need not be considered in this determination;

(d) Run-on into the containment system must be prevented unless the collection system has sufficient excess capacity in addition to that required in paragraph (c) of this subsection to contain any run-on which might enter the system; and

(e) Spilled or leaked waste and accumulated precipitation must be removed from the sump or collection area in as timely a manner as necessary to prevent overflow of the collection system.

(3) Storage areas that store containers holding only wastes that do not contain free liquids need not have a containment system defined by subsection (2) of this section, except as provided by subsection (4) of this section or provided that:

(a) The storage area is sloped or is otherwise designed and operated to drain and remove liquid resulting from precipitation; or

(b) The containers are elevated or otherwise protected from contact with accumulated liquid.

(4) Storage areas that store containers holding the wastes listed in this subsection that do not contain free liquids must have a containment system as defined by subsection (2) of this section: F020, F021, F022, F023, F026, and F027 (chlorinated dioxins, dibenzofurans, and phenols).

Section 7. 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 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 container, unless Section 8(2) of 401 KAR 34:020 is complied with.

(2) Hazardous waste must not be placed in an unwashed container that previously held an incompatible waste or material.

(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.

Section 9. Closure. At closure, all hazardous waste and hazardous waste residues must be removed from the containment system. Remaining containers, liners, bases and soil containing or contaminated with hazardous waste or hazardous waste residues must be decontaminated or removed.

CHARLOTTE E. BALDWIN, Secretary

APPROVED BY AGENCY: November 12, 1985

FILED WITH LRC: November 13, 1985 at 3 p.m.

PUBLIC HEARING SCHEDULED: A public hearing on this regulation will be held on December 30, 1985, at 1 p.m. EST, in the Capital Plaza Tower. Any persons interested in attending this hearing shall submit by December 26, 1985, a written statement of such interest to: J. Alex Barber, Director, Division of Waste Management, 18 Reilly Road, Frankfort, Kentucky 40601. If no statement of interest is received by close of business on December 26, 1985, the hearing on this regulation may be cancelled. Written comments may also be submitted to the address above. Written comments will be accepted until the end of the comment period, which will be close of business on December 30, 1985.

REGULATORY IMPACT ANALYSIS

Agency Contact Person: J. Alex Barber, Director

(1) Type and number of entities affected: All persons who store hazardous waste in containers will be affected by the proposed amendment to Section 4. Only those persons who store EPA hazardous waste nos. F020, F021, F022, F023, F026, and F027 (chlorinated dibenzo-p-dioxins, dibenzofurans, and phenol(s)) will be affected by the proposed amendment to Section 6.

(a) Direct and indirect costs or savings to those affected:

1. First year: Negligible. The requirement in Section 4 will cost a small amount for the purchase of labels; however, the savings to the environment will be considerable. The small number of persons who store EPA hazardous waste nos. F020, F021, F022, F023, F026, and F027 must have a containment system. Some costs will be incurred for installation but the savings to the environment will be significant. See note in item (6) Any Additional Information or Comments.

2. Continuing costs or savings: Negligible. See note (1)(a)1.

3. Additional factors increasing or decreasing costs (note any effects upon competition): None. See note in (1)(a)1.

(b) Reporting and paperwork requirements: Negligible. Those persons who store, treat, or dispose of hazardous waste must purchase and place labels on containers.

(2) Effects on the promulgating administrative body:

(a) Direct and indirect costs or savings:

1. First year: None. Storage containers for hazardous wastes are currently inspected. No additional costs are expected to be incurred for the labeling requirement in Section 4.

2. Continuing costs or savings: None. See note in (2)(a)1 above.

3. Additional factors increasing or decreasing costs: None. See note in (2)(a)1 above.

(b) Reporting and paperwork requirements:

(3) Assessment of anticipated effect on state and local revenues: There will be no effect on state or local revenues from promulgation of this regulation.

(4) Assessment of alternative methods; reasons why alternatives were rejected:

(a) The cabinet chose to require storage containers which hold hazardous waste to be labeled "Hazardous Waste" at the beginning of accumulation.

Alternative:

1. Less stringent: The cabinet could have chosen not to be less stringent by not requiring labeling of containers; however, the labeling of containers is necessary for proper inspection.

2. More stringent: The cabinet could have chosen to require more information on the label. The proposed labeling is considered sufficient to protect the environment and the public health.

3. Present proposal: The present amendment requires labeling of containers to protect the environment and the public health.

(b) The cabinet chose to propose a requirement for storage areas which store containers containing EPA hazardous waste nos. F020, F021, F022, F023, F026, and F027 to have a containment system.

Alternatives:

1. Less stringent: The cabinet could have chosen to not require containment systems for areas which contain EPA hazardous waste nos. F020, F021, F022, F023, F026, and F027. However, this would have afforded less protection to Kentucky's public health and environment than that provided by the federal program.

2. More stringent: The cabinet could have chosen to require more standards for containment systems for EPA hazardous waste nos. F020, F021, F022, F023, F026, and F027. However, the proposed containment system is considered sufficient to protect the environment and public health.

3. Present proposal: The present proposal is identical to the federal regulations requiring containment systems for containers holding chlorinated dioxins, dibenzofurans, and phenols.

(5) Identify any statute, administrative regulation or government policy which may be in conflict, overlapping, or duplication: None

(a) Necessity of proposed regulation if in conflict: Not applicable.

(b) If in conflict, was effort made to armonize the proposed administrative regulation with conflicting provisions: Not applicable.

(6) Any additional information or comments: The impact of this regulation has not been analyzed for those requirements which are equivalent to those found in the corresponding federal regulation, 40 CFR 264.175. The impact of the federal program was analyzed in 50 FR 1997-1998, January 14, 1985. A copy of the January 14, 1985 federal register has been filed with the regulations compiler of the Legislative Research Commission.

Tiering:
Was tiering applied? Yes. The proposed amendment to Section 4 applies only to persons who store, treat, or dispose of hazardous waste. In Section 6, the proposed amendment applies only to persons who store chlorinated dibenzo-p-dioxins, dibenzofurans, or phenols.

NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION CABINET
Department for Environmental Protection
Division of Waste Management
(Proposed Amendment)

401 KAR 34:190. Tanks.

RELATES TO: KRS 224.033, 224.060, 224.071, 224.830 through 224.877, 224.994 [224.835, 224.842, 224.855, 224.860, 224.866]

PURSUANT TO: KRS Chapter 13A, 224.033, [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 tanks.

Section 1. Applicability. (1) This regulation applies to owners and operators of hazardous waste sites or facilities that use tanks to treat or store hazardous waste, except as Section 1 of 401 KAR 34:010 and subsection (2) of this regulation provide otherwise.

(2) This regulation does not apply to facilities that treat or store hazardous waste in covered underground tanks that cannot be entered for inspection.

Section 2. Design of Tanks. Tanks must have sufficient shell strength and, for closed tanks, pressure controls (e.g., vents) to assure that they do not collapse or rupture. The cabinet will review the design of the tanks, including the foundation, structural support, seams and pressure controls. The cabinet shall require that a minimum shell thickness be maintained at all times to ensure sufficient shell strength. Factors to be considered in establishing minimum thickness include the width, height, and materials of construction of the tank, and the specific gravity of the waste which will be placed in the tank. In reviewing the design of the tank and establishing a minimum thickness, the cabinet shall rely upon appropriate industrial design standards and other available information.

Section 3. General Operating Requirements. (1) Wastes and other materials (e.g., treatment reagents) which are incompatible with the material of construction of the tank must not be placed in the tank unless the tank is protected from accelerated corrosion, erosion or abrasion through the use of:

(a) An inner liner or coating which is compatible with the waste or material and which is free of leaks, cracks, holes or other deterioration; or

(b) Alternative means of protection (e.g., cathodic protection or corrosion inhibitors).

(2) The owner or operator must use appropriate controls and practices to prevent overfilling. These must include:

(a) Controls to prevent overfilling (e.g., waste feed cutoff system or by-pass system to a standby tank); and

(b) For uncovered tanks, maintenance of sufficient freeboard to prevent overtopping by wave or wind action or by precipitation.

Section 4. Inspections. (1) The owner or operator must inspect:

(a) Overfilling control equipment (e.g., waste feed cutoff systems and by-pass systems) at least once each operating day to ensure that it is in good working order;

(b) Data gathered from monitoring equipment (e.g., pressure and temperature gauges) where present, at least once each operating day to ensure that the tank is being operated according to its design;

(c) For uncovered tanks, the level of waste in the tank, at least once each operating day to ensure compliance with Section 3(2) of this regulation.

(d) The construction materials of the above-ground portions of the tank, at least weekly to detect corrosion or erosion and leaking of fixtures and seams; and

(e) The area immediately surrounding the tank, at least weekly to detect obvious signs of leakage (e.g., wet spots or dead vegetation).

(2) As part of the inspection schedule required in Section 6(2) of 401 KAR 34:020 and in addition to the specific requirements of subsection (1) of this section, the owner or operator must develop a schedule and procedure for assessing the condition of the tank. The schedule and procedure must be adequate to detect cracks, leaks, corrosion or erosion which may lead to cracks or leaks, or wall thinning to less than the thickness required under Section 2 of this regulation. Procedures for emptying a tank to allow entry and inspection of the interior must be established when necessary to detect corrosion or erosion of the tank sides and bottom. The frequency of these assessments must be based on the material of construction of the tank, type of corrosion or erosion protection used, rate of corrosion or erosion observed during previous inspections, and the characteristics of the waste being treated or stored.

(3)(a) As part of the contingency plan required under 401 KAR 34:040, the owner or operator must specify the procedures he intends to use to respond to tank spills or leakage, including procedures and time for expeditious removal of leaked or spilled waste and repair of the tank.

(b) For EPA Hazardous Waste Nos. F020, F021, F022, F023, F026, and F027, the contingency plan must also include the procedures for responding to a spill or leak of these wastes from tanks into the containment system. These procedures shall include measures for immediate removal of the waste from the system and replacement or repair of the leaking tank.

Section 5. Closure. At closure, all hazardous waste and hazardous waste residues must be removed from tanks, discharge control equipment, and discharge containment structures.

Section 6. Special Requirements for Ignitable or Reactive Wastes. (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 the resulting waste, mixture or dissolution of material no longer meets the definition of ignitable or reactive waste under 401 KAR Chapter 31, and Section 8(2) of 401 KAR 34:020 is complied with; or

(b) The waste is stored or treated in such a way that it is protected from any material or conditions 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).

Section 7. Special Requirements for Incompatible Wastes. (1) Incompatible wastes, or incompatible wastes and materials, must not be placed in the same tank unless Section 8(2) of 401 KAR 34:020 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 34:020 is complied with.

Section 8. Special Requirements for Hazardous Wastes F020, F021, F022, F023, F026, and F027. In addition to the other requirements of this regulation, the following requirements apply to tanks storing or treating hazardous wastes F020, F021, F022, F023, F026, and F027.

(1) Tanks must have systems designed and operated to detect an adequately contained spills or leaks. The design and operation of any containment system must reflect consideration of all relevant factors, including:

(a) Capacity of the tank;

(b) Volumes and characteristics of wastes stored or treated in the tank;

(c) Method of collection of spills or leaks;

(d) The design and construction materials of the tank and containment system; and

(e) The need to prevent precipitation and run-on from entering into the system.

(2) As part of the contingency plan required by 401 KAR 34:040, the owner or operator must specify such procedures for responding to a spill or leak from the tank into the containment system as may be necessary to protect human health and the environment. These procedures shall include measures for immediate removal of the waste from the system and replacement or repair of the leaking tank.

CHARLOTTE E. BALDWIN, Secretary

APPROVED BY AGENCY: November 12, 1985

FILED WITH LRC: November 13, 1985 at 3 p.m.

PUBLIC HEARING SCHEDULED: A public hearing on this regulation will be held on December 30, 1985, at 1 p.m. EST, in the Capital Plaza Tower. Any persons interested in attending this hearing shall submit by December 26, 1985, a written

statement of such interest to: J. Alex Barber, Director, Division of Waste Management, 18 Reilly Road, Frankfort, Kentucky 40601. If no statement of interest is received by close of business on December 26, 1985, the hearing on this regulation may be cancelled. Written comments may also be submitted to the address above. Written comments will be accepted until the end of the comment period, which will be close of business on December 30, 1985.

REGULATORY IMPACT ANALYSIS

Agency Contact Person: J. Alex Barber, Director

(1) Type and number of entities affected: A small number of tanks used for the storage, treatment, or disposal of EPA hazardous waste numbers F020, F021, F022, F023, F026, and F027 will be affected by the proposed amendments. The cabinet has no estimate of the actual number of such tanks.

(a) Direct and indirect costs or savings to those affected:

1. First year: Negligible. See item (6) Any Additional Information or Comments.

2. Continuing costs or savings: Negligible.

3. Additional factors increasing or decreasing costs (note any effects upon competition): A few additional items will be required on the contingency plan. The factors to consider in design and operations of the containment system for such tanks will not increase the costs of the design or operation of tanks.

(b) Reporting and paperwork requirements: A contingency plan is required. This proposed amendment will require a small increase in the number of items addressed.

(2) Effects on the promulgating administrative body:

(a) Direct and indirect costs or savings:

1. First year: Review of contingency plans is currently in affect. The additional items to be reviewed will not significantly affect the cost. The savings to the environment will more than off-set these costs.

2. Continuing costs or savings: None. See note (2)(a)1.

3. Additional factors increasing or decreasing costs:

(b) Reporting and paperwork requirements:

(3) Assessment of anticipated effect on state and local revenues: There will be no effect on state or local revenues from promulgation of this regulation.

(4) Assessment of alternative methods; reasons why alternatives were rejected:

(a) KRS 224.864(3) requires that regulations in 401 KAR Chapter 31 be identical to the federal regulations; therefore, no alternatives were considered to ensure compliance with Kentucky statute.

(5) Identify any statute, administrative regulation or government policy which may be in conflict, overlapping, or duplication: None

(a) Necessity of proposed regulation if in conflict: Not applicable.

(b) If in conflict, was effort made to armonize the proposed administrative regulation with conflicting provisions: Not applicable.

(6) Any additional information or comments: The impact of this regulation has not been analyzed for those requirements which are equivalent to those found in the corresponding federal regulation, 40 CFR 264.173 and 264.175. The impact of the federal program was analyzed in 50 FR 1997-1998, January 14, 1985. A copy of the January 14, 1985 federal register has been filed with the regulations compiler of the Legislative Research Commission.

Tiering:
Was tiering applied? Yes. This regulation pertains only to tanks used for the storage, treatment, or disposal of hazardous waste.

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, 224.060, 224.071, 224.830 through 224.877, 224.994 [224.835, 224.842, 224.855, 224.860, 224.866]

PURSUANT TO: KRS Chapter 13A, 224.033, [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, store or dispose of hazardous waste, except as Section 1 of 401 KAR 34:010 provides otherwise.

Section 2. Design and Operating Requirements. (1)[(a)] Any [A] surface impoundment that is not covered by subsection (3) of this section or Section 1 of 401 KAR 35:200 must have a liner for all portions of the impoundment (except for existing portions of such impoundments). After November 8, 1985, a surface impoundment shall not receive, store or treat hazardous waste unless such surface impoundment is in compliance with subsection (3) of this section. [(except for an existing portion of a surface impoundment which meets the requirements of paragraph (b) of this subsection) must have a] The liner must be [that is] designed, constructed, and installed to prevent any migration of wastes out of the impoundment to the adjacent subsurface soil or ground water or surface water at any time during the active life (including the closure period) of the impoundment. The liner may be constructed of materials that may allow wastes to migrate into the liner (but not into the adjacent subsurface soil or ground water or surface water) during the active life of the facility, provided that the impoundment is closed in accordance with Section 6(1)(a) of this 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 can [will] prevent wastes from migrating into the liner during the active life

of the facility. The liner must be:

(a) [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;

(b) [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 1×10^{7} cm permeability; and

(c) [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 ground water 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 ground water or surface water; and

(d) All other factors which would influence the quality and mobility of the leachate produced and the potential for it to migrate to ground water or surface water.

(3) The owner or operator of each new surface impoundment, each new surface impoundment unit at an existing facility, each replacement of an existing surface impoundment unit, and each lateral expansion of an existing surface impoundment unit, must install two (2) or more liners and a leachate collection system between such liners. The liners and leachate collection system must protect human health and the environment. The requirements of this subsection shall apply with respect to all waste received after the issuance of the permit. The requirement for the installation of two (2) or more liners in this subsection may be satisfied by the installation of a top liner designed, operated and constructed of materials to prevent the migration of any constituent into such liner during the period such facility remains in operation (including any post-closure monitoring period), and a lower liner designed, operated, and constructed to prevent the migration of any constituent through such liner during such period. For the purpose of the preceding sentence, a lower liner shall be deemed to satisfy such requirement if it is constructed of at least a three (3) foot thick layer of recompacted clay or other natural material with a permeability of no more than 1×10^{-7} centimeters per second.

(4) Subsection (3) of this section will not apply if the owner or operator demonstrates to the cabinet, and the cabinet finds for such surface impoundment, that alternative design and operating practices, together with location characteristics, will prevent the migration of any hazardous constituent into the ground water or surface water at least as effectively as such liners and leachate collection systems.

(5) The double liner requirement set forth in subsection (3) of this section may be waived by the cabinet for any monofill, if:

(a) The monofill contains only hazardous wastes from foundry furnace emission controls or metal casting molding sand, and such wastes do not contain constituents which would render the wastes hazardous for reasons other than the EP toxicity characteristics in Section 5 of 401 KAR 31:030; and

(b)1.a. The monofill has at least one (1) liner for which there is no evidence that such liner is leaking. For the purposes of this subsection the term "liner" means a liner designed, constructed, installed, and operated to prevent hazardous waste from passing into the liner at any time during the active life of the facility, or a liner designed, constructed, installed, and operated to prevent hazardous waste from migrating beyond the liner to adjacent subsurface soil, ground water, or surface water at any time during the active life of the facility. In the case of any surface impoundment which has been exempted from the requirements of subsection (3) of this section on the basis of a liner designed, constructed, installed, and operated to prevent hazardous waste from passing beyond the liner, at the closure of such impoundment, the owner or operator must remove or decontaminate all waste residues, all contaminated liner material, and contaminated soil to the extent practicable. If all contaminated soil is not removed or decontaminated, the owner or operator of such impoundment will comply with appropriate post-closure requirements, including but not limited to ground water monitoring and corrective action;

b. The monofill is located more than one-fourth (1/4) mile from an underground source of drinking water (as that term is defined in Section 1 of 401 KAR 30:010); and

c. The monofill is in compliance with generally applicable ground water monitoring requirements for facilities with permits under KRS 224.855 and KRS 224.866; or

2. The owner or operator demonstrates that the monofill is located, designed and operated so as to assure that there will be no migration of any hazardous constituent into ground water or surface water at any future time.

(6) [(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.

(7) [(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.

(8) [(5)] A new surface impoundment shall not be constructed in a floodway in accordance with 401 KAR 34:020, Section 9(2).

(9) [(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).

(10) [(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).

(11) [(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.

Section 3. Double-lined Surface Impoundments. [Exemption from] 401 KAR 34:060 Ground water protection requirements apply to all surface impoundments including those with double-liner systems. [(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 its 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 liners 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.]

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]

(c) [(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 on any liner system included in the surface impoundment construction.

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 Section 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.

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 solidifying the remaining wastes and waste residues;

2. Stabilize remaining wastes to a bearing capacity sufficient to support final cover; and

3. Cover the surface impoundment with a final cover designed and constructed to:

a. Provide long-term minimization of the migration of liquids through the closed impoundment;

b. Function with minimum maintenance;

c. Promote drainage and minimize erosion or abrasion of the final cover;

d. Accommodate settling and subsidence so that the cover's integrity is maintained; and

e. Have a permeability less than or equal to the permeability of any bottom liner system or natural subsoils present.

(2) If some waste residues or contaminated materials are left in place at final closure, the owner or operator 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;]

(b) [(c)] Maintain and monitor the ground water monitoring system and comply with all other applicable requirements of 401 KAR 34:060; and

(c) [(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 2(1) [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 38:500 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 38:500 and KRS 224.855(3), in case not all contaminated subsoils can be practicably removed at closure.

(b) The cost estimates calculated under Section 1 of 401 KAR 34:090 and Section 1 of 401 KAR 34:100 for closure and 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.]

Section 7. 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 placement in the impoundment so that:

(a) The resulting waste or mixture no longer meets the definition of ignitable or reactive waste under 401 KAR Chapter 31;and

(b) Section 8 of 401 KAR 34:020 is complied with; or

(2) The surface impoundment is used solely for emergencies.

Section 8. Special Requirements for Incompatible Wastes. Incompatible wastes, or incompatible wastes and materials (see 401 KAR 34:330 for examples), must not be placed in the same surface impoundment.

Section 9. Special Requirements for Hazardous

Wastes F020, F021, F022, F023, F026, and F027. (1) Hazardous wastes F020, F021, F022, F023, F026, and F027 (chlorinated dioxins, chlorinated dibenzofurans, and chlorinated phenols) must not be placed in surface impoundments unless the owner or operator operates the surface impoundments in accordance with a management plan for these wastes that is approved by the secretary pursuant to the standards set out in this section, and in accordance with all other applicable requirements of this chapter. The factors to be considered are:

(a) The volume, physical, and chemical characteristics of the wastes, including their potential to migrate through soil or to volatilize or escape into the atmosphere;

(b) The attenuative properties of underlying and surrounding soils or other materials;

(c) The mobilizing properties of other materials co-disposed with these wastes; and

(d) The effectiveness of additional treatment, design, or monitoring techniques.

(2) The secretary may determine that additional design, operating, and monitoring requirements are necessary for surface impoundments managing hazardous wastes F020, F021, F022, F023, F026, and F027 in order to reduce the possibility of migration of these wastes to ground water, surface water, or air so as to protect human health and the environment.

CHARLOTTE E. BALDWIN, Secretary

APPROVED BY AGENCY: November 12, 1985

FILED WITH LRC: November 13, 1985 at 3 p.m.

PUBLIC HEARING SCHEDULED: A public hearing on this regulation will be held on December 30, 1985, at 1 p.m. EST, in the Capital Plaza Tower. Any persons interested in attending this hearing shall submit by December 26, 1985, a written statement of such interest to: J. Alex Barber, Director, Division of Waste Management, 18 Reilly Road, Frankfort, Kentucky 40601. If no statement of interest is received by close of business on December 26, 1985, the hearing on this regulation may be cancelled. Written comments may also be submitted to the address above. Written comments will be accepted until the end of the comment period, which will be close of business on December 30, 1985.

REGULATORY IMPACT ANALYSIS

Agency Contact Person: J. Alex Barber, Director

(1) Type and number of entities affected: Surface impoundment which contain hazardous waste will be affected. The cabinet estimates that there are 24 surface impoundments in Kentucky. The proposed changes are identical to the existing federal regulation; therefore, no additional costs will occur. See note (6) Any Additional Information or Comments.

(a) Direct and indirect costs or savings to those affected:

1. First year: None. See not (1)(a)1.

2. Continuing costs or savings: None. See not (1)(a)1 above.

3. Additional factors increasing or decreasing costs (note any effects upon competition): None. See note (1)(a)1 above.

(b) Reporting and paperwork requirements: None. See note (1)(a)1 above.

(2) Effects on the promulgating administrative body:

(a) Direct and indirect costs or savings:

1. First year: None. There will be no increase or decrease in the workload of the promulgating agency resulting from the amendments made to this regulation.

2. Continuing costs or savings: None. See note in (2)(a)1 above.

3. Additional factors increasing or decreasing costs: None. See note in (2)(a)1 above.

(b) Reporting and paperwork requirements:

(3) Assessment of anticipated effect on state and local revenues: There will be no effect on state or local revenues from promulgation of this regulation.

(4) Assessment of alternative methods; reasons why alternatives were rejected:

(a) Requirements for EPA hazardous waste numbers F020, F021, F022, F023, F026 and F027.

Alternative:

1. Less stringent: The cabinet could have been less stringent than the federal regulations; however, public health and the environment would not have been afforded adequate protection.

2. More stringent: The cabinet could have been more stringent than the federal regulations; however, this would have placed an undue burden on the regulated community.

3. Present proposal: The proposed amendment will adequately protect public health and the environment.

(b) Design requirements for surface impoundments.

Alternatives:

1. Less stringent: The cabinet could have chosen to be less stringent than the federal regulations; however, the public health and environment would not have been afforded adequate protection.

2. More stringent: The cabinet could have chosen to be more stringent than the federal regulation. This would have been an excessive burden on the regulated community.

3. Present proposal: The cabinet chose to be identical to the federal regulations. These amendments were considered sufficient to protect public health and the environment.

(c) The federal regulation at 40 CFR 264.222 was removed from the federal regulations. Double-lined surface impoundments which contain hazardous waste must comply with ground water protection requirements. The cabinet elected to retain Section 3 of this regulation to insure that compliance with ground water protection requirements was clearly defined as a standard for all surface impoundments.

(5) Identify any statute, administrative regulation or government policy which may be in conflict, overlapping, or duplication: None

(a) Necessity of proposed regulation if in conflict: Not applicable.

(b) If in conflict, was effort made to harmonize the proposed administrative regulation with conflicting provisions: Not applicable.

(6) Any additional information or comments: The impact of this regulation has not been analyzed for those requirements which are equivalent to those found in the corresponding federal regulations, 40 CFR 264.221, 264.222, 264.226, 264.227, 264.228, and 264.231. The impact of the federal program was analyzed in 40 CFR 1978-1999, January 14, 1985, and 40 CFR 28702-28742, July 15, 1985. Copies of the January 14, 1985 and July 15, 1985 federal registers have been filed with the regulations compiler of the Legislative Research Commission.

Tiering:
Was tiering applied? Yes. The proposed amendments apply only to surface impoundments containing hazardous waste.

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, 224.060, 224.071, 224.830 through 224.877, 224.994 [224.835, 224.842, 224.855, 224.860, 224.866]
PURSUANT TO: KRS Chapter 13A, 224.033, [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).
(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 protected from surface water run-on by the structure or in some other manner;
(c) The pile is designed and operated to control dispersal of the waste by wind, where necessary, by means other than wetting; and
(d) The pile will not generate leachate through decomposition or other reactions.

Section 2. Design and Operating Requirements. (1) A waste pile (except for an existing portion of a waste pile) 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/sec permeability.
3. Installed to cover all surrounding earth likely to be in contact with the waste or leachate; and
(b) A leachate collection and removal system immediately above the liner that is designed, constructed, maintained, and operated to collect and remove leachate from the pile. The cabinet 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 materials that are:
a. Chemically resistant to the waste managed in the pile and the leachate expected to be generated; and
b. Of sufficient strength and thickness to prevent collapse under the pressures exerted by waste placement, overlying wastes, waste cover materials, and by any equipment used at the pile; and
2. Designed and operated to function without clogging through the scheduled closure of the waste pile.
(2) The owner or operator may be exempted from the requirements of subsection (1) of this section if the cabinet finds, based on a demonstration by the owner or operator, that alternate design and operating practices, together with location characteristics, will prevent the migration of any hazardous constituents (see Section 4 of 401 KAR 34:060) into the groundwater or surface water at any future time. In deciding whether to grant an exemption, the cabinet 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.

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.]

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.]

(1) [(2)] If, during inspection of the liner, deterioration, a crack, or other condition is identified that is causing or could cause a leak, the owner or operator must:

(a) Notify the cabinet of the condition in writing within seven (7) days after detecting the condition; and

(b) [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 applicable requirements of 401 KAR 34:060 within a period of time specified in the permit.]

(2) [(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 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;]
(b) [(c)] Proper functioning of wind dispersal control systems, where present; and
(c) [(d)] The presence of leachate in and proper functioning of leachate collection and removal systems, where present.

Section 6. 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
(2) Section 8(2) of 401 KAR 34:020 is complied with.

Section 7. Special Requirements for Incompatible Wastes. (1) Incompatible wastes, or incompatible wastes and materials (see 401 KAR 34:330 for examples), must not be placed in the same pile.
(2) A pile of hazardous waste that is incompatible with any waste or other material stored nearby in other containers, other piles, open tanks, or surface impoundments 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. 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.

Section 9. Special Requirements for Hazardous Wastes F020, F021, F022, F023, F026, and F027. (1) Hazardous waste numbers F020, F021, F022, F023, F026, and F027 (chlorinated dioxins, chlorinated dibenzofurans, and chlorinated phenols) must not be placed in waste piles that are not enclosed (as defined in Section 1(3) of this regulation) unless the owner or operator operates the waste pile in accordance with a management plan for these wastes that is approved by the cabinet pursuant to the standards set out in this section, and in accordance with all other applicable requirements of this chapter. The factors to be considered are:
(a) The volume, physical, and chemical characteristics of the wastes, including their potential to migrate through soil or to volatilize or escape into the atmosphere;
(b) The attenuative properties of underlying and surrounding soils or other materials;
(c) The mobilizing properties of other materials co-disposed with these wastes; and
(d) The effectiveness of additional treatment, design, or monitoring techniques.
(2) The cabinet may determine that additional design, operating, and monitoring requirements are necessary for piles managing hazardous waste numbers F020, F021, F022, F023, F026, and F027 in order to reduce the possibility of migration of these wastes to ground water, surface water, or air so as to protect human health and the environment.

CHARLOTTE E. BALDWIN, Secretary
APPROVED BY AGENCY: November 12, 1985
FILED WITH LRC: November 13, 1985 at 3 p.m.
PUBLIC HEARING SCHEDULED: A public hearing on this regulation will be held on December 30, 1985, at 1 p.m. EST, in the Capital Plaza Tower. Any persons interested in attending this hearing shall submit by December 26, 1985, a written statement of such interest to: J. Alex Barber, Director, Division of Waste Management, 18 Reilly Road, Frankfort, Kentucky 40601. If no statement of interest is received by close of business on December 26, 1985, the hearing on this regulation may be cancelled. Written comments may also be submitted to the address above. Written comments will be accepted until the end of the comment period, which will be close of business on December 30, 1985.

REGULATORY IMPACT ANALYSIS

Agency Contact Person: J. Alex Barber, Director
(1) Type and number of entities affected: Waste piles which contain hazardous waste will be affected by these proposed amendments. There are 3 hazardous waste piles in Kentucky.
(a) Direct and indirect costs or savings to

those affected:
1. First year: None. See note (6) Any Additional Information or Comments.
2. Continuing costs or savings: None. See note (1)(a)1 above.
3. Additional factors increasing or decreasing costs (note any effects upon competition): None. See note (1)(a)1 above.
(b) Reporting and paperwork requirements: None. See note (1)(a)1 above.
(2) Effects on the promulgating administrative body:
(a) Direct and indirect costs or savings:
1. First year: None. There will be no increase or decrease in the workload of the promulgating agency resulting from the amendments made to this regulation.
2. Continuing costs or savings: None. See note in (2)(a)1 above.
3. Additional factors increasing or decreasing costs: None. See note in (2)(a)1 above.
(b) Reporting and paperwork requirements:
(3) Assessment of anticipated effect on state and local revenues: There will be no effect on state or local revenues from promulgation of this regulation.
(4) Assessment of alternative methods; reasons why alternatives were rejected: (a) The proposed amendments adopt the requirements for management of EPA Hazardous Waste Numbers F020, F021, F022, F023, F026, and F027 (chlorinated dioxins, dibenzo-p-furans and phenols).
Alternative:
1. Less stringent: The cabinet could have chosen to be less stringent by not adopting the federal requirement. However, this would have afforded Kentucky's public health and the environment less protection than that afforded by the national program.
2. More stringent: The cabinet could have chosen to adopt more stringent provisions than the federal requirements. However, the current proposal is adequate to protect public health and the environment.
3. Present proposal: The present proposal adopts verbatim the federal requirements from 40 CFR 264.259 promulgated on January 14, 1985.
(b) The proposed amendments delete the exemption from ground water monitoring for waste piles. The requirement to notify the Cabinet of any deterioration, crack or other condition of the liner which might cause a leak is retained.
Alternatives:
1. Less stringent: The cabinet could have been less stringent. However this would have afforded Kentucky's public health and the environment less protection than that afforded by the national program.
2. Present proposal: The present proposal is more stringent than the federal requirements from 40 CFR 264.254 promulgated on July 15, 1985. This was deemed necessary to protect public health and the environment.
(5) Identify any statute, administrative regulation or government policy which may be in conflict, overlapping, or duplication: None
(a) Necessity of proposed regulation if in conflict: Not applicable.
(b) If in conflict, was effort made to armonize the proposed administrative regulation with conflicting provisions: Not applicable.
(6) Any additional information or comments: The impact of this regulation has not been analyzed for those requirements which are equivalent to those found in the corresponding federal regulations, 40 CFR 264.252, 264.253, 264.254, and 264.259. The impact of the federal program was analyzed in 40 FR 1978-1999, January 14, 1985, and 40 CFR 28702-28742, July 15, 1985. Copies of the January 14, 1985, and July 15, 1985 federal registers have been filed with the regulations compiler of the Legislative Research Commission.

Tiering:
Was tiering applied? Yes. The proposed amendments apply only to waste piles containing hazardous wastes.

NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION CABINET
Department for Environmental Protection
Division of Waste Management
(Proposed Amendment)

401 KAR 34:220. Land treatment.

RELATES TO: KRS 224.033, 224.060, 224.071, 224.830 through 224.877, 224.994 [224.835, 224.842, 224.855, 224.860, 224.866]
PURSUANT TO: KRS Chapter 13A, 224.033, [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 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 constituents are constituents identified in 401 KAR 31:170 that are reasonably expected to be in, or derived from, waste placed in or on the treatment zone,

and all maximum groundwater contaminant levels as identified in Table I of 401 KAR 30:060, Section 5.

(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 immobilized in the treatment zone of the proposed land treatment unit; and

(c) Be conducted in a manner that protects human health and the environment considering:

1. The characteristics of the waste to be tested;
2. The operating and monitoring measures taken during the course of the test;
3. The duration of the test;
4. The volume of waste used in the test; and
5. In the case of field tests, the potential for migration of hazardous constituents to groundwater or surface water.

Section 4. Design and Operating Requirements. The cabinet 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 reactions (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 Table I of 401 KAR 34:060, Section 5, and soil pH and submit test results as part of the demonstration required by this subsection.

(c) In making a demonstration under this subsection, the owner or operator may use field tests, greenhouse studies, available data, or, in the case of existing units, operating data, and 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 treatment 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.

Section 11. Special Requirements for Hazardous Wastes F020, F021, F022, F023, F026, and F027. (1) Hazardous wastes numbers F020, F021, F022, F023, F026, and F027 (chlorinated dibenzo-p-dioxins, dibenzofurans, and phenols) must not be placed in a land treatment unit unless the owner or operator operates the facility in accordance with a management plan for these wastes that is approved by the cabinet

pursuant to the standards set out in this subsection, and in accordance with all other applicable requirements of this chapter. The factors to be considered are:

(a) The volume, physical, and chemical characteristics of the wastes, including their potential to migrate through soil or to volatilize or escape into the atmosphere;

(b) The attenuative properties of underlying and surrounding soils or other materials;

(c) The mobilizing properties of other materials co-disposed with these wastes; and

(d) The effectiveness of additional treatment, design or monitoring techniques.

(2) The cabinet may determine that additional design, operating, and monitoring requirements are necessary for land treatment facilities managing hazardous wastes F020, F021, F022, F023, F026, and F027 in order to reduce the possibility of migration of these wastes to ground water, surface water, or air so as to protect human health and the environment.

CHARLOTTE E. BALDWIN, Secretary

APPROVED BY AGENCY: November 12, 1985

FILED WITH LRC: November 13, 1985 at 3 p.m.

PUBLIC HEARING SCHEDULED: A public hearing on this regulation will be held on December 30, 1985, at 1 p.m. EST, in the Capital Plaza Tower. Any persons interested in attending this hearing shall submit by December 26, 1985, a written statement of such interest to: J. Alex Barber, Director, Division of Waste Management, 18 Reilly Road, Frankfort, Kentucky 40601. If no statement of interest is received by close of business on December 26, 1985, the hearing on this regulation may be cancelled. Written comments may also be submitted to the address above. Written comments will be accepted until the end of the comment period, which will be close of business on December 30, 1985.

REGULATORY IMPACT ANALYSIS

Agency Contact Person: J. Alex Barber, Director

(1) Type and number of entities affected: This proposed amendment affects a small number of persons who manage EPA hazardous waste numbers F020, F021, F022, F023, F026, and F027 (chlorinated dibenzo-p-dioxins, dibenzofurans, and phenols) in land treatment. The cabinet has no estimate of this number.

(a) Direct and indirect costs or savings to those affected:

1. First year: Negligible. See item (6) Any Additional Information or Comments.

2. Continuing costs or savings: Negligible.

3. Additional factors increasing or decreasing costs (note any effects upon competition): Negligible. A few additional points of consideration are required in the management plan. These considerations will not affect the cost to produce the management plan.

(b) Reporting and paperwork requirements: Negligible.

(2) Effects on the promulgating administrative body:

(a) Direct and indirect costs or savings:

1. First year: There will be no increased cost in the review of the management plan. However, the savings to the environment which result from preparation of the plan could be significant.

2. Continuing costs or savings: None. See note in (2)(a)1 above.

3. Additional factors increasing or decreasing costs: None. See note in (2)(a)1 above.

(b) Reporting and paperwork requirements:

(3) Assessment of anticipated effect on state and local revenues: There will be no effect on state or local revenues from promulgation of this regulation.

(4) Assessment of alternative methods; reasons why alternatives were rejected:

(a) The cabinet chose to adopt requirements for minimum factors to consider in the management of EPA hazardous waste numbers F020, F021, F022, F023, F026, and F027 in land treatment.

Alternative:

1. Less stringent: The cabinet could have chosen fewer requirements, but the damage caused by these wastes to the environment and health could be substantial. In addition, failure to adopt the federal provisions would have afforded Kentucky's public health and environment less protection than that provided by the national program.

2. More stringent: The cabinet could have adopted more requirements; however, these requirements are considered to be sufficient to protect human health and the environment.

3. Present proposal: The present proposal is identical to the federal regulations requiring a waste management plan at land treatment facilities for chlorinated dioxins, dibenzofurans and phenols.

(5) Identify any statute, administrative regulation or government policy which may be in conflict, overlapping, or duplication: None

(a) Necessity of proposed regulation if in conflict: Not applicable.

(b) If in conflict, was effort made to armonize the proposed administrative regulation with conflicting provisions: Not applicable.

(6) Any additional information or comments: The impact of this regulation has not been analyzed for those requirements which are equivalent to those found in the corresponding federal regulation, 40 CFR 264.283. The impact of the federal program was analyzed in 50 FR 1997-1998, January 14, 1985. A copy of the January 14, 1985 federal register has been filed with the regulations compiler of the Legislative Research Commission.

Tiering:

Was tiering applied? Yes. This proposed amendment applies only to land treatment facilities which manage EPA hazardous waste numbers F020, F021, F022, F023, F026, and F027.

NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION CABINET
Department for Environmental Protection
Division of Waste Management
(Proposed Amendment)

401 KAR 34:230. Landfills.

RELATES TO: KRS 224.033, 224.060, 224.071, 224.830 through 224.877, 224.994 [224.835, 224.842, 224.855, 224.860, 224.866]

PURSUANT TO: KRS Chapter 13A, 224,033, [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 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) Any [A] landfill that is not covered by subsection (3) of this section or Section 2 of 401 KAR 35:230 must have a liner system for all portions of the landfill (except that those portions in existence prior to November 8, 1984 are not required to retrofit with the liner system specified in paragraph (a) of this subsection). The liner system [(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 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 1×10^{-7} cm/sec permeability; and

3. Installed to cover all surrounding earth likely to be in contact with the waste or leachate; and

(b) A leachate collection and removal system immediately above the liner that is designed, constructed, maintained, and operated to collect and remove leachate from the landfill. The cabinet 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 materials that are:

a. Chemically resistant to the waste managed in the landfill and the leachate expected to be generated; and

b. Of sufficient strength and thickness to prevent collapse under the pressures exerted by overlying wastes, waste cover materials, and by any equipment used at the landfill; and

2. Designed and operated to function without clogging through the scheduled closure of the landfill.

(2) The owner or operator 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 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 of each new landfill, each new landfill unit at an existing facility, each replacement of an existing landfill unit, and each lateral expansion of an existing landfill unit, must install two (2) or more liners and a leachate collection system above and between liners. The liners and leachate collection systems must protect human health and the environment. The requirement for the installation of two (2) or more liners in this subsection may be satisfied by the installation of a top liner designed, operated and constructed of materials to prevent the migration of any constituent into such liner during the period such facility remains in operation (including any post-closure monitoring period), and a lower liner designed, operated, and constructed to prevent the migration of any constituent through such liner during such period. For the purpose of the preceding sentence, a lower liner shall be deemed to satisfy such requirement if it is constructed of at least a three (3) foot thick layer of recompacted clay or other natural material with a permeability of no more than 1×10^{-7} centimeter per second.

(4) Subsection (3) of this section will not apply if the owner or operator demonstrates to the cabinet, and the cabinet finds for such landfill, that alternative design and operating practices, together with location characteristics, will prevent the migration of any hazardous constituent into the ground water or surface water at least as effectively as such liners and leachate collection systems.

(5) The double liner requirement set forth in subsection (3) of this section may be waived by the cabinet for any monofill, if:

(a) The monofill contains only hazardous wastes from foundry furnace emission controls or metal casting molding sand, and such wastes do not contain constituents which would render the wastes hazardous for reasons other than the EP toxicity characteristics in Section 5 of 401 KAR 31:030; and

(b)1.a. The monofill has at least one (1) liner for which there is no evidence that such liner is leaking;

b. The monofill is located more than one-fourth (1/4) mile from an underground source of drinking water (as that term is defined in Section 1 of 401 KAR 30:010); and

c. The monofill is in compliance with generally applicable ground water monitoring requirements for facilities with permits under KRS 224.855 and KRS 224.866; or

2. The owner or operator demonstrates that the monofill is located, designed and operated so as to assure that there will be no migration of any hazardous constituent into ground water or surface water at any future time.

(6) [(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.

(7) [(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.

(8) [(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.

(9) [(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.

(10) [(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.

(11) [(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.

(12) [(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 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.]

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;]

(b) [(c)] Proper functioning of wind dispersal control systems, where present; and

(c) [(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;

(2) The contents of each cell and the approximate location of each hazardous waste type within each cell; and

(3) Any other information specified by the cabinet in the permit.

Section 6. Closure and 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 1×10^{-7} centimeters per second [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;]

(b) [(c)] Continue to operate the leachate collection and removal system until leachate is no longer detected;

(c) [(d)] Maintain and monitor the groundwater monitoring system and comply with all other applicable requirements of this regulation;

(d) [(e)] Prevent run-on and run-off from eroding or otherwise damaging the final cover; and

(e) [(f)] Protect and maintain surveyed benchmarks used in complying with Section 5 of this regulation.

(3) In the closure and post-closure plans, the owner or operator must address the following objectives and indicate how they will be achieved: [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.]

(a) Control of pollutant migration from the facility via ground water, surface water and air;

(b) Control of surface water infiltration, including prevention of pooling; and

(c) Prevention of erosion.

(4) the owner or operator must consider at least the following factors in addressing the closure and post-closure care objectives of subsection (3) of this section.

(a) Type and amount of hazardous waste and hazardous waste constituents in the landfill;

(b) The mobility and the expected rate of migration of the hazardous waste and hazardous waste constituents;

(c) Site location, topography and surrounding land use, with respect to the potential effects of pollutant migration (e.g., proximity to ground water, surface water, and drinking water sources);

(d) Climate, including amount, frequency and pH of precipitation;

(e) Characteristics of the cover including material, final surface contours, thickness, porosity and permeability, slope, length of run of slope and type of vegetation on the cover; and

(f) Geological and soil profiles, and surface and subsurface hydrology of the site.

(5) In addition to the requirements of Section 7 of 401 KAR 34:070, during the post-closure care period, the owner or operator of a hazardous waste landfill must:

(a) Maintain and monitor the gas collection and control system (if there is one present in the landfill) to control the vertical and horizontal escape of gases; and

(b) Restrict access to the landfill as appropriate for its post-closure use.

Section 7. Special Requirements for Ignitable or Reactive Waste. Except as provided in subsection (2) of this section, and in Section 11 of this 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 Bulk and Containerized Liquids [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) After May 8, 1985, liquid waste or waste containing free liquids which is mixed with an absorbent solid may not be placed in landfills.

(3) [(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; or

[2. Has been mixed with absorbent or solidified so that free-standing liquid is no longer observed; or]

2. [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 11 of this regulation and is disposed of in accordance with Section 11 of this regulation.

(4) To demonstrate the absence or presence of free liquids in either a containerized or a bulk waste, the following test must be used: Method 9095 (Paint Filter Liquid Test) as described in "Test Methods for Evaluating Solid Wastes, Physical/Chemical Methods," (EPA Publication No. SW-846) which is incorporated by reference in Section 3 of 401 KAR 30:010.

Section 10. Special Requirements for Containers. Unless they are very small, such as an ampule, containers must be either:

(1) At least ninety (90) percent full when placed in the landfill; or

(2) Crushed, shredded, or similarly reduced in volume to the maximum practical extent before burial in the landfill.

Section 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.

Section 12. Special Requirements for Hazardous Wastes F020, F021, F022, F023, F026, and F027. (1) Hazardous waste numbers F020, F021, F022, F023, F026, and F027 (chlorinated dioxins, chlorinated dibenzofurans, and chlorinated phenols) must not be placed in a landfill unless the owner or operator operates the landfill in accordance with a management plan for these wastes that is approved by the cabinet pursuant to the standards set out in this section, and in accordance with all other applicable requirements of this chapter. The factors to be considered are:

(a) The volume, physical, and chemical characteristics of the wastes, including their potential to migrate through soil or to volatilize or escape into the atmosphere;

(b) The attenuative properties of underlying and surrounding soils or other materials;

(c) The mobilizing properties of other materials co-disposed with these wastes; and

(d) The effectiveness of additional treatment, design, or monitoring requirements.

(2) The cabinet may determine that additional design, operating, and monitoring requirements are necessary for landfills managing hazardous wastes F020, F021, F022, F023, F026, and F027 in order to reduce the possibility of migration of these wastes to ground water, surface water, or air so as to protect human health and the environment.

CHARLOTTE E. BALDWIN, Secretary
APPROVED BY AGENCY: November 12, 1985
FILED WITH LRC: November 13, 1985 at 3 p.m.

PUBLIC HEARING SCHEDULED: A public hearing on this regulation will be held on December 30, 1985, at 1 p.m. EST, in the Capital Plaza Tower. Any persons interested in attending this hearing shall submit by December 26, 1985, a written statement of such interest to: J. Alex Barber, Director, Division of Waste Management, 18 Reilly Road, Frankfort, Kentucky 40601. If no statement of interest is received by close of business on December 26, 1985, the hearing on this regulation may be cancelled. Written comments may also be submitted to the address above. Written comments will be accepted until the end of the comment period, which will be close of business on December 30, 1985.

REGULATORY IMPACT ANALYSIS

Agency Contact Person: J. Alex Barber, Director

(1) Type and number of entities affected: All landfills which contain hazardous waste will be affected. There are 3 hazardous waste landfills in Kentucky.

(a) Direct and indirect costs or savings to those affected:

1. First year: See note in item (6) Any Additional Information or Comments.

2. Continuing costs or savings: See note in (1)(a)1.

3. Additional factors increasing or decreasing costs (note any effects upon competition): See note (1)(a)1.

(b) Reporting and paperwork requirements: None.

(2) Effects on the promulgating administrative body:

(a) Direct and indirect costs or savings:

1. First year: Inspection of landfills presently occurs. These amendments will not appreciably affect this process.

2. Continuing costs or savings: See note in (2)(a)1.

3. Additional factors increasing or decreasing costs: See note in (2)(a)1.

(b) Reporting and paperwork requirements:

(3) Assessment of anticipated effect on state and local revenues: There will be no effect on state or local revenues from promulgation of this regulation.

(4) Assessment of alternative methods; reasons why alternatives were rejected:

(a) Special requirements for hazardous waste numbers F020, F021, F022, F023, F026 and F027 (chlorinated dioxins, dibenzo-p-furans and phenols) have been proposed.

Alternative:

1. Less stringent: The cabinet could have chosen to be less stringent than the federal regulations; however, that would have afforded less protection to Kentucky's public health and the environment than that provided by the national program.

2. More stringent: The cabinet could have been more stringent; however, this would have been an unnecessary burden on facilities.

3. Present proposal: The present proposal is sufficient to protect public health and the environment.

(b) A ban on bulk or non-containerized liquid hazardous waste in landfills has been proposed.

Alternatives:

1. More stringent: The cabinet chose to be more stringent. To protect public health and the environment, all liquids are banned from landfills in accordance with KRS 224.866(2).

(5) Identify any statute, administrative regulation or government policy which may be in conflict, overlapping, or duplication: None

(a) Necessity of proposed regulation if in conflict: Not applicable.

(b) If in conflict, was effort made to harmonize the proposed administrative regulation with conflicting provisions: Not applicable.

(6) Any additional information or comments: The impact of this regulation has not been analyzed for those requirements which are equivalent to those found in corresponding federal regulations, 40 CFR 264.301, 264.302, 264.303, 264.310, 264.314, and 264.317. The impact of the federal program was analyzed in 50 FR 1978-1999, January 14, 1985, 18370-18374, April 30, 1985, and 28702-28742, July 15, 1985. Copies of the January 14, 1985, April 30, 1985, and July 15, 1985 federal registers have been filed with the regulations compiler of the Legislatiave Research Commission.

Tiering:
Was tiering applied? Yes. This regulation applies only to hazardous waste landfills.

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, 224.060, 224.071, 224.830 through 224.877, 224.994 [224.835, 224.842, 224.855, 224.860, 224.866]

PURSUANT TO: KRS Chapter 13A, 224.033, [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 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 or [and] operators of hazardous waste sites or facilities that incinerate hazardous waste, except as Section 1 of 401 KAR 34:010 provides otherwise. The following facility owners or operators are considered to incinerate hazardous waste:

(a) Owners or operators of hazardous waste incinerators (as defined in 401 KAR 30:010); and

(b) Owners or operators who burn hazardous wastes in boilers or in industrial furnaces in order to destroy the wastes.

(2) After consideration of the waste analysis included with Part B of the permit application, the cabinet, in establishing the permit conditions, may exempt the applicant from all requirements of this regulation except Sections 2 and 8:

(a) If the cabinet finds that the waste to be burned is:

1. Listed as a hazardous waste in 401 KAR 31:040 solely because it is ignitable (Hazard Code I), corrosive (Hazard Code C), or both; or

2. Listed as a hazardous waste in 401 KAR 31:040 solely because it is reactive (Hazard Code R) for characteristics other than those listed in Section 4(1)(d) and (e) of 401 KAR 31:030, and will not be burned when other hazardous wastes are present in the combustion zone; or

3. A hazardous waste solely because it possesses the characteristic of ignitability, corrosivity, or both, as determined by the test for characteristics of hazardous wastes under 401 KAR 31:030; or

4. A hazardous waste solely because it possesses any of the reactivity characteristics described by Section 4(1)(a), (b), (c), (f), (g), and (h) of 401 KAR 31:030, and will not be burned when other hazardous wastes are present in the combustion zone; and

(b) If the waste analysis shows that the waste contains none of the hazardous constituents listed in 401 KAR 31:170, which would reasonably be expected to be in the waste.

(3) If the waste to be burned is one which is described by subparagraphs (2)(a) 1, 2, 3, or 4 of this section and contains insignificant concentrations of the hazardous constituents listed in 401 KAR 31:170, then the cabinet may, but is not required to in establishing the permit conditions, exempt the applicant from all requirements of this regulation except Section 2 and 8 of this regulation, after consideration of the waste analysis included with Part B of the permit application, unless the cabinet finds that the waste will pose a threat to human health and the environment when burned in an incinerator.

(4) The owner or operator of an incinerator may conduct trial burns, subject only to the requirements of Section 3 of 401 KAR 38:060.

Section 2. Waste Analysis. (1) As a portion of a trial burn plan required by Section 3 of 401 KAR 38:060 or with Part B of his permit application, the owner or operator must have included an analysis of his waste feed sufficient to provide all information required by 401 KAR 38:060 or 401 KAR 38:090. Owners or operators of new hazardous waste incinerators 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, for each waste feed to be burned. This specification

will be based on the degree of difficulty of incineration of the organic constituents in the waste and on their concentration or mass in the waste feed, considering the results of waste analyses and trial burns or alternative data submitted with Part B of the facility's permit application. Organic constituents which represent the greatest degree of difficulty of incineration 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, 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)(a) Except as provided in paragraph (b) of this subsection, 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 constituent (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.

(b) An incinerator burning hazardous wastes F020, F021, F022, F023, F026, or F027 (chlorinated dioxins, chlorinated dibenzofurans, chlorinated phenols) must achieve a destruction and removal efficiency (DRE) of 99.9999 percent for each principal organic hazardous constituent (POHC) designated (under Section 3 of this regulation) in its permit. This performance must be demonstrated on POHCs that are more difficult to incinerate than tetra-, penta-, and hexachlorodibenzo-p-dioxins and dibenzofurans. DRE is determined for each POHC from the equation in paragraph (a) of this subsection. In addition, the owner or operator of the incinerator must notify the secretary of his intent to incinerate hazardous wastes F020, F021, F022, F023, F026, or F027.

(2) An incinerator burning hazardous waste and producing stack emissions of more than 1.8 kilograms per hour (four (4) pounds per hour) of hydrogen chloride (HCl) must control HCl emissions such that the rate of emission is no greater than the larger of either 1.8 kilograms per hour or one (1) percent of the HCl in the stack gas prior to entering any pollution control equipment.

(3) An incinerator burning hazardous waste must not emit particulate matter exceeding 180 milligrams per dry standard cubic meter (0.08 grains per dry standard cubic foot) when corrected for the amount of oxygen in the stack gas according to the formula:

$$P_c = P_m \times \frac{14}{21-Y}$$

When P_c is the corrected concentration of particulate matter, P_m is the measured concentration of particulate matter, and Y is the measured concentration of oxygen in the stack gas, using the Orsat method for oxygen analysis of dry flue gas, presented in 401 KAR 59:020, "new incinerators." This correction procedure is to be used by all hazardous waste incinerators except those operating under conditions of oxygen enrichment. For these facilities the cabinet 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 section may be "information" justifying modification, revocation, or reissuance of a permit under Section 2 of 401 KAR 38:040.

Section 5. Hazardous Waste Incinerator Permits. (1) The owner or operator of a hazardous waste incinerator may burn only wastes specified in his permit and only under operating conditions specified for those wastes under Section 6 of this regulation except:

(a) In approved trial burns under 401 KAR 38:060, Section 3; 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.

(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 38:190, 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 standards 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;

(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 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 at least daily, for leaks, spills, and fugitive emissions, and signs of tampering.

(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) 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.

CHARLOTTE E. BALDWIN, Secretary

APPROVED BY AGENCY: November 12, 1985

FILED WITH LRC: November 13, 1985 at 3 p.m.

PUBLIC HEARING SCHEDULED: A public hearing on this regulation will be held on December 30, 1985, at 1 p.m. EST, in the Capital Plaza Tower. Any persons interested in attending this hearing shall submit by December 26, 1985, a written statement of such interest to: J. Alex Barber, Director, Division of Waste Management, 18 Reilly Road, Frankfort, Kentucky 40601. If no statement of interest is received by close of business on December 26, 1985, the hearing on this regulation may be cancelled. Written comments may also be submitted to the address above. Written comments will be accepted until the end of the comment period, which will be close of business on December 30, 1985.

REGULATORY IMPACT ANALYSIS

Agency Contact Person: J. Alex Barber, Director

(1) Type and number of entities affected: There are a minimum of 5 incinerators, on

aggregate kiln, and one boiler for hazardous waste in Kentucky, which may be affected by changes in this regulation.

(a) Direct and indirect costs or savings to those affected:

1. First year: None. See item (6) Any Additional Information or Comments.

2. Continuing costs or savings: None

3. Additional factors increasing or decreasing costs (note any effects upon competition): None

(b) Reporting and paperwork requirements: This regulation establishes minimum standards for hazardous waste incinerators. Owners and operators of boilers and industrial furnaces in which hazardous wastes are burned must meet the minimum standards for incinerators. However, because this is a federal requirement, there will be no additional impact to Kentucky facilities. See item (6) Additional Information or Comments.

Incinerators which burn EPA waste numbers F020, F021, F022, F023, F026, and F027 (chlorinated dioxins, dibenzo-p-furans and phenols) must meet minimum standards established in this regulation. The owners or operators of these incinerators must notify the cabinet of his intent to incinerate hazardous waste numbers F020, F021, F023, F026 and F027. However, because this is a federal requirement, there will be no additional impact to Kentucky facilities. See item (6) Additional Information or Comments.

(2) Effects on the promulgating administrative body:

(a) Direct and indirect costs or savings:

1. First year: No additional costs will be incurred as the result of changes to this regulation.

2. Continuing costs or savings: None

3. Additional factors increasing or decreasing costs: None

(b) Reporting and paperwork requirements:

(3) Assessment of anticipated effect on state and local revenues: There will be no effect on state or local revenues from promulgation of this regulation.

(4) Assessment of alternative methods; reasons why alternatives were rejected:

(a) The adoption of waste management requirements for the incineration of EPA hazardous waste numbers F020, F021, F023, F026, and F027 (chlorinated dioxins, dibenzo-p-furans, and phenols) is proposed.

Alternative:

1. Less stringent: The cabinet could have chosen to not require minimum standards for the incineration of chlorinated dioxins, dibenzo-p-furans and phenols. However, this would have made the state program less stringent than the federal program. Since the standards would have been applicable in Kentucky under the federal program the cabinet chose to adopt the minimum standards.

2. More stringent: The cabinet could have required more stringent minimum standards for incineration of chlorinated dioxins, dibenzo-p-furans, and phenols. However, the minimum requirements are sufficient to protect public health and the environment.

3. Present proposal: The present proposal is identical to federal minimum standards for incineration of chlorinated dioxins, dibenzo-p-furans and phenols.

(b) Alternatives: The following concerns the proposed amendment to regulate as incinerators, boilers and industrial furnaces which burn hazardous waste.

1. Less stringent: The cabinet could have chosen not to include boilers and industrial furnaces which burn hazardous waste. However, this would have made the state regulations less stringent than the federal program. Since the standards would be applicable under the federal program, the cabinet chose to adopt the requirement.

2. More stringent: The cabinet could have required more standards for boilers and industrial furnaces. However, the minimum standards required are sufficient to protect public health and the environment.

3. Present proposal: The present proposal is identical to federal requirements for inclusion of boilers and industrial furnaces which burn hazardous waste as facilities to be regulated as incinerators.

(5) Identify any statute, administrative regulation or government policy which may be in conflict, overlapping, or duplication: None

(a) Necessity of proposed regulation if in conflict: Not applicable.

(b) If in conflict, was effort made to armonize the proposed administrative regulation with conflicting provisions: Not applicable.

(6) Any additional information or comments: The impact of this regulation has not been analyzed for those requirements which are equivalent to those found in the corresponding federal regulations, 40 CFR 264.340 and 40 CFR 264.343. The impact of the federal program was analyzed in 50 FR 656-657 and 50 FR 1997-1998, January 4, and January 14, 1985. A copy of the January 4, 1985 and the January 14, 1985 federal registers have been filed with the regulations compiler of the Legislative Research Commission.

Tiering:
Was tiering applied? Yes. This regulation applies only to incinerators which burn hazardous wastes.

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 224.033, 224.830 through 224.877, 224.994

PURSUANT TO: KRS Chapter 13A, [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 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 and until certification of final closure or, if the facility is subject to post-closure requirements, until post-closure responsibilities are fulfilled.

(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 through 6 of 401 KAR 38:070, until either final administrative disposition of their permit application is made under 401 KAR Chapter 38 and KRS 224.866, or until applicable 401 KAR Chapter 35 closure and post-closure responsibilities are fulfilled, and to those owners and operators of sites or facilities in existence on November 19, 1980, who failed to provide timely notification as required by Sections 1 through 6 of 401 KAR 38:070, and/or failed to file Part A of the permit application as required by Sections 2 and 4 of 401 KAR 38:070. 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)(a) 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 Sanctuaries Act;

(b) The requirements of this chapter do not apply to 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 requirements of this chapter do not apply to the owner or operator of a POTW which treats, stores, or disposes of hazardous waste;

(d) Unless the state of Kentucky has obtained authorization from the U.S. Environmental Protection Agency under the federal hazardous waste management program, the applicable provisions of 401 KAR Chapters 30 through 39 and the applicable provisions of the federal program shall both apply to the persons identified in subparagraphs 1 and 2 of this paragraph. Provided the state of Kentucky obtains authorization to operate the federal hazardous waste management program for activities identified in subparagraphs 1 and 2 of this paragraph, only the applicable provisions of 401 KAR Chapters 30 through 39 shall apply to the persons identified in subparagraphs 1 and 2 of this paragraph.

1. A person who treats, stores or disposes of hazardous waste by means of underground injection (see paragraph (b) of this subsection).

2. A person who treats, stores or disposes of hazardous waste to which requirements and prohibitions from the Hazardous and Solid Waste Amendments of 1984 apply, provided that Kentucky has not adopted substantially equivalent requirements and prohibitions which regulate the hazardous waste management activity; [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 requirements of this chapter do not apply to 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) The requirements of this chapter do not apply to the owner or operator of a facility managing recyclable materials described in Section 6(1)(b) and (c) of 401 KAR 31:010 (except to the extent that requirements of this chapter are referred to in 401 KAR Chapter 36); [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) The requirements of this chapter do not apply to a farmer disposing of waste pesticides from his own use in compliance with Section 2 of 401 KAR 32:050;

(h) The requirements of this chapter do not apply to the owner or operator of a totally enclosed treatment facility, as defined in Section 1 of 401 KAR 30:010;

(i) The requirements of this chapter do not apply to 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)1. The requirements of this chapter do not apply (except as provided in subparagraph 2 of this paragraph) to a person engaged in treatment or containment activities 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 a hazardous waste; or

c. A discharge of a material which, when discharged, becomes a hazardous waste;

2. An owner or operator of a facility otherwise regulated by this chapter must comply with all applicable requirements of 401 KAR 35:030 and 401 KAR 35:040.

3. Any person who is covered by subparagraph 1 of this paragraph and 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 and 401 KAR Chapter 38 for those activities. [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) The requirements of this chapter do not apply to 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; or

(l) The requirements of this chapter do not apply to 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 absorbent 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) The following hazardous wastes must not be managed at facilities subject to regulation under this chapter: EPA hazardous waste Nos. F020, F021, F022, F023, F026, or F027 (chlorinated dioxins, dibenzofurans, and phenols) unless:

(a) The wastewater treatment sludge is generated in a surface impoundment as part of the plant's wastewater treatment system;

(b) The waste is stored in tanks or containers;

(c) The waste is stored or treated in waste piles that meet the requirements of Section 1(3) of 401 KAR 34:210 as well as all other applicable requirements of 401 KAR 35:210;

(d) The waste is burned in incinerators that are certified pursuant to the standards and procedures in Section 6 of 401 KAR 35:240; or

(e) The waste is burned in facilities that thermally treat the waste in a device other than an incinerator and that are certified pursuant to the standards and procedures in Section 7 of 401 KAR 35:250.

(5) [(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.

CHARLOTTE E. BALDWIN, Secretary
APPROVED BY AGENCY: November 12, 1985
FILED WITH LRC: November 13, 1985 at 3 p.m.
PUBLIC HEARING SCHEDULED: A public hearing on this regulation will be held on December 30, 1985, at 1 p.m. EST, in the Capital Plaza Tower. Any persons interested in attending this hearing shall submit by December 26, 1985, a written statement of such interest to: J. Alex Barber, Director, Division of Waste Management, 18 Reilly Road, Frankfort, Kentucky 40601. If no statement of interest is received by close of business on December 26, 1985, the hearing on this regulation may be cancelled. Written comments may also be submitted to the address above. Written comments will be accepted until the end of the comment period, which will be close of business on December 30, 1985.

REGULATORY IMPACT ANALYSIS

Agency Contact Person: J. Alex Barber, Director
(1) Type and number of entities affected: There are 60 interim status hazardous waste facilities currently permitted in Kentucky.
(a) Direct and indirect costs or savings to those affected:
1. First year: None. See note in item (6) Any Additional Information or Comments.
2. Continuing costs or savings: None. See note in item (6) Any Additional Information or Comments.
3. Additional factors increasing or decreasing costs (note any effects upon competition): None. See note in item (6) Any Additional Information or Comments.
(b) Reporting and paperwork requirements: None. See note in item (6) Any Additional Information or Comments.
(2) Effects on the promulgating administrative body:
(a) Direct and indirect costs or savings:
1. First year: None. The amendments to this regulation will not alter the workload for the promulgating administrative body.
2. Continuing costs or savings: None. See note in (2)(a)1 above.
3. Additional factors increasing or decreasing costs: None. See note in (2)(a)1 above.
(b) Reporting and paperwork requirements:
(3) Assessment of anticipated effect on state and local revenues: There will be no effect on state or local revenues from promulgation of this regulation.
(4) Assessment of alternative methods; reasons why alternatives were rejected:
(a) The proposed amendments to this regulation adopt requirements on the applicability of interim status standards which are identical to those promulgated by the U.S. EPA on January 19, 1983, November 21, 1984, January 4, 1985, January 14, 1985, and July 15, 1985.*
Alternative:
1. Less stringent: The cabinet could have chosen to adopt standards which are less stringent than the federal provisions. However, this would have afforded less protection to Kentucky's public health and environment than that provided by the national program.
2. More stringent: The cabinet could have chosen to adopt provisions which are more stringent than the federal requirements. However, the proposed amendments are adequate to protect public health and the environment.
3. Present proposal: The present proposal adopts identical requirements to the federal requirements at 40 CFR 265.1.
*NOTE: The requirements from the July 15, 1985 federal register have been adopted to reflect that the requirements are applicable only to Kentucky and not to all states. In addition, the statutory mandate in KRS 224.866 which requires all hazardous waste management facilities to obtain a permit from the cabinet is incorporated.
(5) Identify any statute, administrative regulation or government policy which may be in conflict, overlapping, or duplication: None
(a) Necessity of proposed regulation if in conflict: Not applicable.
(b) If in conflict, was effort made to armonize the proposed administrative regulation with conflicting provisions: Not applicable.
(6) Any additional information or comments: The impact of this regulation has not been analyzed for those requirements which are equivalent to those found in the corresponding federal regulation, 40 CFR 265.1. The impact of the federal program was analyzed in 48 FR 2514-2516, January 19, 1983; 49 FR 46094-46095, November 21, 1984; 50 FR 614-668, January 4, 1985; 50 FR 1978-2006, January 14, 1985; and 50 FR 28702-28755, July 15, 1985. A copy of the January 19, 1983; November 21, 1984; January 4, 1985; January 14, 1985; and July 15, 1985 federal registers have been filed with the regulations compiler of the Legislative Research Commission.

Tiering:
Was tiering applied? Yes. This regulation applies only to interim status hazardous waste facilities.

NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION CABINET
Department for Environmental Protection
Division of Waste Management
(Proposed Amendment)

401 KAR 35:020. General facilities standards (IS).

RELATES TO: KRS 224.033, 224.830 through 224.877, 224.994
PURSUANT TO: KRS Chapter 13A, [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 transferring 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 site or facility does not match the waste designated on the accompanying manifest or shipping paper.
(d) The owner or operator of an off-site facility 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, Section 7 of 401 KAR 35:230, Section 3 of 401 KAR 35:240, Section 3 of 401 KAR 35:250, and Section 3 of 401 KAR 35:260.
(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 identified, 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 accidental 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.

Section 9. Location Standards. The placement of any hazardous waste in a salt dome, salt bed formation, underground mine or cave is prohibited.

CHARLOTTE E. BALDWIN, Secretary
APPROVED BY AGENCY: November 12, 1985
FILED WITH LRC: November 13, 1985 at 3 p.m.
PUBLIC HEARING SCHEDULED: A public hearing on this regulation will be held on December 30, 1985, at 1 p.m. EST, in the Capital Plaza Tower. Any persons interested in attending this hearing shall submit by December 26, 1985, a written statement of such interest to: J. Alex Barber, Director, Division of Waste Management, 18 Reilly Road, Frankfort, Kentucky 40601. If no statement of interest is received by close of business on December 26, 1985, the hearing on this regulation may be cancelled. Written comments may also be submitted to the address above. Written comments will be accepted until the end of the comment period, which will be close of business on December 30, 1985.

REGULATORY IMPACT ANALYSIS

Agency Contact Person: J. Alex Barber, Director

(1) Type and number of entities affected: There are approximately 60 interim status hazardous waste management facilities in Kentucky who may be affected by the new requirements.

(a) Direct and indirect costs or savings to those affected:

1. First year: None. See note in item (6) Any Additional Information or Comments.

2. Continuing costs or savings: None. See note in (1)(a)1.

3. Additional factors increasing or decreasing costs (note any effects upon competition): None. See note in (1)(a)1.

(b) Reporting and paperwork requirements: Waste analysis requirements have been added for landfills. See note in item (6) Any Additional Information or Comments.

(2) Effects on the promulgating administrative body:

(a) Direct and indirect costs or savings:

1. First year: None. The amendments made to this regulation will not affect the activities performed by the promulgating administrative body for compliance monitoring.

2. Continuing costs or savings: None. See note in (2)(a)1.

3. Additional factors increasing or decreasing costs: None. See note in (2)(a)1.

(b) Reporting and paperwork requirements:

(3) Assessment of anticipated effect on state and local revenues: There will be no effect on state or local revenues from promulgation of this regulation.

(4) Assessment of alternative methods; reasons why alternatives were rejected:

(a) Provisions for waste analysis by landfills and a ban on placement of hazardous wastes in salt domes, underground mines, and caves have been adopted identical to provisions promulgated by the U.S. EPA on April 30, 1984 and July 15, 1985.

Alternative:

1. Less stringent: The cabinet could have chosen to be less stringent by not incorporating the federal provisions. However, this would have afforded Kentucky's public health and environment less protection than that provided under the national program.

2. More stringent: The cabinet could have chosen to be more stringent by requiring additional provisions for waste analysis and location criteria. However, the present proposal is adequate to protect public health and the environment.

3. Present proposal: The present proposal adopts the federal standards for waste analysis

at landfills and prohibits placement of hazardous waste in salt domes, underground mines, and caves.

(5) Identify any statute, administrative regulation or government policy which may be in conflict, overlapping, or duplication: None

(a) Necessity of proposed regulation if in conflict: Not applicable.

(b) If in conflict, was effort made to armonize the proposed administrative regulation with conflicting provisions: Not applicable.

(6) Any additional information or comments: The impact of this regulation has not been analyzed for those requirements which are equivalent to those found in the corresponding federal regulations, 40 CFR 265.13 and 265.18. The impact of the federal program was analyzed in 50 FR 18370-18375, 28702-28755, April 30, 1985 and July 15, 1985. Copies of the April 30, 1985 and July 15, 1985 federal registers have been filed with the regulations compiler of the Legislative Research Commission.

Tiering:
Was tiering applied? Yes. This regulation applies only to interim status hazardous waste management facilities.

NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION CABINET
Department for Environmental Protection
Division of Waste Management
(Proposed Amendment)

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 Chapter 13A, [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 analyses 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 7 of 401 KAR 35:230;
7. [6.] Section 2 of 401 KAR 35:240;
8. [7.] Section 3 of 401 KAR 35:250; and
9. [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 designated by the cabinet must be used for this report. The annual report must cover site or facility activities during the previous calendar year and must include at a minimum 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 name and 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) Information on transportation, the use of the manifest, and other information from the manifest, as applicable; and [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 designated by the cabinet 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.

CHARLOTTE E. BALDWIN, Secretary

APPROVED BY AGENCY: November 12, 1985

FILED WITH LRC: November 13, 1985 at 3 p.m.

PUBLIC HEARING SCHEDULED: A public hearing on this regulation will be held on December 30, 1985, at 1 p.m. EST, in the Capital Plaza Tower. Any persons interested in attending this hearing shall submit by December 26, 1985, a written statement of such interest to: J. Alex Barber, Director, Division of Waste Management, 18 Reilly Road, Frankfort, Kentucky 40601. If no statement of interest is received by close of business on December 26, 1985, the hearing on this regulation may be cancelled. Written comments may also be submitted to the address above. Written comments will be accepted until the end of the comment period, which will be close of business on December 30, 1985.

REGULATORY IMPACT ANALYSIS

Agency Contact Person: J. Alex Barber, Director

(1) Type and number of entities affected: The proposed amendments to this regulation will affect all owners or operators of hazardous waste treatment, storage and disposal facilities in Kentucky. There are approximately 60 interim status facilities in Kentucky.

(a) Direct and indirect costs or savings to those affected:

1. First year: Negligible. The only costs or savings will be realized from the changes made to the Annual Report requirements. Small costs will be incurred from requiring facilities to report additional data from the manifest forms. However, a small savings will be realized from deletion of requirements to report closure and post-closure cost estimates. Also, see note in item (6) Any Additional Information or Comments.

2. Continuing costs or savings: Negligible. See note in (1)(a)1.

3. Additional factors increasing or decreasing costs (note any effects upon competition): None. See note in (1)(a)1.

(b) Reporting and paperwork requirements: Requirements have been added to the Annual Report which will mean that facilities will need to compile and report data from the manifest. However, the additional requirements are not anticipated to be burdensome or time consuming to prepare.

(2) Effects on the promulgating administrative body:

(a) Direct and indirect costs or savings:

1. First year: None. The amendments to this regulation alter existing requirements for facilities but will not significantly change the amount of time expended for review or compliance monitoring by the promulgating agency.

2. Continuing costs or savings: None. See note in (2)(a)1.

3. Additional factors increasing or decreasing costs: None. See note in (2)(a)1.

(b) Reporting and paperwork requirements:

(3) Assessment of anticipated effect on state and local revenues: There will be no effect on state or local revenues from promulgation of this regulation.

(4) Assessment of alternative methods; reasons why alternatives were rejected:

(a) Provisions for the operating record were adopted identical to those provisions promulgated by the U.S. Environmental Protection Agency on April 30, 1985.

Alternative:

1. Less stringent: The cabinet could have chosen to be less stringent by not adopting the federal provisions. However, this would have afforded Kentucky's public health and environment less protection than that provided by the national program.

2. More stringent: The cabinet could have chosen to be more stringent by requiring additional operating record provisions. However, the present proposal is adequate to protect public health and the environment.

3. Present proposal: The present proposal adopts the federal requirements for the operating record as promulgated on April 30, 1985.

(b) The cabinet proposed to delete information on closure and post-closure cost estimates from the Annual Report and to add information from the manifest forms collected by a facility.

Alternative:

1. Less stringent: The cabinet could have been less stringent by not requiring additional information from the manifest to be reported on the Annual Report. However, the cabinet felt that the additional information was necessary to adequately compile the information required by KRS 224.033(24).

2. More stringent: The cabinet could have chosen to be more stringent by requiring more information to be submitted on the Annual Report and by retaining the information on closure and post-closure cost estimates. However, the cabinet felt that additional information would be unnecessary and burdensome to the regulated community, and that submittal of the closure and post-closure cost estimates was duplicative.

3. Present proposal: The present proposal requires information from the manifest to be submitted on the Annual Report and deletes information on closure and post-closure cost estimates.

(5) Identify any statute, administrative regulation or government policy which may be in conflict, overlapping, or duplication: None

(a) Necessity of proposed regulation if in conflict: Not applicable.

(b) If in conflict, was effort made to harmonize the proposed administrative regulation with conflicting provisions: Not applicable.

(6) Any additional information or comments: The impact of this regulation has not been analyzed for those requirements which are equivalent to those found in the corresponding federal regulation, 40 CFR 265.73. The impact of the federal program was analyzed in 50 FR 18370-18375, April 30, 1985. A copy of the April 30, 1985 federal register has been filed with the regulations compiler of the Legislative Research Commission.

Tiering:

Was tiering applied? Yes. This regulation applies only to interim status hazardous waste management facilities.

NATURAL RESOURCES AND
ENVIRONMENTAL PROTECTION CABINET
Department for Environmental Protection
Division of Waste Management
(Proposed Amendment)

401 KAR 35:070. Closure and post-closure (IS).

RELATES TO: KRS 224.033, 224.830 through 224.877, 224.994
PURSUANT TO: KRS Chapter 13A, [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 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 protect human health and the environment, post-closure escape of hazardous waste, hazardous waste constituents, leachate, contaminated rainfall, or waste decomposition products to the groundwaters or surface waters or to the atmosphere.
(3) Includes any corrective action necessary to bringing the facility into compliance with the applicable facility standards contained in Section 12 of 401 KAR 34:060.

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 35:210, Section 7 of 401 KAR 35:220, Section 4 of 401 KAR 35:230, Section 5 of 401 KAR 35:240, Section 5 of 401 KAR 35:250, and Section 5 of 401 KAR 35:260 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 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 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, this 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 him 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;

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. Certification 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 of monitoring and 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 modifications of the plan including modification of the thirty (30) 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 re-use 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 alteration 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 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.

CHARLOTTE E. BALDWIN, Secretary

APPROVED BY AGENCY: November 12, 1985

FILED WITH LRC: November 13, 1985 at 3 p.m.

PUBLIC HEARING SCHEDULED: A public hearing on this regulation will be held on December 30, 1985, at 1 p.m. EST, in the Capital Plaza Tower. Any persons interested in attending this hearing shall submit by December 26, 1985, a written statement of such interest to: J. Alex Barber, Director, Division of Waste Management, 18 Reilly Road, Frankfort, Kentucky 40601. If no statement of interest is received by close of business on December 26, 1985, the hearing on this regulation may be cancelled. Written comments may also be submitted to the address above. Written comments will be accepted until the end of the comment period, which will be close of business on December 30, 1985.

REGULATORY IMPACT ANALYSIS

Agency Contact Person: J. Alex Barber, Director

(1) Type and number of entities affected: This regulation affects all hazardous waste sites and facilities that qualify for interim status. This includes 52 storage facilities and 28 treatment facilities in Kentucky.

(a) Direct and indirect costs or savings to those affected:

1. First year: The amendment to this regulation is mainly a reporting requirement and therefore the additional costs should be negligible.

2. Continuing costs or savings: See note in (1)(a)1.

3. Additional factors increasing or decreasing costs (note any effects upon competition): Not applicable.

(b) Reporting and paperwork requirements: The additional requirements in this proposed regulation are reporting requirements. Facilities will be required to include a description of how waste pile closure requirements will be met.

(2) Effects on the promulgating administrative body:

(a) Direct and indirect costs or savings:

1. First year: See note (1)(a)1.

2. Continuing costs or savings: Not applicable.

3. Additional factors increasing or decreasing costs: Not applicable.

(b) Reporting and paperwork requirements:

(3) Assessment of anticipated effect on state and local revenues: There will be no effect on state or local revenues from promulgation of this regulation.

(4) Assessment of alternative methods; reasons why alternatives were rejected:

(a) Requirement to describe waste pile closure in closure plan.

Alternative:

1. Less stringent: If Kentucky had been less stringent and not required waste pile closure descriptions in the closure plan, there would be a greater risk of improper closure and a greater threat to the environment.

2. More stringent: It would have been impractical for Kentucky to have been more stringent toward the closure description of waste piles than it is for other units such as surface impoundments or landfills at the same facility.

3. Present proposal: The addition of closure description requirements in the closure plan for waste piles was felt to be necessary for consistency with the other requirements in the regulation and for the protection of the environment.

(b) Corrective action for closure.

Alternatives:

1. Less stringent: Kentucky could not have allowed a facility to close until federal standards are met without jeopardizing human health and the environment.

2. More stringent: Kentucky could not have been more stringent.

3. Present proposal: The present proposal is necessary to ensure protection of human health and the environment.

(5) Identify any statute, administrative regulation or government policy which may be in conflict, overlapping, or duplication: None

(a) Necessity of proposed regulation if in conflict: Not applicable.

(b) If in conflict, was effort made to harmonize the proposed administrative regulation with conflicting provisions: Not applicable.

(6) Any additional information or comments: None.

Tiering:

Was tiering applied? Yes. One amendment to this regulation applies only to hazardous waste facilities that use waste piles. The second amendment applies only to interim status which are closing.

NATURAL RESOURCES AND
ENVIRONMENTAL PROTECTION CABINET
Department for Environmental Protection
Division of Waste Management
(Proposed Amendment)

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 Chapter 13A, [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.
(3) A container holding hazardous waste shall be labeled "Hazardous Waste" upon the date that hazardous waste is first added to the container.

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.

CHARLOTTE E. BALDWIN, Secretary
APPROVED BY AGENCY: November 12, 1985
FILED WITH LRC: November 13, 1985 at 3 p.m.
PUBLIC HEARING SCHEDULED: A public hearing on this regulation will be held on December 30, 1985, at 1 p.m. EST, in the Capital Plaza Tower. Any persons interested in attending this hearing shall submit by December 26, 1985, a written statement of such interest to: J. Alex Barber, Director, Division of Waste Management, 18 Reilly Road, Frankfort, Kentucky 40601. If no statement of interest is received by close of business on December 26, 1985, the hearing on this regulation may be cancelled. Written comments may also be submitted to the address above. Written comments will be accepted until the end of the comment period, which will be close of business on December 30, 1985.

REGULATORY IMPACT ANALYSIS

Agency Contact Person: J. Alex Barber, Director
(1) Type and number of entities affected: Hazardous waste sites or facilities which use containers will be affected. There are approximately 25 such sites or facilities in Kentucky.
(a) Direct and indirect costs or savings to those affected:
1. First year: There will be a small cost for purchase of labels.
2. Continuing costs or savings: See note (1)(a)1 above.
3. Additional factors increasing or decreasing costs (note any effects upon competition): See note (1)(a)1 above.
(b) Reporting and paperwork requirements: None.
(2) Effects on the promulgating administrative body:
(a) Direct and indirect costs or savings:
1. First year: Containers of interim status facilities or sites are currently inspected. The placement of a label on the tank will not appreciably affect the inspection cost.
2. Continuing costs or savings: See note in (2)(a)1 above.
3. Additional factors increasing or decreasing costs: See note in (2)(a)1 above.
(b) Reporting and paperwork requirements:
(3) Assessment of anticipated effect on state and local revenues: There will be no effect on state or local revenues from promulgation of this regulation.
(4) Assessment of alternative methods; reasons why alternatives were rejected:
(a) Labeling of hazardous waste containers at

interim status sites or facilities.

Alternative:

1. Less stringent: The cabinet could have chosen not to label containers. This choice could represent a hazard to the health of employees who work with these containers. Inspection of containers is facilitated by this labeling.

2. More stringent: The cabinet could have chosen to require more information on the label, but this requirement would be an unnecessary burden on the regulated community.

3. Present proposal: The present proposal is sufficient to protect human health and the environment.

(5) Identify any statute, administrative regulation or government policy which may be in conflict, overlapping, or duplication: None

(a) Necessity of proposed regulation if in conflict: Not applicable.

(b) If in conflict, was effort made to harmonize the proposed administrative regulation with conflicting provisions: Not applicable.

(6) Any additional information or comments: None.

Tiering:
Was tiering applied? Yes. This proposed amendment applies only to containers at interim status facilities or sites.

NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION CABINET
Department for Environmental Protection
Division of Waste Management
(Proposed Amendment)

401 KAR 35:190. Tanks (IS).

RELATES TO: KRS 224.033, 224.830 through 224.877, 224.994
PURSUANT TO: KRS Chapter 13A, [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) Hazardous 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 (approximately 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 cut-off system or bypass system to a standby tank).

(5) Tanks holding hazardous waste shall be labeled "Hazardous Waste" upon the date that hazardous waste is first added to the 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 previously 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 cut-off systems, bypass 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 of 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.

CHARLOTTE E. BALDWIN, Secretary

APPROVED BY AGENCY: November 12, 1985

FILED WITH LRC: November 13, 1985 at 3 p.m.

PUBLIC HEARING SCHEDULED: A public hearing on this regulation will be held on December 30, 1985, at 1 p.m. EST, in the Capital Plaza Tower. Any persons interested in attending this hearing shall submit by December 26, 1985, a written statement of such interest to: J. Alex Barber, Director, Division of Waste Management, 18 Reilly Road, Frankfort, Kentucky 40601. If no statement of interest is received by close of business on December 26, 1985, the hearing on this regulation may be cancelled. Written comments may also be submitted to the address above. Written comments will be accepted until the end of the comment period, which will be close of business on December 30, 1985.

REGULATORY IMPACT ANALYSIS

Agency Contact Person: J. Alex Barber, Director

(1) Type and number of entities affected: Hazardous waste sites or facilities which store or treat waste in tanks with interim status will be affected by the proposed amendment. There are approximately 10 interim status tanks in Kentucky.

(a) Direct and indirect costs or savings to those affected:

1. First year: There will be a small cost for purchase of labels.

2. Continuing costs or savings: Negligible. See note in (1)(a)1 above.

3. Additional factors increasing or decreasing costs (note any effects upon competition): Negligible. See note in (1)(a)1 above.

(b) Reporting and paperwork requirements: None. See note in (1)(a)1 above.

(2) Effects on the promulgating administrative body:

(a) Direct and indirect costs or savings:

1. First year: These interim status tanks for storage or treatment of hazardous waste are currently inspected. The placement of a label on the tanks will not appreciably affect the inspection process.

2. Continuing costs or savings: See note in (2)(a)1 above.

3. Additional factors increasing or decreasing costs: See note (2)(a)1 above.

(b) Reporting and paperwork requirements:

(3) Assessment of anticipated effect on state and local revenues: There will be no effect on state or local revenues from promulgation of this regulation.

(4) Assessment of alternative methods; reasons why alternatives were rejected:

(a) Labeling of interim status tanks in which hazardous waste is stored or treated.

Alternative:

1. Less stringent: The cabinet could have chosen not to label interim status tanks. This choice would not have protected the environment or the health of the individuals who work with the tanks. The labeling will also facilitate inspection of the tanks.

2. More stringent: The cabinet could have chosen to be more stringent, but more stringent requirements would be an unnecessary burden on the regulated community.

3. Present proposal: The proposed amendment is sufficient to protect human health and the environment.

(5) Identify any statute, administrative regulation or government policy which may be in conflict, overlapping, or duplication: None

(a) Necessity of proposed regulation if in conflict: Not applicable.

(b) If in conflict, was effort made to harmonize the proposed administrative regulation with conflicting provisions: Not applicable.

(6) Any additional information or comments: None.

Tiering:
Was tiering applied? Yes. This proposed amendment applies only to interim status tanks in which hazardous waste is stored or treated.

NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION CABINET
Department for Environmental Protection
Division of Waste Management
(Proposed Amendment)

401 KAR 35:200. Surface impoundments (IS).

RELATES TO: KRS 224.033, 224.830 through 224.877, 224.994

PURSUANT TO: KRS Chapter 13A, [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 previously treated in that impoundment; or

(2) Chemically treat hazardous waste with a substantially different process than any previously used in that impoundment. the owner or operator 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 once 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. Ignitable or reactive waste must not be placed in a surface impoundment unless:

(1) The waste is treated, rendered or mixed before placement in the impoundment so that: the resulting waste mixture no longer meets the definition of ignitable or reactive waste under Section 2 or 4 of 401 KAR 31:030; or

(2) The surface impoundment is used solely for emergencies.

Section 8. Special Requirements for Incompatible Wastes. Incompatible wastes or incompatible wastes and materials (see 401 KAR 35:330 for examples) 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.

Section 10. Design Requirements. (1) The owner or operator of a surface impoundment must install two (2) or more liners and a leachate collection system in accordance with Section 2(3) of 401 KAR 34:200, with respect to each new unit, replacement of an existing unit, or lateral expansion of an existing unit that is within the area identified in the Part A permit application, and with respect to waste received beginning May 8, 1985.

(2) The owner or operator of each unit referred to in subsection (1) of this section must notify the cabinet at least sixty (60) days prior to receiving waste. The owner or operator of each facility submitting notice must file a Part B application within six (6) months of the receipt of such notice by the cabinet.

(3) Subsection (1) of this section will not apply if the owner or operator demonstrates to the cabinet and the cabinet finds for such surface impoundment, that alternative design and operating practices, together with location characteristics, will prevent the migration of any hazardous constituent into the ground water or surface water at least as effectively as such liners and leachate collection systems.

(4) The double liner requirement set forth in subsection (1) of this section may be waived by the cabinet for any monofill, if:

(a) The monofill contains only hazardous wastes from foundry furnace emission controls or metal casting molding sand, and such wastes do not contain constituents which would render the wastes hazardous for reasons other than the EP toxicity characteristics in Section 5 of 401 KAR 31:030; and

(b) The owner or operator demonstrates that:

1. The monofill:

a. Has at least one (1) liner for which there is no evidence that such liner is leaking. For the purposes of this regulation the term "liner" means a liner designed, constructed, installed, and operated to prevent hazardous waste from passing into the liner at any time during the active life of the facility, or a liner designed, constructed, installed, and operated to prevent hazardous waste from migrating beyond the liner to adjacent subsurface soil, ground water, or surface water at any time during the

active life of the facility. In the case of any surface impoundment which has been exempted from the requirements of subsection (1) of this section on the basis of a liner designed, constructed, installed, and operated to prevent hazardous waste from passing beyond the liner, at the closure of such impoundment the owner or operator must remove or decontaminate all waste residues, all contaminated liner material, and contaminated soil to the extent practicable. If all contaminated soil is not removed or decontaminated, the owner or operator of such impoundment must comply with appropriate post-closure requirements, including but not limited to ground water monitoring and corrective action;

b. Is located more than one-fourth (1/4) mile from an underground source of drinking water (as that term is defined in 401 KAR 30:010); and

c. Is in compliance with generally applicable ground water monitoring requirements for facilities with permits issued in accordance with 401 KAR Chapter 38; or

2. The monofill is located, designed, and operated so as to assure that there will be no migration of any hazardous constituent into ground water or surface water at any future time.

3. In the case of any unit in which the liner and leachate collection system has been installed pursuant to the requirements of subsection (1) of this section and in good faith for compliance with subsection (1) of this section and with guidance documents governing liners and leachate collection systems under subsection (1) of this section, no liner or leachate collection system which is different from that which was so installed pursuant to subsection (1) of this section will be required for such unit by the cabinet when issuing the first permit to such facility, except that the cabinet not be precluded from requiring installation of a new liner when the cabinet has reason to believe that any liner installed pursuant to the requirements of subsection (1) of this section is leaking.

CHARLOTTE E. BALDWIN, Secretary
APPROVED BY AGENCY: November 12, 1985
FILED WITH LRC: November 13, 1985 at 3 p.m.
PUBLIC HEARING SCHEDULED: A public hearing on this regulation will be held on December 30, 1985, at 1 p.m. EST, in the Capital Plaza Tower. Any persons interested in attending this hearing shall submit by December 26, 1985, a written statement of such interest to: J. Alex Barber, Director, Division of Waste Management, 18 Reilly Road, Frankfort, Kentucky 40601. If no statement of interest is received by close of business on December 26, 1985, the hearing on this regulation may be cancelled. Written comments may also be submitted to the address above. Written comments will be accepted until the end of the comment period, which will be close of business on December 30, 1985.

REGULATORY IMPACT ANALYSIS

Agency Contact Person: J. Alex Barber, Director
(1) Type and number of entities affected: The amendments to this regulation affect 24 interim status surface impoundments in Kentucky.
(a) Direct and indirect costs or savings to those affected:
1. First year: There will be no additional costs or savings incurred by the regulated entity because these amendments are equivalent to the federal standards which the facility must already comply with. In the event that a monofill receives a waiver from the double liner requirement, a savings should be realized by the facility.
2. Continuing costs or savings: Not applicable.
3. Additional factors increasing or decreasing costs (note any effects upon competition): Not applicable.
(b) Reporting and paperwork requirements: Facilities with hazardous waste surface impoundments are required to apply to the cabinet for interim status and for an exemption to the double liner requirement.
(2) Effects on the promulgating administrative body:
(a) Direct and indirect costs or savings:
1. First year: See note in (1)(a)1.
2. Continuing costs or savings: Not applicable.
3. Additional factors increasing or decreasing costs: Not applicable.
(b) Reporting and paperwork requirements:
(3) Assessment of anticipated effect on state and local revenues: There will be no effect on state or local revenues from promulgation of this regulation.
(4) Assessment of alternative methods; reasons why alternatives were rejected:
(a) Double liner requirement and exemption.
Alternative:
1. Less stringent: Kentucky could not have chosen to be less stringent than the federal standards without losing authorization to run the RCRA hazardous waste program in Kentucky.
2. More stringent: Kentucky could have chosen to not allow the double liner exemption for monofills; however, this would be unnecessarily stringent on facilities having surface impoundments. The threat to the environment from facilities which meet the requirements for exemption is not great enough to merit excluding the exemption.
3. Present proposal: The present proposal, which is equivalent to the federal standards, was chosen to keep the Kentucky program equivalent to the federal.
(5) Identify any statute, administrative regulation or government policy which may be in conflict, overlapping, or duplication: None
(a) Necessity of proposed regulation if in conflict: Not applicable.
(b) If in conflict, was effort made to harmonize the proposed administrative regulation with conflicting provisions: Not applicable.
(6) Any additional information or comments: The impact of this regulation has not been analyzed for those requirements which are equivalent to those found in the corresponding federal regulation, 40 CFR 265.221. The impact of the federal program was analyzed in 50 FR 28735-28742, July 15, 1985. A copy of the July 15, 1985 federal register has been filed with the regulations compiler of the Legislative Research Commission.

Tiering:
Was tiering applied? Yes. This regulation was tiered to apply to hazardous waste facilities which have surface impoundments.

NATURAL RESOURCES AND
ENVIRONMENTAL PROTECTION CABINET
Department for Environmental Protection
Division of Waste Management
(Proposed Amendment)

401 KAR 35:210. Waste piles (IS).

RELATES TO: KRS 224.033, 224.830 through 224.877, 224.994
PURSUANT TO: KRS Chapter 13A, [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 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. 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 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 residues, contaminated containment system components (liners, etc.), contaminated subsoils, and structures and equipment contaminated with waste and leachate, and manage them as hazardous waste unless Section 3(4) of 401 KAR 31:010 applies; or
(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.

Section 8. Design Requirements. The owner or operator of a waste pile is subject to the requirements for liners and leachate collection systems or equivalent protection provided in Section 2 of 401 KAR 34:210, with respect to each new unit, replacement of an existing unit, or lateral expansion of an existing unit that is within the area identified in Part A permit application, and with respect to waste received beginning May 8, 1985.

CHARLOTTE E. BALDWIN, Secretary
APPROVED BY AGENCY: November 12, 1985
FILED WITH LRC: November 13, 1985 at 3 p.m.
PUBLIC HEARING SCHEDULED: A public hearing on this regulation will be held on December 30, 1985, at 1 p.m. EST, in the Capital Plaza Tower. Any persons interested in attending this hearing shall submit by December 26, 1985, a written statement of such interest to: J. Alex Barber, Director, Division of Waste Management, 18 Reilly Road, Frankfort, Kentucky 40601. If no statement of interest is received by close of business on December 26, 1985, the hearing on this regulation may be cancelled. Written comments may also be submitted to the address above. Written comments will be accepted until the end of the comment period, which will be close of business on December 30, 1985.

REGULATORY IMPACT ANALYSIS

Agency Contact Person: J. Alex Barber, Director
(1) Type and number of entities affected: This regulation currently affects 3 interim status facilities in Kentucky which have hazardous waste in waste piles.
(a) Direct and indirect costs or savings to those affected:
1. First year: There will be no new costs to facilities due to the promulgation of this regulation because facilities are already required to comply with these standards under federal regulations.
2. Continuing costs or savings: None.
3. Additional factors increasing or decreasing costs (note any effects upon competition): None.
(b) Reporting and paperwork requirements: None.
(2) Effects on the promulgating administrative body:
(a) Direct and indirect costs or savings:
1. First year: None. See note (1)(a)1.
2. Continuing costs or savings: None.
3. Additional factors increasing or decreasing costs: None.
(b) Reporting and paperwork requirements:
(3) Assessment of anticipated effect on state and local revenues: There will be no effect on state or local revenues from promulgation of this regulation.
(4) Assessment of alternative methods; reasons why alternatives were rejected:
(a) Liner and leachate collection system requirements.
Alternative:
1. Less stringent: Kentucky could not be less stringent and not require the liner and leachate collection and still maintain authorization to run the RCRA hazardous waste program in the state.
2. More stringent: It is not practical for Kentucky to attempt to be more stringent than the liner and leachate collection requirements contained in this amendment.
3. Present proposal: The present proposal was adopted identical to the federal requirements contained in 40 CFR 265.254.
(5) Identify any statute, administrative regulation or government policy which may be in conflict, overlapping, or duplication: None
(a) Necessity of proposed regulation if in conflict: Not applicable.
(b) If in conflict, was effort made to harmonize the proposed administrative regulation with conflicting provisions: Not applicable.
(6) Any additional information or comments: The impact of this regulation has not been analyzed for those requirements which are equivalent to those found in the corresponding federal regulation, 40 CFR 264.254. The impact of the federal program was analyzed in 50 FR 28735-28742, July 15, 1985. A copy of the July 15, 1985 federal register has been filed with the regulations compiler of the Legislative Research Commission.

Tiering:
Was tiering applied? Yes. This regulation affects only those hazardous waste facilities which have obtained interim status and have their waste in waste piles.

NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION CABINET
Department for Environmental Protection
Division of Waste Management
(Proposed Amendment)

401 KAR 35:220. Land treatment (IS).

RELATES TO: KRS 224.033, 224.830 through 224.877, 224.994
PURSUANT TO: KRS Chapter 13A, [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 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, transformation or immobilization processes [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 constituents 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.

a.

Table 2

Soil Cation Exchange Capacity (meq/100g)	Maximum Cumulative Application (kg/ha) Background Soil pH Less than 6.5	Background Soil pH Greater than 6.5
Less than 5	5	5
5-15	5	10
Greater than 15	5	20

b. For soils with a background pH of less than six and five-tenths (6.5), the cumulative cadmium application rate does not exceed the levels in Table 3 provided that the pH of the waste and soil mixture is adjusted and maintained at six and five-tenths (6.5) or greater whenever food-chain crops are grown.

Table 3

Soil Cation Exchange Capacity (meq/100g)	Maximum Cumulative Application(kg/ha)
Less than 5	5
5-15	10
Greater than 15	20

(b)1. The only food-chain crop produced is animal feed.

2. The pH of the waste and soil mixture is six and five-tenths (6.5) or greater at the time of waste application or at the time the crop is planted, whichever occurs later, and this pH level is maintained whenever food-chain crops are grown;

3. There is a facility operating plan which demonstrates how the animal feed 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 constituents under the

active portion of the land treatment facility; and

(b) Provide information on the background concentrations of the hazardous waste and hazardous waste constituents in similar but untreated soils nearby; this background monitoring 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. (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 precipitation;

(e) Geological and soil profiles and surfaces and subsurface hydrology of the site and soil characteristics including cation exchange capacity, total organic carbon and pH;

(f) Unsaturated zone monitoring information obtained under Section 5 of this 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.

CHARLOTTE E. BALDWIN, Secretary
APPROVED BY AGENCY: November 12, 1985
FILED WITH LRC: November 13, 1985 at 3 p.m.
PUBLIC HEARING SCHEDULED: A public hearing on this regulation will be held on December 30, 1985, at 1 p.m. EST, in the Capital Plaza Tower. Any persons interested in attending this hearing shall submit by December 26, 1985, a written statement of such interest to: J. Alex Barber, Director, Division of Waste Management, 18 Reilly Road, Frankfort, Kentucky 40601. If no statement of interest is received by close of business on December 26, 1985, the hearing on this regulation may be cancelled. Written comments may also be submitted to the address above. Written comments will be accepted until the end of the comment period, which will be close of business on December 30, 1985.

REGULATORY IMPACT ANALYSIS

Agency Contact Person: J. Alex Barber, Director
(1) Type and number of entities affected: There are presently no hazardous waste land treatment facilities in Kentucky.
(a) Direct and indirect costs or savings to those affected:
1. First year: None.
2. Continuing costs or savings: None.
3. Additional factors increasing or decreasing costs (note any effects upon competition): None.
(b) Reporting and paperwork requirements: None.
(2) Effects on the promulgating administrative body:
(a) Direct and indirect costs or savings:
1. First year: None.
2. Continuing costs or savings: None.
3. Additional factors increasing or decreasing costs: None.
(b) Reporting and paperwork requirements:
(3) Assessment of anticipated effect on state and local revenues: There will be no effect on state or local revenues from promulgation of this regulation.
(4) Assessment of alternative methods; reasons why alternatives were rejected:
(a) Section 2 has been amended to be consistent with the language in 401 KAR 34:220. Alternatives are not applicable.
(5) Identify any statute, administrative regulation or government policy which may be in conflict, overlapping, or duplication: None.
(a) Necessity of proposed regulation if in conflict: Not applicable.
(b) If in conflict, was effort made to harmonize the proposed administrative regulation with conflicting provisions: Not applicable.
(6) Any additional information or comments: The impact of this regulation has not been analyzed for those requirements which are equivalent to those found in the corresponding federal regulation, 40 CFR 265.272. The impact of the federal program was analyzed in 50 FR 16044-16048, April 23, 1985. A copy of the April 23, 1985 federal register has been filed with the regulations compiler of the Legislative Research Commission.

Tiering:
Was tiering applied? Yes. This regulation applies only to hazardous waste land treatment facilities.

NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION CABINET
Department for Environmental Protection
Division of Waste Management
(Proposed Amendment)

401 KAR 35:230. Landfill (IS).

RELATES TO: KRS 224.033, 224.830 through 224.877, 224.994
PURSUANT TO: KRS Chapter 13A, [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.
(5) As required by Section 4 of 401 KAR 35:020, the waste analysis plan must include the analyses needed to comply with Sections 5, 6, and 7 of this regulation. As required by Section 4 of 401 KAR 35:050, the owner or operator must place the results of these analyses in the operating record of the facility.

Section 3. Surveying and Recordkeeping. The owner or operator of a landfill 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) 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 the the cover's integrity is maintained; and
(e) Have a permeability less than or equal to 1×10^{-7} cm/sec. [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) After final closure, the owner or operator must comply with all post-closure requirements contained in Sections 7 through 10 of 401 KAR 35:070 including maintenance and monitoring throughout the post-closure care period. The owner or operator must:
(a) Maintain the integrity and effectiveness of the final cover, including making repairs to the cover as necessary to correct the effects of settling, subsidence, erosion, or other events;
(b) Maintain and monitor the ground water monitoring system and comply with all other applicable requirements of 401 KAR 35:060;
(c) Prevent run-on and run-off from eroding or otherwise damaging the final cover; and
(d) Protect and maintain surveyed benchmarks used in complying with this section.
(5) [(4)] 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 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;]
(a) [(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]
(b) [(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, Bulk and Containerized Waste. (1) The placement of bulk or non-containerized liquid hazardous waste or hazardous waste containing free liquids (whether or not absorbents have been added) in any landfill is prohibited. [Bulk or non-containerized liquid waste or waste containing free liquid waste must not be placed in a landfill.]
(2) To demonstrate the absence or presence of free liquids in either a containerized or bulk waste, the following test must be used: Method 9095 (Paint Filter Liquids Test) as described in "Test Methods for Evaluating Solid Wastes, Physical/Chemical Methods," (EPA Publication No. SW-846 which is incorporated by reference in Section 3 of 401 KAR 30:010). [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.

(4) Effective November 8, 1985, the placement of any liquid which is not a hazardous waste in a landfill is prohibited unless the owner or operator of such landfill demonstrates to the cabinet or the cabinet determines that:

(a) The only reasonably available alternative to the placement in such landfill is placement in a landfill or unlined surface impoundment, whether or not permitted or operating under interim status, which contains, or may reasonably be anticipated to contain, hazardous waste;

(b) Placement in such owner's or operator's landfill or surface impoundment will not present a risk of contamination of any underground source of drinking water (as that term is defined in Section 1 of 401 KAR 30:010); and

(c) Placement in such owner's or operator's landfill or unlined surface impoundment is in compliance with the applicable provisions of KRS Chapter 224.

Section 8. Special Requirements for Containers. Unless they are very small, such as an ampule, containers must be either:

(1) At least ninety (90) percent full when placed in the landfill; or [An empty container must be crushed flat, shredded or similarly reduced in volume before it is buried beneath the surface of a landfill.]

(2) Crushed, shredded, or similarly reduced in volume to the maximum practical extent before burial in the landfill. [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 (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 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 non-reactive prior to packaging in accordance with subsections (1) through (4) of this section.

Section 10. Design Requirements. (1) The owner or operator of a landfill must install two (2) or more liners and leachate collection systems above and between such liners in accordance with Section 2(3) of 401 KAR 34:230 with respect to each new unit, replacement of an existing unit, or lateral expansion of an existing unit that is within the area identified in the Part A permit application, and with respect to waste received beginning May 8, 1985.

(2) The owner or operator of each unit referred to in subsection (1) of this section must notify the cabinet at least sixty (60) days prior to receiving waste. The owner or operator of each facility submitting notice must file a Part B application within six (6) months of the receipt of such notice by the cabinet.

(3) Subsection (1) of this section will not apply if the owner or operator demonstrates to the cabinet, and the cabinet finds for such landfill, that alternative design and operating practices, together with location characteristics, will prevent the migration of any hazardous constituent into the ground water or surface water at least as effectively as such liners and leachate collection systems.

(4) The double liner requirement set forth in subsection (1) of this section may be waived by the cabinet for any monofill, if:

(a) The monofill contains only hazardous wastes from foundry furnace emission controls or metal casting molding sand, and such wastes do not contain constituents which would render the wastes hazardous for reasons other than the EP toxicity characteristics in Section 5 of 401 KAR 31:030, and the owner or operator demonstrates that:

1. The monofill:

a. Has at least one (1) liner for which there is no evidence that such liner is leaking;

b. Is located more than one-fourth (1/4) mile from an underground source of drinking water (as that term is defined in 401 KAR 30:010); and

c. Is in compliance with generally applicable ground water monitoring requirements for facilities with permits under 401 KAR Chapter 38; or

2. The owner or operator demonstrates that the monofill is located, designed, and operated so as to assure that there will be no migration of any hazardous constituent into ground water or surface water at any future time.

(5) In the case of any unit in which the liner and leachate collection system has been installed pursuant to the requirements of subsection (1) of this section and in good faith compliance with subsection (1) of this section and with guidance documents governing liners and leachate collection systems under subsection (1) of this section, no liner or leachate collection system which is different from that which was so installed pursuant to subsection (1) of this section will be required for such unit by the cabinet when issuing the first permit to such facility, except that the cabinet will not be precluded from requiring installation of a new liner when the cabinet has reason to believe that any liner installed pursuant to the requirements of subsection (1) of this section is leaking.

CHARLOTTE E. BALDWIN, Secretary
APPROVED BY AGENCY: November 12, 1985

FILED WITH LRC: November 13, 1985 at 3 p.m.

PUBLIC HEARING SCHEDULED: A public hearing on this regulation will be held on December 30, 1985, at 1 p.m. EST, in the Capital Plaza Tower. Any persons interested in attending this hearing shall submit by December 26, 1985, a written statement of such interest to: J. Alex Barber, Director, Division of Waste Management, 18 Reilly Road, Frankfort, Kentucky 40601. If no statement of interest is received by close of business on December 26, 1985, the hearing on this regulation may be cancelled. Written comments may also be submitted to the address above. Written comments will be accepted until the end of the comment period, which will be close of business on December 30, 1985.

REGULATORY IMPACT ANALYSIS

Agency Contact Person: J. Alex Barber, Director

(1) Type and number of entities affected: This regulation applies to 3 interim status hazardous waste landfills in Kentucky.

(a) Direct and indirect costs or savings to those affected:

1. First year: The amendments contained in this regulation are identical to the federal standards contained in 40 CFR 265.301, 265.302, 265.310, 265.314, and 265.315. Because facilities will be required to comply with these standards on a federal level even if they were not adopted on a state level, there will be no cost or savings due to the amendment of this regulation. See note in item (6), Any Additional Information or Comments.

2. Continuing costs or savings: None. See note in item (6), Any Additional Information or Comments.

3. Additional factors increasing or decreasing costs (note any effects upon competition): None. See note in item (6), Any Additional Information or Comments.

(b) Reporting and paperwork requirements: The only additional paperwork requirements involve applying for an exemption to the double liner requirement.

(2) Effects on the promulgating administrative body:

(a) Direct and indirect costs or savings:

1. First year: None. Although additional requirements have been included for interim status landfills, there will be no increase or decrease in the workload for the promulgating agency.

2. Continuing costs or savings: None. See note in (2)(a)1.

3. Additional factors increasing or decreasing costs: None. See note in (2)(a)1.

(b) Reporting and paperwork requirements:

(3) Assessment of anticipated effect on state and local revenues: There will be no effect on state or local revenues from promulgation of this regulation.

(4) Assessment of alternative methods; reasons why alternatives were rejected:

(a) The proposed amendments to this regulation contain a requirement for double liner or an exemption.

Alternative:

1. Less stringent: Kentucky could not have been less stringent on this requirement and still have maintained authorization to administer the RCRA hazardous waste program. To have adopted less stringent provisions would have afforded Kentucky's public health and environment less protection than that provided by the national program.

2. More stringent: Kentucky could have been more stringent and not have allowed an exemption for monofills which meet the required standards. This would be unnecessary because a monofill which meets the standards for the exemption will provide adequate protection to public health and the environment.

3. Present proposal: The present proposal is identical to the federal proposal and is the most appropriate to maintain consistency with the federal program.

(b) The amendments to the regulation provide for the use of the paint filter liquids test.

Alternative:

1. Less stringent: Kentucky chose not to be less stringent because the paint filter liquids test is deemed the most appropriate test for free liquids.

2. More stringent: Kentucky chose not to be more stringent because the paint filter liquids test is deemed the most appropriate test for free liquids.

3. Present proposal: The paint filter liquids test was deemed most appropriate for free liquids.

(c) The proposed amendments contain special requirements for containers.

Alternative:

1. Less stringent: Kentucky cannot be less stringent and maintain equivalency with the federal program. In addition, Kentucky chose not to adopt standards which are less stringent than the federal because this would have afforded less protection to Kentucky's public health and environment than that provided by the national program.

2. More stringent: The cabinet chose not to adopt more stringent standards for containers because the present proposal will adequately protect public health and the environment.

3. Present proposal: The present proposal adequately protects the environment from the threat of improperly managed containers in a landfill.

(5) Identify any statute, administrative regulation or government policy which may be in conflict, overlapping, or duplication: None

(a) Necessity of proposed regulation if in conflict: Not applicable.

(b) If in conflict, was effort made to harmonize the proposed administrative regulation with conflicting provisions: Not applicable.

(6) Any additional information or comments: The impact of this regulation has not been analyzed for those requirements which are equivalent to those found in the corresponding federal regulations, 40 CFR 265.301, 265.302, 265.310, 265.314, and 265.315. The impact of the federal program was analyzed in 50 FR 16044-16047, April 23, 1985; 18370-18375, April 30, 1985; and 28702-28742, July 15, 1985. A copy of the April 23, 1985, April 30, 1985 and July 15, 1985 federal registers have been filed with the regulations compiler of the Legislative Research Commission.

Tiering:

Was tiering applied? Yes. This regulation applies only to hazardous waste landfills that have obtained interim status.

NATURAL RESOURCES AND
ENVIRONMENTAL PROTECTION CABINET
Department for Environmental Protection
Division of Waste Management
(Proposed Amendment)

401 KAR 35:240. Incinerators (IS).

RELATES TO: KRS 224.033, 224.830 through 224.877, 224.994
PURSUANT TO: KRS Chapter 13A, [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 incinerate [treat] hazardous waste [in incinerators], except as Section 1 of 401 KAR 35:010 [and subsection (2) of this section] provides otherwise. The following facility owners or operators are considered to incinerate hazardous waste:

(a) Owners or operators of hazardous waste incinerators as defined in 401 KAR 30:010; and

(b) Owners or operators who burn hazardous wastes in boilers or in industrial furnaces in order to destroy the wastes.

(2) Owners and operators of incinerators burning hazardous waste are exempt from all of the requirements of this regulation, except Section 5 of this regulation, provided that the owner or operator has documented, in writing that the waste would not reasonably be expected to contain any of the hazardous constituents listed in 401 KAR 31:170, and such documentation is retained at the facility, if the waste to be burned is:

(a) Listed as a hazardous waste in 401 KAR 31:040 solely because it is ignitable (Hazard Code I), corrosive (Hazard Code C), or both; or

(b) Listed as a hazardous waste in 401 KAR 31:040 solely because it is reactive (Hazard Code R) for characteristics other than those listed in Section 4(1)(d) and (e) of 401 KAR 31:030, and will not be burned when other hazardous wastes are present in the combustion zone; or

(c) A hazardous waste solely because it possesses the characteristic of ignitability, corrosivity, or both, as determined by the tests for characteristics of hazardous wastes under 401 KAR 31:030; or

(d) A hazardous waste solely because it possesses the reactivity characteristics described by Section 4(1)(a), (b), (c), (f), (g), or (h) of 401 KAR 31:030, and will not be burned when other hazardous wastes are present in the combustion zone.

Section 2. Waste Analysis. In addition to the waste analyses required by Section 4 of 401 KAR 35:020, the owner or operator 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 incinerator is at steady state (normal) conditions of operation, including steady state operating temperature and air flow.

Section 4. Monitoring and Inspections. The owner or operator 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.

Section 6. Interim Status Incinerators Burning Particular Hazardous Wastes. (1) Owners or operators of incinerators subject to this regulation may burn EPA Hazardous Wastes Numbers F020, F021, F023, F026 or F027 (chlorinated dioxins, dibenzofurans, and phenols) if they receive a certification from the cabinet that they can meet the performance standards of 401 KAR 34:240 when they burn these wastes.

(2) The following standards and procedures will be used in determining whether to certify and incinerator:

(a) The owner or operator will submit an application to the cabinet containing applicable information in 401 KAR 38:190 and Section 3 of 401 KAR 38:060 demonstrating that the incinertor can meet the performance standards in 401 KAR 34:240 when they burn these wastes.

(b) The cabinet will issue a tentative decision as to whether the incinerator can meet the performance standards in 401 KAR 34:240. Notification of this tentative decision will be provided by newspaper advertisement and radio broadcast in the jurisdiction where the incinerator is located. The cabinet will accept comment on the tentative decision for sixty (60)

days. The cabinet also may hold a public hearing upon request or at his discretion.

(c) After the close of the public comment period, the director will issue a decision whether or not to certify the incinerator.

CHARLOTTE E. BALDWIN, Secretary
APPROVED BY AGENCY: November 12, 1985
FILED WITH LRC: November 13, 1985 at 3 p.m.

PUBLIC HEARING SCHEDULED: A public hearing on this regulation will be held on December 30, 1985, at 1 p.m. EST, in the Capital Plaza Tower. Any persons interested in attending this hearing shall submit by December 26, 1985, a written statement of such interest to: J. Alex Barber, Director, Division of Waste Management, 18 Reilly Road, Frankfort, Kentucky 40601. If no statement of interest is received by close of business on December 26, 1985, the hearing on this regulation may be cancelled. Written comments may also be submitted to the address above. Written comments will be accepted until the end of the comment period, which will be close of business on December 30, 1985.

REGULATORY IMPACT ANALYSIS

Agency Contact Person: J. Alex Barber, Director

(1) Type and number of entities affected: This regulation affects 5 hazardous waste incinerators in Kentucky.

(a) Direct and indirect costs or savings to those affected:

1. First year: The proposed amendments to this regulation adopt requirements which are identical to those contained in the federal regulations 40 CFR 265.340, 265.341, 265.345, 265.347, 265.351, and 265.352. Facilities will be required to comply with these standards on a federal level even if Kentucky didn't adopt these standards. Therefore, there are no costs or savings above those incurred by compliance with the federal program. See note in item (6) Any Additional Information or Comments.

2. Continuing costs or savings: None. See note in (1)(a)1 above.

3. Additional factors increasing or decreasing costs (note any effects upon competition): None. See note in (1)(a)1 above.

(b) Reporting and paperwork requirements: The reporting and paperwork requirements of this regulation are already required by the federal 40 CFR 265 standards. See note in item (6) Any Additional Information or Comments.

(2) Effects on the promulgating administrative body:

(a) Direct and indirect costs or savings:

1. First year: None. The amendments made to this regulation will not alter the workload of the promulgating agency.

2. Continuing costs or savings: None. See note in (2)(a)1 above.

3. Additional factors increasing or decreasing costs: None. See note in (2)(a)1 above.

(b) Reporting and paperwork requirements:

(3) Assessment of anticipated effect on state and local revenues: There will be no effect on state or local revenues from promulgation of this regulation.

(4) Assessment of alternative methods; reasons why alternatives were rejected:

(a) The proposed amendments incorporate a certification to burn F020, F021, F023, F026, or F027 (chlorinated dioxins, dibenzofurans, and phenols).

Alternative:

1. Less stringent: If Kentucky allows these wastes to be burned without obtaining certification from the cabinet, then Kentucky would be considered less stringent than the federal program and authroization to operate the federal program in the state could be withdrawn. In addition, to adopt less stringent provisions would afford Kentucky's public health and environment less protection than that provided by the national program.

2. More stringent: Kentucky could have chosen to be more stringent and not permit these wastes to be burned. However, it has been determined that the properly controlled burning of these wastes does not present a threat to the environment or public health.

3. Present proposal: The present proposal was chosen because properly managed and regulated incineration is considered one of the most environmentally safe methods of disposing of these wastes.

(5) Identify any statute, administrative regulation or government policy which may be in conflict, overlapping, or duplication: None

(a) Necessity of proposed regulation if in conflict: Not applicable.

(b) If in conflict, was effort made to harmonize the proposed administrative regulation with conflicting provisions: Not applicable.

(6) Any additional information or comments: The impact of this regulation has not been analyzed for those requirements which are equivalent to those found in the corresponding federal regulations, 40 CFR 265.340, 265.351, and 265.352. The impact of the federal program was analyzed in 50 FR 614-662, January 4, 1985 and 1978-1998, January 14, 1985. A copy of the January 4, 1985 and January 14, 1985 federal registers have been filed with the regulations compiler of the Legislative Research Commission.

Tiering:
Was tiering applied? Yes. This regulation applies to incinerators which burn hazardous wastes.

NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION CABINET
Department for Environmental Protection
Division of Waste Management
(Proposed Amendment)

401 KAR 35:250. Thermal treatment (IS).

RELATES TO: KRS 224.033, 224.830 through 224.877, 224.994

PURSUANT TO: KRS Chapter 13A, [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 or [and] operators of sites or facilities that thermally treat hazardous waste in devices other than enclosed devices using controlled flame combustion [incinerators] except as Section 1 of 401 KAR 35:010 provides otherwise. Thermal treatment in enclosed devices using controlled flame combustion is [incinerators are] subject to the requirements of 401 KAR 35:240 if the unit is an incinerator.

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 and 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)

Section 7. Interim Status Thermal Treatment Devices Burning Particular Hazardous Wastes. (1) Owners or operators of thermal treatment devices subject to the requirements of this regulation may burn EPA Hazardous Wastes Numbers F020, F021, F022, F023, F026 or F027 (chlorinated dioxins, dibenzofurans, and phenols) if they receive a certification from the cabinet that they can meet the performance standards of 401 KAR 34:240 when they burn these wastes.

(2) The following standards and procedures will be used in determining whether to certify a thermal treatment unit:

(a) The owner or operator will submit an application to the cabinet containing the applicable information in 401 KAR 38:190 and Section 3 of 401 KAR 38:060 demonstrating that the thermal treatment unit can meet the standards of 401 KAR 34:240 when they burn these wastes.

(b) The cabinet will issue a tentative decision as to whether the thermal treatment unit can meet the performance standards in 401 KAR 34:240. Notification of this tentative decision will be provided by newspaper advertisement and radio broadcast in the jurisdiction where the thermal treatment device is located. The cabinet will accept comment on the tentative decision for sixty (60) days. The cabinet may also hold a public hearing upon request or at his discretion.

(c) After the close of the public comment period, the cabinet will issue a decision whether or not to certify the thermal treatment unit.

CHARLOTTE E. BALDWIN, Secretary
APPROVED BY AGENCY: November 12, 1985

FILED WITH LRC: November 13, 1985 at 3 p.m.

PUBLIC HEARING SCHEDULED: A public hearing on this regulation will be held on December 30, 1985, at 1 p.m. EST, in the Capital Plaza Tower. Any persons interested in attending this hearing shall submit by December 26, 1985, a written statement of such interest to: J. Alex Barber, Director, Division of Waste Management, 18 Reilly Road, Frankfort, Kentucky 40601. If no statement of interest is received by close of business on December 26, 1985, the hearing on this regulation may be cancelled. Written comments may also be submitted to the address above. Written comments will be accepted until the end of the comment period, which will be close of business on December 30, 1985.

REGULATORY IMPACT ANALYSIS

Agency Contact Person: J. Alex Barber, Director

(1) Type and number of entities affected: This regulation affects thermal treatment units in Kentucky. Although the number of potential thermal treatment units in Kentucky is unknown, in 1983 there was only 1 eligible for interim status.

(a) Direct and indirect costs or savings to those affected:

1. First year: The requirements for certification are identical to the federal requirements for thermal treatment units. Therefore, the facilities will incur no additional costs or savings because they will already be required to comply with these standards on a federal level. See note in item (6) Any Additional Information or Comments.

2. Continuing costs or savings: Not Applicable. See note in (1)(a)1 above.

3. Additional factors increasing or decreasing costs (note any effects upon competition): Not Applicable. See note in (1)(a)1 above.

(b) Reporting and paperwork requirements: The additional paperwork requirements of applying for certification to burn the waste would exist on a federal level even if they were not incorporated in state regulation. See note in item (6) Any Additional Information or Comments.

(2) Effects on the promulgating administrative body:

(a) Direct and indirect costs or savings:

1. First year: Not Applicable. See note in (1)(a)1. There will be a cost for certifying a thermal treatment facility, however, the cabinet does not anticipate that there will be any facilities requiring certification in the near future.

2. Continuing costs or savings: Not Applicable. See note in (2)(a)1 above.

3. Additional factors increasing or decreasing costs: Not Applicable. See note in (2)(a)1 above.

(b) Reporting and paperwork requirements:

(3) Assessment of anticipated effect on state and local revenues: There will be no effect on state or local revenues from promulgation of this regulation.

(4) Assessment of alternative methods; reasons why alternatives were rejected:

(a) The proposed amendment to this regulation includes a certification requirement for facilities which wish to burn EPA Hazardous Wastes Numbers F020, F021, F022, F023, F026, or F027 (chlorinated dioxins, dibenzofurans, and phenols).

Alternative:

1. Less stringent: Kentucky could have chosen to be less stringent. However, this would have afforded less protection to Kentucky's public health and environment than that provided by the national program.

2. More stringent: If Kentucky had chosen to be more stringent and not allow thermal treatment units to burn these wastes, it would have placed burdensome and unnecessary restrictions on the regulated facilities.

3. Present proposal: The present proposal was chosen because it is identical to the federal regulations and is fair and equitable to the regulated community while adequately protecting the environment.

(5) Identify any statute, administrative regulation or government policy which may be in conflict, overlapping, or duplication: None

(a) Necessity of proposed regulation if in conflict: Not applicable.

(b) If in conflict, was effort made to harmonize the proposed administrative regulation with conflicting provisions: Not applicable.

(6) Any additional information or comments: The impact of this regulation has not been analyzed for those requirements which are equivalent to those found in the corresponding federal regulations, 40 CFR 265.370 and 265.383. The impact of the federal program was analyzed in 50 FR 614-662, January 4, 1985 and 50 FR 1978-1998, January 14, 1985. A copy of the January 4, 1985 and January 14, 1985 federal registers have been filed with the regulations compiler of the Legislative Research Commission.

Tiering:

Was tiering applied? Yes. The amendments to this regulation were tiered to apply to enclosed thermal treatment units who wish to burn the specific wastes F020, F021, F022, F023, F026, or F027.

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 224.877, 224.994

PURSUANT TO: KRS Chapter 13A, 224.033, 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 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 interim status facilities.

Section 1. Qualifying for Interim Status. (1) Any person who owns or operates: an "existing hazardous waste site or facility;" or a facility in existence on November 8, 1984 if the Hazardous and Solid Waste Amendments of 1984 render the facility subject to the requirements of 401 KAR Chapters 34, 35, 36, 38, and 39; or a facility in existence on the effective date of this regulation if amendments made to 401 KAR Chapters 34, 35, 36, 38 or 39 on that date render the facility subject to those regulations

shall have interim status and shall be treated as having been issued a permit to the extent he or she has:

(a) Complied with the requirements of KRS 224.866 pertaining to notification of an existing hazardous waste activity; and

(b) Complied with the requirements of 401 KAR 38:070 governing submission of Part A applications.

(2) When the cabinet determines on examination or re-examination of a Part A application (or its equivalent, Registration of Intent to Apply for a Permit) that it fails to meet the standards of these 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.

(3) Subsection (1) of this section shall not apply to any facility which has been previously denied a permit or if authority to operate the facility under 401 KAR Chapters 30 through 39 and KRS Chapter 224 has been previously terminated.

Section 2. Operation During Interim Status. (1) During the interim status period the facility, except as provided in Section 3 of the regulation, shall not:

(a) Treat, store or dispose of hazardous waste not specified in Part A of the permit application (or its equivalent, Registration of Intent to Apply for a Permit);

(b) Employ processes not specified in Part A of the permit application (or its equivalent, Registration of Intent to Apply for a Permit); or

(c) Exceed the design capacities specified in Part A of the permit application (or its equivalent, Registration of Intent to Apply for a Permit).

(2) During interim status, owners or operators shall comply with the interim status standards in 401 KAR Chapter 35.

Section 3. Changes During Interim Status. (1) 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 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 or federal or 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 of 401 KAR 35:080 through 401 KAR 35:130, (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. 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, 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 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 (50) percent of the capital cost of a comparable entirely new hazardous waste site or facility.

(6) Closure of the facility during iterim status shall, at a minimum, be in accordance with 401 KAR 34:060, Section 12.

Section 4. Termination of Interim Status. Interim status terminates when:

(1) Final administrative disposition of a permit application is made; or

(2) Interim status is terminated as provided in Section 5 of 401 KAR 38:040.

(3) For owners or operators of each land disposal facility which has been granted interim status prior to November 8, 1984, on November 8, 1985, unless:

(a) The owner or operator submits a Part B application for a permit for such facility prior to that date; and

(b) The owner or operator certifies that such facility is in compliance with all applicable ground water monitoring and financial responsibility requirements.

(4) For owners or operators of each land disposal facility which is in existence on November 8, 1984 or the date applicable amendments are made to 401 KAR Chapters 30 through 39 which render the facility subject to the requirements in 401 KAR Chapters 30 through 39 and which is granted interim status, twelve (12) months after the date on which the facility first becomes subject to such permit requirement unless the owner or operator of such facility:

(a) Submits a Part B application for a permit for such facility before the date twelve (12) months after the date on which the facility first becomes subject to such permit requirements; and

(b) Certifies that such facility is in compliance with all applicable ground water monitoring and financial responsibility requirements.

(5) For owners or operators of each incinerator facility on November 8, 1989, unless the owner or operator of the facility submits a Part B application for a permit for an incinerator facility by November 8, 1986.

(6) For owners or operators of any facility (other than a land disposal or an incinerator facility) on November 8, 1992, unless the owner or operator of the facility submits a Part B application for a permit for the facility by November 8, 1988.

Section 5. Deadlines for Submission of Part B of the Application. All hazardous waste sites or facilities which have submitted Part A of the application or its equivalent 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 US EPA. However, in accordance with KRS 224.866(1), the cabinet may require submission of Part B of the application at any time.

CHARLOTTE E. BALDWIN, Secretary
APPROVED BY AGENCY: November 12, 1985
FILED WITH LRC: November 13, 1985 at 3 p.m.
PUBLIC HEARING SCHEDULED: A public hearing on this regulation will be held on December 30, 1985, at 1 p.m. EST, in the Capital Plaza Tower. Any persons interested in attending this hearing shall submit by December 26, 1985, a written statement of such interest to: J. Alex Barber, Director, Division of Waste Management, 18 Reilly Road, Frankfort, Kentucky 40601. If no statement of interest is received by close of business on December 26, 1985, the hearing on this regulation may be cancelled. Written comments may also be submitted to the address above. Written comments will be accepted until the end of the comment period, which will be close of business on December 30, 1985.

REGULATORY IMPACT ANALYSIS

Agency Contact Person: J. Alex Barber, Director
(1) Type and number of entities affected: The amendments to this regulation apply to all facilities which operate under interim status. There are currently 90 hazardous waste facilities in Kentucky; 60 of these operate under interim status.
(a) Direct and indirect costs or savings to those affected:
1. First year: None. See note in item (6) Any Additional Information or Comments.
2. Continuing costs or savings: None. See note in item (6) Any Additional Information or Comments.
3. Additional factors increasing or decreasing costs (note any effects upon competition): None. See note in item (6) Any Additional Information or Comments.
(b) Reporting and paperwork requirements: None. See note in item (6) Any Additional Information or Comments.
(2) Effects on the promulgating administrative body:
(a) Direct and indirect costs or savings:
1. First year: None. Although changes are proposed to the requirements for facilities operating under interim status, the changes will not result in additional costs or savings to the promulgating administrative body.
2. Continuing costs or savings: None. See note in (2)(a)1 above.
3. Additional factors increasing or decreasing costs: None. See note in (2)(a)1 above.
(b) Reporting and paperwork requirements:
(3) Assessment of anticipated effect on state and local revenues: There will be no effect on state or local revenues from promulgation of this regulation.
(4) Assessment of alternative methods; reasons why alternatives were rejected:
(a) Requirements for facilities operating under interim status have been adopted identical to those promulgated by the U.S. Environmental Protection Agency on July 15, 1985.
Alternative:
1. Less stringent: The cabinet could have chosen to be less stringent by adopting interim status requirements which are less stringent than the federal requirements. However, this would have afforded Kentucky's public health and environment less protection than that afforded by the national program.
2. More stringent: The cabinet could have chosen to adopt criteria which are more stringent than the criteria adopted by U.S. EPA. However, the current proposal is adequate to protect public health and the environment.
3. Present proposal: The present proposal adopts the federal standards for facilities operating under iterim status verbatim.
(b) The cabinet proposes to include a reference requiring facilities closing under interim status without obtaining a Part B permit to include corrective action measures if necessary.
Alternative:
1. Less stringent: The cabinet could have omitted this reference. However, this would not have met the intent of Section 3004(u) of the Resource Conservation and Recovery Act which specifies that corrective action measures must be taken regardless of when the waste was actually placed in the unit.
2. More stringent: The cabinet could have chosen to be more stringent by requiring additional provisions for interim status facilities which are closing. However, the present proposal is adequate to protect public health and the environment.
3. Present proposal: The cabinet chose to include the reference to insure compliance with the corrective action provisions required by the Resource Conservation and Recovery Act.
(5) Identify any statute, administrative regulation or government policy which may be in conflict, overlapping, or duplication: None
(a) Necessity of proposed regulation if in conflict: Not applicable.
(b) If in conflict, was effort made to harmonize the proposed administrative regulation with conflicting provisions: Not applicable.
(6) Any additional information or comments: The impact of this regulation has not been analyzed for those requirements which are equivalent to those found in the corresponding federal regulations, 40 CFR 270.70 and 270.73. The impact of the federal program was analyzed in 50 FR 28702-28755, July 15, 1985. A copy of the July 15, 1985 federal register has been filed with the regulations compiler of the Legislative Research Commission.

Tiering:
Was tiering applied? Yes. This regulation applies only to interim status hazardous waste facilities.

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, 224.830 through 224.877, 224.994 [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,]
PURSUANT TO: KRS Chapter 13A, 224.033, 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 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. 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, 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. In the event of noncompliance with the permit, the permittee shall take all reasonable steps to minimize releases to the environment, and shall carry out such measures as are reasonable to prevent significant adverse impacts on human health and the environment.
(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 backup 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, the certification required by Section 4(2)(i) of 401 KAR 34:050, 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, certification 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.
(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 reoccurrence 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 supply.
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 2 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) Each permit shall include permit conditions necessary to achieve compliance with KRS Chapter 224 and regulations promulgated pursuant thereto, including each of the applicable requirements specified in 401 KAR Chapters 34 and 36. In satisfying this provision, the cabinet may incorporate applicable requirements of 401 KAR Chapters 34 and 36 directly into the permit or establish other permit conditions that are based on these requirements. [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) Each permit issued under KRS 224.855 and 224.866 shall contain terms and conditions as the cabinet determines necessary to protect human health and the environment. [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 3 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.

(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 intern 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.

CHARLOTTE E. BALDWIN, Secretary
APPROVED BY AGENCY: November 12, 1985
FILED WITH LRC: November 13, 1985 at 3 p.m.

PUBLIC HEARING SCHEDULED: A public hearing on this regulation will be held on December 30, 1985, at 1 p.m. EST, in the Capital Plaza Tower. Any persons interested in attending this hearing shall submit by December 26, 1985, a written statement of such interest to: J. Alex Barber, Director, Division of Waste Management, 18 Reilly Road, Frankfort, Kentucky 40601. If no statement of interest is received by close of business on December 26, 1985, the hearing on this regulation may be cancelled. Written comments may also be submitted to the address above. Written comments will be accepted until the end of the comment period, which will be close of business on December 30, 1985.

REGULATORY IMPACT ANALYSIS

Agency Contact Person: J. Alex Barber, Director

(1) Type and number of entities affected: There are 90 hazardous waste facilities in Kentucky which may be affected by the proposed amendments to this regulation.

(a) Direct and indirect costs or savings to those affected:

1. First year: None. See note in item (6) Any Additional Information or Comments.

2. Continuing costs or savings: None. See note in item (6) Any Additional Information or Comments.

3. Additional factors increasing or decreasing costs (note any effects upon competition): None. See note in item (6) Any Additional Information or Comments.

(b) Reporting and paperwork requirements: None. See note in item (6) Any Additional Information or Comments.

(2) Effects on the promulgating administrative body:

(a) Direct and indirect costs or savings:

1. First year: None. Although revisions have been made to the requirements for all permits there will be no effect on the workload of the promulgating agency.

2. Continuing costs or savings: None. See note in (2)(a)1 above.

3. Additional factors increasing or decreasing costs: None. See note in (2)(a)1 above.

(b) Reporting and paperwork requirements:

(3) Assessment of anticipated effect on state and local revenues: There will be no effect on state or local revenues from promulgation of this regulation.

(4) Assessment of alternative methods; reasons why alternatives were rejected:

(a) The proposed amendments adopt requirements for all permits which are identical to the requirements promulgated by the U.S. EPA on July 15, 1985.

Alternative:

1. Less stringent: The cabinet could have chosen to be less stringent by not adopting the federal provisions. However, this would have afforded less protection to Kentucky's public health and environment than that provided by the national program.

2. More stringent: The cabinet could have chosen to be more stringent by requiring provisions which were more stringent than the federal provisions. However, the proposed amendments are adequate to protect public health and the environment.

3. Present proposal: The present proposal adopts provisions from the federal regulations at 40 CFR 270.30 and 270.32 as promulgated on July 15, 1985.

(5) Identify any statute, administrative regulation or government policy which may be in conflict, overlapping, or duplication: None

(a) Necessity of proposed regulation if in conflict: Not applicable.

(b) If in conflict, was effort made to armonize the proposed administrative regulation with conflicting provisions: Not applicable.

(6) Any additional information or comments: The impact of this regulation has not been analyzed for those requirements which are equivalent to those found in the corresponding federal regulations, 40 CFR 270.30 and 270.32. The impact of the federal program was analyzed in 50 FR 28702-28755, July 15, 1985. A copy of the July 15, 1985 federal register has been filed with the regulations compiler of the Legislative Research Commission.

Tiering:
Was tiering applied? Yes. This regulation applies only to hazardous waste facilities.

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.

RELATES TO: KRS 224.033, 224.036, 224.071, 224.087, 224.830 through 224.877, 224.994
PURSUANT TO: KRS Chapter 13A, 224.033, 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 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 regulation) 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. Major Modification or Revocation and Reissuance of Permits. When the cabinet receives any information (for example, if the cabinet inspects the facility, receives information submitted by the permittee as required in the permit under Section 1 of 401 KAR 38:030, receives a request for modification or revocation and reissuance under Section 2 of 401 KAR 38:050, or conducts a review of permit file), the cabinet may determine whether or not one (1) or more of the causes listed in subsections (1) and (2) of this section for modification or revocation and reissuance or both exist. If cause exists, the cabinet may modify or revoke and reissue the permit accordingly, subject to the limitations of subsection (3) of this section and may request an updated application if necessary. When a permit is modified, only the conditions subject to modification are reopened. If a permit is revoked and reissued, the entire permit is reopened and subject to revision and the permit is reissued for a new term (see Section 2(4) of 401 KAR 38:050. If cause does not exist under this section or Section 3 of this regulation, the cabinet shall not modify or revoke and reissue the permit. If a permit modification satisfies the criteria in Section 3 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 followed.

(1) Causes for modification. Paragraphs (a) through (d) [(e)] of this subsection 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 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 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 within ninety (90) days of judicial remand.

(d) Compliance schedules. The cabinet determines good cause exists for modification of a compliance schedule, such as an act of God, strike, flood, materials shortage, or other events over which the permittee has little or no control and for which there is no reasonably available remedy (see also Section 3 of this 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.

(f) Not withstanding any other provision in this section, when a permit for a land disposal facility is reviewed by the cabinet under

Section 5(4) of this regulation, the cabinet shall modify the permit as necessary to assure that the facility continues to comply with the currently applicable requirements in 401 KAR Chapters 30 through 39.

(2) Causes for modification or revocation and reissuance. The following are causes to modify or, alternatively, revoke and reissue a permit:

(a) Cause exists for termination under Section 4 of this regulation and the cabinet determines that modification or revocation and reissuance is appropriate.

(b) The cabinet has received notification (as required in the permit in Section 1(12)(c) of 401 KAR 38:030 of a proposed transfer of the permit.

(c) Cause exists for termination under Section 2(1)(e) and (f) of this regulation, and the cabinet determines that modification or revocation and reissuance is appropriate.

(3) Facility siting. Suitability of the facility location will not be considered at the time of permit modification or revocation and reissuance unless new information or standards indicate that a threat to human health or the environment exists which was unknown at the time of permit issuance.

Section 3. Minor Modifications of Permits. Upon consent of the permittee, the cabinet may modify a permit to make the corrections or allowances for changes in the permitted activity listed in this section, without following the procedures of 401 KAR 38:050. Any permit modification not processed as a minor modification under this section 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;

(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 and 401 KAR Chapter 40 in terminating any permit under this section.

Section 5. Duration of Permit. (1) Term of permit. Hazardous waste site or facility permits shall be effective for a fixed term not to exceed ten (10) years. (See also Section 5 of 401 KAR 38:060, Interim permits for UIC wells.)

(2) Modification of term of permit. Except as provided in Section 6 of this regulation, the term of a permit shall not be extended by modification beyond the maximum duration specified in subsection (1) of this section.

(3) Reduced term of permit. The cabinet may issue any permit for a duration that is less than the full allowable term under subsection (1) of this section.

(4) Each permit for a land disposal facility shall be reviewed by the cabinet five (5) years after the date of permit issuance or reissuance and shall be modified as necessary, as provided in Section 2 of this regulation.

Section 6. Continuation of Expiring Permits. (1) The conditions of an expired permit continue in force until the effective date of a new permit if:

(a) The permittee has submitted a timely application under 401 KAR 38:090 and 401 KAR 38:100 and the applicable requirements in 401 KAR 38:150 through 401 KAR 38:210 and which is a complete (under Section 1(3) of 401 KAR 38:070) application for a new permit, paid the appropriate fees due (under 401 KAR Chapter 39); and

(b) The cabinet through no fault of the permittee, does not issue a new permit with an effective date on or before the expiration date of the previous permit (for example, when issuance is impracticable due to time or resources constraints).

(2) Effect. Permits continued under this section remain fully effective and enforceable.

(3) Enforcement. When the permittee is not in compliance with the conditions of the expiring or expired permit, the cabinet may choose to do any or all of the following:

(a) Initiate enforcement action based upon 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.

CHARLOTTE E. BALDWIN, Secretary
APPROVED BY AGENCY: November 12, 1985
FILED WITH LRC: November 13, 1985 at 3 p.m.
PUBLIC HEARING SCHEDULED: A public hearing on this regulation will be held on December 30, 1985, at 1 p.m. EST, in the Capital Plaza Tower. Any persons interested in attending this hearing shall submit by December 26, 1985, a written statement of such interest to: J. Alex Barber, Director, Division of Waste Management, 18 Reilly Road, Frankfort, Kentucky 40601. If no statement of interest is received by close of business on December 26, 1985, the hearing on this regulation may be cancelled. Written comments may also be submitted to the address above. Written comments will be accepted until the end of the comment period, which will be close of business on December 30, 1985.

REGULATORY IMPACT ANALYSIS

Agency Contact Person: J. Alex Barber, Director

(1) Type and number of entities affected: The amendments proposed to this regulation will affect all treatment, storage, and disposal facilities in Kentucky. There are potentially 90 facilities affected by this proposal.

(a) Direct and indirect costs or savings to those affected:

1. First year: The amendments to this regulation will allow the cabinet to revoke and reissue a permit for significant permit modifications. It is intended that this will result in a net savings as a reissued permit will more closely reflect current standards. However, there will be some costs associated with preparing information required for a permit application for reissuance, and applicants will be required to pay a permit fee which depends on the type of facility.

2. Continuing costs or savings: None. See note in (1)(a)1.

3. Additional factors increasing or decreasing costs (note any effects upon competition): None. See note in (1)(a)1.

(b) Reporting and paperwork requirements: The proposed amendments to this regulation will require the affected individual to submit information for permit reissuance. The cabinet notes, however, that the majority of the information is already required by regulation and the amendments only change the purpose for which the information will be used (i.e., revocation and reissuance instead of modification). In addition, see the note in item (6) Any Additional Information or Comments.

(2) Effects on the promulgating administrative body:

(a) Direct and indirect costs or savings:

1. First year: The cabinet will be required to review a disposal facility permit after five years (as opposed to the existing requirement for review after ten years). This will result in a small cost to the cabinet and a small savings as permits are upgraded to reflect the new standards. In addition, the cabinet will incur a slight cost for revoking and reissuing permits that under the existing regulations would be modified. However, since this will result in improved clarity in their permit, a small savings will also be realized.

2. Continuing costs or savings: None. See note in (2)(a)1 above.

3. Additional factors increasing or decreasing costs: None. See note in (2)(a)1 above.

(b) Reporting and paperwork requirements:

(3) Assessment of anticipated effect on state and local revenues: There will be no effect on state or local revenues from promulgation of this regulation.

(4) Assessment of alternative methods; reasons why alternatives were rejected:

(a) The cabinet chose to adopt standards for modifying and reviewing land disposal facility permits which are identical to those in the federal regulations issued July 15, 1985.

Alternative:

1. Less stringent: The cabinet could have chosen to adopt standards which are less stringent than the federal requirements. However, this would have provided less protection to Kentucky's public health and environment than that afforded by the national program.

2. More stringent: The cabinet could have chosen to be more stringent than the federal program. However, the current proposal is adequate to protect public health and the environment.

3. Present proposal: The current proposal adopts provisions on modification and review of land disposal facility permits which are identical to the federal.

(b) The cabinet chose to adopt provisions which would allow it to revoke and reissue a permit instead of modifying for significant changes.

Alternatives:

1. Less stringent: The cabinet could have chosen to retain existing requirements providing only for modification of the permit. However,

under certain circumstances, the ability to revoke and reissue a permit will improve the clarity of the permit and provide a better control document for enforcement.

2. More stringent: The cabinet could have chosen to be more stringent by requiring revocation and reissuance instead of modification for the list of permit changes. However, the cabinet would prefer to revoke and reissue a permit only if necessary for clarity of the permit.

3. Present proposal: The present proposal adopts provisions for optional revocation and reissuance or modification as appropriate.

(5) Identify any statute, administrative regulation or government policy which may be in conflict, overlapping, or duplication: None

(a) Necessity of proposed regulation if in conflict: Not applicable.

(b) If in conflict, was effort made to harmonize the proposed administrative regulation with conflicting provisions: Not applicable.

(6) Any additional information or comments: The impact of this regulation has not been analyzed for those requirements which are equivalent to those found in the corresponding federal regulations, 40 CFR 270.41 and 270.50. The impact of the federal program was analyzed in 50 FR 28702-28755, July 15, 1985. A copy of the July 15, 1985 federal register has been filed with the regulations compiler of the Legislative Research Commission.

Tiering:
Was tiering applied? Yes. This regulation applies only to hazardous waste treatment, storage and disposal facilities.

NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION CABINET
Department for Environmental Protection
Division of Waste Management
(Proposed Amendment)

401 KAR 38:050. Public information procedures.

RELATES TO: KRS 224.033, 224.036, 224.071, 224.087, 224.830 through 224.877, 224.994
PURSUANT TO: KRS Chapter 13A, 224.033, 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 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 Permit. (1)(a) Any person who requires a hazardous waste site or facility permit under KRS Chapter 224 shall complete, sign, and submit to the cabinet an application for each permit required under Section 1 of 401 KAR 38:010. Applications are not required for hazardous waste site or facility permits by rule (Section 1 of 401 KAR 38:060) or underground injections authorized by rule. However, for all facilities, including underground injection wells, which meet the definition of a disposal facility (see 401 KAR 30:010), compliance with the requirements of 401 KAR 38:500 (Provisions for approval by the local government or the Kentucky Regional Integrated Treatment and Disposal Facility Siting Board) must be demonstrated to the cabinet prior to construction or operation under a permit by rule.

(b) The cabinet shall not begin the processing of a permit until the applicant has fully complied with the application requirements for that permit (see Sections 1 through 6 of 401 KAR 38:070, 401 KAR 38:080 and the applicable requirements in 401 KAR 38:150 through 38:210).

(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 to the requirements of this section.

(4) If the cabinet tentatively decides to terminate a permit under Section 4 of 401 KAR 38:040, it shall issue a notice of intent to terminate. A notice of intent to terminate is a type of draft permit which follows the same procedures as any draft permit prepared under Section 3 of this 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. 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 and 3 of 401 KAR 38:030;

(b) All compliance schedules under Section 4 of 401 KAR 38:030;

(c) All monitoring requirements under Section 2 of 401 KAR 38:030; and

(d) Standards for treatment, storage or disposal, and other permit conditions under Section 1 of 401 KAR 38:030.

(4) All draft permits prepared by the cabinet under this section shall be accompanied by a statement of basis (see Section 4 of this 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 <u>which includes an incinerator, a surface impoundment, disposal facility (i.e., landfill, land treatment facility, injection well, etc.), or a research, development, and demonstration facility</u>, 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 procedures for reaching a final decision on the draft permit including:

1. The beginning and ending dates of the comment period under Section 7 of this 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. 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) of this regulation;

2. A draft permit has been prepared under Section 3(3) of this regulation;

3. A hearing has been scheduled under Section 9 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. Written notice of that denial shall be given to the requester and to the permittee.

(c) Public notices may describe more than one (1) permit or permit action.

(2) Timing.

(a) Public notice of the preparation of a draft permit (including a notice of intent to deny a permit application) required under subsection (1) of this section shall allow at least forty-five (45) days for public comment.

(b) Public notice of a public hearing shall be given at least thirty (30) days before the hearing. (Public notice of the hearing may be given at the same time as public notice of the draft permit and the two (2) notices may be combined.)

(3) Methods. Public notice of activities described in subsection (1)(a) of this section shall be given by the following methods:

(a) By mailing a copy of a notice to the following persons (any person otherwise entitled to receive notice under this subparagraph may waive his or her rights to receive notice for any classes and categories of permits):

1. The applicant;

2. Any other agency which the cabinet knows has issued or is required to issue an environmental permit for the same facility or activity (including United States Environmental Protection Agency);

3. Federal and state agencies with jurisdiction over fish, shellfish, and wildlife resources and over coastal zone management plans, the Advisory Council on Historic Preservation, State Historic Preservation Officers, and other appropriate government authorities, including any other affected states;

4. Persons on a mailing list developed by:

a. Including those who request in writing to be on the list;

b. Soliciting persons for "area lists" from participants in past permit proceedings in that area; and

c. Notifying the public of the opportunity to be put on the mailing list through periodic publication in the public press and in such publications as regional and state funded newsletters, environmental bulletins, or state law journals. (The cabinet may update the mailing list from time to time by requesting written indication of continued interest from those listed. The cabinet may delete from the list the name of any person who fails to respond to such a request.)

5. To any unit of local government having jurisdiction over the area where the facility is proposed to be located; and

6. To each state agency having any authority under state law with respect to the construction or operation of such facility.

(b) Publication of a notice in a daily or weekly major local newspaper of general circulation as required by KRS 224.855(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, statement of basis or fact sheet, and the application;

5. A brief description of the comment procedures required by Sections 8 and 9 of this 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 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 8. Public Comments and Requests for Public Hearings. During the public comment period provided under Section 7 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 of this regulation.

Section 9. Public Hearings. (1)(a) The cabinet shall hold a public hearing on the basis of requests, when a significant degree of public interest in a draft permit(s) is found.

(b) The cabinet at its discretion may also hold a public hearing whenever, for instance, such a hearing might clarify one (1) or more issues involved in the permit decision.

(c) 1. The cabinet shall hold a public hearing whenever written notice of opposition to a draft permit and a request for a hearing within forty-five (45) days of public notice under Section 7(2)(a) of this 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 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 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. Response to Comments. (1) At the time that any final permit decision is issued, the cabinet shall issue a response to comments when a final permit is issued. This response shall:

(a) Specify which provisions, if any, of the draft permit have been changed in the final permit decision, and the reasons for the change; and

(b) Briefly describe and respond to all significant comments on the draft permit raised during the public comment period, or during any hearing.

(2) For cabinet issued permits, any documents cited in the response to comments shall be included in the administrative record for the final permit decision. If new points are raised or new material supplied during the public comment period, the cabinet may document its response to those matters by adding new materials to the administrative record.

(3) The response to comments shall be available to the public.

(4) In the case of a hazardous waste disposal site or facility, no permit shall be approved or issued by the cabinet prior to the approvals specified in KRS 224.855(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.

CHARLOTTE E. BALDWIN, Secretary
APPROVED BY AGENCY: November 12, 1985
FILED WITH LRC: November 13, 1985 at 3 p.m.
PUBLIC HEARING SCHEDULED: A public hearing on this regulation will be held on December 30, 1985, at 1 p.m. EST, in the Capital Plaza Tower. Any persons interested in attending this hearing shall submit by December 26, 1985, a written statement of such interest to: J. Alex Barber, Director, Division of Waste Management, 18 Reilly Road, Frankfort, Kentucky 40601. If no statement of interest is received by close of business on December 26, 1985, the hearing on this regulation may be cancelled. Written comments may also be submitted to the address above. Written comments will be accepted until the end of the comment period, which will be close of business on December 30, 1985.

REGULATORY IMPACT ANALYSIS

Agency Contact Person: J. Alex Barber, Director
(1) Type and number of entities affected: This regulation will affect all new facilities which are required to obtain a permit to construct or operate a hazardous waste disposal facility. Presently, there are no individuals/companies which are seeking a disposal facility permit.
(a) Direct and indirect costs or savings to those affected:
1. First year: None. The amendment made to this regulation inserts a reference to an existing requirement to improve the clarity of the regulations. In addition, technical amendments have been made to Section 5 to clarify the requirements.
2. Continuing costs or savings: None. See note in (1)(a)1.
3. Additional factors increasing or decreasing costs (note any effects upon competition): None. See note in (1)(a)1.
(b) Reporting and paperwork requirements: None.
(2) Effects on the promulgating administrative body:
(a) Direct and indirect costs or savings:
1. First year: None. The amendment made to this regulation inserts a reference to an existing requirement to improve the clarity of the regulations and revises the language in Section 5 to clarify the requirements.
2. Continuing costs or savings: None. See note in (2)(a)1 above.
3. Additional factors increasing or decreasing costs: None. See note in (2)(a)1 above.
(b) Reporting and paperwork requirements:
(3) Assessment of anticipated effect on state and local revenues: There will be no effect on state or local revenues from promulgation of this regulation.
(4) Assessment of alternative methods; reasons why alternatives were rejected: Not applicable. The amendment to this regulation inserts a reference to an existing requirement to improve the clarity of the regulations.
(5) Identify any statute, administrative regulation or government policy which may be in conflict, overlapping, or duplication: None
(a) Necessity of proposed regulation if in conflict: Not applicable.
(b) If in conflict, was effort made to harmonize the proposed administrative regulation with conflicting provisions: Not applicable.
(6) Any additional information or comments: None.

Tiering:
Was tiering applied? Yes. The amendment made to this regulation affects only hazardous waste disposal facilities.

NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION CABINET
Department for Environmental Protection
Division of Waste Management
(Proposed Amendment)

401 KAR 38:060. Special types of permits.

RELATES TO: KRS 224.033, 224.036, 224.071, 224.087, 224.830 through 224.877, 224.994
PURSUANT TO: KRS Chapter 13A, 224.033, 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 cabinet. This chapter establishes the permitting process for hazardous waste sites or facilities. An overview of the permit program is found in the Necessity and Function of 401 KAR 38:010. This regulation establishes standards for special types of permits.

Section 1. Permit by Rule. Notwithstanding any other provision of this chapter the following shall be deemed to have a permit by rule if the conditions listed are met:
(1) Ocean disposal barges or vessels. The owner or operator of a barge or other vessel which accepts hazardous waste for ocean disposal, if the owner or operator:
(a) Has a permit for ocean disposal issued by the U.S. EPA;
(b) Complies with the conditions of that permit; and
(c) Complies with the following hazardous waste regulations:
1. Section 2 of 401 KAR 34:020, Identification Number;
2. Section 2 of 401 KAR 34:050, Use of Manifest System;
3. Section 3 of 401 KAR 34:050, Manifest Discrepancies;
4. Section 4(1) and (2)(a) of 401 KAR 34:050, Operating Record;
5. Section 6(1) and (2)(a) of 401 KAR 34:050, Annual Report; and
6. Section 7 of 401 KAR 34:050, Unmanifested Waste Report.
(2) Injection wells. The owner or operator of an injection well disposing of hazardous waste, if the owner or operator:
(a) Has a permit for underground injection issued by the U.S. EPA; [and]
(b) Complies with the conditions of that permit and the requirements of 40 CFR 144.14 (wells managing hazardous waste);
(c) For UIC permits issued after November 8, 1984, complies with Section 12 of 401 KAR 34:060; and
(d) Complies with the requirements of 401 KAR

38:500, if applicable.

(3) Publicly owned treatment works (POTW). The owner or operator of a POTW which accepts hazardous waste for treatment, if the owner or operator:

(a) Has an NPDES permit or a KPDES permit issued under the authorized program;

(b) Complies with the conditions of that permit; and

(c) Complies with the following 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; and

7. For NPDES or KPDES permits issued after November 8, 1984, Section 12 of 401 KAR 34:060, Corrective action.

(d) If the waste meets all federal, state, and local pretreatment requirements which would be applicable to the waste if it were being discharged into the POTW through a sewer, pipe, or similar conveyance.

(4) Elementary neutralization units. The owner or operator of an elementary neutralization unit which accepts hazardous waste for treatment, if the owner or operator complies with the national pretreatment standards (see Section 9 of 401 KAR 5:055).

(5) Wastewater treatment units. The owner or operator of a wastewater treatment unit which accepts hazardous waste for treatment, if the owner or operator:

(a) Has a NPDES permit or a KPDES permit (after the state program receives authorization from EPA); and

(b) Complies with the conditions of the permit.

Section 2. Emergency Permits. (1) Notwithstanding any other provision of this chapter, in the event the cabinet finds an imminent and substantial endangerment to human health or the environment, the cabinet may issue an emergency permit to allow temporary treatment, storage, or disposal of hazardous waste for a nonpermitted facility, thus, granting the nonpermitted facility an effective temporary hazardous waste site or facility permit. An emergency permit shall be granted [only] when the secretary has issued an emergency order to discontinue, abate or alleviate pursuant to KRS 224.071, if applicable. However, an emergency permit may be issued whenever an imminent and substantial endangerment to human health and the environment exists, but the circumstances of the situation render an order for discontinuance, abatement or alleviation inappropriate.

(2) This emergency permit:

(a) May be oral or written. If oral, it shall be followed in five (5) days by a written emergency permit.

(b) Shall not exceed ninety (90) days in duration.

(c) Shall clearly specify the hazardous wastes to be received, and the manner and location of their treatment, storage, or disposal.

(d) May be terminated by the cabinet at any time without process if the cabinet determines that termination is appropriate to protect human health and the environment.

(e) Shall be accompanied by a public notice published under Section 7(2) of 401 KAR 38:050 including:

1. Name and address of the office granting the emergency authorization;

2. Name and location of the permitted hazardous waste site or facility;

3. A brief description of the wastes involved;

4. A brief description of the action authorized and reasons for authorizing it; and

5. Duration of the emergency permit.

(f) Shall incorporate to the extent possible and not inconsistent with the emergency situation, all applicable requirements of this chapter, and 401 KAR Chapter 34 and 401 KAR 30:030.

(g) Shall specify that all remaining hazardous waste and residues are removed at the end of the term of the emergency permit to a properly permitted hazardous waste site or facility in order to be exempted from the financial requirements of Section 1 of 401 KAR 34:080.

(h) Shall specify that failure to comply with the conditions of the emergency permit shall cause the cabinet to sue for the recovery of the cost of proper closure (see Section 2 of 401 KAR 34:070 for closure performance standards and KRS Chapter 224 for the appropriate fines and penalties).

Section 3. Hazardous Waste Incinerator Permits. (1) For the purposes of determining operational readiness following completion of physical construction, the cabinet 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 34:240 based on engineering judgment.

(2) For the purposes of determining feasibility of compliance with the performance standards of Section 4 of 401 KAR 34:240 and of determining adequate operating conditions under Section 6 of 401 KAR 34:240, the cabinet 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 application and specify those requirements for this period most likely to meet the performance standards of Section 4 of 401 KAR 34:240, based on engineering judgment.

(4) For the purposes of determining feasibility of compliance with the performance standards of Section 4 of 401 KAR 34:240 and of determining adequate operating conditions under Section 6 of 401 KAR 34:240, the applicant for a permit 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 as a two (2) phase facility permit covering the field tests, or laboratory analyses, and design, construction, operation and maintenance of the land treatment unit.

(a) The cabinet may issue a two (2) phase facility permit if it is found that, based on information submitted in Part B of the application, substantial, although incomplete or inconclusive, information already exists upon which to base the issuance of a facility permit.

(b) If the cabinet finds that not enough information exists upon which it can establish permit conditions to attempt to provide for compliance with all of the requirements of 401 KAR 34:220, the cabinet shall issue a treatment demonstration permit covering only the field test or laboratory analyses.

(2) If the cabinet finds that a phased permit may be issued, it 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 401 KAR 38:500 and shall be for a term not to exceed two (2) years. No such permit shall be issued after approval or promulgation of a UIC program in Kentucky. Any permit under this section shall contain a condition providing that it will terminate upon final action by the cabinet under a UIC program to issue or deny a UIC permit for the facility.

Section 6. Research, Development, and Demonstration Permits. (1) The cabinet may issue a research, development, and demonstration permit for any hazardous waste treatment facility which proposes to utilize an innovative and experimental hazardous waste treatment technology or process for which permit standards for such experimental activity have not been promulgated under 401 KAR Chapters 34 or 36. Any such permit shall include such terms and conditions as will assure protection of human health and the environment. Such permits:

(a) Shall provide for the construction of such facilities as necessary, and for operation of the facility for not longer than one (1) year unless renewed as provided in subsection (4) of this section; and

(b) Shall provide for the receipt and treatment by the facility of only those types and quantities of hazardous waste which the cabinet deems necessary for purposes of determining the efficacy and performance capabilities of the technology or process and the effects of such technology or process on human health and the environment; and

(c) Shall include such requirements as the cabinet deems necessary to protect human health and the environment (including, but not limited to, requirements regarding monitoring, operation, financial responsibility, closure, and remedial action), and such requirements as the cabinet deems necessary regarding testing and providing of information to the cabinet with respect to the operation of the facility.

(2) For the purpose of expediting review and issuance of permits under this section, the cabinet may, consistent with the protection of human health and the environment, modify or waive permit application and permit issuance requirements in 401 KAR Chapter 38 except that there may be no modificiation or waiver of provisions in KRS Chapter 224 regarding financial responsibility (including insurance) or of procedures regarding public participation.

(3) The cabinet may order an immediate termination of all operations at the facility at any time it is determined that termination is necessary to protect human health and the environment.

(4) Any permit issued under this section may be renewed not more than three (3) times. Each such renewal shall be for a period of not more than one (1) year.

CHARLOTTE E. BALDWIN, Secretary

APPROVED BY AGENCY: November 12, 1985

FILED WITH LRC: November 13, 1985 at 3 p.m.

PUBLIC HEARING SCHEDULED: A public hearing on this regulation will be held on December 30, 1985, at 1 p.m. EST, in the Capital Plaza Tower. Any persons interested in attending this hearing shall submit by December 26, 1985, a written statement of such interest to: J. Alex Barber, Director, Division of Waste Management, 18 Reilly Road, Frankfort, Kentucky 40601. If no statement of interest is received by close of business on December 26, 1985, the hearing on this regulation may be cancelled. Written comments may also be submitted to the address above. Written comments will be accepted until the end of the comment period, which will be close of business on December 30, 1985.

REGULATORY IMPACT ANALYSIS

Agency Contact Person: J. Alex Barber, Director

(1) Type and number of entities affected: The amendments made to this regulation will affect

facilities seeking a permit by rule for underground injection and NPDES/KPDES permitted facilities. There are presently no permit applicants in these categories. In addition this regulation will affect individuals requiring emergency permits. Although the cabinet is unable to determine an exact number, in 1984 fewer than 5 emergency permits were issued and the cabinet assumes that approximately this number of individuals will be affected in any given year. Additionally, any applicant for a research, development, and demonstration facility permit will be affected by the new rule. There are currently no applicants for this type of permit.

(a) Direct and indirect costs or savings to those affected:

1. First year: An undetermined cost and savings to applicants seeking a research, development, and demonstration (RD&D) facility permit will occur. Standards for applications have been inserted which will require submittal of information for a RD&D permit. However, since the applicant will not be required to comply with non-applicable permit standards which would have applied under the existing requirements, it is likely the applicant will derive some savings. No costs or savings are expected for underground injection well permits by rule, NPDES/KPDES permits by rule, or emergency permit applicants.

2. Continuing costs or savings: None. This regulation applies only to permit applications which would be exclusively a first year cost/saving.

3. Additional factors increasing or decreasing costs (note any effects upon competition): None. See note in (1)(a)2.

(b) Reporting and paperwork requirements: Different paperwork requirements for submittal of a RD&D permit application are required. However, these requirements are similar to what would have been required under existing regulations. Thus, no increase in reporting or paperwork is anticipated.

(2) Effects on the promulgating administrative body:

(a) Direct and indirect costs or savings:

1. First year: None. These amendments clarify the requirements for specific types of permit applications and should not increase or decrease requirements for the promulgating administrative body.

2. Continuing costs or savings: None. See note in (2)(a)1.

3. Additional factors increasing or decreasing costs: None. See note in (2)(a)1.

(b) Reporting and paperwork requirements:

(3) Assessment of anticipated effect on state and local revenues: There will be no effect on state or local revenues from promulgation of this regulation.

(4) Assessment of alternative methods; reasons why alternatives were rejected:

(a) References have been inserted to clarify the existing requirement that underground injection wells must obtain local approval or siting board approval prior to permit issuance.

Alternative:

1. Less stringent: The cabinet could have chosen not to include the references. However, since the requirement is already in existence in accordance with KRS 224.855, the regulation would have been inconsistent with the statute.

2. More stringent: The cabinet could have chosen to require additional permit by rule criteria. However, the present proposal is adequate to protect public health and the environment.

3. Present proposal: The present proposal incorporates a reference to existing requirements to insure that the applicant is aware of his full responsibilities under the regulations.

(b) Emergency permit provisions have been amended to reflect that an emergency permit may be issued in the absence of an order to abate and alleviate.

Alternatives:

1. Less stringent: The cabinet could have chosen to allow issuance of an emergency permit for circumstances less severe than a bona fide emergency. However, this would have been inconsistent with the intent of an emergency permit.

2. More stringent: The cabinet could have left the requirement for an order to abate and alleviate in the prerequisites for issuance of an emergency permit. However, circumstances may not warrant the issuance of an order to abate and alleviate, but would dictate the need for an emergency permit.

3. Present proposal: The cabinet believes that under certain emergency circumstances, an emergency permit should be issued in the absence of an order to abate and alleviate.

(c) Provisions have been adopted verbatim from the July 15, 1985 federal regulations on corrective action requirements for facilities permitted by rule. In addition, provisions for research, development and demonstration facility permits have been incorporated verbatim from the July 15, 1985 federal regulations.

Alternatives:

1. Less stringent: The cabinet could have adopted provisions which are less stringent than the federal requirements. However, this would have provided less protection to Kentucky's environment and public health than that afforded by the federal program.

2. More stringent: The cabinet could have chosen to adopt more stringent standards than the federal. However, the federal requirements are adequate to protect human health and the environment.

3. Present proposal: The cabinet chose to adopt provisions on corrective action and RD&D permits which are identical to the federal provisions promulgated July 15, 1985.

(5) Identify any statute, administrative regulation or government policy which may be in conflict, overlapping, or duplication: None

(a) Necessity of proposed regulation if in conflict: Not applicable.

(b) If in conflict, was effort made to harmonize the proposed administrative regulation with conflicting provisions: Not applicable.

(6) Any additional information or comments: The impact of this regulation has not been analyzed for those requirements which are equivalent to those found in the corresponding federal regulations, 40 CFR 270.60 and 270.65. The impact of the federal program was analyzed in 50 FR 28702-28755, July 15, 1985. A copy of the July 15, 1985 federal register has been filed with the regulations compiler of the Legislative Research Commission.

Tiering:
Was tiering applied? Yes. The amendments to this

regulation apply only to facilities seeking a permit by rule for underground injection or NPDES/KPDES; emergency permit; and RD&D permits.

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 224.877, 224.994
PURSUANT TO: KRS Chapter 13A, 224.033, 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 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 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 of 401 KAR 38:060, need not apply <u>except as required by 401 KAR 38:500 for disposal facilities permitted by rule</u>. Procedures for applications, issuance and administration of emergency permits are found exclusively in Section 2 of 401 KAR 38:060. <u>Procedures for application issuance and administration of research, development, and demonstration permits are found exclusively in Section 6 of 401 KAR 38:060.</u>

(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) Completeness. The cabinet shall not issue a permit before receiving a complete application for a permit <u>except for permits by rule or emergency permits</u>. An application for a permit is complete when the cabinet receives an application form and any supplemental information which <u>are completed to the satisfaction of the cabinet. An application for a permit is complete notwithstanding the failure of the owner or operator to submit the exposure information described in Section 9 of this regulation. However, failure by the applicant to submit exposure information may be grounds for denial of the permit or revocation of an issued permit.</u> [is required to determine the merits of the application. 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.]

(4) Information requirements. All applicants for permits shall provide the applicable information in compliance with 401 KAR 38:080 through 401 KAR 38:210 to the cabinet, using the application form provided by the cabinet.

(5) Number of copies. Any person who requires a hazardous waste site or facility permit shall submit two (2) copies of the application. If the application for a permit includes an incinerator or a facility which requires groundwater monitoring, three (3) copies of the application must be submitted to the cabinet. Additional copies may be required prior to permit issuance.

Section 2. Existing Hazardous Waste Sites or Facilities <u>and Interim Status Qualifications</u>. (1) Owners and operators of existing hazardous waste sites or facilities <u>or of hazardous waste sites or facilities in existence on the effective date of statutory or regulatory amendments that render the facility subject to the requirement to have a permit</u> 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:

<u>(a) Six (6) months after the date of publication of regulations which first require them to comply with the standards set forth in 401 KAR Chapters 35 or 36; or</u>

<u>(b) Thirty (30) days after the date they first become subject to the standards set forth in 401 KAR Chapters 35 or 36, whichever first occurs.</u> [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. <u>Notwithstanding the above, any owner or operator of an existing hazardous waste site or facility must submit a Part B permit application in accordance with the dates specified in Section 4 of 401 KAR 38:020. Any owner or operator of a land disposal facility in existence on the effective date of statutory or regulatory amendments that render the facility subject to the requirement to have a hazardous waste site or facility permit must submit a Part B application in accordance with the dates specified in Section 4 of 401 KAR 38:020.</u>

(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.

(6) Owners and operators of existing hazardous waste sites or facilities which close under interim status without submitting Part B of the permit application shall, at a minimum, comply with the corrective action requirements in Section 12 of 401 KAR 38:060.

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. All applications must be submitted at least 180 days before physical construction is expected to commence.

(3) Notwithstanding subsection (1) of this section, a person may construct a facility for the incineration of polychlorinated biphenyls pursuant to an approval issued by the Administrator of the U.S. Environmental Protection Agency under Section (6)(e) of the Toxic Substances Control Act and any person owning or operating such a facility may, at any time after construction or operation of such facility has begun, file an application for a permit to incinerate hazardous waste authorizing such facility to incinerate waste identified or listed under KRS 224.864(3) and the regulations promulgated pursuant thereto.

(4) An application for a permit for a new hazardous waste disposal facility must be in compliance with the requirements specified in KRS 224.855 and 401 KAR 38:500 regarding approval by the local government or the Kentucky Regional Integrated Waste Treatment and Disposal Facility Siting Board.

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. Recordkeeping. Applicants shall keep records of all data used to complete permit applications and any supplemental information submitted under Section 1(4) of this regulation and 401 KAR 38:080 through 38:210, for a period of at least three (3) years from the date the application is signed.

Section 7. Signatures to Permit Applications and Reports. (1) Applications. All permit applications shall be signed as follows:

(a) For a corporation: by a responsible corporate officer. For the purpose of this section, a responsible corporate officer means:

1. A president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision making functions for the corporation; or

2. The manager of one (1) or more manufacturing, production or operating facilities employing more than 250 persons or having gross annual sales or expenditures exceeding $25 million (in second-quarter 1980 dollars), if authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures;

(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. For purposes of this section, a principal executive officer of a federal agency includes:

1. The chief executive officer of the agency; or

2. A senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., regional administrators of EPA).

(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 this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information sumittted. Based on my inquiry of the person or persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

Section 8. 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 9. Exposure Information. (1) After August 8, 1985, any Part B application submitted by an owner or operator of a facility that stores, treats, or disposes of hazardous waste in a surface impoundment or landfill must be accompanied by information reasonably ascertainable by the owner or operator, on the potential for the public to be exposed to hazardous wastes or hazardous constituents through releases related to the unit. At a minimum, such information must address:

(a) Reasonably foreseeable potential releases from both normal operations and accidents at the unit, including releases associated with transportation to or from the unit;

(b) The potential pathways of human exposure to hazardous wastes or constituents resulting from the releases described under paragraph (a) of this subsection; and

(c) The potential magnitude and nature of the human exposure resulting from such releases.

(2) By August 8, 1985, owners and operators of a landfill or a surface impoundment who have already submitted a Part B application must submit the exposure information required in subsection (1) of this section.

(3) Information required by this section may in part satisfy the requirements of KRS 224.866(1) and Section 2(19) of 401 KAR 38:090.

CHARLOTTE E. BALDWIN, Secretary

APPROVED BY AGENCY: November 12, 1985

FILED WITH LRC: November 13, 1985 at 3 p.m.

PUBLIC HEARING SCHEDULED: A public hearing on this regulation will be held on December 30, 1985, at 1 p.m. EST, in the Capital Plaza Tower. Any persons interested in attending this hearing shall submit by December 26, 1985, a written statement of such interest to: J. Alex Barber, Director, Division of Waste Management, 18 Reilly Road, Frankfort, Kentucky 40601. If no statement of interest is received by close of business on December 26, 1985, the hearing on this regulation may be cancelled. Written comments may also be submitted to the address above. Written comments will be accepted until the end of the comment period, which will be close of business on December 30, 1985.

REGULATORY IMPACT ANALYSIS

Agency Contact Person: J. Alex Barber, Director

(1) Type and number of entities affected: The proposed amendments to this regulation will affect all owners and operators applying for a hazardous waste facility permit. There are currently 90 hazardous waste facilities in Kentucky.

(a) Direct and indirect costs or savings to those affected:

1. First year: None. See note in Item (6) Any Additional Information or Comments.

2. Continuing costs or savings: None. See note in Item (6) Any Additional Information or Comments.

3. Additional factors increasing or decreasing costs (note any effects upon competition): None. See note in Item (6) Any Additional Information or Comments.

(b) Reporting and paperwork requirements: None. See note in Item (6) Any Additional Information or Comments.

(2) Effects on the promulgating administrative body:

(a) Direct and indirect costs or savings:

1. First year: None. The proposed amendments to this regulation will not substantially alter the workload of the promulgating agency.

2. Continuing costs or savings: None. See note in (2)(a)1.

3. Additional factors increasing or decreasing costs: None. See note in (2)(a)1.

(b) Reporting and paperwork requirements:

(3) Assessment of anticipated effect on state and local revenues: There will be no effect on state or local revenues from promulgation of this regulation.

(4) Assessment of alternative methods; reasons why alternatives were rejected:

(a) The proposed amendments to this regulation adopt changes made to the federal regulations at 40 CFR 270.10 on July 15, 1985.

Alternative:

1. Less stringent: The cabinet could have been less stringent by not adopting the federal regulations. However, this would have afforded less protection to Kentucky's public health and environment than that provided by the national program.

2. More stringent: The cabinet could have chosen to be more stringent than the federal requirements. However, the present proposal is adequate to protect public health and the environment.

3. Present proposal: The present proposal

adopts the requirements from 40 CFR 270.10 verbatim.

(b) The present proposal includes a clarification that failure to submit exposure information may be grounds for denial of a permit application or revocation of an issued permit.

Alternative:

1. Less stringent: The cabinet could have chosen to be less stringent by not requiring submittal of exposure assessment information. However, this would not have been in compliance with the federal law (HSWA of 1984) which requires submittal of an exposure assessment.

2. More stringent: The cabinet could have chosen to be more stringent by requiring submittal of exposure assessment prior to issuing a permit. However, the cabinet realizes that some data cannot be compiled on exposure assessments within the six month time frame allowed for application submittal. Therefore, the ability to submit exposure assessment after submittal of the permit application will allow for submittal of higher quality exposure assessment data.

3. Present proposal: The present proposal allows for a delayed submittal of exposure assessment information. However, it provides for denial of the permit application or revocation of an issued permit if the owner or operator fails to submit an exposure assessment.

(c) The present proposal includes references to other applicable regulatory requirements from 401 KAR 38:500 and 34:060. No alternatives were considered since these are technical changes which serve to clarify the existing requirements by including an appropriate reference.

(5) Identify any statute, administrative regulation or government policy which may be in conflict, overlapping, or duplication: None

(a) Necessity of proposed regulation if in conflict: Not applicable.

(b) If in conflict, was effort made to harmonize the proposed administrative regulation with conflicting provisions: Not applicable.

(6) Any additional information or comments: The impact of this regulation has not been analyzed for those requirements which are equivalent to those found in the corresponding federal regulation, 40 CFR 270.10. The impact of the federal program was analyzed in 50 FR 28702-28755, July 15, 1985. A copy of the July 15, 1985 federal register has been filed with the regulations compiler of the Legislative Research Commission.

Tiering:
Was tiering applied? Yes. This regulation applies only to hazardous waste facilities.

NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION CABINET
Department for Environmental Protection
Division of Waste Management
(Proposed Amendment)

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 Chapter 13A, 224.033, 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 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. The Part B information requirements presented in this regulation and 401 KAR 38:100 through 401 KAR 38:210 [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 34:190, 34:200 and 34:210.

(8) A description of procedures, structures, or equipment used at the facility to:

(a) Prevent hazards in unloading operations (for example, ramps, special 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 provide the following information:

1. Engineering analysis to indicate the various hydrodynamic and hydrostatic forces expected to result at the site as a consequence of a 100-year flood;

2. Structural or other engineering studies showing the design of operational units (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 34:220, 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.

(d) For each and every individual or other entity listed in paragraph (a) of this subsection, a current financial statement prepared by a certified public accountant.

(e) Hazardous waste sites or facilities which have been regulated under interim status shall be exempt from the requirements of this subsection unless the cabinet specifies otherwise in writing.

(21) An evaluation of subsurface geologic formations and surface topography for solution or karst features. The owner or operator shall demonstrate compliance with either paragraph (a) or (b) of this subsection.

(a) If the owner or operator demonstrates to the satisfaction of the cabinet that the facility is not underlain by soluble limestone, he is exempt from all of the requirements of this subsection.

(b) If the owner or operator does not make the demonstration of paragraph (a) of this subsection, the owner or operator 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.

(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.

CHARLOTTE E. BALDWIN, Secretary

APPROVED BY AGENCY: November 12, 1985

FILED WITH LRC: November 13, 1985 at 3 p.m.

PUBLIC HEARING SCHEDULED: A public hearing on this regulation will be held on December 30, 1985, at 1 p.m. EST, in the Capital Plaza Tower. Any persons interested in attending this hearing shall submit by December 26, 1985, a written statement of such interest to: J. Alex Barber, Director, Division of Waste Management, 18 Reilly Road, Frankfort, Kentucky 40601. If no statement of interest is received by close of business on December 26, 1985, the hearing on this regulation may be cancelled. Written comments may also be submitted to the address above. Written comments will be accepted until the end of the comment period, which will be

close of business on December 30, 1985.

REGULATORY IMPACT ANALYSIS

Agency Contact Person: J. Alex Barber, Director
(1) Type and number of entities affected: There are 90 hazardous waste management facilities which may be affected by the proposed amendments to this regulation.
(a) Direct and indirect costs or savings to those affected:
1. First year: None. See note in item (6) Any Additional Information or Comments.
2. Continuing costs or savings: None. See note in item (6) Any Additional Information or Comments.
3. Additional factors increasing or decreasing costs (note any effects upon competition): None. See note in item (6) Any Additional Information or Comments.
(b) Reporting and paperwork requirements: None. See note in item (6) Any Additional Information or Comments.
(2) Effects on the promulgating administrative body:
(a) Direct and indirect costs or savings:
1. First year: None. Although the amendments to this regulation will affect the contents of a permit application, it will not significantly alter the amount of time required for the promulgating agency to review the application.
2. Continuing costs or savings: None. See note in (2)(a)1 above.
3. Additional factors increasing or decreasing costs: None. See note in (2)(a)1 above.
(b) Reporting and paperwork requirements:
(3) Assessment of anticipated effect on state and local revenues: There will be no effect on state or local revenues from promulgation of this regulation.
(4) Assessment of alternative methods; reasons why alternatives were rejected:
(a) The proposed amendments adopt requirements for the Part B permit application which are identical to the requirements promulgated by the U.S. Environmental Protection Agency on July 15, 1985.
Alternative:
1. Less stringent: The cabinet could have chosen to adopt standards which are less stringent than the federal standards. However, this would have afforded less protection to Kentucky's public health and environment than that afforded by the national program.
2. More stringent: The cabinet could have chosen to adopt provisions which are more stringent than the federal requirements. However, the present proposal is adequate to protect public health and the environment.
3. Present proposal: The present proposal adopts verbatim the requirements from the federal regulations at 40 CFR 270.14 on Part B permit requirements adopted July 15, 1985.
(5) Identify any statute, administrative regulation or government policy which may be in conflict, overlapping, or duplication: None
(a) Necessity of proposed regulation if in conflict: Not applicable.
(b) If in conflict, was effort made to harmonize the proposed administrative regulation with conflicting provisions: Not applicable.
(6) Any additional information or comments: The impact of this regulation has not been analyzed for those requirements which are equivalent to those found in the corresponding federal regulation, 40 CFR 270.14. The impact of the federal program was analyzed in 50 FR 28702-28755, July 15, 1985. A copy of the July 15, 1985 federal register has been filed with the regulations compiler of the Legislative Research Commission.

Tiering:
Was tiering applied? Yes. This regulation applies only to hazardous waste facilities.

NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION CABINET
Department for Environmental Protection
Division of Waste Management
(Proposed Amendment)

401 KAR 38:100. Specific Part B requirements for ground water protection.

RELATES TO: KRS 224.033, 224.036, 224.071, 224.087, 224.830 through 224.877, 224.994
PURSUANT TO: KRS Chapter 13A, 224.033, 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 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 additional Part B requirements necessary for the protection of ground water.

Section 1. Applicability. This regulation applies to all owners or operators of hazardous waste <u>surface impoundments, piles, land treatment units, and landfills except as otherwise provided in Section 1(2) of 401 KAR 34:060</u> [sites or facilities in Kentucky].

Section 2. Part B Requirements for Ground Water Protection. In addition to the information required by 401 KAR 38:080, 38:090, and the applicable requirements of 401 KAR 38:150 through 401 KAR 38:210, the following additional information regarding protection of ground water 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 ground water monitoring data obtained during the interim status period under 401 KAR 35:060, where applicable.
(2) Identification of the uppermost aquifer and aquifers hydraulically interconnected beneath the facility property, including ground water 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 ground water 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 ground water 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 from 401 KAR 31:170 throughout the plume or identifies the maximum concentrations of each constituent from 401 KAR 31:170 in the plume.

(5) Detailed plans and an engineering report describing the proposed ground water 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 ground water 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 ground water;

(b) A proposed ground water 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 ground water monitoring data.

(7) If the presence of hazardous constituents has been detected in the ground water 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 ground water, 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 ground water 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 ground water monitoring data.

(8) If hazardous constituents have been measured in the ground water which exceed the concentration limits established under Section 5 of 401 KAR 34:060, or if ground water 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 ground water over established background concentrations, the owner or operator 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. To demonstrate compliance with Section 11 of 401 KAR 34:060, the owner or operator must address, at a minimum, the following items:

(a) A characterization of the contaminated ground water, including concentrations of hazardous constituents;

(b) The concentration limit for each hazardous constituent found in the ground water as set forth in Section 4 of 401 KAR 34:060;

(c) Detailed plans and an engineering report describing the corrective action to be taken; and

(d) A description of how the ground water monitoring program will demonstrate the adequacy of the corrective action.

CHARLOTTE E. BALDWIN, Secretary

APPROVED BY AGENCY: November 12, 1985

FILED WITH LRC: November 13, 1985 at 3 p.m.

PUBLIC HEARING SCHEDULED: A public hearing on this regulation will be held on December 30, 1985, at 1 p.m. EST, in the Capital Plaza Tower. Any persons interested in attending this hearing shall submit by December 26, 1985, a written statement of such interest to: J. Alex Barber, Director, Division of Waste Management, 18 Reilly Road, Frankfort, Kentucky 40601. If no statement of interest is received by close of business on December 26, 1985, the hearing on this regulation may be cancelled. Written comments may also be submitted to the address above. Written comments will be accepted until the end of the comment period, which will be close of business on December 30, 1985.

REGULATORY IMPACT ANALYSIS

Agency Contact Person: J. Alex Barber, Director

(1) Type and number of entities affected: There are 90 hazardous waste facilities in Kentucky; almost half of these may be affected by the revisions made to this regulation.

(a) Direct and indirect costs or savings to those affected:

1. First year: None. Amendments made to this regulation are technical changes to clarify the existing requirements.

2. Continuing costs or savings: None. See note in (1)(a)1.

3. Additional factors increasing or decreasing costs (note any effects upon competition): None. See note in (1)(a)1.

(b) Reporting and paperwork requirements: None. See note in (1)(a)1.

(2) Effects on the promulgating administrative body:

(a) Direct and indirect costs or savings:

1. First year: None. The amendments made to this regulation are technical changes to clarify existing requirements.

2. Continuing costs or savings: None. See note in (2)(a)1 above.

3. Additional factors increasing or decreasing costs: None. See note in (2)(a)1 above.

(b) Reporting and paperwork requirements:

(3) Assessment of anticipated effect on state

and local revenues: There will be no effect on state or local revenues from promulgation of this regulation.

(4) Assessment of alternative methods; reasons why alternatives were rejected: No alternatives were considered since the amendments made to this regulation are technical revisions designed to clarify the existing requirements.

(5) Identify any statute, administrative regulation or government policy which may be in conflict, overlapping, or duplication: None

(a) Necessity of proposed regulation if in conflict: Not applicable.

(b) If in conflict, was effort made to armonize the proposed administrative regulation with conflicting provisions: Not applicable.

(6) Any additional information or comments: None.

Tiering:
Was tiering applied? Yes. This regulation applies only to those hazardous waste facilities which must monitor their ground water.

NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION CABINET
Department for Environmental Protection
Division of Waste Management
(Proposed Amendment)

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 Chapter 13A, 224.033, 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 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 regulation 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 401 KAR 38:090, and 401 KAR 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.

(7) Where applicable, a description of the containment and detection systems to demonstrate compliance with Section 8 of 401 KAR 34:190 (Management of chlorinated dioxins, dibenzofurans, and phenols) must include at least the following:

(a) Drawings and a description of the basic design parameters, dimensions, and materials of construction of the containment system.

(b) Capacity of the containment system relative to the design capacity of the tank(s) within the system.

(c) Description of the system to detect leaks and spills, and how precipitation and run-on will be prevented from entering into the detection system.

CHARLOTTE E. BALDWIN, Secretary
APPROVED BY AGENCY: November 12, 1985
FILED WITH LRC: November 13, 1985 at 3 p.m.

PUBLIC HEARING SCHEDULED: A public hearing on this regulation will be held on December 30, 1985, at 1 p.m. EST, in the Capital Plaza Tower. Any persons interested in attending this hearing shall submit by December 26, 1985, a written statement of such interest to: J. Alex Barber, Director, Division of Waste Management, 18 Reilly Road, Frankfort, Kentucky 40601. If no statement of interest is received by close of business on December 26, 1985, the hearing on this regulation may be cancelled. Written comments may also be submitted to the address above. Written comments will be accepted until the end of the comment period, which will be close of business on December 30, 1985.

REGULATORY IMPACT ANALYSIS

Agency Contact Person: J. Alex Barber, Director

(1) Type and number of entities affected: There are 52 hazardous waste storage facilities currently operating in Kentucky. The cabinet estimates that none of these facilities will be affected by the proposed requirements.

(a) Direct and indirect costs or savings to those affected:

1. First year: None. See note in item (6) Any Additional Information or Comments.

2. Continuing costs or savings: None. See note in item (6) Any Additional Information or Comments.

3. Additional factors increasing or decreasing costs (note any effects upon competition): None. See note in item (6) Any Additional Information or Comments.

(b) Reporting and paperwork requirements: None. See note in item (6) Any Additional Information or Comments.

(2) Effects on the promulgating administrative body:

(a) Direct and indirect costs or savings:

1. First year: None. The cabinet anticipates there will be no increase or decrease in the workload of the promulgating agency as a result of the proposed amendments.

2. Continuing costs or savings: None. See note in (2)(a)1 above.
3. Additional factors increasing or decreasing costs: None. See note in (2)(a)1 above.
(b) Reporting and paperwork requirements:
(3) Assessment of anticipated effect on state and local revenues: There will be no effect on state or local revenues from promulgation of this regulation.
(4) Assessment of alternative methods; reasons why alternatives were rejected:
(a) The proposed amendments adopt the requirements for a description of the containment and detection system for tank facilities from the federal regulations promulgated on January 14, 1985.
Alternative:
1. Less stringent: The cabinet could have chosen to be less stringent by not adopting the federal requirements. However, this would have afforded Kentucky's public health and environment less protection than that provided by the national program.
2. More stringent: The cabinet could have chosen to adopt more stringent provisions than the federal requirements. However, the current proposal is adequate to protect public health and the environment.
3. Present proposal: The present proposal adopts verbatim the federal requirements from 40 CFR 270.16 promulgated on January 14, 1985.
(5) Identify any statute, administrative regulation or government policy which may be in conflict, overlapping, or duplication: None
(a) Necessity of proposed regulation if in conflict: Not applicable.
(b) If in conflict, was effort made to harmonize the proposed administrative regulation with conflicting provisions: Not applicable.
(6) Any additional information or comments: The impact of this regulation has not been analyzed for those requirements which are equivalent to those found in the corresponding federal regulation, 40 CFR 270.16. The impact of the federal program was analyzed in 50 FR 1978-2006, January 14, 1985. A copy of the January 14, 1985 federal register has been filed with the regulations compiler of the Legislative Research Commission.

Tiering:
Was tiering applied? Yes. This regulation applies only to individuals requesting a permit for managing hazardous waste in tanks.

NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION CABINET
Department for Environmental Protection
Division of Waste Management
(Proposed Amendment)

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 Chapter 13A, 224.033, 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 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, 401 KAR 38:090, and 401 KAR 38:100, owners and operators of facilities that store, treat, or dispose or will store, treat, or dispose of hazardous waste in surface impoundments, except as otherwise provided in Section 1 of 401 KAR 34:010 and Section 1 of 401 KAR 34:200, must provide the following additional information:
(1) A list of the hazardous wastes placed or to be placed in each surface impoundment;
(2) Detailed plans and an engineering report describing how the surface impoundment is or will be designed, 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 requirement for a liner is sought as provided by Section 2(2) of 401 KAR 34:200, submit detailed plans and engineering and hydrogeologic reports as appropriate, describing alternate design and operating practices that will, in conjunction with location aspects, prevent the migration of any hazardous constituents into the groundwater or surface water at any future time;
(b) 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 leak detection system between the liners;]
(3) [(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;
(4) [(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;
(5) [(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;

(6) [(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;

(7) [(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;

(8) [(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.

(9) A waste management plan for EPA hazardous waste numbers F020, F021, F022, F023, F026, and F027 (chlorinated dioxins, dibenzofurans and phenols) describing how the surface impoundment is or will be designed, constructed, operated, and maintained to meet the requirements of 401 KAR 34:200, Section 9. This submission must address the following items as specified in 401 KAR 34:200, Section 9.

(a) The volume, physical, and chemical characteristics of the wastes, including their potential to migrate through soil or to volatilize or escape into the atmosphere;

(b) The attenuative properties of underlying and surrounding soils or other materials;

(c) The mobilizing properties of other materials co-disposed with these wastes; and

(d) The effectiveness of additional treatment, design, or monitoring techniques.

CHARLOTTE E. BALDWIN, Secretary

APPROVED BY AGENCY: November 12, 1985

FILED WITH LRC: November 13, 1985 at 3 p.m.

PUBLIC HEARING SCHEDULED: A public hearing on this regulation will be held on December 30, 1985, at 1 p.m. EST, in the Capital Plaza Tower. Any persons interested in attending this hearing shall submit by December 26, 1985, a written statement of such interest to: J. Alex Barber, Director, Division of Waste Management, 18 Reilly Road, Frankfort, Kentucky 40601. If no statement of interest is received by close of business on December 26, 1985, the hearing on this regulation may be cancelled. Written comments may also be submitted to the address above. Written comments will be accepted until the end of the comment period, which will be close of business on December 30, 1985.

REGULATORY IMPACT ANALYSIS

Agency Contact Person: J. Alex Barber, Director

(1) Type and number of entities affected: There are 24 surface impoundments for hazardous waste management in Kentucky, which may be affected by changes to this regulation.

(a) Direct and indirect costs or savings to those affected:

1. First year: None. See note in item (6) Any Additional Information or Comments.

2. Continuing costs or savings: None.

3. Additional factors increasing or decreasing costs (note any effects upon competition): None.

(b) Reporting and paperwork requirements: The requirements in this regulation concern the permit application for a hazardous waste surface impoundment facility. There will be a minimal increase in information required on the permit application for those facilities managing chlorinated dioxins, dibenzofurans and phenols. However, because this is a federal requirement, there will be no additional impact to Kentucky facilities. See Item (6) Any Additional Information and Comments.

(2) Effects on the promulgating administrative body:

(a) Direct and indirect costs or savings:

1. First year: No additional costs will be incurred as the result of changes to this regulation.

2. Continuing costs or savings: None.

3. Additional factors increasing or decreasing costs: None.

(b) Reporting and paperwork requirements:

(3) Assessment of anticipated effect on state and local revenues: There will be no effect on state or local revenues from promulgation of this regulation.

(4) Assessment of alternative methods; reasons why alternatives were rejected:

(a) A waste management plan is required for chlorinated dioxins, dibenzofurans, and phenol management.

Alternative:

1. Less stringent: The cabinet could have chosen not to require a waste management plan for these wastes. However, this would have made the state program less stringent than the federal program. Since the standards would be applicable in Kentucky under the federal program, the cabinet chose to adopt the requirements.

2. More stringent: The cabinet could have required additional information to be submitted on the waste management plan. However, the information required is sufficient to protect public health and the environment with respect to chlorinated dioxins, dibenzofurans, and phenols.

3. Present proposal: The present proposal is identical to the federal requirements for surface impoundments managing chlorinated dioxins, dibenzofurans, and phenols.

(5) Identify any statute, administrative regulation or government policy which may be in conflict, overlapping, or duplication: None

(a) Necessity of proposed regulation if in conflict: Not applicable.

(b) If in conflict, was effort made to harmonize the proposed administrative regulation with conflicting provisions: Not applicable.

(6) Any additional information or comments: The impact of this regulation has not been analyzed for those requirements which are equivalent to those found in the corresponding federal regulation, 40 CFR 270.17. The impact of the federal program was analyzed in 50 FR 1978, January 14, 1985 and 50 FR 28702, July 15, 1985. A copy of the January 14, 1985 and July 15, 1985 federal registers have been filed with the regulations compiler of the Legislative Research Commission.

Tiering:

Was tiering applied? Yes. This regulation

applies only to surface impoundments for hazardous waste management.

NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION CABINET
Department for Environmental Protection
Division of Waste Management
(Proposed Amendment)

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 Chapter 13A, 224.033, 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 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, 401 KAR 38:090, and 401 KAR 38:100, owners and operators of facilities that store or treat or will store or treat hazardous waste in waste piles, except as otherwise provided in Section 1 of 401 KAR 34:010 and Section 1 of 401 KAR 34:210, must provide the following additional information:

(1) A list of the hazardous wastes placed or to be placed in each waste pile;

(2) If an exemption is sought to Section 2 of 401 KAR 34:210 and 401 KAR 34:060 as provided by Section 1(3) of 401 KAR 34:210, an explanation of how the standards [requirements] of Section 1(3) of 401 KAR 34:210 will be complied with or detailed plans and an engineering report describing how the requirements of 401 KAR 34:060, Section 1(2)(b) will be met;

(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;]

(4) [(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];

(5) [(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;

(6) [(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;

(7) [(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;

(8) [(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.

(9) A waste management plan for EPA hazardous waste numbers F020, F021, F022, F023, F026, and F027 (chlorinated dioxins, dibenzofurans and phenols) describing how a waste pile that is not enclosed (as defined in 401 KAR 34:210, Section 1(3)) is or will be designed, constructed, operated, and maintained to meet the requirements of 401 KAR 34:210, Section 9. This submission must address the following items as specified in 401 KAR 34:210, Section 9:

(a) The volume, physical, and chemical characteristics of the wastes to be disposed in the waste pile, including their potential to migrate through soil or to volatilize or escape into the atmosphere;

(b) The attenuative properties of underlying and surrounding soils or other materials;

(c) The mobilizing properties of other materials co-disposed with these wastes; and

(d) The effectiveness of additional treatment, design, or monitoring techniques.

CHARLOTTE E. BALDWIN, Secretary
APPROVED BY AGENCY: November 12, 1985
FILED WITH LRC: November 13, 1985 at 3 p.m.
PUBLIC HEARING SCHEDULED: A public hearing on this regulation will be held on December 30, 1985, at 1 p.m. EST, in the Capital Plaza Tower. Any persons interested in attending this hearing

shall submit by December 26, 1985, a written statement of such interest to: J. Alex Barber, Director, Division of Waste Management, 18 Reilly Road, Frankfort, Kentucky 40601. If no statement of interest is received by close of business on December 26, 1985, the hearing on this regulation may be cancelled. Written comments may also be submitted to the address above. Written comments will be accepted until the end of the comment period, which will be close of business on December 30, 1985.

REGULATORY IMPACT ANALYSIS

Agency Contact Person: J. Alex Barber, Director

(1) Type and number of entities affected: There are 3 hazardous waste piles currently operating within Kentucky.

(a) Direct and indirect costs or savings to those affected:

1. First year: None. See note in item (6) Any Additional Information or Comments.

2. Continuing costs or savings: None. See note in item (6) Any Additional Information or Comments.

3. Additional factors increasing or decreasing costs (note any effects upon competition): None. See note in item (6) Any Additional Information or Comments.

(b) Reporting and paperwork requirements: For chlorinated dioxins, dibenzofurans and phenols, waste piles must have a waste management plan. See Item (6) Any Additional Information and Comments.

(2) Effects on the promulgating administrative body:

(a) Direct and indirect costs or savings:

1. First year: Negligible. Review of the waste management plans for chlorinated dioxins, dibenzofurans, and phenols, may require a minimal amount of additional review time.

2. Continuing costs or savings: None. See note in (2)(a)1.

3. Additional factors increasing or decreasing costs: None. See note in (2)(a)1.

(b) Reporting and paperwork requirements:

(3) Assessment of anticipated effect on state and local revenues: There will be no effect on state or local revenues from promulgation of this regulation.

(4) Assessment of alternative methods; reasons why alternatives were rejected:

(a) The cabinet adopted the federal requirements for a waste management plan for chlorinated dioxins, dibenzofurans, and phenols.

Alternative:

1. Less stringent: The cabinet could have chosen to be less stringent by not adopting the federal requirement for a plan. However, this would have made the state program inconsistent with the federal program and resulted in less environmental and public health protection in Kentucky than that afforded nationally.

2. More stringent: The cabinet could have chosen to adopt more stringent provisions in the waste management plan. However, the present proposal is adequate to protect public health and the environment.

3. Present proposal: The cabinet chose to adopt the federal requirements from January 14, 1985, verbatim. This will adequately protect public health and the environment.

(b) The cabinet chose to delete an exemption from ground water monitoring requirements for double lined waste piles.

Alternatives:

1. Less stringent: The cabinet could have kept the existing exemption. However, this would have been in contravention of the federal hazardous and solid waste amendments of 1984.

2. More stringent: The cabinet could not have been more stringent than to repeal the exemption.

3. Present proposal: The present proposal complies with the new federal law.

(5) Identify any statute, administrative regulation or government policy which may be in conflict, overlapping, or duplication: None

(a) Necessity of proposed regulation if in conflict: Not applicable.

(b) If in conflict, was effort made to harmonize the proposed administrative regulation with conflicting provisions: Not applicable.

(6) Any additional information or comments: The impact of this regulation has not been analyzed for those requirements which are equivalent to those found in the corresponding federal regulation, 40 CFR 270.18. The impact of the federal program was analyzed in 50 FR 1978-2006, January 14, 1985 and 50 FR 28702-28755, July 15, 1985. A copy of the January 14, 1985 and July 15, 1985 federal registers have been filed with the regulations compiler of the Legislative Research Commission.

Tiering:

Was tiering applied? Yes. This regulation applies only to hazardous waste piles.

NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION CABINET
Department for Environmental Protection
Division of Waste Management
(Proposed Amendment)

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 Chapter 13A, 224.033, 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 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, 401 KAR 38:090 and 401 KAR 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 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 wastes for which the demonstration will be made and the potential hazardous constituents in the wastes;

(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 for 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 placed 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.

(i) A waste management plan for EPA hazardous waste numbers F020, F021, F022, F023, F026, and F027 (chlorinated dioxins, dibenzofurans and phenols) describing how a land treatment facility is or will be designed, constructed, operated, and maintained to meet the requirements of Section 11 of 401 KAR 34:220. This submission must address the following items as specified in Section 11 of 401 KAR 34:220:

1. The volume, physical, and chemical characteristics of the wastes, including their potential to migrate through soil or to volatilize or escape into the atmosphere;

2. The attenuative properties of underlying and surrounding soils or other materials;

3. The mobilizing properties of other materials co-disposed with these wastes; and

4. The effectiveness of additional treatment, design, or monitoring techniques.

CHARLOTTE E. BALDWIN, Secretary

APPROVED BY AGENCY: November 12, 1985

FILED WITH LRC: November 13, 1985 at 3 p.m.

PUBLIC HEARING SCHEDULED: A public hearing on this regulation will be held on December 30, 1985, at 1 p.m. EST, in the Capital Plaza Tower. Any persons interested in attending this hearing shall submit by December 26, 1985, a written statement of such interest to: J. Alex Barber, Director, Division of Waste Management, 18 Reilly Road, Frankfort, Kentucky 40601. If no statement of interest is received by close of business on December 26, 1985, the hearing on this regulation may be cancelled. Written comments may also be submitted to the address above. Written comments will be accepted until the end of the comment period, which will be close of business on December 30, 1985.

REGULATORY IMPACT ANALYSIS

Agency Contact Person: J. Alex Barber, Director

(1) Type and number of entities affected: There are no hazardous waste land treatment facilities currently in Kentucky who may be affected by the proposed amendments. The cabinet has no estimate of the actual number of the land treatment facilities who might want to manage chlorinated dioxins, dibenzofurans and phenols in the future.

(a) Direct and indirect costs or savings to those affected:

1. First year: None. See note in item (6) Any Additional Information or Comments.

2. Continuing costs or savings: None. See note in item (6) Any Additional Information or Comments.

3. Additional factors increasing or decreasing costs (note any effects upon competition): None. See note in item (6) Any Additional Information or Comments.

(b) Reporting and paperwork requirements: None. See Item (6) Any Additional Information and Comments.

(2) Effects on the promulgating administrative body:

(a) Direct and indirect costs or savings:

1. First year: Negligible. Although a waste management plan for chlorinated dioxins, dibenzofurans, and phenols would have to be submitted and thus reviewed by the cabinet, it is assumed that: (1) there is not a significant number of land treatment facilities who will want to manage these wastes; and (2) it will not require a substantial amount of time for review or compliance monitoring.

2. Continuing costs or savings: None. See note in (2)(a)1 above.

3. Additional factors increasing or decreasing costs: None. See note in (2)(a)1 above.

(b) Reporting and paperwork requirements:

(3) Assessment of anticipated effect on state and local revenues: There will be no effect on state or local revenues from promulgation of this regulation.

(4) Assessment of alternative methods; reasons why alternatives were rejected:

(a) The cabinet chose to adopt requirements for management of chlorinated dioxins, dibenzofurans, and phenols which are identical to those promulgated by the U.S. Environmental Protection Agency on January 14, 1985.

Alternative:

1. Less stringent: The cabinet could have chosen to adopt provisions which are less stringent than the federal requirements for these wastes. However, this would have afforded less protection for Kentucky's public health and environment than that provided by the national program.

2. More stringent: The cabinet could have chosen to adopt provisions which are more stringent than those adopted by the U.S. Environmental Protection Agency. However, the current proposal is adequate to protect public health and the environment.

3. Present proposal: The present proposal adopts the requirements for chlorinated dioxins, dibenzofurans, and phenols which are identical to those promulgated by the U.S. Environmental Protection Agency on January 14, 1985.

(5) Identify any statute, administrative regulation or government policy which may be in conflict, overlapping, or duplication: None

(a) Necessity of proposed regulation if in conflict: Not applicable.

(b) If in conflict, was effort made to harmonize the proposed administrative regulation with conflicting provisions: Not applicable.

(6) Any additional information or comments: The impact of this regulation has not been analyzed for those requirements which are equivalent to those found in the corresponding federal regulation, 40 CFR 270.20. The impact of the federal program was analyzed in 50 FR 1978-2006, January 14, 1985. A copy of the January 14, 1985 federal register has been filed with the regulations compiler of the Legislative Research Commission.

Tiering:

Was tiering applied? Yes. This regulation applies only to hazardous waste land treatment facilities.

NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION CABINET
Department for Environmental Protection
Division of Waste Management
(Proposed Amendment)

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 Chapter 13A, 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 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, 401 KAR 38:090 and 401 KAR 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-containerized 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.

(10) A waste management plan for EPA hazardous waste numbers F020, F021, F022, F023, F026, and F027 (chlorinated dioxins, dibenzofurans and phenols) describing how a landfill is or will be designed, constructed, operated, and maintained to meet the requirements of Section 12 of 401 KAR 34:230 and KRS 224.866(2). This submission must address the following items as specified in Section 12 of 401 KAR 34:230 and KRS 224.866(2):

(a) The volume, physical, and chemical characteristics of the wastes, including their potential to migrate through soil or to volatilize or escape into the atmosphere;

(b) The attenuative properties of underlying and surrounding soils or other materials;

(c) The mobilizing properties of other materials co-disposed with these wastes; and

(d) The effectiveness of additional treatment, design, or monitoring techniques.

CHARLOTTE E. BALDWIN, Secretary

APPROVED BY AGENCY: November 12, 1985

FILED WITH LRC: November 13, 1985 at 3 p.m.

PUBLIC HEARING SCHEDULED: A public hearing on this regulation will be held on December 30, 1985, at 1 p.m. EST, in the Capital Plaza Tower. Any persons interested in attending this hearing shall submit by December 26, 1985, a written statement of such interest to: J. Alex Barber, Director, Division of Waste Management, 18 Reilly Road, Frankfort, Kentucky 40601. If no statement of interest is received by close of business on December 26, 1985, the hearing on this regulation may be cancelled. Written comments may also be submitted to the address above. Written comments will be accepted until the end of the comment period, which will be close of business on December 30, 1985.

REGULATORY IMPACT ANALYSIS

Agency Contact Person: J. Alex Barber, Director

(1) Type and number of entities affected: There are currently three hazardous waste landfills in Kentucky.

(a) Direct and indirect costs or savings to those affected:

1. First year: None. See note in item (6) Any Additional Information or Comments.

2. Continuing costs or savings: None. See note in item (6) Any Additional Information or Comments.

3. Additional factors increasing or decreasing costs (note any effects upon competition): None. See note in item (6) Any Additional Information or Comments.

(b) Reporting and paperwork requirements: The amendments made to this regulation will require landfills which manage chlorinated dioxins, dibenzofurans, and phenols to prepare a waste management plan. However, the costs of preparing the plan and the savings derived from safer management of these wastes have not been assessed because the impact has already been assessed by the U.S. Environmental Protection Agency as the result of identical amendments made to the federal program on January 14, 1985. (See note in item (6) Additional Information and Comments.)

(2) Effects on the promulgating administrative body:

(a) Direct and indirect costs or savings:

1. First year: Negligible. The cabinet estimates that there will be very few hazardous waste management facilities managing chlorinated dioxins, dibenzofurans, and phenols. Thus the increase in review time needed to evaluate the waste management plans for these wastes will be minimal.

2. Continuing costs or savings: None.

3. Additional factors increasing or decreasing costs: None.

(b) Reporting and paperwork requirements:

(3) Assessment of anticipated effect on state and local revenues: There will be no effect on state or local revenues from promulgation of this regulation.

(4) Assessment of alternative methods; reasons why alternatives were rejected:

(a) The cabinet proposes to adopt the federal requirement that landfills must prepare a waste management plan in order to manage chlorinated dioxins, dibenzofurans, and phenols.

Alternative:
1. Less stringent: The cabinet could have chosen to be less stringent by not requiring a waste management plan for these wastes. However, this would have made the Kentucky program less stringent than the federal program and thus would have afforded less protection to public health and the environment than that afforded by the national program.
2. More stringent: The cabinet could have chosen to adopt more requirements in the waste management plan for these wastes. However, the current proposal is adequate to protect public health and the environment.
3. Present proposal: The cabinet is proposing to adopt the federal requirements for landfills to have a waste management plan for chlorinated dioxins, dibenzofurans, and phenols.
(5) Identify any statute, administrative regulation or government policy which may be in conflict, overlapping, or duplication: None
(a) Necessity of proposed regulation if in conflict: Not applicable.
(b) If in conflict, was effort made to harmonize the proposed administrative regulation with conflicting provisions: Not applicable.
(6) Any additional information or comments: The impact of this regulation has not been analyzed for those requirements which are equivalent to those found in the corresponding federal regulation, 40 CFR 270.21. The impact of the federal program was analyzed in 50 FR 1978-2006, January 14, 1985. A copy of the January 14, 1985 federal register has been filed with the regulations compiler of the Legislative Research Commission.

Tiering:
Was tiering applied? Yes. The amendments made to this regulation apply only to landfills managing chlorinated dioxins, dibenzofurans, and phenols.

NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION CABINET
Department for Environmental Protection
Division of Waste Management
(Proposed Amendment)

401 KAR 39:010. Generator registration fees.

RELATES TO: KRS 224.033, 224.830 through 224.877, 224.994 [224.864, 224.866, 224.871]
PURSUANT TO: KRS Chapter 13A, 224.033, 224.871
NECESSITY AND FUNCTION: KRS 224.033(20) states that the 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 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.

Section 2. Schedule of Fees for Application for Registration. All applications for registration as a hazardous waste generator shall be accompanied by the appropriate fee set forth below:
(1) The fee for registration as a hazardous waste generator shall be based on the number of hazardous wastestreams generated 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

(2) Modification fee. If a registrant desires to increase by an additional hazardous waste the number of hazardous wastes he generates, the fee for the processing of such modification shall be fifty (50) dollars. A modification fee will also be required if the name of the company or the authorized contact person changes.

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.

CHARLOTTE E. BALDWIN, Secretary
APPROVED BY AGENCY: November 12, 1985
FILED WITH LRC: November 13, 1985 at 3 p.m.
PUBLIC HEARING SCHEDULED: A public hearing on this regulation will be held on December 30, 1985, at 1 p.m. EST, in the Capital Plaza Tower. Any persons interested in attending this hearing shall submit by December 26, 1985, a written statement of such interest to: J. Alex Barber, Director, Division of Waste Management, 18 Reilly Road, Frankfort, Kentucky 40601. If no statement of interest is received by close of business on December 26, 1985, the hearing on this regulation may be cancelled. Written comments may also be submitted to the address above. Written comments will be accepted until the end of the comment period, which will be close of business on December 30, 1985.

REGULATORY IMPACT ANALYSIS

Agency Contact Person: J. Alex Barber, Director
(1) Type and number of entities affected: This regulation applies to 282 hazardous waste generators in Kentucky.
(a) Direct and indirect costs or savings to those affected:
1. First year: There will be a direct cost of $50 to the generator each time they change the company name or name of the designated contact person.
2. Continuing costs or savings: See note (1)(a)1.
3. Additional factors increasing or decreasing costs (note any effects upon competition): None.
(b) Reporting and paperwork requirements: The generators will be required to notify the cabinet each time their generator registration needs modifications.
(2) Effects on the promulgating administrative body:
(a) Direct and indirect costs or savings:
1. First year: There will be no cost to the promulgating body because the fee charged will

cover the cost of review.
2. Continuing costs or savings: See note in (2)(a)1 above.
3. Additional factors increasing or decreasing costs: None.
(b) Reporting and paperwork requirements:
(3) Assessment of anticipated effect on state and local revenues: The fees collected due to the promulgation of this regulation will go directly to the General Fund to be redistributed the following year. There will be no effect on local revenues from promulgation of this regulation.
(4) Assessment of alternative methods; reasons why alternatives were rejected: Modification fee for name changes. The cabinet is required to charge a fee to cover the cost of processing permits. The paperwork and time involved in modifying records for name changes was determined to merit the $50 modification fee.
(5) Identify any statute, administrative regulation or government policy which may be in conflict, overlapping, or duplication: None
(a) Necessity of proposed regulation if in conflict: Not applicable.
(b) If in conflict, was effort made to harmonize the proposed administrative regulation with conflicting provisions: Not applicable.
(6) Any additional information or comments: None.

Tiering:
Was tiering applied? Yes. This regulation is tiered to apply to hazardous waste generators.

NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION CABINET
Department for Environmental Protection
Division of Waste Management
(Proposed Amendment)

401 KAR 39:020. Delisting and exemption fees.

RELATES TO: KRS 224.033, 224.864, 224.866, 224.871, 224.994
PURSUANT TO: KRS Chapter 13A, 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 and for applications for specific exemptions.

Section 1. Applicability for Delisting Fees. A petition to delist a hazardous waste in accordance with Section 1 of 401 KAR 31:062 [31:040] shall be accompanied by payment of a fee of $2,000 [$1,000] per waste petitioned. If a hazardous waste has been granted a temporary exclusion and is listed in Section 3 of 401 KAR 31:070 and the generator petitions to have that waste delisted in accordance with Section 1 of 401 KAR 31:040, then a payment of $1,000 per waste shall accompany the petition to delist.

Section 2. Applicability for Exemption Fees. An application for an exemption of a hazardous constituent in a permit in accordance with Section 4(2) of 401 KAR 34:060 or an application to establish alternate concentration limits in accordance with Section 5(2) of 401 KAR 34:060 shall require submittal of a fee to the cabinet. The fee charged shall be the cost of the review. The cost shall not exceed $30,000 for the first constituent reviewed and $7,500 for each additional constituent reviewed. All fees collected shall be used to defray the costs for performing the required review activities to determine whether or not the exemption shall be granted or the alternate concentration limit established. Such fees shall be deposited in the Division of Waste Management's Agency Receipt Account.

Section 3. Submittal of Fee. The fee for delisting shall be submitted to the cabinet with the petition for delisting. The fee for an application for a specific exemption shall be submitted upon the cabinet's request at the completion of the review. The checks should be made payable to the Kentucky State Treasurer.

CHARLOTTE E. BALDWIN, Secretary
APPROVED BY AGENCY: November 12, 1985
FILED WITH LRC: November 13, 1985 at 3 p.m.
PUBLIC HEARING SCHEDULED: A public hearing on this regulation will be held on December 30, 1985, at 1 p.m. EST, in the Capital Plaza Tower. Any persons interested in attending this hearing shall submit by December 26, 1985, a written statement of such interest to: J. Alex Barber, Director, Division of Waste Management, 18 Reilly Road, Frankfort, Kentucky 40601. If no statement of interest is received by close of business on December 26, 1985, the hearing on this regulation may be cancelled. Written comments may also be submitted to the address above. Written comments will be accepted until the end of the comment period, which will be close of business on December 30, 1985.

REGULATORY IMPACT ANALYSIS

Agency Contact Person: J. Alex Barber, Director
(1) Type and number of entities affected: This regulation could affect 228 hazardous waste generators in Kentucky.
(a) Direct and indirect costs or savings to those affected:
1. First year: There will be an additional cost of $1,000 to those seeking a delisting who have already paid $1,000 and received a temporary delisting. Those seeking a delisting for a waste who have not been granted a temporary delisting for the waste will be charged a fee of $2,000 when petitioning to delist a waste.
2. Continuing costs or savings: There will be no continuing cost.
3. Additional factors increasing or decreasing costs (note any effects upon competition): None. See note (1)(a)1 above.
(b) Reporting and paperwork requirements: There are no additional reporting or paperwork requirements imposed by this regulation.
(2) Effects on the promulgating administrative body:
(a) Direct and indirect costs or savings:
1. First year: A savings will result due to the revision of this regulation to more adequately cover review costs.

2. Continuing costs or savings: None. See note in (2)(a)1 above.

3. Additional factors increasing or decreasing costs: None. See note in (2)(a)1 above.

(b) Reporting and paperwork requirements:

(3) Assessment of anticipated effect on state and local revenues: All fees collected for this regulation will go into the Commonwealth's General Fund. There will be no effect on local revenues from promulgation of this regulation.

(4) Assessment of alternative methods; reasons why alternatives were rejected:

(a) The fee is being revised for petitioning to delist a waste and to include a separate fee for wastes which have previously been delisted under temporary exclusions.

Alternative:

1. Less stringent: The cabinet is required by statute to charge a fee to cover the cost of reviewing applications for exemptions. Charging a smaller fee would not have adequately covered the review cost.

2. More stringent: The cabinet could have chosen to charge a higher fee, especially in the case of a waste which has already received a temporary delisting, however it was felt that $1,000 would cover the review expense necessary to determine if the waste should be granted a full delist exclusion.

3. Present proposal: The proposed fees of $1,000 and $2,000 will adequately cover the review costs for the delist petitions.

(5) Identify any statute, administrative regulation or government policy which may be in conflict, overlapping, or duplication: None

(a) Necessity of proposed regulation if in conflict: Not applicable.

(b) If in conflict, was effort made to harmonize the proposed administrative regulation with conflicting provisions: Not applicable.

(6) Any additional information or comments: None.

Tiering:
Was tiering applied? Yes. This regulation is tiered to apply only to those hazardous waste generators who wish to petition to delist a particular waste.

NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION CABINET
Department for Environmental Protection
Division of Air Pollution
(Proposed Amendment)

401 KAR 51:017. Prevention of significant deterioration of air quality.

RELATES TO: KRS [Chapter] 224.320, 224.330, 224.340

PURSUANT TO: KRS 224.033

NECESSITY AND FUNCTION: KRS 224.033 requires the Natural Resources and Environmental Protection Cabinet to prescribe regulations for the prevention, abatement and control of air pollution. This regulation provides for the prevention of significant deterioration of ambient air quality.

Section 1. Applicability. The provisions of this regulation are applicable to any major stationary source or any major modification which:

(1) Commenced construction after September 22, 1982 [the effective date of this regulation];

(2) Emits any pollutant regulated by the Clean Air Act; and

(3) Is constructed in areas designated as attainment or unclassifiable for any pollutant as defined pursuant to Section 107(d)(1)(D) or (E) of the Clean Air Act. Area designations are contained in 40 CFR 81.318 [in 401 KAR 51:010].

Section 2. Definitions. As used in this regulation terms not defined herein shall have the meaning given them in 401 KAR 50:010.

(1) "Major stationary source" means:

(a) Any of the following stationary sources of air pollutants which emits, or has the potential to emit, 100 tons per year or more of any pollutant subject to regulation under the Clean Air Act: fossil fuel-fired steam electric plants of more than 250 million BTU per hour heat input, coal cleaning plants (with thermal dryers), kraft pulp mills, portland cement plants, primary zinc smelters, iron and steel mill plants, primary aluminum ore reduction plants, primary copper smelters, municipal incinerators capable of charging more than 250 tons of refuse per day, hydrofluoric, sulfuric, and nitric acid plants, petroleum refineries, lime plants, phosphate rock processing plants, coke oven batteries, sulfur recovery plants, carbon black plants (furnace process), primary lead smelters, fuel conversion plants, sintering plants, secondary metal production plants, chemical process plants, fossil fuel boilers (or combination thereof) totaling more than 250 million BTU per hour heat input, petroleum storage and transfer units with a total storage capacity exceeding 300,000 barrels, taconite ore processing plants, glass fiber processing plants, and charcoal production plants;

(b) Notwithstanding the stationary source size specified in paragraph (a) of this subsection, any stationary source which emits, or has the potential to emit, 250 tons per year or more of any air pollutant subject to regulation under the Clean Air Act; and

(c) Any physical change that would occur at a stationary source not otherwise qualifying under this subsection as a major stationary source, if the changes would constitute a major stationary source by themselves.

(d) A major stationary source that is major for volatile organic compounds shall be considered major for ozone.

(2) "Major modification" means any physical change in or change in the method of operation of a major stationary source that would result in a significant net emissions increase of any pollutant subject to regulation under the Clean Air Act.

(a) Any net emissions increase that is significant for volatile organic compounds shall be significant for ozone.

(b) A physical change or change in the method of operation shall not include:

1. Routine maintenance, repair and replacement;

2. Use of alternative fuel or raw material by reason of an order or by reason of a natural gas curtailment plan in effect under a federal act;

3. Use of an alternative fuel at a steam generating unit to the extent that the fuel is generated from municipal solid waste;

4. Use of an alternative fuel or raw material by a stationary source which:

a. The source was capable of accommodating before January 6, 1975, unless such change would

be prohibited under any permit condition which was established after January 6, 1975; or

b. The source is approved to use under any permit issued under this regulation[, previously adopted regulations 401 KAR 51:015 and 401 KAR 51:016E,] or under 40 CFR 52.21;

5. An increase in the hours of operation or in the production rate, unless such change would be prohibited after January 6, 1975 pursuant to 40 CFR 52.21, after June 6, 1979 pursuant to 401 KAR 51:015, after September 22, 1982 [the effective date of this regulation] pursuant to this regulation; or under 401 KAR 50:035 and 401 KAR 51:016E; or

6. Any change in ownership at a stationary source.

(3) "Net emission increase" means the amount by which the sum of paragraphs (a) and (b) of this subsection exceeds zero:

(a) Any increase in actual emissions from a particular physical change or change in method of operation at a stationary source; and

(b) Any other increases and decreases in actual emissions at the source that are contemporaneous with the particular change and are otherwise creditable.

(c) An increase or decrease in actual emissions is contemporaneous with the increase from the particular change only if it occurs between the date which is ten (10) years before construction on the particular change commences, but not before January 6, 1975, and the date that the increase from the particular change occurs.

(d) An increase or decrease in actual emissions is creditable only if the cabinet or the U.S. EPA has not relied on it in issuing a permit for the source under this regulation[, 401 KAR 51:015, 401 KAR 51:016E,] or 40 CFR 52.21, which permit is in effect when the increase in actual emissions from the particular change occurs.

(e) An increase or decrease in actual emissions of sulfur dioxide or particulate matter which occurs before the applicable baseline date is creditable only if it is required to be considered in calculating the amount of maximum allowable increases remaining available.

(f) An increase in actual emissions is creditable only to the extent that the new level of actual emissions exceeds the old level.

(g) A decrease in actual emissions is creditable only to the extent that:

1. The old level of actual emissions or the old level of allowable emissions, whichever is lower, exceeds the new level of actual emissions;

2. It is state and federally enforceable at and after the time that actual construction on the particular change begins; and

3. It has approximately the same qualitative significance for public health and welfare as that attributed to the increase from the particular change.

(h) An increase that results from a physical change at a source occurs when the emissions unit on which construction occurred becomes operational and begins to emit a particular pollutant. Any replacement unit that requires shakedown becomes operational only after a reasonable shakedown period, not to exceed 180 days.

(4) "Potential to emit" means the maximum capacity of a stationary source to emit a pollutant under its physical or operational design. Any physical or operational limitation on the capacity of the source to emit a pollutant, including air pollution control equipment and restrictions on hours of operation or on the type or amount of material combusted, stored, or processed, shall be treated as part of its design if the limitation or the effect it would have on emissions is state and federally enforceable. Secondary emissions do not count in determining the potential to emit of a stationary source.

(5) "Stationary source" means any building, structure, facility, or installation which emits or may emit any air pollutant subject to regulation under the Clean Air Act.

(6) "Building, structure, facility, or installation" means all of the pollutant emitting activities which belong to the same industrial grouping, are located on one (1) or more contiguous or adjacent properties, and are under the control of the same person (or persons under common control) except the activities of any vessel. Pollutant-emitting activities shall be considered as part of the same industrial grouping if they belong to the same major group (i.e., which have the same two (2) digit code) as described in the Standard Industrial Classification Manual, 1972, as amended by the 1977 supplement.

(7) "Emission unit" means any part of a stationary source which emits or would have the potential to emit any pollutant subject to regulation under the Clean Air Act.

(8) "Construction" means any physical change or change in the method of operation (including fabrication, erection, installation, demolition, or modification of an emissions unit) which would result in a change in actual emissions.

(9) "Commence" as applied to construction of a major stationary source or major modification means that the owner or operator has all necessary preconstruction approvals or permits and either has:

(a) Begun, or caused to begin, a continuous program of actual on-site construction of the source, to be completed within a reasonable time; or

(b) Entered into agreements or contractual obligations, which cannot be cancelled or modified without substantial loss to the owner or operator, to undertake a program of actual construction of the source to be completed within a reasonable time.

(10) "Necessary preconstruction approvals or permits" means those permits or approvals required under the regulations of Title 401, Chapters 50 to 63 and federal air quality control laws and regulations.

(11) "Begin actual construction" means, in general, initiation of physical on-site construction activities on an emissions unit which are of a permanent nature. Such activities include, but are not limited to, installation of building supports and foundations, laying underground pipework and construction of permanent storage structures. With respect to a change in method of operations, this term refers to those on-site activities other than the preparatory activities which mark the initiation of the change.

(12) "Best available control technology" means an emissions limitation (including a visible emission standard) based on the maximum degree of reduction for each pollutant subject to regulation under the Clean Air Act which would

be emitted from any proposed major stationary source or major modification which the cabinet, on a case-by-case basis, taking into account energy, environmental, and economic impacts and other costs, determines is achievable for such source or modification through application of production processes or available methods, systems, and techniques, including fuel cleaning or treatment or innovative fuel combustion techniques for control of such pollutant. In no event shall application of best available control technology result in emissions of any pollutant which would exceed the emissions allowed by any applicable standard under Title 401, Chapters 57 and 59 or 40 CFR Parts 60 and 61. If the secretary determines that technological or economic limitations on the application of measurement methodology to a particular emissions unit would make the imposition of an emissions standard infeasible, a design, equipment, work practice, operational standard, or combination thereof may be prescribed instead to satisfy the requirement for the application of best available control technology. Such standard shall, to the degree possible, set forth the emissions reduction achievable by implementation of such design, equipment, work practice or operation, and shall provide for compliance by means which achieve equivalent results.

(13) "Baseline concentration" means that ambient concentration level which exists in the baseline area at the time of the applicable baseline date. A baseline concentration is determined for each pollutant for which a baseline date is established and shall include:

(a) The actual emissions representative of sources in existence on the applicable baseline date, except as provided in paragraph (c) of this subsection; and

(b) The allowable emissions of major stationary sources which commenced construction before January 6, 1975, but were not in operation by the applicable baseline date.

(c) The following will not be included in the baseline concentration and will affect the applicable maximum allowable increase(s):

1. Actual emissions from any major stationary source on which construction commenced after January 6, 1975; and

2. Actual emissions increases and decreases at any stationary source occurring after the baseline date.

(14) "Baseline date" means the earliest date after August 7, 1977, on which the first complete application is submitted by a major stationary source or major modification subject to the requirements of federal or state prevention of significant deterioration regulations. The baseline date is established for each pollutant for which increments or other equivalent measures have been established if:

(a) The area in which the proposed source or modification would construct is designated as attainment or unclassifiable pursuant to Section 107(d)(1)(D) or (E) of the Clean Air Act [under 401 KAR 51:010] for the pollutant on the date of its complete application; and

(b) In the case of a major stationary source, the pollutant would be emitted in significant amounts, or, in the case of a major modification, there would be a significant net emissions increase of the pollutant.

(15) "Baseline area" means any area (and every part thereof) designated as attainment or unclassifiable pursuant to Section 107(d)(1)(D) or (E) of the Clean Air Act [under 401 KAR 51:010] in which the major source or major modification establishing the baseline date would construct or would have an air quality impact equal to or greater than one (1) ug/m^3 (annual average) of the pollutant for which the baseline date is established. Area redesignations under Section 107(d)(1)(D)or (E) of the Clean Air Act cannot intersect or be smaller than the area of impact of any major stationary source or major modification which:

(a) Establishes a baseline date; or

(b) Is subject to this regulation and would be constructed in the Commonwealth of Kentucky.

(16) "Allowable emissions" means the emissions rate of a stationary source calculated using the maximum rated capacity of the source (unless the source is subject to state and federally enforceable limits which restrict the operating rate, or hours of operation, or both) and the most stringent of the following:

(a) The applicable standards as set forth in Title 401, Chapters 57 and 59, or 40 CFR 60 and 61;

(b) The applicable state and federally approved regulatory emissions limitation, including those with a future compliance date; or

(c) The emissions rate specified as a state and federally [an] enforceable permit condition, including those with a future compliance date.

(17) "Federally enforceable" means all limitations and conditions which are enforceable by the U.S. EPA, including those requirements developed pursuant to 40 CFR 60 and 61, requirements within any applicable State Implementation Plan, and any permit requirement established pursuant to 40 CFR 52.21 or under regulations approved pursuant to 40 CFR 51.18 or 40 CFR 51.24[, including those requirements developed pursuant to Title 401, Chapters 50 to 63].

(18) "Secondary emissions" means emissions which would occur as a result of the construction or operation of a major stationary source or major modification, but do not come from the major stationary source or major modification itself. For the purpose of this regulation, secondary emissions must be specific, well defined, quantifiable, and impact the same general area as the stationary source or modification which causes the secondary emissions. Secondary emissions include emissions from any offsite support facility which would not otherwise be constructed or increase its emissions as a result of the construction or operation of the major stationary source or major modification. Secondary emissions do not include any emissions which come directly from a mobile source, such as the emissions from the tailpipe of a motor vehicle, from a train, or from a vessel.

(19) "Innovative control technology" means any system of air pollution control that has not been adequately demonstrated in practice, but would have a substantial likelihood of achieving greater continuous emissions reduction than any control system in current practice or of achieving at least comparable reductions at lower cost in terms of energy, economics, or nonair quality environmental impacts.

(20) "Fugitive emissions" means those emissions which could not reasonably pass through a stack, chimney, vent, or other functionally equivalent opening.

(21) (a) "Actual emissions" means the actual rate of emissions of a pollutant from an emissions unit, as determined in accordance with paragraphs (b) to (d) of this subsection.

(b) In general, actual emissions as of a particular date shall equal the average rate, in tons per year, at which the unit actually emitted the pollutant during a two (2) year period which precedes the particular date and which is representative of normal source operation. The cabinet shall allow the use of a different time period upon a determination that it is more representative of normal source operation. Actual emissions shall be calculated using the unit's actual operating hours, production rates, and types of materials processed, stored, or combusted during the selected time period.

(c) The cabinet may presume that source-specific allowable emissions for the unit are equivalent to the actual emissions of the unit.

(d) For any emissions unit which has not begun normal operations on the particular date, actual emissions shall equal the potential to emit of the unit on that date.

(22) "Complete" means, in reference to an application for a permit, that the application contains all of the information necessary for processing the application.

(23) "Significant" means:

(a) In reference to a net emissions increase or the potential of a source to emit any of the following pollutants, a rate of emissions that would equal or exceed any of the rates given in Appendix A of this regulation.

(b) In reference to a net emissions increase or the potential of a source to emit a pollutant subject to regulation under the Clean Air Act that is not listed in Appendix A to this regulation, any emissions rate.

(c) Notwithstanding paragraph (b) of this subsection and Appendix A to this regulation, "significant" means any emissions rate or any net emissions increase associated with a major stationary source or major modification, which would construct within ten (10) kilometers of a Class I area, and have an impact on such area equal to or greater than one (1) ug/m^3 (twenty-four (24) hour average).

(24) "Federal land manager" means, with respect to any lands in the United States, the secretary of the department with authority over such lands.

(25) "High terrain" means any area having an elevation 900 feet or more above the base of the stack of a source.

(26) "Low terrain" means any area other than high terrain.

(27) "Adverse impact on visibility" means visibility impairment which interferes with the management, protection, preservation or enjoyment of the visitor's visual experience of the Class I area. This determination shall be made on a case-by-case basis taking into account the geographic extent, intensity, duration, frequency and time of visibility impairment, and how these factors correlate with the times of visitor use of the Class I area, and the frequency and timing of natural conditions that reduce visibility.

(28) "State Implementation Plan" means the most recently prepared plan or the revision thereof required by Section 110 of the Clean Air Act which has been approved by the U.S. EPA.

Section 3. Ambient Air Increments. In areas designated as Class I or II, increases in pollutant concentration over the baseline concentration shall be limited to the levels specified in Appendix B of this regulation. For any period other than an annual period, the applicable maximum allowable increase may be exceeded during one (1) such period per year at any one (1) location.

Section 4. Ambient Air Ceilings. No concentration of a pollutant specified in Section 1 of this regulation shall exceed:

(1) The concentration permitted under the national secondary ambient air quality standard; or

(2) The concentration permitted under the national primary ambient air quality standard, whichever concentration is lower for the pollutant for a period of exposure.

Section 5. Area Classifications. (1)(a) In Kentucky, Mammoth Cave National Park is the only [shall be a] Class I area.

(b) [(2)] Any other area, unless otherwise specified in the legislation creating such an area, is designated Class II.

(2) The Class I areas for other states shall be the mandatory Class I federal areas where visibility is an important value as listed in 40 CFR 81, Subpart D.

Section 6. Exclusions from Increment Consumption. (1) The cabinet may, after notice and opportunity for at least one (1) public hearing to be held in accordance with procedures established in 401 KAR 50:035, exclude the following concentrations in determining compliance with a maximum allowable increase:

(a) Concentrations attributable to the increase in emissions from stationary sources which have been converted from the use of petroleum products, natural gas, or both by reason of an order in effect under a federal statute or regulation over the emissions from such sources before the effective date of such an order;

(b) Concentrations attributable to the increase in emissions from sources which have converted from using natural gas by reason of a natural gas curtailment plan in effect pursuant to the federal statute over the emissions from such sources before the effective date of such plan;

(c) Concentrations of particulate matter attributable to the increase in emissions from construction or other temporary emission-related activities of new or modified sources; and

(d) Concentrations attributable to the temporary increase in emissions of sulfur dioxide or particulate matter from stationary sources which are affected by plan revisions approved by the Administrator of the U.S. EPA.

(2) No exclusion of such concentrations shall apply more than five (5) years after the effective date of the order to which subsection (1)(a) of this section refers or the plan to which subsection (1)(b) of this section refers, whichever is applicable. If both such order and plan are applicable, no such exclusion shall apply more than five (5) years after the later of such effective dates.

(3) No exclusion under this section shall occur after May 7, 1981, unless a State Implementation Plan revision meeting the

requirements of 40 CFR 51.24 has been approved by the U.S. EPA.

(4) The plan revision referred to in subsection (3) of this section shall specify the following provisions:

(a) The time over which the temporary emission increase of sulfur dioxide or particulate matter would occur. Such time shall not exceed two (2) years in duration unless a longer time is approved by the U.S. EPA;

(b) That the time period for excluding certain contributions in accordance with paragraph (a) of this subsection is not renewable;

(c) That no emissions increase will occur from a stationary source which would:

1. Impact a Class I area or an area where an applicable increment is known to be violated; or

2. Cause or contribute to the violation of a national ambient air quality standard; and

(d) Limitations will be in effect at the end of the time period specified in accordance with paragraph (a) of this subsection which would ensure that the emissions levels from stationary sources affected by the plan revision would not exceed those levels occurring from such sources before the plan revision was approved.

Section 7. Stack Heights. (1) The degree of emission limitation required for control of any air pollutant under this regulation shall not be affected in any manner by:

(a) So much of the stack height of any source as exceeds good engineering practice; or

(b) Any other dispersion technique.

(2) Subsection (1) of this section shall not apply with respect to stack heights in existence before December 31, 1970, or to dispersion techniques implemented before then.

Section 8. Review of Major Stationary Sources and Major Modifications; Source Applicability and Exemptions. (1) No major stationary source or major modifications to which the requirements of Sections 9 to 17 of this regulation apply shall begin actual construction without a permit which states that the stationary source or modification would meet those requirements.

(2) The requirements of Sections 9 to 17 of this regulation shall apply to any major stationary source and any major modification with respect to each pollutant subject to regulations under the Clean Air Act that it would emit, except as otherwise provided in Section 1 of this regulation.

(3) The requirements of Sections 9 to 17 of this regulation shall apply only to any major stationary source or major modification that would be constructed in an area designated as attainment or unclassifiable pursuant to Section 107(d)(1)(D) or (E) of the Clean Air Act [under 401 KAR 51:010]. Major volatile organic compound sources locating in an area unclassified for ozone may choose to accept the non-attainment area review requirement immediately pursuant to 401 KAR 51:052 and conduct post-approval monitoring for ozone.

(4) The requirements of Sections 9 to 17 of this regulation shall not apply to a particular major stationary source or major modification if:

(a) The owner or operator:

1. Obtained a federal, state or local preconstruction approval effective before September 22, 1982 [the effective date of this regulation];

2. Commenced construction before September 22, 1982 [the effective date of this regulation]; and

3. Did not discontinue construction for a period of eighteen (18) months or more; or

(b) The source or [of] modification would be a nonprofit health or nonprofit educational institution, or a major modification would occur at such an institution, and the Governor of the Commonwealth of Kentucky requests that it be exempt from those requirements;

(c) The source or modification would be a major stationary source or major modification only if fugitive emissions, to the extent quantifiable, are considered in calculating the potential to emit of the stationary source or modification and the source does not belong to any of the following categories:

1. Coal cleaning plants (with thermal dryers);
2. Kraft pulp mills;
3. Portland cement plants;
4. Primary zinc smelters;
5. Iron and steel mills;
6. Primary aluminum ore reduction plants;
7. Primary copper smelters;
8. Municipal incinerators capable of charging more than 250 tons of refuse per day;
9. Hydrofluoric, sulfuric, or nitric acid plants;
10. Petroleum refineries;
11. Lime plants;
12. Phosphate rock processing plants;
13. Coke oven batteries;
14. Sulfur recovery plants;
15. Carbon black plants (furnace process);
16. Primary lead smelters;
17. Fuel conversion plants;
18. Sintering plants;
19. Secondary metal production plants;
20. Chemical process plants;
21. Fossil-fuel boilers (or combination thereof) totaling more than 250 million BTUs per hour heat input;
22. Petroleum storage and transfer units with a total storage capacity exceeding 300,000 barrels;
23. Taconite ore processing plants;
24. Glass fiber processing plants;
25. Charcoal production plants;
26. Fossil fuel-fired steam electric plants of more than 250 million BTUs per hour heat input; or
27. Any other stationary source category which, as of August 7, 1980, is being regulated under Title 401, Chapters 57 and 59 or 40 CFR Parts 60 and 61; or

(d) The source is a portable stationary source which has previously received a permit under this regulation; and:

1. The owner or operator proposes to relocate the source and emissions of the source at the new location would be temporary;

2. The emissions from the source would not exceed its allowable emissions;

3. The emissions from the source would impact no Class I area and no area where an applicable increment is known to be violated; and

4. Reasonable notice is given to the cabinet prior to the relocation identifying the proposed new location and the probable duration of operation at the new location. Such notice shall be given to the cabinet not less than ten (10) days in advance of the proposed relocation unless a different time duration is previously approved by the cabinet.

(5) The requirements of Sections 9 to 17 of this regulation shall not apply to a major

stationary source or major modification with respect to a particular pollutant if the owner or operator demonstrates that, relative to that pollutant, the source or modification is located in an area designated as non-attainment pursuant to Section 107(d)(1)(A), (B), or (C) of the Clean Air Act [under 401 KAR 51:010].

(6) The requirements of Sections 10, 12 and 14 of this regulation shall not apply to a major stationary source or major modification with respect to a particular pollutant, if the allowable emissions of that pollutant from the source, or the net emissions increase of that pollutant from the modifications:

(a) Would impact no Class I area and no area where an applicable increment is known to be violated; and

(b) Would be temporary.

(7) The requirements of Sections 10, 12 and 14 of this regulation as they relate to any maximum allowable increase for a Class II area shall not apply to a major modification at a stationary source that was in existence on March 1, 1978, if the net increase in allowable emissions of each pollutant subject to regulations under the Clean Air Act from the modification after the application of best available control technology would be less than fifty (50) tons per year.

(8) The cabinet may exempt a stationary source or modification from the requirements of Section 12 of this regulation with respect to monitoring for a particular pollutant if:

(a) The emissions increase of the pollutant from the new source or the net emissions increase of the pollutant from the modification would cause, in any area, air quality impacts less than the amounts given in Appendix C to this regulation; or

(b) The concentrations of the pollutant in the area that the source or modification would affect are less than the concentrations listed in Appendix C to this regulation, or the pollutant is not listed in Appendix C to this regulation.

Section 9. Control Technology Review. (1) A major stationary source or major modification shall meet each applicable emissions limitation under Title 401, Chapters 50 to 63 and each applicable emission standard and standard of performance pursuant to 40 CFR 60 and 61.

(2) A new major stationary source shall apply best available control technology for each pollutant subject to regulation under the Clean Air Act that it would have the potential to emit in significant amounts.

(3) A major modification shall apply best available control technology for each pollutant subject to regulation under Clean Air Act for which it would result in a significant net emissions increase at the source. This requirement applies to each proposed emissions unit at which a net emissions increase in the pollutant would occur as a result of a physical change or change in the method of operation in the unit.

(4) For phased construction projects, the determination of best available control technology shall be reviewed and modified as appropriate at the latest reasonable time which occurs no later than eighteen (18) months prior to commencement of construction of each independent phase of the project. At such time, the owner or operator of the applicable stationary source may be required to demonstrate the adequacy of any previous determination of best available control technology for the source.

Section 10. Source Impact Analysis. The owner or operator of the proposed source or modification shall demonstrate that allowable emission increases from the proposed source or modification, in conjunction with all other applicable emissions increases or reductions (including secondary emissions), would not cause or contribute to air pollution in violation of:

(1) Any national ambient air quality standard in any air quality control region; or

(2) Any applicable maximum allowable increase over the baseline concentration in any area.

Section 11. Air Quality Models. (1) All estimates of ambient concentrations required under this regulation shall be based on the applicable air quality models, data bases, and other requirements specified in the "Guideline on Air Quality Models," filed by reference in 401 KAR 50:015.

(2) Where an air quality impact model specified in the "Guideline on Air Quality Models" is inappropriate, the model may be modified or another model substituted. Such a change must be subject to notice and opportunity for public comment under Section 17 of this regulation. Written approval of the U.S. EPA must be obtained for any modification or substitution. Methods like those outlined in the "Workbook for the Comparison of Air Quality Models," filed by reference in 401 KAR 50:015, should be used to determine the comparability of air quality models.

Section 12. Air Quality Analysis. (1) Preapplication analysis.

(a) Any application for a permit under this regulation shall contain an analysis of ambient air quality in the area that the major stationary source or major modification would affect for each of the following pollutants:

1. For the source, each pollutant that it would have the potential to emit in a significant amount as defined in Section 2(23) of this regulation;

2. For the modification, each pollutant for which it would result in a significant net emissions increase.

(b) With respect to any such pollutant for which no national ambient air quality standard exists, the analysis shall contain such air quality monitoring data as the cabinet determines are [is] necessary to assess ambient air quality for that pollutant in any area that the emissions of that pollutant would affect.

(c) With respect to any such pollutant (other than nonmethane hydrocarbons) for which such a standard does exist, the analysis shall contain continuous air quality monitoring data gathered for purposes of determining whether emissions of that pollutant would cause or contribute to a violation of the standard or any maximum allowable increase.

(d) In general, the continuous air quality monitoring data that are [is] required shall have been gathered over a period of at least one (1) year and shall represent at least the year preceding receipt of the application, except that, if the applicant demonstrates through historical data or dispersion models that the monitoring data gathered over a period shorter than one (1) year (but not to be less than four

(4) months) will be obtained during a time period when maximum air quality levels can be expected, the data that are [is] required shall have been gathered over at least that shorter period.

(e) The owner or operator of a proposed stationary source or modification of volatile organic compounds who satisfies all conditions of 401 KAR 51:052 may provide post-approval monitoring data for ozone in lieu of providing preconstruction data as required under paragraphs (a) to (d) of this subsection.

(2) Post-construction monitoring. The owner or operator of a major stationary source or major modification shall, after construction of the stationary source or modification, conduct such ambient monitoring as the cabinet determines is necessary to determine the effect emissions from the stationary source or modification may have, or are having, on air quality in any area.

(3) Operations of monitoring stations. The owner or operator of a major stationary source or major modification shall meet the requirements of Appendix B to 40 CFR 58, filed by reference in 401 KAR 50:015, during the operation of monitoring stations for purposes of satisfying subsections (1) and (2) of this section.

Section 13. Source Information. The owner or operator of a proposed source or modification shall submit all information necessary to perform any analysis or make any determination required under this regulation.

(1) With respect to a major source or major modification to which Sections 9, 11, 13 and 15 of this regulation apply, such information shall include:

(a) A description of the nature, location, design capacity, and typical operating schedule of the source or modification, including specifications and drawings showing its design and plant layout;

(b) A detailed schedule for construction of the source or modification;

(c) A detailed description as to what system of continuous emission reduction is planned for the source or modification, emission estimates, and any other information necessary to determine that best available control technology would be applied.

(2) Upon request of the cabinet, the owner or operator shall also provide information on:

(a) The air quality impact of the source or modification, including meteorological and topographical data necessary to estimate such impact; and

(b) The air quality impacts, and the nature and extent of any or all general commercial, residential, industrial, and other growth which has occurred since August 7, 1977, in the area the source or modification would affect.

Section 14. Additional Impact Analysis. (1) The owner or operator shall provide an analysis of the impairment to visibility, soils and vegetation that would occur as a result of the source or modification and general commercial, residential, industrial and other growth associated with the source or modification. The owner or operator need not provide an analysis of the impact on vegetation having no significant commercial or recreational value.

(2) The owner or operator shall provide an analysis of the air quality impact projected for the area as a result of general commercial, residential, industrial and other growth associated with the source or modification.

(3) Visibility monitoring. The cabinet may require monitoring of visibility in any Class I area impacted by the proposed new stationary source or major modification using human observations, teleradiometers, photographic cameras, nephelometers, or fine particulate monitors. The method selected shall be determined on a case-by-case basis by the cabinet. Any visibility monitoring required by the cabinet in a Class I area will be approved by the federal land manager. Data obtained from any visibility monitoring shall be made available to the cabinet, U.S. EPA, and the federal land manager, upon request.

Section 15. Sources Impacting [Federal] Class I Areas; Additional Requirements. (1) Notice to U.S. EPA and federal land managers. The cabinet shall provide written notice of any permit application for a proposed major stationary source or major modification the emissions from which may [would] affect a Class I area to the U.S. EPA, the federal land manager, and the federal official charged with direct responsibility for management of any lands within any such area. The cabinet shall provide such notice promptly after receiving the application. Such notification shall include a copy of all information relevant to the permit application and shall be given within thirty (30) days of receipt and at least sixty (60) days prior to any public hearing on the application for a permit to construct. Such notification shall include an analysis of the proposed source's anticipated impacts on visibility in the Class I area. The cabinet shall also provide the federal land manager and such federal officials with a copy of the preliminary determination required under Section 17 of this regulation, and shall make available to them any materials used in making that determination, promptly after the cabinet makes it. Finally, the cabinet shall also notify all affected federal land managers within thirty (30) days of receipt of any advanced notification of any such permit application.

(2) Federal land manager. The federal land manager and the federal official charged with direct responsibility for management of such lands have an affirmative responsibility to protect the air quality related values (including visibility) of such lands and to consider, in consultation with the cabinet, whether a proposed source or modification will have an adverse impact on such values.

(3) Visibility analysis. The cabinet shall consider any analysis performed by the federal land manager, provided within thirty (30) days of the notification and analysis required by subsection (1) of this section that shows that a proposed new major stationary source or major modification may have an adverse impact on visibility in any Class I area. Where the cabinet finds that such analysis does not demonstrate to the satisfaction of the cabinet that an adverse impact on visibility will result in the Class I area, the cabinet shall, in the public notice required in 401 KAR 50:035, Section 4, either explain that decision or give notice as to where the explanation can be explained.

(4) [(3)] Denial; impact on air quality

related values. The federal land manager of any such lands may demonstrate to the cabinet that the emissions from a proposed source or modification would have an adverse impact on the air quality related values (including visibility) of those lands, notwithstanding that the change in air quality resulting from emissions from such source or modification would not cause or contribute to concentrations which would exceed the maximum allowable increases for a Class I area as defined in Appendix B to this regulation. If the cabinet concurs with such demonstration then the cabinet shall not issue the permit.

(5) [(4)] Class I variances. The owner or operator of a proposed source or modification may demonstrate to the federal land manager that the emissions from such source or modification would have no adverse impact on the air quality related values of any such lands (including visibility), notwithstanding that the change in air quality resulting from emissions from such source or modification would cause or contribute to concentrations which would exceed the maximum allowable increases for a Class I area. If the federal land manager concurs with such demonstration and he so certifies, the cabinet may, provided that the applicable requirements of this regulation are otherwise met, issue the permit with such emission limitations as may be necessary to assure that emissions of sulfur dioxide and particulate matter would not exceed the maximum allowable increases over baseline concentration for such pollutants specified in Appendix D to this regulation.

(6) [(5)] Sulfur dioxide variance by governor with federal land manager's concurrence. The owner or operator of a proposed source or modification which cannot be approved under subsection (5) [(4)] of this section may demonstrate to the Governor of the Commonwealth of Kentucky that the source cannot be constructed by reason of any maximum allowable increase in sulfur dioxide for a period of twenty-four (24) hours or less applicable to any Class I area and [, in the case of federal mandatory Class I areas,] that a variance under this clause would not adversely affect the air quality related values of the area (including visibility). The governor, after consideration of the federal land manager's recommendation (if any) and subject to his concurrence, may, after notice and public hearing, grant a variance from such maximum allowable increase. If such variance is granted, the cabinet shall issue a permit to such source or modification pursuant to the requirements of subsection (8) [(7)] of this section, provided that the applicable requirements of this regulation are otherwise met.

(7) [(6)] Variance by the governor with the president's concurrence. In any case where the Governor of the Commonwealth of Kentucky recommends a variance in which the federal land manager does not concur, the recommendations of the governor and the federal land manager shall be transmitted to the President of the United States of America. If the variance is approved, the cabinet shall issue a permit pursuant to the requirements of subsection (8) [(7)] of this section, provided that the applicable requirements of this regulation are otherwise met.

(8) [(7)] Emission limitations for presidential or gubernatorial variance. In the case of a permit issued pursuant to subsections (6) or (7) [(5) or (6)] of this section the source or modification shall comply with such emission limitations as may be necessary to assure that emissions of sulfur dioxide from the source or modification would not (during any day on which the otherwise applicable maximum allowable increases are exceeded) cause or contribute to concentrations which would exceed the maximum allowable increases over the baseline concentration as specified in Appendix E of this regulation and to assure that such emissions would not cause or contribute to concentrations which exceed the otherwise applicable maximum allowable increases for periods of exposure of twenty-four (24) hours or less for more than eighteen (18) days, not necessarily consecutive, during any annual period.

Section 16. Public Participation. The cabinet shall follow the applicable procedures of 401 KAR 50:035 in processing applications under this regulation.

Section 17. Source Obligation. (1) Any owner or operator who constructs or operates a source or modification not in accordance with the application submitted pursuant to this regulation or with the terms of any approval to construct, or any owner or operator of a source or modification subject to this regulation who begins actual construction after September 22, 1982 [the effective date of this regulation] without applying for and receiving approval hereunder, shall be subject to appropriate enforcement action.

(2) Approval to construct shall become invalid if construction is not commenced within eighteen (18) months after receipt of such approval, if construction is discontinued for a period of eighteen (18) months or more, or if construction is not completed within a reasonable time. The cabinet may extend the eighteen (18) month period upon a satisfactory showing that an extension is justified. This provision does not apply to the time period between construction of the approved phases of a phased construction project; each phase must commence construction within eighteen (18) months of the projected and approved commencement date.

(3) Approval to construct shall not relieve any owner or operator of the responsibility to comply fully with applicable provisions of Title 401, Chapters 50 to 63 and any other requirements under local, state, or federal law.

(4) At such time that a particular source or modification becomes a major stationary source or major modification solely by virtue of a relaxation in any enforceable limitation which was established after August 7, 1980, on the capacity of the source or modification otherwise to emit a pollutant, such as a restriction on hours of operation, then the requirements of Sections 9 to 18 of this regulation shall apply to the source or modification as though construction had not yet commenced on the source or modification.

Section 18. Environmental Impact Statements. Whenever any proposed source or modification is subject to action by a federal agency which might necessitate preparation of an environmental impact statement pursuant to the National Environmental Policy Act (42 U.S.C.

4321), review by the cabinet conducted pursuant to this regulation shall be coordinated with the broad environmental reviews under that Act and under Section 309 of the Clean Air Act to the maximum extent feasible and reasonable.

Section 19. Innovative Control Technology. (1) An owner or operator of a proposed major stationary source or major modification may request the cabinet in writing to approve a system of innovative control technology.

(2) The cabinet shall, with the consent of the governor(s) of other affected state(s), determine that the source or modification may employ a system of innovative control technology if:

(a) The proposed control system would not cause or contribute to an unreasonable risk to public health, welfare, or safety in its operation or function;

(b) The owner or operator agrees to achieve a level of continuous emissions reduction equivalent to that which would have been required under Section 9(2) of this regulation by a date specified by the cabinet. Such date shall not be later than four (4) years from the time of startup or seven (7) years from permit issuance.

(c) The source or modification would meet the requirements of Sections 9 and 10 of this regulation based on the emissions rate that the stationary source employing the system of innovative control technology would be required to meet on the date specified by the cabinet;

(d) The source or modification would not before the date specified by the cabinet:

1. Cause or contribute to a violation of an applicable national ambient air quality standard;

2. Impact any Class I area; or

3. Impact any area where an applicable increment is known to be violated; and

(e) All other applicable requirements including those for public participation have been met.

(3) The cabinet shall withdraw any approval to employ a system of innovative control technology made under this regulation if:

(a) The proposed system fails by the specified date to achieve the required continuous emissions reduction rate;

(b) The proposed system fails before the specified date so as to contribute to an unreasonable risk to public health, welfare, or safety; or

(c) The cabinet decides at any time that the proposed system is unlikely to achieve the required level of control or to protect the public health, welfare, or safety.

(4) If a source or modification fails to meet the required level of continuous emission reduction within the specified time period or the approval is withdrawn in accordance with subsection (3) of this section, the cabinet may allow the source or modification up to an additional three (3) years to meet the requirement for the application of best available control technology through use of a demonstrated system of control.

Section 20. Permit Condition Rescission. (1) Any owner or operator holding a permit for a stationary source or modification which contains conditions pursuant to 401 KAR 51:015 or 401 KAR 51:016E may request that the cabinet rescind the applicable conditions.

(2) The cabinet shall rescind a permit condition if so requested if the applicant can demonstrate to the satisfaction of the cabinet that this regulation would [does] not apply to the source or modification or a portion thereof.

APPENDIX A TO 401 KAR 51:017
Significant Net Emissions Rates

POLLUTANT	EMISSIONS RATE
Carbon monoxide	100 tons per year (tpy)
Nitrogen oxides	40 tpy
Sulfur dioxide	40 tpy
Particulate matter	25 tpy
Ozone	40 tpy of volatile organic compounds
Lead	0.6 tpy
Asbestos	0.007 tpy
Beryllium	0.0004 tpy
Mercury	0.1 tpy
Vinyl chloride	1 tpy
Fluorides	3 tpy
Sulfuric acid mist	7 tpy
Hydrogen sulfide (H_2S)	10 tpy
Total reduced sulfur (including H_2S)	10 tpy
Reduced sulfur compounds (including H_2S)	10 tpy

APPENDIX B TO 401 KAR 51:017
Ambient Air Increments

Pollutant	Maximum Allowable Increase (Micrograms per cubic meter)
Class I	
Particulate Matter:	
Annual geometric mean	5
24-hour maximum	10
Sulfur Dioxide:	
Annual arithmetic mean	2
24-hour maximum	5
3-hour maximum	25
Class II	
Particulate Matter:	
Annual geometric mean	19
24-hour maximum	37
Sulfur Dioxide:	
Annual arithmetic mean	20
24-hour maximum	91
3-hour maximum	512

APPENDIX C TO 401 KAR 51:017
Significant Air Quality Impact

Pollutant	Air Quality Level	Averaging Time
Carbon monoxide	575 ug/m^3	8-hour average
Nitrogen dioxide	14 ug/m^3	annual average
Total suspended particulate	10 ug/m^3	24-hour average
Sulfur dioxide	13 ug/m^3	24-hour average

Ozone	No de minimis air quality level is provided for ozone. However, any net increase of 100 tons per year or more of volatile organic compounds subject to this regulation would be required to perform an ambient impact analysis including the gathering of ambient air quality data.	
Lead	0.1 ug/m^3	24-hour average
Mercury	0.25 ug/m^3	24-hour average
Beryllium	0.001 ug/m^3	24-hour average
Fluorides	0.25 ug/m^3	24-hour average
Vinyl chloride	15 ug/m^3	24-hour average
Hydrogen sulfide	0.04 ug/m^3	1-hour average

APPENDIX D TO 401 KAR 51:017
Ambient Air Increments
for Class I Variances

	Maximum Allowable Increase (micrograms per cubic meter)
Particulate Matter:	
Annual geometric mean	19
24-hour maximum	37
Sulfur Dioxide:	
Annual arithmetic mean	20
24-hour maximum	91
3-hour maximum	325

APPENDIX E TO 401 KAR 51:017
Ambient Air Increments for Presidential
or Gubernatorial SO_2 Variances

Maximum Allowable Increase
(Micrograms per cubic meter)

	Terrain areas	
Period of Exposure	Low	High
24-hour maximum	36	62
3-hour maximum	130	221

CHARLOTTE E. BALDWIN, Secretary
APPROVED BY AGENCY: November 14, 1985
FILED WITH LRC: November 15, 1985 at 11 a.m.
PUBLIC HEARING SCHEDULED: A public hearing to receive comments on this proposed amendment will be conducted on December 30, 1985 at 10 a.m. EST in Room G-2 of the Capital Plaza Tower in Frankfort, Kentucky. Those persons interested in attending this public hearing should contact, in writing, at least five days prior to the hearing: Mr. William S. Coakley, Manager, Program Development Branch, Division of Air Pollution Control, 18 Reilly Road, Frankfort, Kentucky.

REGULATORY IMPACT ANALYSIS

Agency Contact Person:Roger B. McCann, Director
(1) Type and number of entities affected: This regulation applies to major stationary sources and major modifications constructing in areas that are designated as attainment or unclassified. It is being amended to add the provisions in 40 CFR 52 relating to the protection of visibility, as required by the U.S. EPA. The proposed amendments relating to visibility protection could potentially affect major stationary sources, or major modificiations to them, locating in or impacting Class I areas. Mammoth Cave National Park is the only Class I area in Kentucky, however, there is one federal Class I area in Missouri (Mingo National Wilderness Refuge) that could possibly be impacted by sources locating in western and central Kentucky. Sources are presently required to provide to the cabinet an analysis of the impairment to visibility that would occur as a result of the source or modification. That requirement is not being changed. The amendments state that the cabinet may require sources to monitor in the Class I area for visibility using human observation, photographic cameras, teleradiometry, nephelometry or fine particulate monitors. Any visibility monitors located in Mammoth Cave National Park will also be approved by the federal land manager. In its monitoring strategy, the cabinet will use the data on visual observations that are available from Bowling Green-Warren County Airport in Bowling Green, Kentucky. The airport is approximately 25 air miles from the park. Observers at the airport obtain visibility readings approximately every hour of every day. In addition to the visual observations from the airport, the cabinet may provide one visibility monitoring station at the park, when EPA provides the methods, type of equipment, and funds for such a station. Data from the airport or the monitoring station would be used to determine any impacts from sources. EPA's regulations still require, however, that the cabinet have the authority to require sources to perform visibility monitoring.
(a) Direct and indirect costs or savings to those affected: It is the cabinet's intent that the data from the airport or the monitoring station, if installed, would be used by all sources so that there would be no cost to the sources. However, if the cabinet were to require a source to perform visibility monitoring, the cost would depend on the level of monitoring required, which would be determined on a case-by-case basis. The least expensive method would be human observation, and the most expensive method would be a teleradiometer or nephelometer.
1. First year: The following costs will be given as a worst-case condition, if the cabinet is required to have the source perform visibility monitoring. First year costs would be comprised of capital equipment costs and operating and maintenance costs. Estimates will be given for a few of the methods available. Equipment costs for a teleradiometer could be $15,000-$20,000. That cost could be reduced if a shelter were already in place. The operating and maintenance costs could be $20,000-$25,000, which would include hiring a person to operate the teleradiometer. The least expensive method would be human observation. There would be no initial or operating costs if existing personnel were used to obtain human visibility readings.
2. Continuing costs or savings: Continuing costs or savings are the same as the operating and maintenance costs as discussed above.
3. Additional factors increasing or decreasing costs (note any effects upon competition): N/A

(b) Reporting and paperwork requirements: Copies of visibility data obtained shall be submitted to the cabinet, U.S. EPA, and the National Park Service, upon request.

(2) Effects on the promulgating administrative body: The amendments require that the cabinet provide the federal land manager who has authority over the Class I area which will be impacted by the source requesting the construction permit, with information relating to the cabinet's determination on the construction permit. The amendments state that the federal land manager must be given the information at least sixty days prior to any public hearing on the permit. In addition, the cabinet shall also notify the federal land manager within thirty days of receipt of any advance notification of any permit application. Finally, the cabinet shall review any adverse impact of visibility performed by the federal land manager. If the cabinet does not agree with the determination of adverse impact on visibility, the cabinet shall explain that decision in the public notice of opportunity for public hearing, as required in 401 KAR 50:035, Section 4, or give information where the cabinet's determination can be obtained.

(a) Direct and indirect costs or savings: Minor costs would be incurred from purchasing the visual observations for the Bowling Green Airport; less than $100 for ten years of data, and less than $10 for each subsequent year.

1. First year: N/A
2. Continuing costs or savings: N/A
3. Additional factors increasing or decreasing costs: N/A

(b) Reporting and paperwork requirements: The cabinet must provide to the federal land manager, within the specified time frame, a determination of the cabinet's intention regarding the issuance of the construction permit.

(3) Assessment of anticipated effect on state and local revenues: None

(4) Assessment of alternative methods; reasons why alternatives were rejected: No alternatives were considered since the U.S. EPA requires that these provisions be followed. If the cabinet does not promulgate and enforce these proposed amendments to the state's regulation, then the U.S. EPA would enforce the federal regulation, and sources which would impact Class I areas would be required to have their permits reviewed by the U.S. EPA and would be required to follow EPA's requirements for visibility.

(5) Identify any statute, administrative regulation or government policy which may be in conflict, overlapping, or duplication: None

(a) Necessity of proposed regulation if in conflict: N/A

(b) If in conflict, was effort made to harmonize the proposed administrative regulation with conflicting provisions: N/A

(6) Any additional information or comments: On December 2, 1980, the U.S. EPA issued regulations pertaining to the protection of visibility in Class I areas and requiring states to provide for visibility protection (45 FR 80084). On September 22, 1982, the cabinet promulgated a new regulation relating to the prevention of significant deterioration (PSD) of air quality (401 KAR 51:017). That regulation contained some provisions relating to visibility protection, as required in the federal PSD regulations. As a result of suits by the Environmental Defense Fund, et al, the U.S. EPA is now under a court order to develop and implement visibility state implementation plans (SIPs), for those states that have not submitted visibility SIP provisions to the U.S. EPA. In the Federal Register notice of October 23, 1984 (49 FR 42670), the U.S. EPA proposed revisions to the federal regulations relating to visibility, and proposed a disapproval that the SIPs for numerous states, including Kentucky, did not meet the requirements of 40 CFR 51.305 or 51.307 (relating to visibility protection). However, the notice also gave each state the option of promulgating appropriate regulations and submitting a revised SIP for visibility protection to the U.S. EPA before the federal regulations for visibility protection became final. Therefore, the cabinet is proposing these amendments to the state's PSD regulation so that the regulation will be acceptable to the U.S. EPA and the cabinet will be authorized to issue permits relating to visibility to those sources which would impact the Mammoth Cave National Park, or any other Class I area. In the final rule regarding visibility plans (50 FR 28550, July 12, 1985), the U.S. EPA did not disapprove Kentucky's plan, due to the pending promulgation of this regulation and the related plan.

The cabinet is also amending this regulation to include some provisions relating to the attainment classifications as provided for in Section 107(d)(1)(D) or (E) of the Clean Air Act and to federal enforceability. The U.S. EPA has requested that these changes be made. The cabinet has changed the references to the state's regulation on attainment status designations (401 KAR 51:010) to Section 107(d)(1)(D) or (E) of the Clean Air Act since the U.S. EPA contends that the federal designations may be different from the cabinet's designations. The federal definition of "federally enforceable" has also been added. The U.S. EPA requested that this definition be added since the federal regulations require that certain exemptions can only be allowed for federally enforceable permits. In addition, references to the state's previous regulations for PSD (401 KAR 51:015 and 401 KAR 51:016E) are also being deleted since it is the U.S. EPA's position that those regulations were not approved by the U.S. EPA and, therefore, permits issued under those regulations are not federally enforceable.

Tiering:
Was tiering applied? Yes. This regulation only applies to major stationary sources and major modifications (emissions greater than 100 or 250 tons per year, depending on the type of source) which construct only in attainment and unclassified areas.

NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION CABINET
Department for Environmental Protection
Division of Air Pollution
(Proposed Amendment)

401 KAR 51:052. Review of new sources in or impacting upon non-attainment areas.

RELATES TO: KRS [Chapter] 224.320, 224.330, 224.340
PURSUANT TO: KRS 224.033

NECESSITY AND FUNCTION: KRS 224.033 requires the Natural Resources and Environmental Protection Cabinet to prescribe regulations for the prevention, abatement and control of air pollution. This regulation establishes requirements for the construction, modification of stationary sources within, or impacting upon, areas where the national ambient air quality standards have not been attained.

Section 1. Applicability. (1) The requirements of this regulation shall apply to new major sources or major modifications commenced after the classification date defined below and that will locate in or impact upon any area designated as non-attainment pursuant to Section 107(d)(1)(A), (B), or (C) of the Clean Air Act [in 401 KAR 51:010]. Areas designations are contained in 40 CFR 81.318.

(2) The provisions of this regulation relating to visibility shall also apply to major sources or major modifications in non-attainment areas which potentially have an impact on visibility in any Class I area.

Section 2. Definitions. As used in this regulation terms not defined herein shall have the meaning given them in 401 KAR 50:010 or for terms relating to the protection of visibility, in 401 KAR 51:017.

(1) "Major stationary source" means:

(a) Any stationary source which emits, or has the potential to emit, 100 tons per year or more of any pollutant subject to regulation under the Clean Air Act; or

(b) Any physical change that would occur at a stationary source not qualifying under paragraph (a) of this subsection as a major stationary source, if the change would constitute a major stationary source by itself.

(c) A major stationary source that is major for volatile organic compounds shall be considered major for ozone.

(2) "Major modification" means any physical change in or change in the method of operation of a major stationary source that would result in a significant net emissions increase of any pollutant subject to regulation under the Clean Air Act.

(a) Any net emissions increase that is significant for volatile organic compounds shall be significant for ozone.

(b) A physical change or change in the method of operation shall not include:

1. Routine maintenance, repair and replacement;

2. Use of alternative fuel or raw material by reason of an order or by reason of a natural gas curtailment plan in effect under a federal act;

3. Use of an alternative fuel at a steam generating unit to the extent that the fuel is generated from municipal solid waste;

4. Use of an alternative fuel or raw material by a stationary source which:

a. The source was capable of accommodating before December 21, 1976, unless such change would be prohibited under any permit condition which was established after December 21, 1976 pursuant to 40 CFR 52.21 or pursuant to [401 KAR 51:015, 401 KAR 51:016E or] 401 KAR 51:017 or under regulations established pursuant to 40 CFR 51.18; or

b. The source is approved to use under any permit issued under this regulation[, previously adopted regulations 401 KAR 51:050 and 401 KAR 51:051E, or under 40 CFR 51, Appendix S];

5. An increase in the hours of operation or in the production rate, unless such change is prohibited under a permit condition which was established after December 21, 1976 pursuant to 40 CFR 52.21 or pursuant to [401 KAR 51:015, 401 KAR 51:016E or] 401 KAR 51:017 or under regulations established pursuant to 40 CFR 51.18; or

6. Any change in ownership at a stationary source.

(3) "Net emission increase" means the amount by which the sum of paragraphs (a) and (b) of this subsection exceeds zero:

(a) Any increase in actual emissions from a particular physical change or change in method of operation at a stationary source; and

(b) Any other increases and decreases in actual emissions at the source that are contemporaneous with the particular change and are otherwise creditable.

(c) An increase or decrease in actual emissions is contemporaneous with the increase from the particular change only if it occurs between the date which is ten (10) years before construction on the particular change commences, but not before December 21, 1976, and the date that the increase from the particular change occurs.

(d) An increase or decrease in actual emissions is creditable only if the cabinet has not relied on it in issuing a permit for the source under this regulation, which permit is in effect when the increase in actual emissions from the particular change occurs.

(e) An increase in actual emissions is creditable only to the extent that the new level of actual emissions exceeds the old level.

(f) A decrease in actual emissions is creditable only to the extent that:

1. The old level of actual emissions or the old level of allowable emissions, whichever is lower, exceeds the new level of actual emissions;

2. It is state and federally enforceable at and after the time that actual construction on the particular change begins;

3. The cabinet has not relied on it in issuing any permit or in demonstrating attainment or reasonable further progress; and

4. It has approximately the same qualitative significance for public health and welfare as that attributed to the increase from the particular change.

(g) An increase that results from a physical change at a source occurs when the emissions unit on which construction occurred becomes operational and begins to emit a particular pollutant. Any replacement unit that requires shakedown becomes operational only after a reasonable shakedown period, not to exceed 180 days.

(4) "Potential to emit" means the maximum capacity of a stationary source to emit a pollutant under its physical or operational design. Any physical or operational limitation on the capacity of the source to emit a pollutant, including air pollution control equipment and restrictions on hours of operation or on the type or amount of material combusted, stored, or processed, shall be treated as part of its design if the limitation or the effect it would have on emissions is state and federally enforceable. Secondary emissions do not count in determining the potential to emit of a stationary source.

(5) "Stationary source" means any building,

structure, facility, or installation which emits or may emit any air pollutant subject to regulation under the Clean Air Act.

(6) "Building, structure, facility, or installation" means all of the pollutant emitting activities which belong to the same industrial grouping, are located on one (1) or more contiguous or adjacent properties, and are under the control of the same person (or persons under common control) except the activities of any vessel. Pollutant-emitting activities shall be considered as part of the same industrial grouping if they belong to the same major group (i.e., which have the same two (2) digit code) as described in the Standard Industrial Classification Manual, 1972, as amended by the 1977 supplement.

(7) "Emission unit" means any part of a stationary source which emits or would have the potential to emit any pollutant subject to regulation under the Clean Air Act.

(8) "Construction" means any physical change or change in the method of operation (including fabrication, erection, installation, demolition, or modification of an emissions unit) which would result in a change in actual emissions.

(9) "Commence" as applied to construction of a major stationary source or major modification means that the owner or operator has all necessary preconstruction approvals or permits and either has:

(a) Begun, or caused to begin, a continuous program of actual on-site construction of the source, to be completed within a reasonable time; or

(b) Entered into agreements or contractual obligations, which cannot be cancelled or modified without substantial loss to the owner or operator, to undertake a program of actual construction of the source to be completed within a reasonable time.

(10) "Necessary preconstruction approvals or permits" means those permits or approvals required under the regulations of Title 401, Chapters 50 and 63.

(11) "Allowable emissions" means the emissions rate calculated using the maximum rated capacity of the source (unless the source is subject to state and federally enforceable permit conditions which limit operating rate, or hours or operation, or both) and the most stringent of the following:

(a) The applicable new source performance standards set forth in Title 401, Chapters 57 and 59, or 40 CFR Parts 60 and 61;

(b) Any other state and federally approved regulatory emission limitations, including those with a future compliance date; or

(c) The emission rate specified as a state and federally [an] enforceable permit condition, including those with a future compliance date.

(12) "Federally enforceable" means all limitations and conditions which are enforceable by the U.S. EPA, including those requirements developed pursuant to 40 CFR 60 and 61, requirements within any applicable State Implementation Plan, and any permit requirements established pursuant to 40 CFR 52.21 or under regulations approved pursuant to 40 CFR 51.18 or 40 CFR 51.24 [having the legal authority to compel a source to comply with limitations and conditions including those developed pursuant to Title 401, Chapters 50 to 63].

(13) "Secondary emissions" means emissions which would occur as a result of the construction or operation of a major stationary source or major modification, but do not come from the major stationary source or major modification itself. For the purpose of this regulation, secondary emissions must be specific, well defined, quantifiable, and impact the same general area as the stationary source or modification which causes the secondary emissions. Secondary emissions include emissions from any offsite support facility which would not otherwise be constructed or increase its emissions as a result of the construction or operation of the major stationary source or major modification. Secondary emissions do not include any emissions which come directly from a mobile source, such as the emissions from the tailpipe of a motor vehicle, from a train, or from a vessel.

(14) "Actual emissions" means the actual rate of emissions of a pollutant from an emissions unit, as determined in accordance with paragraphs (a) to (c) of this subsection.

(a) In general, actual emissions as of a particular date shall equal the average rate, in tons per year, at which the emission unit actually emitted the pollutant during a two (2) year period which precedes the particular date and which is representative of normal source operation. The cabinet shall allow the use of a different time period upon a determination that it is more representative of normal source operation. Actual emissions shall be calculated using the emission unit's actual operating hours, production rates, and types of materials processed, stored, or combusted during the selected time period.

(b) The cabinet may presume that source specific allowable emissions for the emission unit are equivalent to the actual emissions of the emissions unit.

(c) For any emissions unit which has not begun normal operations on the particular date, actual emissions shall equal the potential to emit of the emission unit on that date.

(15) "Fugitive emissions" means those emissions which could not reasonably pass through a stack, chimney, vent, or other functionally equivalent opening.

(16) "Significant" means in reference to a net emissions increase or the potential of a source to emit any pollutant, a rate of emissions that would equal or exceed any rates given in Appendix A of this regulation.

(17) "Lowest achievable emission rate" means, for any source, the more stringent rate of emissions based on the following:

(a) The most stringent emissions limitation which is contained in any implementation plan of any state for such class or category of stationary source, unless the owner or operator of the proposed stationary source demonstrates that such limitations are not achievable; or

(b) The most stringent emissions limitation which is achieved in practice by such class or category of stationary source. This limitation, when applied to a major modification, means the lowest achievable emissions rate for the new or modified emission unit within the stationary source. In no event shall the application of this term permit a proposed new or modified stationary source to emit any pollutant in excess of the amount allowable under any applicable new source standard under Title 401, Chapters 57 and 59, and 40 CFR Parts 60 and 61.

[(18) "VOC" means volatile organic compounds.]

(18) [(19)] "Classification date" means September 22, 1982 [the effective date of this regulation].

(19) [(20)] "Reasonable further progress" means annual incremental reductions in emissions of the applicable air pollutant which are sufficient, in the judgment of the cabinet and the U.S. EPA, to provide for attainment of the applicable ambient air quality standard by the date specified in 401 KAR 51:010, Section 2.

(20) [(21)] "Begin actual construction" means, in general, initiation of physical on-site construction activities on an emissions unit which are of a permanent nature. Such activities include, but are not limited to, installation of building supports and foundations, laying of underground pipework, and construction of permanent storage structures. With respect to a change in method of operating, this term refers to those on-site activities other than preparatory activities which mark the initiation of the change.

(21) [(22)] "Resource recovery facility" means any facility at which solid waste is processed for the purpose of extracting, converting to energy, or otherwise separating and preparing solid waste for reuse. Energy conversion facilities must utilize solid waste to provide more than fifty (50) percent of the heat input to be considered a resource recovery facility under this regulation.

(22) "Class I area" means any area listed in 40 CFR 81, Subpart D.

(23) "Adverse impact on visibility" means visibility impairment which interferes with the management, protection, preservation or enjoyment of the visitor's visual experience of the Class I area. This determination shall be made on a case-by-case basis taking into account the geographic extent, intensity, duration, frequency at time of visibility impairments, and how these factors correlate with the times of visitor use of the Class I area, and the frequency and timing of natural conditions that reduce visibility.

(24) "State Implementation Plan" means the most recently prepared plan or revision thereof required by Section 110 of the Clean Air Act which has been approved by the U.S. EPA.

Section 3. Initial Screening Analyses and Determination of Applicable Requirements. (1) Review of all sources for emissions limitation compliance. The cabinet shall examine each proposed major new source and proposed major modification to determine if such source or modification will meet all applicable emission requirements in Title 401, Chapters 50 to 63. If the cabinet determines from the application and all other available information that the proposed source or modification will not meet the applicable emission requirements, the permit to construct shall be denied.

(2) Review of specified sources of air quality impact. In addition, the cabinet shall determine whether the major stationary source or major modification would be constructed in an area designated [in 401 KAR 51:010] as non-attainment pursuant to Section 107(d)(1)(A), (B), or (C) of the Clean Air Act for a pollutant for which the stationary source or modification is major. If a designated non-attainment area is projected to be an attainment area as part of an approved control strategy by the new source start-up date, offsets shall not be required if the new source would not cause a new violation.

(3) Fugitive emission sources. Sections 5 and 11 of this regulation shall not apply to a source or modification that would be a major stationary source or major modification only if fugitive emissions, to the extent quantifiable, are considered in calculating the potential to emit of the stationary source or modification and the source does not belong to any of the following categories:

(a) Coal cleaning plants (with thermal dryers);
(b) Kraft pulp mills;
(c) Portland cement plants;
(d) Primary zinc smelters;
(e) Iron and steel mills;
(f) Primary aluminum ore reduction plants;
(g) Primary copper smelters;
(h) Municipal incinerators capable of charging more than 250 tons of refuse per day;
(i) Hydrofluoric, sulfuric, or nitric acid plants;
(j) Petroleum refineries;
(k) Lime plants;
(l) Phosphate rock processing plants;
(m) Coke oven batteries;
(n) Sulfur recovery plants;
(o) Carbon black plants (furnace process);
(p) Primary lead smelters;
(q) Fuel conversion plants;
(r) Sintering plants;
(s) Secondary metal production plants;
(t) Chemical process plants;
(u) Fossil-fuel boilers (or combination thereof) totaling more than 250 million BTUs per hour heat input;
(v) Petroleum storage and transfer units with a total storage capacity exceeding 300,000 barrels;
(w) Taconite ore processing plants;
(x) Glass fiber processing plants;
(y) Charcoal production plants;
(z) Fossil fuel-fired steam electric plants of more than 250 million BTUs per hour heat input; or
(aa) Any other stationary source category which, as of August 7, 1980, is being regulated under Title 401, Chapters 57 and 59, or [and] 40 CFR Parts 60 and 61.

Section 4. Sources Locating in Designated Attainment or Unclassifiable Areas. (1) This section shall apply only to new major stationary sources or new major modifications which will locate in designated attainment or unclassifiable areas pursuant to Section 107(d)(1)(D) or (E) of the Clean Air Act [specified in 401 KAR 51:010] if the source or modification would cause impacts which exceed the significance levels specified in Appendix B of this regulation at any locality that does not meet the national ambient air quality standards.

(2) Sources to which this section applies must meet the requirements in Section 5(1), (2) and (4) of this regulation. However, such sources may be exempt from Section 5(3) of this regulation.

(3) For sources of sulfur dioxide, particulate matter, and carbon monoxide, the determination of whether a new major source or major modification will cause or contribute to a violation of a national ambient air quality standard shall be made on a case-by-case basis using the source's allowable emissions in an approved atmospheric simulation model pursuant to 401 KAR 50:040.

(4) For sources of nitrogen oxides, the initial determination of whether a new major source or major modification would cause or contribute to a violation of the national ambient air quality standard for nitrogen dioxide shall be made using an approved atmospheric simulation model assuming all the nitric oxide emitted is oxidized to nitrogen dioxide by the time the plume reaches ground level. The initial concentration estimates may be adjusted if adequate data are available to account for the expected oxidation rate.

(5) For ozone, sources of VOC, locating outside a designated ozone non-attainment area [as defined in 401 KAR 51:010], will be presumed to have no significant impact on the designated non-attainment area. If ambient monitoring indicates that the area of source location is in fact non-attainment, then the source may be permitted under the applicable provisions of this regulation until the area is designated non-attainment pursuant to Section 107(d)(1)(A), (B), or (C) of the Clean Air Act [in 401 KAR 51:010]. Once the area of source location has been redesignated to non-attainment status in 40 CFR 81.318 [401 KAR 51:010], the provisions of Section 5(3) and (4) of this regulation as they relate to emissions of VOC shall not apply, provided the area is not also an urban county as defined in 401 KAR 50:010.

(6) The determination as to whether a new major source or major modification would cause or contribute to a violation of a national ambient air quality standard shall be made as of the start-up date.

(7) Applications for major new sources and major modifications locating in attainment or unclassifiable areas the operation of which would cause a new violation of a national ambient air quality standard but would not contribute to an existing violation may be approved only if both the following conditions are met:

(a) The new source is required to meet an emission limitation, or a design, operational or equipment standard, or existing sources are controlled, such that the new source will not cause a violation of any national ambient air quality standard.

(b) The new emission limitations for the new source as well as any existing sources affected must be state and federally enforceable in accordance with the mechanisms set forth in Section 8 of this regulation.

Section 5. Conditions for Approval. The provisions of this section shall apply to new major stationary sources or major modifications which would be constructed in an area designated [in 401 KAR 51:010] as non-attainment pursuant to Section 107(d)(1)(A), (B) or (C) of the Clean Air Act for a pollutant for which the stationary source or modification is major. Approval may be granted only if the following conditions are met:

(1) The new major source or major modification shall be required to meet an emission limitation which specifies the lowest achievable emission rate for such source.

(2) The applicant shall demonstrate that all existing major sources owned or operated by the applicant (or any entity controlling, controlled by, or under common control with the applicant) in the Commonwealth of Kentucky are in compliance with all applicable emission limitations and standards specified in Title 401, Chapters 50 to 63, and 40 CFR Parts 60 and 61 and the Clean Air Act, or are in compliance with an expeditious state and federally enforceable compliance schedule or a court decree establishing a compliance schedule.

(3) Emissions from existing sources in the affected area of the proposed new major source or modifications (whether or not under the same ownership) shall be reduced (offset) such that there will be reasonable progress toward attainment of the applicable national ambient air quality standard. Only those transactions in which the emissions being offset are from the same criteria pollutant category shall be accepted.

(4) The emission reductions shall be such as to provide a positive net air quality benefit in the affected area. Atmospheric simulation modeling is not necessary for volatile organic compounds and oxides of nitrogen. Except as provided in Section 4(5) of this regulation, compliance with subsection (3) of this section and Section 7(7) of this regulation will be adequate to meet this condition.

(5) For a major stationary source or major modification locating in an area designated non-attainment with respect to that pollutant for which the proposed source or modification is major, permits issued under this regulation shall specify that construction shall not commence until the U.S. EPA has approved the cabinet's plan relating to the requirements of Part D, Title I, of the Clean Air Act.

Section 6. Exemptions from Certain Conditions. The following sources are exempt from Section 5(3) and (4) of this regulation:

(1) Resource recovery projects burning municipal solid waste;

(2) Sources which must switch fuels due to lack of adequate fuel supplies or a source which is required to be modified as a result of federal regulations or other federal statutes and from which no exemption from such regulation or statute is available to the source. Such exemption shall be granted only if all the requirements of subsection (3) of this section are met;

(3) The exemptions contained in this section for sources identified under subsections (1) and (2) of this section shall be granted only if:

(a) The applicant demonstrates to the cabinet's satisfaction that it has made its best efforts to obtain sufficient emission offsets to comply with Section 5(3) and (4) of this regulation and that such efforts were unsuccessful;

(b) The applicant has secured all available emission offsets; and

(c) The applicant will continue to seek the necessary emissions offsets and apply them when they become available.

(4) Such an exemption may result in the need to revise the applicable requirements of the cabinet to provide additional control of existing sources so as to achieve reasonable progress towards attainment of applicable ambient air quality standards.

(5) Temporary emission sources, such as pilot plants, portable facilities which will be relocated after a short period of time not to exceed 120 days, and emissions resulting from the construction phase of a new source, shall be exempt from Section 5(3) and (4) of this regulation.

(6) Secondary emissions associated with major sources or major modifications locating in or impacting upon a non-attainment area may be exempt from Section 5(1) and (2) of this regulation, providing that the source of the secondary emissions is not itself a major stationary source or major modification. If the source of the secondary emissions is itself a major source or major modification, then that source is subject to the provisions of this regulation.

Section 7. Baseline for Determining Credit for Emission Offsets. The baseline for determining credit for emission reductions or offsets will be the emission limitations in effect at the time the application to construct or modify a source is filed. Credit for emission offset purposes may be allowed for existing control that goes beyond that required by regulations. Offset calculations shall be made on a pound per hour basis when all facilities involved in the emission offset calculations are operating at their maximum expected or allowed production rate. Offsets may be calculated on a tons per year basis providing that baseline emissions for existing sources providing the offsets are calculated using the actual annual operating hours for the previous two (2) year period. Where the cabinet requires certain hardware controls in lieu of an emission limitation, baseline allowable emissions shall be based on actual operating conditions for the previous two (2) year period in conjunction with the required hardware controls.

(1) No applicable emission limitation. Where the requirements of the cabinet do not contain an emission limitation for a source or source category, the emission offset baseline involving such sources shall be actual emissions determined under actual operating conditions for the previous two (2) year period. Where the emission limitations required by the cabinet allow greater emissions than the uncontrolled emission rate of the source, emission offset credit will be allowed only for control below the uncontrolled emission rate.

(2) Combustion of fuels. The emissions for determining emission offset credit involving an existing fuel combustion source will be the allowable emissions under the emission limitation requirements of the cabinet for the type of fuel being burned at the time the new major source or major modification application is filed. If the existing source has switched to a different type of fuel at some earlier date, any resulting emission reduction (either actual or allowable) shall not be used for emission offset credit. If the existing source commits to switch to a cleaner fuel at some future date, emission offset credit based on the allowable emissions for the fuels involved is not acceptable unless the permit is conditioned to require the use of a specified alternative control measure which would achieve the same degree of emission reduction should the source switch back to a dirtier fuel at some later date.

(3) Operating hours and source shutdown. A source may be credited with emission reductions achieved by shutting down an existing source or permanently curtailing production or operating hours below baseline levels provided that the work force to be affected has been notified in writing of the proposed shutdown or curtailment. Source shutdowns and curtailments in production or operating hours occurring prior to the date the new source application is filed shall not be used for emission offset credit. However, where an applicant can establish that it shut down or curtailed production after August 7, 1977, or less than one (1) year prior to the date of permit application, whichever is earlier, and the proposed new source is a replacement for the shutdown or curtailment, credit for such shutdown or curtailment may be applied to offset emissions from the new source.

(4) Credit for hydrocarbon substitution. No emission offset credit may be allowed for replacing one (1) volatile organic compound with another of lesser photochemical reactivity, unless the replacement compound is methane, ethane, 1,1,1-trichloroethane and trichlorofluoroethane.

(5) Banking of emission offset credit. New sources obtaining permits by applying offsets after January 16, 1979 may bank offsets that exceed the requirements of reasonable progress toward attainment for future use. An owner or operator of an existing source that reduces its own emissions may bank any resulting reduction beyond those required by regulation for use under this regulation, even if the offsets are applied immediately to a new source permit. These banked emissions offsets may be used under the preconstruction review program required in the Clean Air Act as long as these banked emissions are identified and accounted for in the Commonwealth's control strategy. The banked emissions may be used pursuant to procedures specified in 401 KAR 51:055.

(6) Offset credit for meeting NSPS or NESHAPS. Where a source is subject to an emission limitation established in a New Source Performance Standard (NSPS) or a National Emission Standard for Hazardous Air Pollutants (NESHAPS) in compliance with Title 401, Chapters 59 and 57 respectively, and a different emission limitation required by the cabinet, the more stringent limitation shall be used as the baseline for determining credit for emission offsets. The difference in emissions between NSPS or NESHAPS and other emission limitations may not be used as offset credit.

(7) Location of offsetting emissions. In the case of emission offsets involving nitrogen oxides, offsets may be obtained only within the same air quality control region, as defined in 401 KAR 50:020 in which the source is to be located. For sulfur dioxide, particulate matter and carbon monoxide, the cabinet shall require atmospheric simulation modeling to ensure that the emission offsets provide a positive net air quality benefit. In the case of emission offsets involving VOC, offsetting emissions may be obtained only as provided in 401 KAR 51:055, Section 11(2).

Section 8. Administrative Procedures. The necessary emission offsets may be proposed either by the owner of the proposed source or the cabinet. The emission reduction committed to must be <u>state and federally</u> enforceable by the cabinet, and must be accomplished by the start-up date of the new source. If emission reductions are to be obtained in a state that neighbors the Commonwealth of Kentucky for a new source to be located in the Commonwealth, the emission reductions committed to must be <u>state and federally</u> enforceable by the neighboring state and/or local agencies and the U.S. EPA.

(1) Source initiated emission offsets. The owner and/or operator of a source may propose emission offsets which involve reductions from sources controlled by the owner (internal emission offsets) and/or reductions from other sources (external emission offsets). As long as the emission offsets obtained represent reasonable progress toward attainment, they shall be acceptable. An internal emission offset shall be made enforceable by inclusion as a condition of the new source permit. An external emission offset will not be accepted unless the affected source(s) is subject to a new emission limitation requirement of the cabinet to ensure that its emissions will be reduced by a specified amount in a specified time. The form of the new emission limitation may be a cabinet regulation, operating permit condition, or consent or enforcement order.

(2) Cabinet initiated emission offsets. The cabinet may commit to reducing emissions from existing sources (including mobile sources) to provide a net air quality benefit in the impact area of the proposed new source so as to accommodate the proposed new source. The commitment must be reflected in the emission limitation requirements of the cabinet for the new and existing sources as required by this section.

Section 9. Source Obligation. (1) Any owner or operator who constructs or operates an applicable source or modification not in accordance with the application submitted pursuant to this regulation or with the terms of any approval to construct, or any owner or operator of a source or modification subject to this regulation who begins actual construction after September 22, 1982 [the effective date of this regulation] without applying for and receiving approval hereunder, shall be subject to appropriate enforcement action.

(2) Approval to construct shall become invalid if construction is not commenced within eighteen (18) months after receipt of such approval, or if construction is discontinued for a period of eighteen (18) months or more, or if construction is not completed within a reasonable time. The cabinet may extend the eighteen (18) month period upon satisfactory showing that an extension is justified.

(3) Approval to construct shall not relieve any owner or operator of the responsibility to comply fully with applicable provisions of Title 401, Chapters 50 to 63 and any other requirements under local, state, or federal law.

(4) At such time that a particular source or modification becomes a major stationary source or major modification solely by virtue of a relaxation in any state and federally enforceable limitation which was established after August 7, 1980, on the capacity of the source or modification otherwise to emit a pollutant, such as a restriction on hours of operation, then the requirements of this regulation shall apply to the source or modification as though construction had not yet commenced on the source or modification.

Section 10. Permit Condition Rescission. (1) Any owner or operator holding a permit for a stationary source or modification which was issued pursuant to 401 KAR 51:050 or 401 KAR 51:051E may request that the cabinet rescind the permit condition.

(2) The cabinet shall rescind a permit condition if so requested if the applicant can demonstrate to the satisfaction of the cabinet that this regulation does not apply to the source or modification or a portion thereof.

Section 11. Protection of Visibility. (1) New source review - applicability and exemptions.

(a) No stationary source or modification to which the requirements of this section apply shall begin actual construction without a permit which states that the stationary source or modification would meet those requirements.

(b) The requirements of this section shall apply to construction of any new major stationary source or major modification that would both be constructed in an area classified as non-attainment under Section 107(d)(1)(A), (B), or (C) of the Clean Air Act and potentially has an impact on visibility in any Class I area.

(c) The requirements of this section shall apply to any such major stationary source and any such major modification with respect to each pollutant subject to regulation under the Clean Air Act that it would emit, except as this section otherwise provides.

(d) The requirements of this section shall not apply to a particular major stationary source or major modification if:

1. The source or modification would be a nonprofit health or nonprofit educational institution, or a major modification would occur at such an institution, and the Governor of the Commonweatlh of Kentucky requests that it be exempt from those requirements.

2. The source is a portable stationary source which has previously received a permit under this section; and:

a. The owner or operator proposes to relocate the source and emissions of the source at the new location would be temporary;

b. The emissions from the source would not exceed its allowable emissions;

c. The emissions from the source would impact no Class I area and no area where an applicable increment is known to be violated; and

d. Reasonable notice is given to the cabinet prior to the relocation, identifying the proposed new location and the probable duration of operation at the new location. Such notice shall be given to the cabinet not less than ten (10) days in advance of the proposed relocation unless a different time duration is previously approved by the cabinet.

(e) The requirements of this section shall not apply to a major stationary source or major modification with respect to a particular pollutant, if the allowable emissions of that pollutant from the source, or the net emissions increase of that pollutant from the modification:

1. Would impact no Class I area and no area where an applicable increment is known to be violated; and

2. Would be temporary.

(2) Visibility impact analyses. The owner or operator of a source shall provide an analysis of the impairment to visibility that would occur in Class I areas as a result of the source or modification and general commercial, residential, industrial and other growth associated with the source or modification.

(3) Federal land manager notification.

(a) The federal land manager and the federal official charged with direct responsibility for management of Class I areas have an affirmative

responsibility to protect the air quality related values (including visibility) of such lands and to consider, in consultation with the cabinet, whether a proposed source or modification will have an adverse impact on such values.

(b) The cabinet shall provide written notification to all affected federal land managers of any permit application for any proposed new major stationary source or major modification that may affect visibility in any Class I area. The cabinet shall also provide such notification to the federal official charged with direct responsibility for management of any lands within any such area. Such notification shall include a copy of all information relevant to the permit application and shall be given within thirty (30) days of receipt and at least sixty (60) days prior to any public hearing on the application for a permit to construct. Such notification shall include an analysis of the proposed source's anticipated impacts on visibility in any Class I area. The cabinet shall also notify all affected federal land managers within thirty (30) days of receipt of any advance notification of any such permit application.

(c) The cabinet shall consider any analysis performed by the federal land manager provided wthin thirty (30) days of the notification and analysis required by paragraph (b) of this subsection, that such proposed new major stationary source or major modification may have an adverse impact on visibility in any Class I area. Where the cabinet finds that such an analysis does not demonstrate to the satisfaction of the cabinet that an adverse impact on visibility will result in the Class I area, the cabinet shall, in the public hearing notice required in 401 KAR 50:035, Section 4, either explain that decision or give notice as to where the explanation can be obtained.

(4) Public participation. The cabinet shall follow the applicable procedures of 401 KAR 50:035 in processing applications under this section. The cabinet shall follow the procedures at 40 CFR 52.21(r) as in effect on August 7, 1980, to the extent that the procedures of 401 KAR 50:035 do not apply.

(5) National visibility goal. The cabinet shall only issue permits to those sources whose emissions will be consistent with making reasonable progress toward the national goal of preventing any future, and remedying any existing, impairment of visibility in Class I areas which impairment results from man-made air pollution. In making the decision to issue a permit the cabinet may take into account the overriding factors of the cost of compliance, the time necessary for compliance, the energy and nonair quality environmental impacts of compliance, and the useful life of the source.

(6) Monitoring. The cabinet may require monitoring of visibility in any Class I area near the proposed new stationary source or major modification using human observations, teleradiometers, photographic cameras, nephelometers, or fine particulate monitors. The method selected shall be determined on a case-by-case basis by the cabinet. Any visibility monitoring required by the cabinet in a Class I area will be approved by the federal land manager. Data obtained from visibility monitoring shall be made available to the cabinet, the federal land manager, and the U.S. EPA, upon request.

APPENDIX A TO 401 KAR 51:052
Significant Pollutant and Emissions Rate

Carbon monoxide:	100 per year (tpy)
Nitrogen oxides:	40 tpy
Sulfur dioxide:	40 tpy
Particulate matter:	25 tpy
Ozone:	40 tpy of volatile organic compounds
Lead:	0.6 tpy

APPENDIX B TO 401 KAR 51:052
Significant Levels of Air Quality Impact

Pollutant	Annual Average	Averaging Time 24-Hour	8-Hour	3-Hour	1-Hour
Sulfur Dioxide	1.0 ug/m^3	5 ug/m^3	--	25 ug/m^3	--
Total Suspended Particulates	1.0 ug/m^3	5 ug/m^3	--	--	--
Nitrogen Dioxide	1.0 ug/m^3	--	--	--	--
Carbon Monoxide	--	--	0.5ug/m^3	--	2ug/m^3

CHARLOTTE E. BALDWIN, Secretary
APPROVED BY AGENCY: November 14, 1985
FILED WITH LRC: November 15, 1985 at 11 a.m.
PUBLIC HEARING SCHEDULED: A public hearing to receive comments on this proposed amendment will be conducted on December 30, 1985 at 10 a.m. EST in Room G-2 of the Capital Plaza Tower in Frankfort, Kentucky. Those persons interested in attending this public hearing should contact, in writing, at least five days prior to the hearing: Mr. William S. Coakley, Manager, Program Development Branch, Division of Air Pollution Control, 18 Reilly Road, Frankfort, Kentucky.

REGULATORY IMPACT ANALYSIS

Agency Contact Person:Roger B. McCann, Director
(1) Type and number of entities affected: This regulation applies to major stationary sources and major modifications constructing in areas that are designated as non-attainment. It is being amended to add the provisions in 40 CFR 52 relating to the protection of visibility, as required by the U.S. EPA. The proposed amendments relating to visibility protection could potentially affect major stationary sources, or major modifications to them, locating in or impacting Class I areas. Mammoth Cave National Park is the only Class I area in Kentucky, however, there is one federal Class I area in Missouri (Mingo National Wilderness Refuge) that could possibly be impacted by sources locating in western and central Kentucky. Sources will be required to provide to the cabinet an analysis of the impairment to visibility that would occur as a result of the source or modification. The amendments state that the cabinet may require sources to monitor for in the Class I area visibility using human observation, photographic cameras, teleradiometry, nephelometry or fine particulate monitors. Any visibility monitors located in Mammoth Cave National Park will also be approved by the federal land manager. In its monitoring strategy, the cabinet will use the data on visual observations that are available from Bowling Green-Warren County Airport in Bowling Green, Kentucky. The airport is approximately 25 air miles from the park. Observers at the airport obtain visibility readings approximately every hour of every day. In addition to the visual observations from the airport, the cabinet may provide one visibility monitoring station at the park, when EPA provides the methods, type of equipment, and funds for such a station. Data from the airport or the monitoring station would be used to determine any impacts from sources. EPA's regulations still require, however, that the cabinet have the authority to require sources to perform visibility monitoring, if it becomes necessary.
(a) Direct and indirect costs or savings to those affected: It is the cabinet's intent that the data from the airport or the monitoring station, if installed, would be used by all sources so that there would be no cost to the sources. However, if the cabinet were to require a source to perform visibility monitoring the cost would depend on the level of monitoring required, which would be determined on a case-by-case basis. The least expensive method would be human observation, and the most expensive method would be a teleradiometer or nephelometer.
1. First year: The following costs will be given as a worst-case condition, if the cabinet is required to have the source perform visibility monitoring. First year costs would be comprised of capital equipment costs and operating and maintenance costs. Estimates will be given for a few of the methods available. Equipment costs for a teleradiometer could be $15,000-$20,000. That cost could be reduced if a shelter were already in place. The operating and maintenance costs could be $20,000-$25,000, which would include hiring a person to operate the teleradiometer. The least expensive method would be human observation. There would be no initial or operating costs if existing personnel were used to obtain human visibility readings.
2. Continuing costs or savings: Continuing costs or savings are the same as the operating and maintenance costs as discussed above.
3. Additional factors increasing or decreasing costs (note any effects upon competition): N/A
(b) Reporting and paperwork requirements: Copies of visibility data obtained shall be submitted to the cabinet, U.S. EPA, and the National Park Service, upon request.
(2) Effects on the promulgating administrative body: The amendments require that the cabinet provide the federal land manager who has authority over the Class I area which will be impacted by the source requesting the construction permit, with information relating to the cabinet's determination on the construction permit. The amendments state that the federal land manager must be given the information at least sixty days prior to any public hearing on the permit. In addition, the cabinet shall also notify the federal land manager within thirty days of receipt of any advance notification of any permit application. Finally, the cabinet shall review any adverse impact of visibility performed by the federal land manager. If the cabinet does not agree with the determination of adverse impact on visibility, the cabinet shall explain that decision in the public notice of opportunity for public hearing, as required in 401 KAR 50:035, Section 4, or give information where the cabinet's determination can be obtained.
(a) Direct and indirect costs or savings: Minor costs would be incurred from purchasing the visual observations for the Bowling Green Airport; less than $100 for ten years of data, and less than $10 for each subsequent year.
1. First year: N/A
2. Continuing costs or savings: N/A
3. Additional factors increasing or decreasing costs: N/A
(b) Reporting and paperwork requirements: The cabinet must provide to the federal land manager, within the specified time frame, a determination of the cabinet's intention regarding the issuance of the construction permit.
(3) Assessment of anticipated effect on state and local revenues: None
(4) Assessment of alternative methods; reasons why alternatives were rejected: No alternatives were considered since the U.S. EPA requires that these provisions be followed. If the cabinet does not promulgate and enforce these proposed amendments to the state's regulation, then the U.S. EPA would enforce the federal regulation, and sources which would impact Class I areas would be required to obtain permits from the U.S. EPA (for visibility provisions) and from

the Division of Air Pollution Control (for all other provisions).

(5) Identify any statute, administrative regulation or government policy which may be in conflict, overlapping, or duplication: None

(a) Necessity of proposed regulation if in conflict: N/A

(b) If in conflict, was effort made to harmonize the proposed administrative regulation with conflicting provisions: N/A

(6) Any additional information or comments: As a result of court suits by the Environmental Defense Fund, et al, the U.S. EPA is now under a court order to develop and implement visibility state implementation plans (SIPs), for those states that are required to have such a plan, but have not submitted visibility SIP provisions to the U.S. EPA. Kentucky's present regulation on the prevention of significant deterioration (PSD) (401 KAR 51:017) does contain the federal PSD provisions relating to visibility which were in effect at the time the state's regulation was promulgated. However, in the Federal Register notice of October 23, 1984 (49 FR 42670), the EPA proposed revisions to the federal regulations relating to visibility, and proposed a disapproval that the SIPs for numerous states, including Kentucky, did not meet the requirements of 40 CFR 51.305 or 51.307 (relating to visibility protection). The notice also gave each state the option of promulgating appropriate regulations and submitting a revised SIP for visibility protection to the U.S. EPA before the federal regulations for visibility protection became final. Therefore, the cabinet is proposing this amendment to the state's regulation on new source review in non-attainment areas so that the regulation will be acceptable to the U.S. EPA and the cabinet will be authorized to issue permits relating to visibility to those sources which would impact the Mammoth Cave National Park, or any other Class I area. In the final rule regarding visibility plans (50 FR 28550, July 12, 1985), the EPA did not disapprove Kentucky's plan, due to the pending promulgation of this regulation and the related plan.

The cabinet is also amending this regulation to include some provisions relating to the attainment and non-attainment designations as provided for in Section 107(d) of the Clean Air Act and to federal enforceability. The U.S. EPA has requested that these changes be made. The cabinet has changed the references to the state's regulation on attainment status designations (401 KAR 51:010) to appropriate subsections of Section 107(d) of the Clean Air Act since the U.S. EPA contends that the federal designations may be different from the cabinet's designations. The federal definition of "federally enforceable" has also been added. The U.S. EPA requested that this definition be added since the federal regulations require that certain exemptions can only be allowed for federally enforceable permits. In addition, references to the state's previous regulations for PSD (401 KAR 51:015 and 401 KAR 51:016E) and new source review in non-attainment areas (401 KAR 51:050 and 401 KAR 51:051E) are also being deleted since it is the U.S. EPA's position that those regulations were not approved by the U.S. EPA and, therefore, permits issued under those regulations are not federally enforceable.

Tiering:
Was tiering applied? Yes. This regulation only applies to major stationary sources and major modifications (emissions greater than 100 tons per year) which construct only in non-attainment areas and which could impact any Class I area.

NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION CABINET
Department for Surface Mining Reclamation and Enforcement
(Proposed Amendment)

405 KAR 7:020. Definitions and abbreviations.

RELATES TO: KRS Chapter 350
PURSUANT TO: KRS Chapter 13A, 350.028, 350.465
NECESSITY AND FUNCTION: KRS Chapter 350 in pertinent part requires the cabinet to promulgate rules and regulations pertaining to surface coal mining and reclamation operations under the permanent regulatory program. This regulation provides for the defining of certain essential terms used in Title 405, Chapters 7 through 24.

Section 1. Definitions. Unless otherwise specifically defined or otherwise clearly indicated by their context, terms in Title 405, Chapters 7 through 24 shall have the meanings given in this regulation.

(1) "Acid drainage" means water with a pH of less than 6.0 and in which total acidity exceeds total alkalinity, discharged from active, inactive or abandoned surface coal mine and reclamation operation or from an area affected by surface coal mining and reclamation operations.

(2) "Acid-forming materials" means earth materials that contain sulfide minerals or other materials which, if exposed to air, water, or weathering processes, form acids that may create acid drainage.

(3) "Adjacent area" means land located outside the affected area or permit area, depending on the context in which "adjacent area" is used, where air, surface or ground water, fish, wildlife, vegetation or other resources protected by KRS Chapter 350 may be adversely impacted by surface coal mining and reclamation operations.

(4) "Affected area" means any land or water which is used to facilitate, or is physically altered by, surface coal mining and reclamation operations. The affected area includes the disturbed area; any area upon which surface coal mining and reclamation operations are conducted; any adjacent lands the use of which is incidental to surface coal mining and reclamation operations; all areas covered by new or existing roads used to gain access to, or for hauling coal to or from, surface coal mining and reclamation operations, except as provided in this definition; any area covered by surface excavations, workings, impoundments, dams, ventilation shafts, entryways, refuse banks, dumps, stockpiles, overburden piles, spoil banks, culm banks, tailings, holes or depressions, repair areas, storage areas, shipping areas; any areas upon which are sited structures, facilities, or other property or material on the surface resulting from, or incident to, surface coal mining and reclamation operations; and the area located above

underground workings associated with underground mining activities, auger mining, or in situ mining. The affected area shall include every road used for the purposes of access to, or for hauling coal to or from, surface coal mining and reclamation operations, unless the road:

(a) Was designated as a public road pursuant to the laws of the jurisdiction in which it is located;

(b) Is maintained with public funds, and constructed in a manner similar to other public roads of the same classification within the jurisdiction; and

(c) There is substantial (more than incidental) public use.

(5) "Agricultural use" means the use of any tract of land for the production of animal or vegetable life. The uses include, but are not limited to, the pasturing, grazing, and watering of livestock, and the cropping, cultivation, and harvesting of plants.

(6) "Applicant" means any person seeking a permit from the cabinet to conduct surface coal mining and reclamation operations or approval to conduct coal exploration operations pursuant to KRS Chapter 350 and all applicable regulations.

(7) "Application" means the documents and other information filed with the cabinet for the issuance for exploration approval or a permit.

(8) "Approximate original contour" means that surface configuration achieved by backfilling and grading of the mined area so that the reclaimed area, including any terracing or access roads, closely resembles the general surface configuration of the land prior to mining and blends into and complements the drainage pattern of the surrounding terrain, with all highwalls and spoil piles eliminated. Permanent water impoundments may be permitted where the cabinet has determined that they comply with KRS Chapter 350 and either [,] 405 KAR 16:100; 405 KAR 16:060, Section 10; and 405 KAR 16:210 or 405 KAR 18:100; 405 KAR 18:060, Section 10 [8]; and 405 KAR 18:220.

(9) "Aquifer" means a zone, stratum, or group of strata that can store and transmit water in sufficient quantities for domestic, agricultural, industrial, or other beneficial use.

(10) "Area" as used in Title 405, Chapter 24, means a geographic unit in which the criteria alleged in the petition pursuant to 405 KAR 24:020, Sections 3 and 4 and 405 KAR 24:030, Section 8, occur throughout and form a significant feature.

(11) "Auger mining" means a method of mining coal at a cliff or highwall by drilling holes into an exposed coal seam from the highwall and transporting the coal along an auger bit to the surface and shall also include all other such methods of mining in which coal is extracted from beneath the overburden by mechanical devices located at the face of the cliff or highwall and extending laterally into the coal seam, such as extended depth, secondary recovery systems.

(12) "Best technology currently available" means equipment, devices, systems, methods, or techniques which will prevent, to the extent possible, additional contributions of suspended solids to stream flow or runoff outside the permit area and minimize, to the extent possible, disturbances and adverse impacts on fish, wildlife and related environmental values, and achieve enhancement of those resources where practicable. The term includes equipment, devices, systems, methods, or techniques which are currently available anywhere as determined by the cabinet, even if they are not in routine use. The term includes, but is not limited to, construction practices, siting requirements, vegetative selection and planting requirements, animal stocking requirements, scheduling of activities and design of sedimentation ponds in accordance with Title 405, Chapters 16 and 18. The cabinet shall have the discretion to determine the best technology currently available on a case-by-case basis, as authorized by KRS Chapter 350 and Title 405, Chapters 7 through 24.

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

(14) "Cemetery" means any area where human bodies are interred.

(15) "Coal" means combustible carbonaceous rock, classified as anthracite, bituminous, subbituminous, or lignite by ASTM Standard D 388-77.

(16) "Coal exploration" means the field gathering of:

(a) Surface or subsurface geologic, physical, or chemical data by mapping, trenching, drilling, geophysical, or other techniques necessary to determine the quality and quantity of overburden and coal of an area; or

(b) Environmental data to establish the conditions of an area before beginning surface coal mining and reclamation operations under the requirements of Title 405, Chapters 7 through 24 where such activity may cause any disturbance of the land surface or may cause any appreciable effect upon land, air, water or other environmental resources.

(17) "Coal mine waste" means coal processing waste and underground development waste.

(18) "Coal processing plant" means a facility where coal is subjected to chemical or physical processing or cleaning, concentrating, crushing, sizing, or other processing or preparation including all associated support facilities including but not limited to: loading facilities; storage and stockpile facilities; sheds, shops, and other buildings; water treatment and water storage facilities; settling basins and impoundments; and coal processing and other waste disposal areas [collection of facilities, including all associated support facilities and operations, where run-of-the-mine coal is subjected to chemical or physical processing and separated from its impurities].

(19) "Coal processing waste" means materials which are separated from the product coal during the cleaning, concentrating, or other processing or preparation of coal.

(20) "Collateral bond" means an idemnity agreement in a sum certain payable to the cabinet executed by the permittee and which is supported by the deposit with the cabinet of cash, negotiable certificates of deposit or an irrevocable letter of credit of any bank organized and authorized to transact business in the United States.

(21) "Combustible material" means organic material that is capable of burning, either by fire or through oxidation, accompanied by the evolution of heat and a significant temperature rise.

(22) "Community or institutional building" means any structure, other than a public building or an occupied dwelling, which is used

primarily for meetings, gatherings, or functions of local civic organizations or other community groups; functions as an educational, cultural, historic, religious, scientific, correctional, mental health or physical health care facility; or is used for public services, including, but not limited to, water supply, power generation or sewage treatment.

(23) "Compaction" means increasing the density of a material by reducing the voids between the particles by mechanical effort.

(24) "Complete application" means an application for exploration approval or permit, which contains all information required under KRS Chapter 350 and Title 405, Chapters 7 through 24.

(25) "Cropland" means land used for the production of adapted crops for harvest, alone or in a rotation with grasses and legumes, and includes row crops, small grain crops, hay crops, nursery crops, orchard crops, and other similar specialty crops. Land used for facilities in support of cropland farming operations which is adjacent to or an integral part of these operations is also included for purposes of land use categories.

(26) "Date of primacy" means the effective date of the Secretary of Interior's unconditional or conditional approval of Kentucky's permanent regulatory program under Section 503 of the 1977 Surface Mining Control and Reclamation Act (P.L. 95-87).

(27) "Day" means calendar day unless otherwise specified to be a working day.

(28) "Department" means the Department for Surface Mining Reclamation and Enforcement.

(29) "Developed water resources land" means land used for storing water for beneficial uses such as stockponds, irrigation, fire protection, flood control, and water supply.

(30) "Disturbed area" means an area where vegetation, topsoil, or overburden is removed or upon which topsoil, spoil, coal processing waste, underground development waste, or noncoal waste is placed by surface coal mining operations. Those areas are classified as "disturbed" until reclamation is complete and the performance bond or other assurance of performance required by Title 405, Chapter 10 is released.

(31) "Diversion" means a channel, embankment, or other manmade structure constructed to divert water from one (1) area to another.

(32) "Downslope" means the land surface below the projected outcrop of the lowest coalbed being mined along each highwall.

(33) "Embankment" means a man-made deposit of material that is raised above the natural surface of the land and used to contain, divert, or store water, support roads or railways, or for other similar purposes.

(34) "Ephemeral stream" means a stream which flows only in direct response to precipitation in the immediate watershed or in response to the melting of a cover of snow and ice, and which has a channel bottom that is always above the local water table.

(35) "Excess spoil" means spoil material disposed of in a location other than the coal extraction area, provided that spoil material used to achieve the approximate original contour shall not be considered excess spoil.

(36) "Existing structure" means a structure or facility used in connection with or to facilitate surface coal mining and reclamation operations for which construction begins prior to January 18, 1983.

[(37) "Experimental practice," as used in 405 KAR 7:060, means the use of alternative surface coal mining and reclamation operation practices for experimental or research purposes.]

(37) [(38)] "Extraction of coal as an incidental part" means the extraction of coal which is necessary to enable the construction to be accomplished. Only that coal extracted from within the right-of-way, in the case of a road, railroad, utility line or other such construction, or within the boundaries of the area directly affected by other types of government-financed construction, may be considered incidental to that construction. Extraction of coal outside the right-of-way or boundary of the area directly affected by the construction shall be subject to the requirements of KRS Chapter 350 and Title 405, Chapters 7 through 24.

(38) [(39)] "Federal lands" means any land, including mineral interests, owned by the United States, without regard to how the United States acquired ownership of the lands or which agency manages the lands. It does not include Indian lands.

(39) [(40)] "Federal lands program" means a program established by the Secretary of the Interior pursuant to Section 523 of the Surface Mining Control and Reclamation Act of 1977 (P.L. 95-87, 91 Stat. 445 (30 USC Section 1201 et. seq.)) to regulate surface coal mining and reclamation operations on federal lands.

(40) [(41)] "Fish and wildlife habitat" means land dedicated wholly or partially to the production, protection or management of species of fish or wildlife.

(41) [(42)] "Forest land" means land used or managed for the long-term production of wood, wood fiber, or wood derived products. Land used for facilities in support of forest harvest and management operations which is adjacent to or an integral part of these operations is also included.

(42) [(43)] "Fragile lands" means geographic areas containing natural, ecologic, scientific or aesthetic resources that could be damaged or destroyed by surface coal mining operations. These lands may include, but are not limited to, uncommon geologic features, National Natural Landmark sites, valuable habitats for fish and wildlife, critical habitats for endangered or threatened species of animals and plants, wetlands, environmental corridors containing concentration of ecologic and aesthetic features, state-designated nature preserves and wild rivers, areas of recreational value due to high environmental quality, buffer zones around areas where surface coal mining is prohibited, and important, unique or highly productive soils or mineral resources other than coal.

(43) [(44)] "Fugitive dust" means that particulate matter which becomes airborne due to wind erosion from exposed surfaces.

(44) [(45)] "General area" means, with respect to hydrology, the topographic and ground water basin surrounding a permit area which is of sufficient size, including areal extent and depth, to include one (1) or more watersheds containing perennial streams and ground water zones and to allow assessment of the probable cumulative impacts on the quality and quantity of surface and ground water systems in the basins.

(45) [(46)] "Government-financed construction" means construction funded fifty (50) percent or more by funds appropriated from a government financing agency's budget or obtained from general revenue bonds, but shall not mean government financing agency guarantees, insurance, loans, funds obtained through industrial revenue bonds or their equivalent, or in-kind payments.

(46) [(47)] "Government financing agency" means a federal, Commonwealth of Kentucky, county, municipal, or local unit of government, or a cabinet, department, agency or office of the unit which, directly or through another unit of government, finance construction.

(47) [(48)] "Grazingland" means grassland and forest lands where the indigenous vegetation is actively managed for grazing, browsing, or occasional hay production. Land used for facilities in support of grazing operations which are adjacent to or an integral part of these operations is also included.

(48) [(49)] "Ground water" means subsurface water that fills available openings in rock or soil materials to the extent that they are considered water saturated.

(49) [(50)] "Half-shrub" means a perennial plant with a woody base whose annually-produced stems die back each year.

(50) [(51)] "Head-of-hollow fill" means a fill structure consisting of any material, other than coal processing waste and organic material, placed in the uppermost reaches of a hollow near the approximate elevation of the ridgeline, where there is no significant natural drainage area above the fill, and where the side slopes of the existing hollow measured at the steepest point are greater than twenty (20) degrees or the average slope of the profile of the hollow from the toe of the fill to the top of the fill is greater than ten (10) degrees.

(51) [(52)] "Highwall" means the face of exposed overburden and coal in an open cut of a surface coal mining activity or for entry to underground mining activities.

(52) [(53)] "Historic lands" means historic or cultural districts, places, structures or objects, including but not limited to sites listed on or eligible for listing on a State or National Register of Historic Places, National Historic Landmarks, archaeological and paleontological sites, cultural or religious districts, places, or objects, or sites for which historic designation is pending.

(53) [(54)] "Historically used for cropland:"

(a) "Historically used for cropland" means that lands have been used for cropland for any five (5) years or more out of the ten (10) years immediately preceding:

1. The application; or

2. The acquisition of the land for the purpose of conducting surface coal mining and reclamation operations.

(b) Lands meeting either paragraph (a)1 or paragraph (a)2 of this subsection shall be considered "historically used for cropland."

(c) In addition to the lands covered by paragraph (a) of this subsection, other lands shall be considered "historically used for cropland" as described below:

1. Land that would likely have been used as cropland for any five (5) out of the last ten (10) years immediately preceding the acquisition or the application but for some fact of ownership or control of the land unrelated to the productivity of the land; and

2. Lands that the cabinet determines, on the basis of additional cropland history of the surrounding lands and the lands under consideration, are clearly cropland but fall outside the specific five (5) years in ten (10) criterion.

(d) Acquisition includes purchase, lease, or option of the land for the purpose of conducting or allowing through resale, lease or option, the conduct of surface coal mining and reclamation operations.

(54) [(55)] "Hydrologic balance" means the relationship between the quality and quantity of water inflow to, water outflow from, and water storage in a hydrologic unit such as a drainage basin, aquifer, soil zone, lake, or reservoir. It encompasses the dynamic relationship between precipitation, runoff, evaporation, and changes in ground and surface water storage.

(55) [(56)] "Hydrologic regime" means the entire state of water movement in a given area. It is a function of the climate and includes the phenomena by which water first occurs as atmospheric water vapor, passes into a liquid or solid form, falls as precipitation, moves along or into the ground surface, and returns to the atmosphere as vapor by means of evaporation and transpiration.

(56) [(57)] "Imminent danger to the health and safety of the public" means the existence of any condition or practice, or any violation of a permit or other requirements of KRS Chapter 350 in a surface coal mining and reclamation operation, which could reasonably be expected to cause substantial physical harm to persons outside the permit area before the condition, practice, or violation can be abated. A reasonable expectation of death or serious injury before abatement exists if a rational person, subjected to the same condition or practice giving rise to the peril, would avoid exposure to the danger during the time necessary for abatement.

(57) [(58)] "Impoundment" means a closed basin, naturally formed or artificially built, which is dammed or excavated for the retention of water, sediment, or waste.

(58) [(59)] "Incidental boundary revision" means an extension to a permit area that is necessary for reasons unforeseen at the time the original permit application was prepared and that is small in relation to the permit area (surface operations area for underground mining activities).

(a) Where an extension includes new areas from which coal will be removed, it will be considered as an incidental boundary revision only if the extension is no more than ten (10) percent of the permit area acreage or five (5) acres, whichever is less.

(b) Where an extension is for new areas not involving extraction of coal, it will be considered an incidental boundary revision only if the extension is no more than ten (10) percent of the permit area acreage (surface operations area acreage for underground mining activities) or two (2) acres, whichever is greater.

(c) Cumulative acreage added by successive revisions may not exceed the above limitations.

(59) [(60)] "Industrial/commercial lands" means lands used for:

(a) Extraction or transformation of materials for fabrication of products, wholesaling of

products or for long-term storage of products; and heavy and light manufacturing facilities. Land used for facilities in support of these operations which is adjacent to or an integral part of that operation is also included.

(b) Retail or trade of goods or services, including hotels, motels, stores, restaurants, and other commercial establishments. Lands used for facilities in support of commercial operations which is adjacent to or an integral part of these operations is also included.

(c) Commercial agriculture activities including pasturing, grazing, and watering of livestock, and the cropping, cultivation and harvesting of plants for sale or resale.

(60) [(61)] "In situ processes" means activities conducted on the surface or underground in connection with in-place distillation, retorting, leaching, or other chemical or physical processing of coal. The term includes, but is not limited to, in situ gasification, in situ leaching, slurry mining, solution mining, borehole mining, and fluid recovery mining.

(61) [(62)] "Intermittent stream" means:

(a) A stream or reach of stream that drains a watershed of one (1) square mile or more but does not flow continuously during the calendar year; or

(b) A stream or reach of stream that is below the local water table for at least some part of the year, and obtains its flow from both surface runoff and ground water discharge.

(62) [(63)] "Irreparable damage to the environment," as used in 405 KAR 8:010, Sections 13(4) and 14(9) only, means any damage to the environment that cannot be corrected by actions of the applicant.

(63) [(64)] "Land use" means specific uses or management-related activities rather than the vegetation or cover of the land, and may be identified in combination when joint or seasonal uses occur.

(64) [(65)] "Monitoring" means the collection of environmental data by either continuous or periodic sampling methods.

(65) [(66)] "Mulch" means vegetation residues or other suitable materials that aid in soil stabilization and soil moisture conservation, thus providing micro-climatic conditions suitable for germination and growth.

(66) [(67)] "Natural hazard lands" means geographic areas in which natural conditions exist that pose or, as a result of surface coal mining operations, may pose a threat to the health, safety, or welfare of people, property or the environment, including, but not limited to, areas subject to landslides, cave-ins, subsidence, substantial erosion, unstable geology, or frequent flooding.

(67) [(68)] "Notice of noncompliance and order for remedial measures" means a written document and order prepared by an authorized representative of the cabinet which sets forth with specificity the violations of KRS Chapter 350, Title 405, Chapters 7 through 24, or permit conditions which the authorized representative of the cabinet determines to have occurred based upon his inspection, and the necessary remedial actions, if any, and the time schedule for completion thereof, which the authorized representative deems necessary and appropriate to correct the violations.

(68) [(69)] "Notice of violation" means any written notification from a governmental entity of a violation of law, whether by letter, memorandum, legal or administrative pleading, or other written communication.

(69) [(70)] "Noxious plants" means species classified under Kentucky law as noxious plants.

(70) [(71)] "Occupied dwelling" means any building that is currently being used on a regular or temporary basis for human habitation.

(71) [(72)] "Operations" means surface coal mining and reclamation operations, all of the premises, facilities, roads and equipment used in the process of producing coal from a designated area or removing overburden for the purpose of determining the location, quality or quantity of a natural coal deposit or the activity to facilitate or accomplish the extraction or removal of coal.

(72) [(73)] "Operator" means any person, partnership, or corporation engaged in surface coal mining and reclamation operations.

(73) [(74)] "Order for cessation and immediate compliance" means a written document and order issued by an authorized representative of the cabinet when:

(a) A person to whom a notice of noncompliance and order for remedial measures was issued has failed, as determined by cabinet inspection, to comply with the terms of the notice of noncompliance and order for remedial measures within the time limits set therein, or as subsequently extended; or

(b) The authorized representative finds, on the basis of a cabinet inspection, any condition or practice; or any violation of KRS Chapter 350, Title 405, Chapters 7 through 24, or any condition of a permit or exploration approval which:

1. Creates an imminent danger to the health or safety of the public; or

2. Is causing or can reasonably be expected to cause significant, imminent environmental harm to land, air or water resources.

(74) [(75)] "Outslope" means the face of the spoil or embankment sloping downward from the highest elevation to the toe.

(75) [(76)] "Overburden" means material of any nature, consolidated or unconsolidated, that overlies a coal deposit, excluding topsoil.

(76) [(77)] "Pastureland" means land used primarily for the long-term production of adapted, domesticated forage plants to be grazed by livestock or occasionally cut and cured for livestock feed. Land used for facilities in support of pastureland which is adjacent to or an integral part of these operations is also included.

(77) [(78)] "Perennial stream" means a stream or that part of a stream that flows continuously during all of the calendar year as a result of ground-water discharge or surface runoff. The term does not include "intermittent stream" or "ephemeral stream."

(78) [(79)] "Performance bond" means a surety bond, collateral bond, cash bond, letter of credit or a combination thereof, by which a permittee assures faithful performance of all the requirements of KRS Chapter 350, Title 405, Chapters 7 through 24, and the requirements of the permit and reclamation plan.

(79) [(80)] "Permanent diversion" means a diversion remaining after surface coal mining and reclamation operations are completed which has been approved for retention by the cabinet and other appropriate Kentucky and federal agencies.

(80) [(81)] "Permit" means written approval issued by the cabinet to conduct surface coal mining and reclamation operations.

(81) [(82)] "Permit area" means the area of land and water within boundaries designated in the approved permit application, which shall include, at a minimum, all areas which are or will be affected by surface coal mining and reclamation operations under that permit.

(82) [(83)] "Permittee" means an operator or a person holding or required by KRS Chapter 350 or Title 405, Chapters 7 through 24 to hold a permit to conduct surface coal mining and reclamation operations during the permit term and until all reclamation obligations imposed by KRS 350 and Title 405, Chapters 7 through 24 are satisfied.

(83) [(84)] "Person" means any individual, partnership, association, society, joint stock company, firm, company, corporation, or other business organization, or any agency, unit, or instrumentality of federal, state, or local government, including any publicly owned utility or publicly owned corporation of federal, state, or local government.

(84) [(85)] "Person having an interest which is or may be adversely affected" or "person with a valid legal interest" shall include any person:

(a) Who uses any resource of economic, recreational, aesthetic, or environmental value that may be adversely affected by coal exploration or surface coal mining and reclamation operations, or by any related action of the cabinet; or

(b) Whose property is or may be adversely affected by coal exploration or surface coal mining and reclamation operations, or by any related action of the cabinet.

(85) [(86)] "Petitioner" means a person who submits a petition under Title 405, Chapter 24 to designate a specific area as unsuitable for all or certain types of surface coal mining and reclamation operations, or who submits a petition under Title 405, Chapter 24 to terminate such a designation.

(86) [(87)] "Precipitation event" means a quantity of water resulting from drizzle, rain, snowmelt, sleet, or hail in a specified period of time.

(87) [(88)] "Prime farmland" means those lands which are defined by the Secretary of Agriculture in 7 CFR 657 and which have historically been used for cropland as that phrase is defined above.

(88) [(89)] "Principal shareholder" means any person who is the record or beneficial owner of ten (10) percent or more of any class of voting stock of the applicant.

(89) [(90)] "Probable cumulative impacts" means the expected total qualitative, and quantitative, direct and indirect effects of surface coal mining and reclamation operations on the hydrologic regime.

(90) [(91)] "Probable hydrologic consequences" means the projected results of proposed surface coal mining and reclamation operations which may reasonably be expected to change the quantity or quality of the surface and ground water; the surface or ground water flow, timing and pattern; and the stream channel conditions on the permit area and adjacent areas.

(91) [(92)] "Property to be mined" means both the surface and mineral estates on and underneath lands which are within the permit area.

(92) [(93)] "Public building" means any structure that is owned by a public agency or used principally for public business, meetings or other group gatherings.

(93) [(94)] "Public office" means a facility under the direction and control of a governmental entity which is open to public access on a regular basis during reasonable business hours.

(94) [(95)] "Public park" means an area dedicated or designated by any federal, state, or local agency for public recreational use, despite whether such use is limited to certain times or days. It includes any land leased, reserved or held open to the public because of that use.

(95) [(96)] "Public road" means any publicly owned thoroughfare for the passage of vehicles.

(96) [(97)] "Recharge capacity" means the ability of the soils and underlying materials to allow precipitation and runoff to infiltrate and reach the zone of saturation.

(97) [(98)] "Reclamation" means the reconditioning and restoration of areas affected by surface coal mining operations as required by KRS Chapter 350 and Title 405, Chapters 7 through 24 under a plan approved by the cabinet.

(98) [(99)] "Recreation land" means land used for public or private leisure-time use, including developed recreation facilities such as parks, camps, and amusement areas, as well as areas for less intensive uses such as hiking, canoeing, and other undeveloped recreational uses.

(99) [(100)] "Recurrence interval" means the interval of time in which an event is expected to occur once, on the average.

(100) [(101)] "Reference area" means a land unit maintained under appropriate management for the purpose of measuring vegetation ground cover, productivity and plant species diversity that are produced naturally or by crop production methods approved by the cabinet. Reference areas must be representative of geology, soil, slope and vegetation in the permit area.

(101) [(102)] "Refuge pile" means a surface deposit of coal mine waste that that is not retained by an impounding structure and does not impound water, slurry, or other liquid or semi-liquid material.

(102) [(103)] "Renewable resource lands" means aquifers and areas for the recharge of aquifers and other underground waters, areas for agricultural or silvicultural production of food and fiber, and grazing lands.

(103) [(104)] "Residential land" means tracts employed for single and multiple-family housing, mobile home parks, and other residential lodgings. Also included is land used for support facilities such as vehicle parking, open space, and other facilities which directly relate to the residential use of the land.

(104) [(105)] "Road" means a surface right-of-way for purposes of travel by land vehicles used in coal exploration or surface coal mining and reclamation operations. A road consists of the entire area within the right-of-way, including the roadbed, shoulders, parking and side area, approaches, structures, ditches, surface, and such contiguous appendages as are necessary for the total structure. The term includes access and haul roads constructed, used, reconstructed, improved, or maintained for use in coal exploration or surface coal mining

and reclamation operations, including use by coal hauling vehicles leading to transfer, processing, or storage areas. The term does not include pioneer or construction roadways used for part of the road construction procedure and promptly replaced by a road pursuant to Title 405, Chapters 16 and 18 located in the identical right-of-way as the pioneer or construction roadway. The term also excludes any roadway within the immediate mining pit area.

(105) [(106)] "Safety factor" means the ratio of the available shear strength to the developed shear stress, or the ratio of the sum of the resisting forces to the sum of the loading or driving forces, as determined by accepted engineering practices.

(106) [(107)] "Secretary" means the Secretary of the Cabinet for Natural Resources and Environmental Protection.

(107) [(108)] "Sedimentation pond" means a primary sediment controlled structure designed, constructed and maintained in accordance with 405 KAR 16:090 or 405 KAR 18:090 and including but not limited to a barrier, dam, or excavated depression which slows down water runoff to allow suspended solids to settle out. A sedimentation pond shall not include secondary sedimentation control structures such as straw dikes, riprap, check dams, mulches, dugouts and other measures that reduce overland flow velocity, reduce runoff volume or trap sediment, to the extent that such secondary sedimentation structures drain to a sedimentation pond.

(108) [(109)] "Significant, imminent environmental harm" is an adverse impact on land, air, or water resources which resources include, but are not limited to, plant and animal life as further defined in this subsection.

(a) An environmental harm is imminent, if a condition, practice, or violation exists which:

1. Is causing such harm; or

2. May reasonably be expected to cause such harm at any time before the end of the reasonable abatement time that would be set by the cabinet's authorized agents pursuant to the provisions of KRS Chapter 350.

(b) An environmental harm is significant if that harm is appreciable and not immediately reparable.

(109) [(110)] "Slope" means average inclination of a surface, measured from the horizontal, generally expressed as the ratio of a unit of vertical distance to a given number of units of horizontal distance (e.g. 1v:5h). It may also be expressed as a percent or in degrees.

(110) [(111)] "Slurry mining" means the hydraulic breakdown of subsurface coal with drill-hole equipment, and the eduction of the resulting slurry to the surface for processing.

(111) [(112)] "Soil horizons" means contrasting layers of soil parallel or nearly parallel to the land surface. Soil horizons are differentiated on the basis of field characteristics and laboratory data. The four (4) master soil horizons are:

(a) "A horizon." The uppermost mineral layer, often called the surface soil. It is the part of the soil in which organic matter is most abundant, and leaching of soluble or suspended particles is typically the greatest.

(b) "E horizon." The layer commonly near the surface below an A horizon and above a B horizon. An E horizon is most commonly differentiated from an overlying A horizon by a lighter color and generally has measurably less organic matter than the A horizon. An E horizon is most commonly differentiated from an underlying B horizon in the same sequum by color of higher value or lower chroma, by coarser texture or by a combination of these properties.

(c) "B horizon." The layer that typically is immediately beneath the E horizon and often called the subsoil. This middle layer commonly contains more clay, iron, or aluminum than the A, E, or C horizons.

(d) "C horizon." The deepest layer of soil profile. It consists of loose material or weathered rock that is relatively unaffected by biologic activity.

(112) [(113)] "Soil survey" means a field or other investigation, resulting in a map showing the geographic distribution of different kinds of soils and an accompanying report that describes, classifies, and interprets such soils for use. Soil surveys must meet the standards of the National Cooperative Soil Survey.

(113) [(114)] "Spoil" means overburden and other materials, excluding topsoil, coal mine waste, and mine coal, that are excavated during surface coal mining and reclamation operations.

(114) [(115)] "Stabilize" means to control movement of soil, spoil piles, or areas of disturbed earth by modifying the geometry of the mass, or by otherwise modifying physical or chemical properties, such as by providing a protective surface coating.

(115) [(116)] "Steep slope" means any slope of more than twenty (20) degrees.

(116) [(117)] "Substantially disturb" means for purposes of coal exploration, to impact significantly upon land, air or water resources by such activities as blasting, mechanical excavation, drilling or altering coal or water exploratory holes or wells, construction of roads and other access routes, and the placement of structures, excavated earth, or other debris on the surface of land.

(117) [(118)] "Successor in interest" means any person who succeeds to rights granted under a permit, by transfer, assignment, or sale of those rights.

(118) [(119)] "Surety bond" means an idemnity agreement in a sum certain payable to the cabinet executed by the permittee which is supported by the performance guarantee of a corporation licensed to do business as a surety in the Commonwealth of Kentucky where the surface or underground coal mining operation subject to the indemnity agreement is located.

(119) [(120)] "Surface coal mining and reclamation operations" means surface coal mining operations and all activities necessary and incident to the reclamation of such operations.

(120) [(121)] "Surface coal mining operations" means activities conducted on the surface of lands in connection with a surface coal mine and surface operations and surface impacts incident to an underground coal mine. Such activities include excavation for the purpose of obtaining coal, including such common methods as contour, strip, auger, mountaintop removal, box cut, open pit, and area mining, the use of explosives and blasting, and in situ distillation or retorting, leaching or other chemical or physical processing, and cleaning, concentrating, or other processing or preparation, and the loading of coal at or near the mine-site. Such activities shall not include the extraction of

coal by a landowner for his own noncommercial use from land owned or leased by him, except that noncommercial use shall not include the extraction of coal by one (1) unit of an integrated company or other business entity which uses the coal in its own manufacturing or power plants; the extraction of coal as an incidental part of federal, state, or local government financed highway or other construction; or the extraction of, or intent to extract, 250 tons or less of coal by any person by surface coal mining operations within twelve (12) successive calendar months; the extraction of coal incidental to the extraction of other minerals where coal does not exceed sixteen and two-thirds (16 2/3) percent of the tonnage of minerals removed for the purpose of commercial use or sale; or coal exploration. Surface coal mining operations shall also include the areas upon which such activities occur or where such activities disturb the natural land surface. Such areas shall also include any adjacent land the use of which is incidental to any such activities, all lands affected by the construction of new roads or the improvement or use of existing roads to gain access to the site of such activities and for haulage, and excavations, workings, impoundments, dams, ventilation shafts, entryways, refuse banks, dumps, stockpiles, overburden piles, spoil banks, culm banks, tailings, holes or depressions, repair areas, storage areas, processing areas, shipping areas and other areas upon which are sited structures, facilities, or other property or materials on the surface, resulting from or incident to such activities. This definition includes the terms "strip mining of coal" and the surface effects of underground mining of coal as defined in KRS Chapter 350.

(121) [(122)] "Surface mining activities" means those surface coal mining and reclamation operations incident to the extraction of coal from the earth by removing the materials over a coal seam before recovering the coal, by auger coal mining, by extraction of coal from coal refuse piles, or by recovery of coal from slurry ponds.

(122) [(123)] "Suspended solids" or nonfilterable residue, expressed as miligrams per liter, means organic or inorganic materials carried or held in suspension in water which are retained by a standard glass fiber filter in the procedure outlined by the Environmental Protection Agency's regulations for waste water and analyses (40 CFR 136).

(123) [(124)] "Temporary diversion" means a diversion of a stream or overland flow which is used during coal exploration or surface coal mining and reclamation operations and not approved by the cabinet to remain after reclamation as part of the approved postmining land use.

(124) [(125)] "Ton" means 2,000 pounds avoirdupois (.90718 metric ton).

(125) [(126)] "Topsoil" means the A and E soil horizon layers of the four (4) master soil horizons.

(126) [(127)] "Toxic-forming materials" means earth materials or wastes which, if acted upon by air, water, weathering, or microbiological processes, are likely to produce chemical conditions in soils or water that are detrimental to biota or uses of water.

(127) [(128)] "Toxic-mine drainage" means water that is discharged from active or abandoned mines or other areas affected by coal exploration or surface coal mining and reclamation operations, which contains a substance that through chemical action is likely to kill, injure, or impair biota commonly present in the area that might be exposed to it.

(128) [(129)] "Transfer, assignment or sale of rights" means a change in ownership or other effective control over the right to conduct surface coal mining operations under a permit issued by the cabinet.

(129) [(130)] "Underground development waste" means waste coal, shale, claystone, siltstone, sandstone, limestone, or similar materials that are extracted from underground workings in connection with underground mining activities.

(130) [(131)] "Underground mining activities" means a combination of:

(a) Surface operations incident to underground extraction of coal or in situ processing, including construction, use, maintenance, and reclamation of roads; above-ground repair areas, storage areas, processing areas, and shipping areas; areas upon which are sited support facilities including hoist and ventilating ducts, areas utilized for the disposal and storage of waste, and areas on which materials incident to underground mining operations are placed; and

(b) Underground operations such as underground construction, operation, and reclamation of shafts, adits, underground support facilities, in situ processing, and underground mining, hauling, storage, and blasting.

(131) [(132)] "Undeveloped land or no current use or land management" means land that is undeveloped or, if previously developed, land that has been allowed to return naturally to an undeveloped state or has been allowed to return to forest through natural succession.

(132) [(133)] "Unwarranted failure to comply" means the failure of the permittee due to indifference, lack of diligence or lack of reasonable care:

(a) To prevent the occurrence of any violation of any applicable requirement of KRS Chapter 350, the regulations of Title 405, Chapters 7 through 24, or permit conditions; or

(b) To abate any violation of any applicable requirement of KRS Chapter 350, the regulations of Title 405, Chapters 7 through 24, or permit conditions.

(133) [(134)] "Valley fill" means a fill structure consisting of any material other than coal waste and organic material that is placed in a valley where side slopes of the existing valley measured at the steepest point are greater than twenty (20) degrees or the average slope of the profile of the valley from the toe of the fill to the top of the fill is greater than ten (10) degrees.

(134) [(135)] "Water table" means the upper surface of a zone of saturation, where the body of ground water is not confined by an overlying impermeable zone.

(135) [(136)] "Water transmitting zone" means a body of consolidated or unconsolidated rocks which, due to their greater primary or secondary permeability relative to the surrounding rocks, can reasonably be considered to function as a single hydraulic medium for the flow of ground water.

(136) [(137)] "Willful violation" means an act or omission which violates the Surface Mining

Control and Reclamation Act (P.L. 95-87), KRS Chapter 350, the regulations of Title 405, Chapters 7 through 24, or any permit condition, committed by a person who intends the result which actually occurs.

Section 2. Abbreviations. As used in Title 405, Chapters 7 through 24, the following abbreviations shall have the meanings given below:

ac - acre
CFR - Code of Federal Regulations
dB - decibels
FDIC - Federal Deposit Insurance Corporation
FSLIC - Federal Savings and Loan Insurance Corporation
Hz - hertz
KAR - Kentucky Administrative Regulations
KPDES - Kentucky Pollutant Discharge Elimination System
KRS - Kentucky Revised Statutes
l - liter
mg - milligram
MRP - mining and reclamation plan
MSHA - Mine Safety and Health Administration
NPDES - National Pollutant Discharge Elimination System
OSM - Office of Surface Mining Reclamation and Enforcement, United States Department of the Interior
SCS - Soil Conservation Service
SMCRA - Surface Mining Control and Reclamation Act of 1977, P.L. 95-87
USDA - United States Department of Agriculture
USDI - United States Department of the Interior
U.S. EPA - United States Environmental Protection Agency
USGS - United States Geological Survey

CHARLOTTE E. BALDWIN, Secretary
APPROVED BY AGENCY: November 14, 1985
FILED WITH LRC: November 15, 1985 at 11 a.m.
PUBLIC HEARING SCHEDULED: A public hearing on this regulation has been scheduled for December 30, 1985, at 10 a.m. in Room G-1 of the Capital Plaza Tower. Written comments may be submitted on or before the scheduled hearing date. However, if no written notice of intent to attend and testify at the public hearing is received within five (5) days before the scheduled hearing, the hearing will be cancelled. Those interested in attending and testifying at this hearing shall notify in writing: George Risk, Department for Surface Mining Reclamation and Enforcement, 3rd Floor Capital Plaza Tower, Frankfort, Kentucky 40601.

REGULATORY IMPACT ANALYSIS

Agency Contact Person: George Risk
(1) Type and number of entities affected: This regulation defines terms and abbreviations which are used in 405 KAR Chapters 7 through 24. In that regard, this regulation affects all persons who hold permanent-program permits to conduct surface coal mining and reclamation operations (excluding those affecting areas which are two acres or less in size) under this title. (Approximately 2,400 such operations have been permitted under Kentucky's permanent regulatory program for coal mining.)
By affecting those persons identified above, this regulation also affects, directly or indirectly and in varying degrees, persons living in, or with interests in the coal field regions of Kentucky.
More specifically, the amendments proposed in this rulemaking redefine the term "coal processing plant" and remove the term "experimental practice." The definition of "coal processing plant" is being expanded to include operations which crush, size, or otherwise process coal regardless of whether they separate coal from impurities. This revised definition will bring an estimated 600 to 800 existing operations under the regulatory jurisdiction of Kentucky's permanent program for coal mining.
The term "experimental practice" is being removed since this term is fully described in 405 KAR 7:060. Removing this term from 405 KAR 7:020 will eliminate a redundancy in Kentucky's permanent regulatory program. The removal of this term should have no effect on the persons identified above or any other entity.
(a) Direct and indirect costs or savings to those affected:
1. First year: By being regulated under Kentucky's permanent program, the coal processing operations identified above will be required to comply with certain performance standards and permitting requirements. Compliance with these will result in additional expenses to the estimated 600 to 800 existing operations which will be brought under the regulatory jurisdiction of the permanent program.
Future operations will incur similar expenses if, under the unamended definition of "coal processing plant," they would have been exempt from permanent-program requirements but, under the revised definition, will be included within the definition of this term.
2. Continuing costs or savings: Same as first year, except the majority of the applications for the estimated 600 to 800 existing, previously exempt operations should be processed within the first year.
3. Additional factors increasing or decreasing costs (note any effects upon competition): None.
(b) Reporting and paperwork requirements: Additional paperwork and reporting requirements will be imposed on those previously exempt persons who will be required, under the revised definition of "coal processing plant," to comply with the regulatory requirements of Kentucky's permanent program.
(2) Effects on the promulgating administrative body:
(a) Direct and indirect costs or savings:
1. First year: The cabinet will incur additional expenses in the regulation of those operations which were previously exempt from the requirements of Kentucky's permanent program.
2. Continuing costs or savings: Same as first year, except the majority of the applications for the estimated 600 to 800 existing, previously exempt operations should be processed within the first year.
3. Additional factors increasing or decreasing costs: None.
(b) Reporting and paperwork requirements: The workload of the cabinet (including paperwork and reporting) will increase due to the regulation of those operations which are no longer exempt from the requirements of Kentucky's permanent program.
(3) Assessment of anticipated effect on state and local revenues: None.
(4) Assessment of alternative methods; reasons why alternatives were rejected: None.

(5) Identify any statute, administrative regulation or government policy which may be in conflict, overlapping, or duplication: By redefining the term "coal processing plant," the amendments as proposed are not in direct conflict with any statute or regulation. It should be noted, however, that concomitant with this rulemaking the cabinet is proposing amendments to permitting requirements and performance standards of KAR Title 405, and the manner in which this term is used in these other amendments does conflict with KRS 350.060(22). However, the federal Office of Surface Mining (OSM) has proposed to preempt and supersede KRS 350.060.(22) (see 50 FR 37699) pursuant to Section 505(b) of SMCRA and 30 CFR 730.11(a), and this preemption and supersession will, in effect, require the cabinet to apply the permanent-program requirements as is indicated in the concomitant amendments.

The removal of the term "experimental practice" does not conflict with any statute or regulation.

(a) Necessity of proposed regulation if in conflict: The amendments to the term "coal processing plant" are necessary to maintain consistency between the federal laws and regulations for coal processing plants and Kentucky's regulations for similar operations. These amendments are also necessary to fulfill a requirement of the final judgment and order of the U.S. District Court in Sierra Club et al. vs. Watt et al., Civil Action No. 82-30.

(b) If in conflict, was effort made to harmonize the proposed administrative regulation with conflicting provisions: See (5) above.

(6) Any additional information or comments: None.

Tiering:
Was tiering applied? No. Tiering is not applicable to these proposed amendments since these requirements must, pursuant to the federal and Kentucky surface mining laws and regulations, apply equally to all applicants and permittees under 405 KAR Chapters 7 through 24.

A fiscal note is not required for this regulation because it will have no impact on local government.

NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION CABINET
Department for Surface Mining Reclamation and Enforcement
(Proposed Amendment)

405 KAR 7:060. Experimental practices mining.

RELATES TO: KRS 350.020, 350.028, 350.465
PURSUANT TO: KRS Chapter 13A, 350.028, 350.465
NECESSITY AND FUNCTION: KRS Chapter 350 in pertinent part requires the cabinet to promulgate rules and regulations pertaining to surface coal mining and reclamation operations that are no more stringent than SMCRA. This regulation governs the granting and approval of experimental mining practices that encourage advances in mining, reclamation, and postmining land use practices.

Section 1. General. Experimental practices provide a variance from the environmental protection performance standards of KRS Chapter 350 and 405 KAR Chapters 16 through 20 for experimental or research purposes to encourage advances in mining and reclamation practices or to allow certain alternative postmining land uses. Experimental practices may be undertaken if they are approved by the cabinet and the Director of OSM and if their terms and conditions are incorporated into a permit, a permit amendment, or a permit revision issued in accordance with 405 KAR 8:010. [(1) Applicability. This regulation shall apply to any person who conducts or intends to conduct surface coal mining and reclamation operations under a permit authorizing the use of alternative mining practices on an experimental basis if the practices require a variance from the environmental protection performance standards of Title 405, Chapters 16 through 20 and such variance is not otherwise obtainable under Title 405, Chapters 7 through 24.]

[(2) This regulation sets forth requirements for the permitting of surface coal mining and reclamation operations that encourage advances in mining and reclamation practices or allow postmining land use for industrial, commercial, residential or public use (including recreational facilities) on an experimental basis.]

[(3) Experimental practices need not comply with specific environmental protection performance standards of Title 405, Chapters 7 through 24, if approved pursuant to this regulation.]

Section 2. Approval Procedures. (1) Required approval [required]. No person shall engage in or maintain any experimental practice unless that practice is first approved in a permit by the cabinet and the Director of OSM.

(2) Application requirements. [Each person who desires to conduct an experimental practice shall submit a permit application for the approval of the cabinet and the Director of OSM.] Each [The] permit application submitted pursuant to this regulation shall contain appropriate descriptions, data, maps, and plans which identify [show]:

(a) The nature of the experimental practice, including a description of the performance standards for which variances are requested, the duration of the experimental practice, and any special monitoring which will be conducted. [;]

(b) How use of the experimental practice:

1. Encourages advances in mining and reclamation technology; or

2. Allows a postmining land use for industrial, commercial, residential, or public [use] (including recreational facilities) use on an experimental basis, when the results are not otherwise attainable under the regulations of 405 KAR Chapters 7 through 24.

[(c) That the mining and reclamation operations proposed for using an experimental practice are not larger or more numerous than necessary to determine the effectiveness and economic feasibility of the experimental practice;]

(c) [(d)] That the experimental practice:

1. Is potentially more, or at least as, environmentally protective during and after the proposed mining and reclamation operations as would otherwise be required by standards promulgated under 405 KAR Chapters 16 through 20 [those required under Title 405, Chapters 7 through 24]; and

2. Will not reduce the protection afforded

public health and safety below that is provided by the requirements of 405 KAR Chapters 16 through 20 [7 through 24].

(d) [(e)] That the applicant will conduct monitoring of the effects of the experimental practice [special monitoring with respect to the experimental practice during and after the operations involved]. The monitoring program shall[: 1.] ensure the collection, [and] analysis, and reporting of sufficient, [and] reliable data to enable the cabinet and the Director of OSM to: [make adequate comparisons with other surface coal mining and reclamation operations employing similar experimental practices; and]

1. Evaluate the effectiveness of the experimental practice; and

2. [Include requirements designed to] Identify, as soon as possible, potential risks to the environment and public health and safety which may be caused by the experimental practice during and after mining [from the use of the experimental practice].

(e) To the extent possible as can be foreseen prior to the actual conductance of the experimental practice, the procedures and measures which will be implemented to comply with the performance standards of KRS Chapter 350 and 405 KAR Chapters 16 through 20, or, if such compliance is not possible, to provide a level of protection equivalent to or in excess of that provided for by the performance standards of KRS Chapter 350 and 405 KAR Chapters 16 through 20, if the experimental practice should fail to be as environmentally protective or as protective of the health or safety of the public as provided for by the performance standards of KRS Chapter 350 and 405 KAR Chapters 16 through 20.

[(f) Each application shall set forth the environmental protection performance standards of Title 405, Chapters 7 through 24 which will be implemented, in the event the objective of the experimental practice is a failure.]

(3) Public notice. All experimental practices for which variances are sought shall be specifically identified through the newspaper advertisements by the applicant and the written notifications by the cabinet required under 405 KAR 8:010, Section 8.

(4) Criteria for approval. No permit authorizing an experimental practice shall be issued unless the cabinet finds, in writing upon the basis of both a complete application filed in accordance with the requirements of this regulation and 405 KAR Chapter 8, and the concurrence [comments] of the Director of OSM, that:

(a) The experimental practice encourages advances in mining and reclamation technology or allows a postmining land use for industrial, commercial, residential, or public (including recreational facilities) use on an experimental basis;

(b) The experimental practice is potentially more, or at least as, environmentally protective during and after mining operations as would otherwise be required under 405 KAR Chapters 16 through 20;

(c) The mining operations approved for a particular land use or other purpose are not larger or more numerous than necessary to determine the effectiveness and feasibility of the experimental practice; and

(d) The experimental practice does not reduce the protection afforded public health and safety below that provided by standards promulgated under 405 KAR Chapters 16 through 20.

[(a) The experimental practice meets all of the requirements of subsection (2)(b) through (e);]

[(b) The experimental practice is based on a clearly defined set of objectives which can reasonably be expected to be achieved;]

[(c) The experimental practice has been specifically approved, in writing, by the Director of OSM, based on the Director's findings that all of the requirements of subsection (2)(a) through (e) will be met; and]

[(d) The permit contains conditions which specifically:]

[1. Limit the experimental practice authorized to that granted by the cabinet and the Director of OSM.]

[2. Impose enforceable alternative environmental protection requirements; and]

[3. Require the person to conduct the periodic monitoring, recording and reporting program set forth in the application, with such additional requirements as the cabinet or the Director of OSM may require.]

(5) Revisions. Revisions to an experimental practice shall be processed and approved in accordance with 405 KAR 8:010, Section 20. Any revisions which propose significant alterations in the experimental practice shall be deemed major revisions and subject to the approval of the Director of OSM. Revisions that do not propose significant alterations in the experimental practice shall be deemed minor revisions and shall not require the approval of the Director of OSM.

(6) Prime farmland. Experimental practices granting variances from the special environmental peformance standards applicable to prime farmland shall be approved only after consultation with SCS.

(7) Alternative postmining land uses. Experimental practices granting variances from the requirements of KRS Chapter 350 and this Title for alternative postmining land uses shall not be approved by the cabinet, unless the attainment of the alternative postmining land uses would not otherwise be practicable or feasible without the approval of the experimental practice.

Section 3. Monitoring and Additional Requirements. (1) Each permittee undertaking an experimental practice shall conduct the periodic monitoring, recording, and reporting programs set forth and approved in the application. Each permittee shall satisfy such additional requirements as the cabinet or the Director of OSM may impose to ensure protection of the environment and the public health and safety.

(2) In accordance with 405 KAR 8:010, Section 18, the terms and conditions applicable to the experimental practice shall be as indicated in the approved permit application.

(3) If, subsequent to the issuance of a permit for an experimental practice, the experimental practice should fail to be as environmentally protective or as protective of the health or safety of the public as provided for by the performance standards of KRS Chapter 350 and 405 KAR Chapters 16 through 20, the permittee shall immediately contact the cabinet and the OSM, shall fully and accurately describe the situation to those agencies, and shall implement

those procedures and measures identified pursuant to Section 2(2)(e) of this regulation which are necessary to achieve such a condition. If the procedures and measures identified pursuant to Section 2(2)(e) of this regulation are determined by the cabinet or the OSM to be insufficient to achieve this condition, the permittee shall perform remedial measures as required by the cabinet or the OSM to achieve such a condition. If the cabinet or the OSM determines that such a level of protection cannot be achieved, the cabinet or the OSM shall inform the permittee of remedial measures which must be implemented to provide maximum protection to the environment and the health and safety of the public.

Section 4. [3.] Periodic Review. (1) Each [permit which authorizes the use of an] experimental practice shall be reviewed by the cabinet at a frequency set forth in the approved permit but no less than two and one-half (2 1/2) years [in its entirety at least every three (3) years by the cabinet or at least once prior to the middle of the permit term]. After review the cabinet shall, after consulting with the Director of OSM, [with the consent of the Director of OSM,] require, by order supported by written findings, any reasonable [revision or] modification of the experimental practice [permit provisions] necessary to ensure that the operations involved are conducted to fully protect [fully] the environment and public health and safety.

(2) Administrative review of modification order. Any person who is or may be adversely affected by an order pursuant to subsection (1) of this section shall be provided with an opportunity for a hearing as established in 405 KAR 7:090.

CHARLOTTE E. BALDWIN, Secretary
APPROVED BY AGENCY: November 14, 1985
FILED WITH LRC: November 15, 1985 at 11 a.m.
PUBLIC HEARING SCHEDULED: A public hearing on this regulation has been scheduled for December 30, 1985, at 10 a.m. in Room G-1 of the Capital Plaza Tower. Written comments may be submitted on or before the scheduled hearing date. However, if no written notice of intent to attend and testify at the public hearing is received within five (5) days before the scheduled hearing, the hearing will be cancelled. Those interested in attending and testifying at this hearing shall notify in writing: George Risk, Department for Surface Mining Reclamation and Enforcement, 3rd Floor Capital Plaza Tower, Frankfort, Kentucky 40601.

REGULATORY IMPACT ANALYSIS

Agency Contact Person: George Risk
(1) Type and number of entities affected: This regulation governs experimental mining and reclamation activities which encourage advances in mining, reclamation, and postmining land use practices. In that regard, this regulation affects all persons who submit permanent program applications for such activities and persons who conduct such experimental practices under Kentucky's permanent regulatory program for coal mining.

By affecting those persons identified above, this regulation also affects, directly or indirectly and in varying degrees, persons with interests in such experimental practices and persons who live in, or have interests in, the coal field regions of Kentucky.

To date, the cabinet has not issued any permanent program permits for experimental practices. Based on these previous trends, the cabinet anticipates that no experimental-practices permits will be issued prior to the effective date of the amendments proposed by this rulemaking. If this presumption is correct, this regulation, as amended by this rulemaking, will not impose additional requirements on any permanent program coal mining permit issued prior to the effective date of these amendments. However, due to the nature of the changes proposed by this rulemaking, a person who previously was unable to make all of the demonstrations necessary for the cabinet to approve his proposed experimental practice may be able to demonstrate compliance with the experimental-practices requirements as revised by this rulemaking and, therefore, may be able to obtain an experimental-practices permit under the amended regulation. The amendments as proposed will also affect several permit applications which are currently in the cabinet's review process.

(a) Direct and indirect costs or savings to those affected:

1. First year: The amendments proposed in this rulemaking will delete requirements from the current experimental-practices regulation as well as add requirements to this regulation. Many of the requirements which are to be added and those which are to be deleted pertain to the demonstrations that are required prior to approval of experimental practices.

The costs incurred by applicants in making the additional demonstrations necessary for the cabinet to approve an experimental practice will be offset, to some extent, by the savings resulting from the removal of some of the demonstration requirements. This cost-savings ratio will be determined by the nature and the specific proposals of each experimental practice.

2. Continuing costs or savings: See section (1)(a)1.

3. Additional factors increasing or decreasing costs (note any effects upon competition): None.

(b) Reporting and paperwork requirements: As discussed in section (1)(a)1, the demonstration requirements necessary for approval of an experimental practice are being revised by these amendments. As a result of these revised requirements, applications for experimental practices will be required to contain additional information for some facets of the practices; however, other application requirements will be removed by these amendments.

(2) Effects on the promulgating administrative body:

(a) Direct and indirect costs or savings:

1. First year: Under these proposed amendments, the cabinet will be required to make determinations concerning proposed experimental practices in excess of those determinations which are currently required. The cabinet will also be required to review experimental practices at least once every 2.5 years rather than once every 3 years as is currently required. Therefore, the cabinet will incur additional expenses as a result of these amendments. However, in light of previous trends regarding experimental practices, the cabinet anticipates that these additional expenses will

be minimal.

2. Continuing costs or savings: See section (2)(a)1.

3. Additional factors increasing or decreasing costs: None.

(b) Reporting and paperwork requirements: The increased determination requirements and the increased review frequency (see section (2)(a)1) imposed on the cabinet by these amendments will increase the workload (including paperwork) of the cabinet. However, this additional workload should be minimal if, as is anticipated by the cabinet, relatively few operations propose to conduct experimental practices.

(3) Assessment of anticipated effect on state and local revenues: None.

(4) Assessment of alternative methods; reasons why alternatives were rejected: None.

(5) Identify any statute, administrative regulation or government policy which may be in conflict, overlapping, or duplication: None.

(a) Necessity of proposed regulation if in conflict: Not applicable.

(b) If in conflict, was effort made to harmonize the proposed administrative regulation with conflicting provisions: Not applicable.

(6) Any additional information or comments: These amendments reflect interpretations manifested by the U.S. District Court in an Order of Dismissal for issues in In Re: Permanent Surface Mining Regulation Litigation II, Civil Action No. 79-1144.

Tiering:
Was tiering applied? No. Tiering is not applicable to these proposed amendments since these requirements must, pursuant to the federal and Kentucky surface mining laws and regulations, apply equally to all experimental practices under 405 KAR Chapters 7 through 24.

A fiscal note is not required for this regulation because it will have no impact on local government.

NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION CABINET
Department for Surface Mining Reclamation and Enforcement
(Proposed Amendment)

405 KAR 8:030. Surface coal mining permits.

RELATES TO: KRS 350.060, 350.465

PURSUANT TO: KRS Chapter 13A, 350.020, 350.028, 350.060, 350.465

NECESSITY AND FUNCTION: KRS Chapter 350 in pertinent part requires the cabinet to promulgate rules and regulations pertaining to permits for surface mining activities. This regulation specifies certain information to be shown by the applicant related to legal and compliance status, environmental resources, and his mining and reclamation plan. This regulation further specifies certain showings to be made by the applicant to obtain a permit.

Section 1. General. (1) This regulation applies to any person who applies for a permit to conduct surface mining activities.

(2) The requirements set forth in this regulation specifically for applications for permits to conduct surface mining activities are in addition to the requirements applicable to all applications for permits to conduct surface coal mining and reclamation operations as set forth in 405 KAR 8:010.

(3) This regulation sets forth information required to be contained in applications for permits to conduct surface mining activities, including:

(a) Legal, financial, compliance, and related information;

(b) Environmental resources information; and

(c) Mining and reclamation plan information.

Section 2. Identification of Interests. (1) Each application shall contain the names and addresses of:

(a) The permit applicant, including his or her telephone number;

(b) Every legal or equitable owner of record of the property to be mined;

(c) The holders of record of any leasehold interest in the property to be mined;

(d) Any purchaser of record, under a real estate contract, of the property to be mined;

(e) The operator, if different from the applicant, who will conduct surface mining activities on behalf of the applicant, including his or her telephone number; and

(f) The resident agent of the applicant who will accept service of process, including his or her telephone number.

(2) If any owner, holder, purchaser, or operator, identified under subsection (1) of this section, is a business entity other than a single proprietor, the application shall contain the names and addresses of their respective principals, officers, and resident agents.

(3) Each application shall contain a statement of whether the applicant is a corporation, partnership, single proprietorship, association or other business entity. For businesses other than single proprietorships, the application shall contain the following information, where applicable:

(a) Names and addresses of every officer, partner, director, or other person performing a function similar to a director of the applicant;

(b) Name and address of any person who is a principal shareholder of the applicant;

(c) Names under which the applicant, partner, or principal shareholder previously operated a surface coal mining operation in the United States within the five (5) years preceding the date of application;

(d) If a partnership, a certified copy of the partnership agreement; and

(e) If a domestic corporation, a certified copy of the certificate of incorporation from the Secretary of State; and if a foreign corporation, a certified copy of the certificate of authority to conduct business within the Commonwealth of Kentucky.

(4) Each application shall contain a statement of any current or previous coal mining permits in the United States held by the applicant during the five (5) years preceding the application and by any person identified in subsection (3)(c) of this section, and of any pending permit application to conduct surface coal mining and reclamation operations in the United States. The information shall be listed by permit or application number and identify the regulatory authority for each of those coal mining operations.

(5) Each application shall contain the names and addresses of the owners of record of all surface and subsurface areas contiguous to any

part of the proposed permit area.
(6) Each application shall contain the name of the proposed mine and all MSHA identification numbers that have been assigned for the mine and all sections.
(7) Each application shall contain proof, such as a power of attorney or a resolution of the board of directors, that the individual signing the application has the power to represent the applicant in the permit matter.
(8) Each application shall contain a statement of all lands, interests in lands, options, or pending bids on interests held or made by the applicant for lands which are contiguous to the area to be covered by the permit.

Section 3. Compliance Information. (1) Each application shall contain a statement of whether the applicant, any subsidiary, affiliate, or persons controlled by or under common control with the applicant has:
(a) Had a coal mining permit of the United States or any state suspended or revoked in the last five (5) years; or
(b) Forfeited a coal mining performance bond or similar security deposited in lieu of bond.
(2) If any such suspension, revocation, or forfeiture as described in subsection (1) of this section has occurred, the application shall contain a statement of the facts involved, including:
(a) Identification number and date of issuance of the permit, and date and amount of bond or similar security;
(b) Identification of the authority that suspended or revoked a permit or forfeited a bond and the stated reasons for that action;
(c) The current status of the permit, bond, or similar security involved;
(d) The date, location, and type of any administrative or judicial proceedings initiated concerning the suspension, revocation, or forfeiture; and
(e) The current status of these proceedings.
(3) Each application shall contain a list of each violation notice pertaining to SMCRA (P.L. 95-87) or KRS Chapter 350 and regulations promulgated thereto, received by the applicant in connection with any surface coal mining operation during the three (3) year period before the application date. Each application shall also contain a list of each violation notice pertaining to air or water environmental protection received by the applicant in connection with any surface coal mining operation during the three (3) year period before the application date, for violations of any law, rule or regulation of the United States, or of any state law, rule or regulation enacted pursuant to federal law, rule or regulation. The application shall also contain a statement regarding each violation notice, including:
(a) The date of issuance and identity of the issuing regulatory authority, department, or agency;
(b) A brief description of the particular violation alleged in the notice;
(c) The final resolution of each violation notice, if any;
(d) For each violation notice that has not been finally resolved:
1. The date, location, and type of any administrative or judicial proceedings initiated concerning the fact of the violation, including, but not limited to, proceedings initiated by the applicant to obtain administrative or judicial review of the fact of the violation and the current status of the proceedings; and
2. The actions, if any, taken or being taken by the applicant to abate the violation.
(4) Upon request by a small operator as defined in KRS 350.450(4)(d), the cabinet will provide to the small operator, with regard to persons under subsection (1) of this section which are identified by the small operator, the compliance information required by this section regarding suspension and revocation of permits and forfeiture of bonds under KRS Chapter 350, and information pertaining to violations of KRS Chapter 350 and regulations promulgated thereunder.

Section 4. Right of Entry and Right to Surface Mine. (1) Each application shall contain a description of the documents upon which the applicant bases his or her legal right to enter and begin surface mining activities in the permit area and whether that right is the subject of pending litigation. The description shall identify those documents by type and date of execution, identify the specific lands to which the document pertains, and explain the legal rights claimed by the applicant.
(2) Where the private mineral estate to be mined has been severed from the private surface estate, the application shall also provide for lands within the permit area, a copy of the document of conveyance that grants or reserves the right to extract the coal by surface mining methods.
(3) Nothing in this section shall be construed to afford the cabinet the authority to adjudicate property title disputes.

Section 5. Relationship to Areas Designated Unsuitable for Mining. (1) Each application shall contain a statement of available information on whether the proposed permit area is within an area designated unsuitable for surface mining activities under Title 405, Chapter 24 or under study for designation in an administrative proceeding under that chapter.
(2) If an applicant claims the exemption in 405 KAR 8:010, Section 14(4)(b), the application shall contain information supporting the applicant's assertion that it made substantial legal and financial commitments before January 4, 1977, concerning the proposed surface mining activities.
(3) If an applicant proposes to conduct surface mining activities within 300 feet of an occupied dwelling, the application shall contain the waiver of the owner of the dwelling as required in 405 KAR 24:040, Section 2(5).

Section 6. Permit Term Information. (1) Each application shall state the anticipated or actual starting and termination date of each phase of the surface mining activities and the anticipated number of acres of land to be affected for each phase of mining and over the total life of the permit.
(2) If the applicant proposes to conduct the surface mining activities in excess of five (5) years, the application shall contain the information needed for the showing required under 405 KAR 8:010, Section 17(1).

Section 7. Personal Injury and Property Damage

Insurance Information. Each permit application shall contain a certificate of liability insurance according to 405 KAR 10:030, Section 4.

Section 8. Identification of Other Licenses and Permits. Each application shall contain a list of all other licenses and permits needed by the applicant to conduct the proposed surface mining activities. This list shall identify each license and permit by:

(1) Type of permit or license;

(2) Name and address of issuing authority;

(3) Identification numbers of applications for those permits or licenses or, if issued, the identification numbers of the permits or licenses; and

(4) If a decision has been made, the date of approval or disapproval by each issuing authority.

Section 9. Identification of Location of Public Office for Filing of Application. Each application shall identify, by name and address, the appropriate regional office of the cabinet where the applicant will file a copy of the complete application for public inspection under 405 KAR 8:010, Section 8(8).

Section 10. Newspaper Advertisement and Proof of Publication. A copy of the newspaper advertisement of the application and proof of publication of the advertisement shall be filed with the cabinet and made a part of the complete application, not later than fifteen (15) days after the last date of publication required under 405 KAR 8:010, Section 8(2).

Section 11. Environmental Resources Information. (1) Each permit application shall include descriptions of the existing environmental resources within the proposed permit area and adjacent areas as required by Sections 11 through 23 of this regulation. The descriptions required by this regulation may, where appropriate, be based upon published texts or other public documents together with reasonable extrapolations from specific data available from existing permit areas or other appropriate areas.

(2) Each application shall describe and identify the nature of cultural and historic resources listed in or eligible for listing in the National Register of Historic Places and known archaeological features within the proposed permit area and adjacent areas. The description shall be based on all available information, including, but not limited to, data of state and local archaeological, historical, and cultural preservation agencies.

Section 12. General Requirements for Baseline Geologic and Hydrologic Information. (1) The application shall contain baseline geologic and hydrologic information which has been collected, analyzed, and submitted in the detail and manner acceptable to the cabinet, and which shall be sufficient to:

(a) Identify and describe protective measures pursuant to Section 32(1) of this regulation which will be implemented during the mining and reclamation process to assure protection of the hydrologic balance, or to demonstrate that protection of the hydrologic balance can be assured without the design and installation of protective measures; and to design necessary protective measures pursuant to Section 32(2) of this regulation;

(b) Determine the probable hydrologic consequences of the mining and reclamation operations upon the hydrologic balance in the permit area and adjacent area pursuant to Section 32(3) of this regulation so that an assessment can be made by the cabinet pursuant to 405 KAR 8:010, Section 14(3) of the probable cumulative impacts of all anticipated mining on the hydrologic balance in the cumulative impact area;

(c) Determine pursuant to 405 KAR 8:010, Section 14(2) and (3) whether reclamation as required by KAR Title 405 can be accomplished and whether the proposed operation has been designed to prevent material damage to the hydrologic balance; and

(d) Design surface and ground water monitoring systems pursuant to Section 32(4) of this regulation for the during-mining and postmining time period which, together with the baseline data collected under Sections 14(1) and 15(1) of this regulation, will demonstrate whether the mining operation is meeting applicable effluent limitations and stream standards and protecting the hydrologic balance.

(2)(a) Geologic and hydrologic information pertaining to the area outside the permit and adjacent area but within the cumulative impact assessment area shall be provided to the applicant by the cabinet:

1. If this information is needed in preparing the cumulative impact assessment; and

2. If this information is available from an appropriate federal or state agency.

(b) If this information is needed by the cabinet for conducting the cumulative impact assessment and is not available from a federal or state agency, the applicant may gather and submit this information to the cabinet as part of the permit application.

(3) Interpolation, modeling, correlation or other statistical methods, and other data extrapolation techniques may be used if the applicant can demonstrate to the satisfaction of the cabinet that such data extrapolation techniques are valid and that information obtained through such techniques meets the requirements of subsection (1) of this section.

(4) All water quality analyses performed to meet the requirements of this chapter shall be conducted according to the methodology in the fourteenth edition of "Standard Methods for the Examination of Water and Wastewater," or the methodology in 40 CFR Parts 136 and 434. All water quality sampling shall be conducted according to either methodology listed above when feasible.

Section 13. Baseline Geologic Information. (1) The application shall contain baseline geologic information collected from the permit area which shall meet the requirements of Section 12(1) of this regulation and shall include at a minimum:

(a) The results of samples obtained from continuous cores; drill cuttings; channel cuttings from fresh, unweathered, rock outcrops; or other rock or soil material which has been collected using acceptable sampling techniques.

1. The vertical extent of sampling shall include those strata from the surface down to and including the stratum immediately below the lowest coal seam to be mined; and

2. Where aquifers which are located within the

permit area underlie the lowest coal seam to be mined and such aquifers may be adversely affected by the mining operation, the vertical extent of sampling shall also include those strata from the lowest coal seam to be mined down to and including such aquifers.

3. The areal and vertical density of sampling shall, at a minimum, be sufficient to determine the distribution of strata which have a potential to produce acid drainage and to determine the areal and vertical extent of aquifers which may be adversely affected.

4. If the vertical extent, and the areal and vertical density of sampling specified in subparagraphs 1 through 3 of this paragraph are not sufficient to locate suitable strata for use as a topsoil substitute, or for other required design or analysis, additional sampling shall be conducted as necessary to furnish adequate geologic information.

(b) Chemical analyses including, but not limited to, maximum potential acidity and neutralization potential of each overburden stratum and the stratum immediately below the lowest coal seam to be mined, to identify those strata which have a potential to produce acid or toxic drainage.

(c) Chemical analyses of the coal seam to be mined to determine the potential to produce acid or toxic drainage, including the parameters of total sulfur and pyritic sulfur; except that the cabinet will not require an analysis for pyritic sulfur if the applicant can demonstrate to the satisfaction of the cabinet that an analysis for total sulfur provides adequate information to assure protection of the hydrologic balance.

(d) Collection of geologic information from the permit area as required in this subsection may be waived in whole or in part if:

1. The applicant can demonstrate to the satisfaction of the cabinet through geologic correlation or other procedures that information collected from outside the permit area is representative of the permit area and is sufficient to meet the requirements of Section 12(1) of this regulation; or

2. Other information equivalent to that required by this subsection is available to the cabinet in a satisfactory form and is made a part of the permit application; and

3. The cabinet provides a written statement granting a waiver.

(2) The application shall contain a description of the geology of the proposed permit area and adjacent area which shall meet the requirements of Section 12(1) of this regulation and be based on the information required in subsection (1) of this section or other appropriate geologic information. The description shall include, at a minimum, geologic logs, cross-sections, fence diagrams, or other appropriate illustrations and written descriptions depicting:

(a) Within the permit area:

1. The structural geology and lithology of overburden strata and the stratum immediately below the lowest coal seam to be mined;

2. The thickness and chemical characteristics of each overburden stratum and the stratum immediately below the lowest coal seam to be mined; and

3. Where aquifers may be adversely affected by the mining operation, the structural geology, lithology, thickness, and areal extent of such aquifers; and structural geology and lithology of strata, and thickness of each stratum, from the surface down to such aquifers.

(b) Within the adjacent area, the approximate areal extent and approximate thickness of aquifers which may be adversely affected by the mining operation.

(3) If determined by the cabinet to be necessary to assure adequate reclamation and protection of the hydrologic balance, the cabinet may require geologic information and description in addition to that required by subsections (1) and (2) of this section including, but not limited to, leaching tests of material from strata which may be disturbed by the operation to determine the potential for the operation to produce drainage with elevated levels of acidity, sulfate, and total dissolved solids, and the collection of information to greater depths within the proposed permit area or the collection of information for areas outside the proposed permit area.

Section 14. Baseline Ground Water Information. (1) The application shall contain baseline ground water information for the permit area and adjacent area which shall be collected and submitted in a manner acceptable to the cabinet and shall be adequate to meet the requirements of Section 12(1) of this regulation.

(2) Ground water information shall include an inventory of wells, springs, underground mines, or other similar ground water supply facilities which are currently being used, have been used in the past, or have a potential to be used for domestic, agricultural, industrial, or other beneficial purpose. The inventory shall include the location, ownership, type of usage, and where possible, other relevant information such as the depth and diameter of wells and approximate rate of usage, pumpage or discharge from wells, springs, and other ground water supply facilities.

(3) Ground water information shall include seasonal ground water quantity and quality data collected from monitoring wells, springs, underground mines, or other appropriate ground water monitoring facilities, at a sufficient number of monitoring locations with adequate areal distribution to meet the requirements of Section 12(1) of this regulation. Seasonal ground water quantity and quality data shall be provided for each water transmitting zone above, and potentially impacted water transmitting zone below, the lowest coal seam to be mined including at a minimum:

(a) Ground water levels; and

(b) Total dissolved solids, or specific conductance corrected to twenty-five (25) degrees C; pH; dissolved iron; dissolved manganese; acidity; alkalinity; and sulfate. For data collected prior to the effective date of these amendments, total iron and total manganese may be substituted for dissolved iron and dissolved manganese.

(4) The ground water information described in subsection (3) of this section will be required in whole or in part for coal seams in those cases where coal seams to be mined are serving as water supply sources or are otherwise significant in protecting the hydrologic balance.

(5) If additional information is needed to assess the need for protective measures, to design protective measures, to determine the probable hydrologic consequences of mining, or to conduct the cumulative impact assessment, the

cabinet may require ground water information in addition to that described in subsections (2), (3), and (4) of this section including, but not limited to, information pertaining to aquifer storage, yield, discharge, recharge capacity, and additional water quality parameters.

Section 15. Baseline Surface Water Information. (1) The application shall contain baseline surface water information for the permit area and adjacent area which shall be collected and submitted in a manner acceptable to the cabinet and shall be adequate to meet the requirements of Section 12(1) of this regulation.

(2) Surface water information shall include an inventory of all streams, lakes, impoundments or other surface water bodies in the permit and adjacent area which are currently being used for domestic, agricultural, industrial, or other beneficial purpose. The inventory shall include the name of the surface water body which is being used as a water supply source; the location, drainage area, ownership, and type of usage for the withdrawal; and where possible other relevant information such as the rate of withdrawal and seasonal variation.

(3) Surface water information shall include:

(a) The name, location, and ownership where appropriate, of all streams, lakes, impoundments, and other surface water bodies which receive runoff from watersheds which will be disturbed by the operation; and

(b) The location and description of any existing facilities located in watersheds which will be disturbed by the mining operation which may contribute to surface water pollution, such as existing or abandoned mining operations, oil wells, logging operations, or other similar facilities, including the location of any discharges which may be flowing from such facilities.

(4) Surface water information shall include seasonal quantity and quality data collected from a sufficient number of watersheds which will be disturbed by the operation with adequate areal distribution to meet the requirements of Section 12(1) of this regulation and include at a minimum:

(a) Flow rates; and

(b) Total dissolved solids, or specific conductance corrected to twenty-five (25) degrees C; total suspended solids; pH; total iron; total manganese; acidity; alkalinity; and sulfate.

(5) If additional information is needed to assess the need for protective measures, to design protective measures, to determine the probable hydrologic consequences of mining, or to conduct the cumulative impact assessment, the cabinet may require surface water information in addition to that described in subsections (2), (3), and (4) of this section including, but not limited to, information pertaining to flood flows and additional water quality parameters.

Section 16. Alternative Water Supply Information. (1) The application shall identify the extent to which the proposed surface mining activities may proximately result in contamination, diminution, or interruption of an underground or surface source of water within the proposed permit area or adjacent area which is used for domestic, agricultural, industrial, or other beneficial use.

(2) If contamination, diminution, or interruption of a surface or ground water source may result, then the application shall identify and describe the adequacy and suitability of the alternative sources of water supply that could be developed for existing premining uses and approved postmining land uses.

Section 17. Climatological Information. (1) When requested by the cabinet, the application shall contain a statement of the climatological factors that are representative of the proposed permit area, including:

(a) The average seasonal precipitation;

(b) The average direction and velocity of prevailing winds; and

(c) Seasonal temperature ranges.

(2) The cabinet may request such additional data as deemed necessary to ensure compliance with the requirements of this chapter.

Section 18. Soil Resources Information. (1) If soil survey information for the proposed permit area is available from SCS, the application shall include such information as a part of the description of premining land use capability and productivity required by Section 22(1)(b).

(2) Where the applicant proposes to use selected overburden materials as a supplement or substitute for topsoil, the application shall provide results of analyses, trials, and tests as required under 405 KAR 16:050, Section 2.

Section 19. Vegetation Information. (1) The permit application shall, as required by the cabinet, contain a map that delineates existing vegetative types and a description of the plant communities within the proposed permit area and within any proposed reference area. This description shall include information adequate to predict the potential for reestablishing vegetation.

(2) When a map or aerial photograph is required, sufficient adjacent areas shall be included to allow evaluation of vegetation as important habitat for fish and wildlife.

Section 20. Fish and Wildlife Resources Information. Permit applications shall not be required under this section to contain a study of fish and wildlife unless and until federal regulations requiring such study have been promulgated and this regulation has been amended as necessary to be consistent with the corresponding federal regulations.

Section 21. Prime Farmland Investigation. (1) The applicant shall before making application investigate the proposed permit area to determine whether lands within the area may be prime farmland.

(2) Land shall not be considered prime farmland where the applicant can demonstrate, to the satisfaction of the cabinet, one (1) of the following:

(a) The land has not been historically used as cropland;

(b) The slope of the land is ten (10) percent or greater;

(c) Other relevant factors exist, which would preclude the soils from being defined as prime farmland according to 7 CFR 657, such as a very rocky surface, or the land is flooded during the growing season more often than once in two (2) years, and the flooding has reduced crop yields; or

(d) On the basis of a soil survey of lands within the permit area, there are no soil map units that have been designated prime farmland by the U.S. SCS.

(3) If the investigation establishes that the lands are not prime farmland, the applicant shall submit with the permit application a request for a negative determination and results of the investigation which show that the land for which the negative determination is sought meets one (1) of the criteria of subsection (2) of this section.

(4) If the investigation indicates that lands within the proposed permit area may be prime farmlands, the applicant shall contact the U.S. SCS to determine if a soil survey exists for those lands and whether the applicable soil map units have been designated as prime farmlands. If no soil survey has been made for the lands within the proposed permit area, the applicant shall request the SCS to conduct a soil survey [cause such a survey to be made].

(a) When a soil survey of lands within the proposed permit area contains soil map units which have been designated as prime farmlands, the applicant shall submit an application, in accordance with 405 KAR 8:050, Section 3 for such designated land.

(b) When a soil survey for lands within the proposed permit area contains no soil map units which have [not] been designated as prime farmland after review by the U.S. SCS, the applicant shall submit with the permit application a request for negative determination under subsection (2)(d) of this section for such non-designated land.

(5) The cabinet shall decide to grant or deny a negative determination based upon documentation provided by the applicant and any other pertinent information, such as cropping history, available to the cabinet from other sources.

(6) The cabinet shall consult with the SCS in deciding on a request for negative determination under subsection (2)(c) of this section.

(7) The cabinet shall examine any records on crop history available from the Agriculture Stabilization and Conservation Service when deciding on a request for negative determination under subsection (2)(a) of this section. Any such request for negative determination shall include signed, notarized affidavits from landowners identifying the uses of the land for each year of the ten (10) year period.

Section 22. Land-use Information. (1) The application shall contain a statement of the condition, capability, and productivity of the land within the proposed permit area, including:

(a) A map and supporting narrative of the uses of the land existing at the time of the filing of the application. If the premining use of the land was changed within five (5) years before the date of application, the historic use of the land shall also be described.

(b) A narrative of land use capability and productivity, which analyzes the land-use description in conjunction with other environmental resources information required under this regulation. The narrative shall provide analyses of:

1. The capability of the land before any mining to support a variety of uses, giving consideration to soil and foundation characteristics, topography, vegetative cover and the hydrology of the proposed permit area; and

2. The productivity of the proposed permit area before mining, expressed as average yield of food, fiber, forage, or wood products from such lands obtained under high levels of management. The productivity shall be determined by yield data or estimates for similar sites based on current data from the U.S. Department of Agriculture, state agricultural universities or appropriate state natural resource or agricultural agencies.

(2) The application shall state whether the proposed permit area has been previously mined, and, if so, the following information, if available:

(a) The type of mining method used;

(b) The coal seams or other mineral strata mined;

(c) The extent of coal or other minerals removed;

(d) The approximate dates of past mining; and

(e) The uses of the land preceding mining.

(3) The application shall contain a description of the existing land uses and local government land use classifications, if any, of the proposed permit area and adjacent areas.

(4) The application shall contain a description identifying the extent to which cities, towns, and municipalities, or parts thereof, are located within the proposed permit area.

Section 23. Maps and Drawings. (1) The permit application shall include a map or maps showing:

(a) The boundaries of all subareas which are proposed to be affected over the estimated total life of the proposed surface mining activities, with a description of the size, sequence, and timing of the surface mining operations for which it is anticipated that additional permits will be sought;

(b) Any land within the proposed permit area and adjacent area which is within the boundaries of any units of the National System of Trails or the Wild and Scenic Rivers System, including study rivers designated under Section 5(a) of the Wild and Scenic Rivers Act (16 USC 1276(a)), or which is within the boundaries of a wild river established pursuant to KRS Chapter 146;

(c) The boundaries of any public park and locations of any cultural or historical resources listed in or eligible for listing in the National Register of Historic Places and known archaeological sites within the permit area and adjacent areas;

(d) The locations of water supply intakes for current users of surface water within a hydrologic area defined by the cabinet, and those surface waters which will receive discharges from affected areas in the proposed permit area;

(e) All boundaries of lands and names of present owners of record of those lands, both surface and subsurface, included in or contiguous to the permit area;

(f) The boundaries of land within the proposed permit area upon which the applicant has the legal right to enter and begin surface mining activities;

(g) The location of surface and subsurface manmade features within, passing through, or passing over the proposed permit area, including, but not limited to, major electric transmission lines, pipelines, and agricultural

drainage tile fields;
(h) The location and boundaries of any proposed reference areas for determining the success of revegetation for the permit area;
(i) The location of all buildings on and within 1,000 feet of the proposed permit area, with identification of the current use of the buildings;
(j) Each public road located in or within 100 feet of the proposed permit area;
(k) Each public or private cemetery or Indian burial ground located in or within 100 feet of the proposed permit area;
(l) Other relevant information required by the cabinet.
(2) The application shall include drawings, cross sections, and maps showing:
(a) Elevations and locations of test borings and core samplings;
(b) Elevations and locations of monitoring stations or other sampling points in the permit area and adjacent areas used to gather data on water quality and quantity, fish and wildlife, and air quality, if required, in preparation of the application, or which will be used for such data gathering during the term of the permit;
(c) Nature, depth, and thickness of the coal seams to be mined, any coal or rider seams above the seam to be mined, each stratum of the overburden, and the stratum immediately below the lowest coal seam to be mined, for the permit area;
(d) All coal crop lines and the strike and dip of the coal to be mined within the proposed permit area;
(e) Location and extent of known workings of active, inactive, or abandoned underground mines, including mine openings to the surface within the proposed permit area and adjacent areas;
(f) Location and extent of subsurface water, if encountered, within the proposed permit area or adjacent areas;
(g) Location of surface water bodies such as streams, lakes, ponds, springs, constructed or natural drainage patterns, and irrigation ditches within the proposed permit area and adjacent areas;
(h) Location and extent of existing or previously surface-mined areas within the proposed permit area;
(i) Location, and depth if available, of gas and oil wells within the proposed permit area and water wells in the permit area and adjacent areas;
(j) Location and dimensions of existing areas of spoil, waste, and non-coal waste disposal, dams, embankments, other impoundments, and water treatment and air pollution control facilities within the proposed permit area;
(k) Sufficient slope measurements to adequately represent the existing land surface configuration of the proposed permit area, measured and recorded according to the following:
1. Each measurement shall consist of an angle of inclination along the prevailing slope extending 100 linear feet above and below or beyond the coal outcrop or the area to be disturbed or, where this is impractical, at locations and in a manner as specified by the cabinet.
2. Where the area has been previously mined, the measurements shall extend at least 100 feet beyond the limits of mining disturbances, or any other distance determined by the cabinet to be representative of the premining configuration of the land.
3. Slope measurements shall take in account natural variations in slope, to provide accurate representation of the range of natural slopes and reflect geomorphic differences of the area to be disturbed.
(3) The permit application shall include the map information specified in Sections 22(1)(a), 24(3), 24(4)(c), 24(4)(h), 27(1), 28(1), 31, 32, 33, 34, and 38 of this regulation, and 405 KAR 8:010, Section 5(6).
(4) Maps, drawings, and cross-sections included in a permit application which are required by this section shall be prepared by or under the direction of and certified by a qualified registered professional engineer, and shall be updated as required by the cabinet. The qualified registered professional engineer shall not be required to certify true ownership of property.

Section 24. Mining and Reclamation Plan; General Requirements. (1) Each application shall contain a detailed mining and reclamation plan (MRP) for the proposed permit area as set forth in this section through Section 38, showing how the applicant will comply with KRS Chapter 350 and Title 405, Chapters 16 through 20.
(2) Each application shall contain a description of the mining operations proposed to be conducted within the proposed permit area, including, at a minimum, the following:
(a) A narrative description of the type and method of coal mining procedures and proposed engineering techniques, anticipated annual and total production of coal, by tonnage, and the major equipment to be used for all aspects of those operations; and
(b) A narrative explaining the construction, modification, use, maintenance, and removal of the following facilities (unless retention of such facilities is approved as necessary for postmining land use as specified in 405 KAR 16:210):
1. Dams, embankments, and other impoundments;
2. Overburden and topsoil handling and storage areas and structures;
3. Coal removal, handling, storage, cleaning, and transportation areas and structures;
4. Spoil, coal processing waste, and non-coal waste removal, handling, storage, transportation, and disposal areas and structures;
5. Mine facilities; and
6. Water and air pollution control facilities.
(3) Each application shall contain plans and maps of the proposed permit area and adjacent areas as follows:
(a) The plans and maps shall show the lands proposed to be affected throughout the operation and any change in a facility or feature to be caused by the proposed operations, if the facility or feature was shown under Section 23 of this regulation.
(b) The following shall be shown for the proposed permit area:
1. Buildings, utility corridors and facilities to be used;
2. The area of land to be affected within the proposed permit area, according to the sequence of mining and reclamation;
3. Each area of land for which a performance bond or other equivalent guarantee will be posted under Title 405, Chapter 10;

4. Each coal storage, cleaning and loading area;
5. Each topsoil, spoil, coal waste, and non-coal waste storage area;
6. Each water diversion, collection, conveyance, treatment, storage, and discharge facility to be used;
7. Each air pollution collection and control facility;
8. Each source of waste and each waste disposal facility relating to coal processing or pollution control;
9. Each facility to be used to protect and enhance fish and wildlife and related environmental values;
10. Each explosive storage and handling facility; and
11. Location of each sedimentation pond, permanent water impoundment, coal processing waste bank, and coal processing waste dam and embankment, in accordance with Section 34 of this regulation, and fill area for the disposal of excess spoil in accordance with Section 27 of this regulation.

(c) Plans, maps, and drawings required under this section shall be prepared by, or under the direction of, and certified by a qualified registered professional engineer.

(4) Each plan shall contain the following information for the proposed permit area:

(a) A projected timetable for the completion of each major step in the mining and reclamation plan;

(b) A detailed estimate of the cost of reclamation of the proposed operations required to be covered by a performance bond under Title 405, Chapter 10, with supporting calculations for the estimates;

(c) A plan for backfilling, soil stabilization, compacting, and grading, with contour maps or cross-sections that show the anticipated final surface configuration of the proposed permit area, in accordance with 405 KAR 16:190;

(d) A plan for removal, storage, and redistribution of topsoil, subsoil, and other material to meet the requirements of 405 KAR 16:050 including a demonstration of suitability of any proposed topsoil substitutes or supplements;

(e) A plan for revegetation as required in 405 KAR 16:200, including, but not limited to, descriptions of the: schedule of revegetation; species and amounts per acre of seeds and seedlings to be used; methods to be used in planting and seeding; mulching techniques; irrigation, if appropriate; pest and disease control measures, if any; and measures proposed to be used to determine the success of revegetation as required in 405 KAR 16:200, Section 6; and a soil testing plan for evaluation of the results of topsoil handling and reclamation procedures related to revegetation;

(f) A description of the measures to be used to maximize the use and conservation of the coal resource as required in 405 KAR 16:010, Section 2;

(g) A description of measures to be employed to ensure that all debris, acid-forming and toxic-forming materials, and materials constituting a fire hazard are disposed of in accordance with 405 KAR 16:150, and 405 KAR 16:190, Section 3, and a description of the contingency plans which have been developed to preclude sustained combustion of such materials;

(h) A description, including appropriate maps and drawings, of the measures to be used to seal or manage mine openings, and to plug, case, or manage exploration holes, other bore holes, wells, and other openings within the proposed permit area, in accordance with 405 KAR 16:040; and

(i) A description of steps to be taken to comply with the requirements of the Clean Air Act (42 USC Sec. 7401 et seq.), the Clean Water Act (33 USC Sec. 1251 et seq.), and other applicable air and water quality laws and regulations and health and safety standards. This description shall, at a minimum, consist of identification of permits or approvals required by these laws and regulations which the applicant either has obtained, has applied for, or intends to apply for.

Section 25. MRP; Existing Structures. (1) Each application shall contain a description of each existing structure proposed to be used in connection with or to facilitate the surface coal mining and reclamation operation. The description shall include:

(a) Location;

(b) Plans of the structure which describe its current condition;

(c) Approximate dates on which construction of the existing structure was begun and completed; and

(d) A showing, including relevant monitoring data or other evidence, whether the structure meets the performance standards of Title 405, Chapters 16 through 20 or, if the structure does not meet those performance standards, a showing whether the structure meets the performance standards of the interim performance standards of Title 405, Chapter 1.

(2) Each application shall contain a compliance plan for each existing structure proposed to be modified or reconstructed for use in connection with or to facilitate the surface coal mining and reclamation operation. The compliance plan shall include:

(a) Design specifications for the modification or reconstruction of the structure to meet the performance standards of Title 405, Chapters 16 through 20;

(b) A construction schedule which shows dates for beginning and completing interim steps and final reconstruction;

(c) Provisions for monitoring the structure as required by the cabinet to ensure that the performance standards of Title 405, Chapters 16 through 20 are met; and

(d) A showing that the risk of harm to the environment or to public health or safety is not significant during the period of modification or reconstruction.

Section 26. MRP; Blasting. (1) Each application shall contain a blasting plan for the proposed permit area explaining how the applicant intends to comply with the requirements of 405 KAR 16:120. This plan shall include, at a minimum, information setting forth the limitations the permittee will meet with regard to ground vibration and airblast, the bases for the ground vibration and airblast limitations, and the methods to be applied in controlling the adverse effects of blasting operations.

(2) Each application shall contain a

description of the systems to be used to monitor compliance with the standards for ground vibration and airblast including identification of the types, capabilities, and sensitivities of blast monitoring equipment and identification of the monitoring procedures and locations.

(3) Blasting operations within 500 feet of active underground mines require approval of the cabinet, MSHA, and the Kentucky Department of Mines and Minerals.

Section 27. MRP; Disposal of Excess Spoil. (1) Each application shall contain descriptions, including appropriate maps and cross-section drawings, of the proposed disposal site and design of the spoil disposal structures according to 405 KAR 16:130. These plans shall describe the geotechnical investigation, design, construction, operation, maintenance, and removal if appropriate, of the site and structures.

(2) Each application shall contain the results of a geotechnical investigation of the proposed disposal site, including the following:

(a) The character of bedrock and any adverse geologic conditions in the disposal area;

(b) A survey identifying all springs, seepage, and groundwater flow observed or anticipated during wet periods in the area of the disposal site;

(c) An assessment of the potential effects of subsidence of the subsurface strata due to past and future mining operations;

(d) A technical description of the rock materials to be utilized in the construction of those disposal structures containing rock chimney cores or underlain by a rock drainage blanket; and

(e) A stability analysis including, but not limited to, strength parameters, pore pressures and long-term seepage conditions. These data shall be accompanied by a description of all engineering design assumptions and calculations and the alternatives considered in selecting the specific design specifications and methods.

(3) If, under 405 KAR 16:130, Section 1(4) [(9)], rock toe buttresses or key way cuts are required, the application shall include the following:

(a) The number, location, and depth of borings or test pits which shall be determined with respect to the size of the spoil disposal structure and subsurface conditions; and

(b) Engineering specifications utilized to design the rock toe buttresses or key way cuts which shall be determined in accordance with subsection (2)(e) of this section.

Section 28. MRP; Transportation Facilities. (1) Each application shall contain a transportation facilities plan including a description of each road, conveyor, or rail system to be constructed, used, or maintained within the proposed permit area. The description shall include a map, appropriate cross-sections, and the following:

(a) Specifications for each road width, road gradient, road surface. road cut, fill embankment, culvert, bridge, drainage ditch, and drainage structure.

(b) A report of appropriate geotechnical analysis, where approval of the cabinet is required for alternative specifications, or for steep cut slopes under 405 KAR 16:220.

(c) A description of measures to be taken to obtain approval of the cabinet for alteration or relocation of a natural drainageway under 405 KAR 16:220.

(d) A description of measures, other than use of a rock headwall, to be taken to protect the inlet end of a ditch relief culvert, for approval by the cabinet under 405 KAR 16:220.

(2) Each plan shall contain a general description of each road, conveyor, or rail system to be constructed, used, or maintained within the proposed permit area.

Section 29. MRP; Surface Mining Near Underground Mining. For surface mining activities within the proposed permit area to be conducted within 500 feet of an underground mine, the application shall describe the measures to be used to comply with 405 KAR 16:010, Section 3.

Section 30. MRP; Protection of Public Parks and Historic Places. For any public parks or historic places that may be adversely affected by the proposed operations, each plan shall describe the measures to be used to minimize or prevent these impacts and to obtain approval of the cabinet and other agencies as required in 405 KAR 24:040, Section 2(4).

Section 31. MRP; Protection of Public Roads. Each application shall describe, with appropriate maps and drawings, the measures to be used to ensure that the interests of the public and landowners affected are protected if, under 405 KAR 24:040, Section 2(6), the applicant seeks to have the cabinet approve:

(1) Conducting the proposed surface mining activities within 100 feet of the right-of-way line of any public road, except where mine access or haul roads join that right-of-way; or

(2) Relocating a public road.

Section 32. MRP; Protection of the Hydrologic Balance. (1) Each application shall contain a description, as set forth in this subsection, of the measures to be taken to minimize disturbances to the hydrologic balance within the permit area and adjacent area and to prevent material damage to the hydrologic balance outside the permit area.

(a) The description shall be based upon the baseline geologic, hydrologic, and other information required by Sections 12 through 16 of this regulation and other appropriate information, shall be specific to local hydrologic conditions, and shall be prepared in a manner and detail acceptable to the cabinet.

(b) The description shall identify the protective measures to be taken to enable the operation to meet, at a minimum, each of the hydrologic requirements referenced in this paragraph, or shall demonstrate to the satisfaction of the cabinet that protective measures are not necessary in order to enable the operation to meet such requirements:

1. Meet applicable water quality statutes, regulations, standards, and effluent limitations as required by 405 KAR 16:060, Section 1(3);

2. Avoid acid or toxic drainage as required by 405 KAR 16:060, Sections 4, [and] 5, and 6;

3. Control the discharge of sediment to streams located outside the permit area as required by 405 KAR 16:060, Section 2;

4. Control the drainage and discharge of water within the permit area as required by 405 KAR

16:060, Sections 1(4), 3, 9, and 12, and 405 KAR 16:080;

5. Restore the approximate premining recharge capacity of the permit area as required by 405 KAR 16:060, Section 5 [6]; and

6. Protect or replace the water supply of present users as required by 405 KAR 16:060, Section 8.

(c) The cabinet may require that the description include protective measures in addition to those identified under paragraph (b) of this subsection, if the cabinet determines that additional measures are needed to protect the hydrologic balance in accordance with 405 KAR 16:060.

(2) Each application shall include the design of any necessary protective measures identified under subsection (1) of this section. The design shall be prepared in a manner and detail acceptable to the cabinet including, as appropriate, calculations, maps, drawings, and written explanations as necessary to document the design.

(3) Each application shall include a determination of the probable hydrologic consequences of the mining and reclamation operations for the permit area and adjacent area.

(a) The determination shall be based upon the baseline geologic, hydrologic, and other information required by Sections 12 through 16 of this regulation and other appropriate information, and may include information statistically representative of the site.

(b) The determination shall be completed according to the parameters and in the detail required by the cabinet to enable the cabinet to prepare a cumulative impact assessment, and shall take into account the anticipated effects of protective measures required by this chapter.

(c) For surface water systems, the determination shall, at a minimum, include probable impacts on:

1. Peak discharge rates, emphasizing the potential for flooding;

2. Settleable solids at peak discharge;

3. Low-flow discharge rates, emphasizing the potential for water supply diminution;

4. Suspended solids at low flow;

5. pH, at low flow, emphasizing the potential for acid drainage conditions, including depressed levels of alkalinity and elevated levels of iron, manganese, acidity, sulfate, and total dissolved solids or specific conductance, which are generally associated with acid drainage conditions.

(d) For ground water systems, the determination shall, at a minimum, include probable impacts on:

1. Water quantity, emphasizing water levels and the potential for water supply diminution for existing users, and dewatering of aquifers which are not currently being used for water supply but have the potential to be developed as a water supply source.

2. pH, emphasizing the potential for acid drainage conditions, including depressed levels of alkalinity and elevated levels of iron, manganese, acidity, sulfate, and total dissolved solids or specific conductance, which are generally associated with acid drainage conditions.

(e) An application for a major revision to a permit shall be reviewed by the cabinet to determine whether a new or updated determination of the probable hydrologic consequences shall be required.

(4)(a) The application shall include a plan for the collection, recording, and reporting of ground water and surface water quantity and quality data to monitor the effects of the mining and reclamation operations on the hydrologic balance, according to 405 KAR 16:110.

(b) The monitoring plan shall be based on the geologic and hydrologic baseline information, the mining and reclamation plan, and the determination of probable hydrologic consequences; and shall:

1. Identify the quantity and quality parameters to be monitored, sampling frequency, and monitoring site locations; and

2. Describe how the data may be used to determine the impacts of the operation on the hydrologic balance.

(5) An application for a major revision to a permit shall be reviewed by the cabinet to determine whether a new or updated cumulative hydrologic impact assessment shall be made.

Section 33. MRP; Diversions. Each application shall contain descriptions, including maps and cross-sections, of stream channel diversions and other diversions to be constructed within the proposed permit area to achieve compliance with 405 KAR 16:080.

Section 34. MRP; Impoundments and Embankments. (1) General. Each application shall include detailed design plans for each proposed sedimentation pond, water impoundment, and coal processing waste bank, dam, or embankment within the proposed permit area. Each plan shall:

(a) Be prepared by, or under the direction of, and certified by a qualified registered professional engineer;

(b) Contain a description, map, and appropriate cross-sections and drawings of the structure and its location;

(c) Contain all hydrologic and geologic information and computations necessary to demonstrate compliance with the design and performance standards of Title 405, Chapter 16; and all information utilized by the applicant to determine the probable hydrologic consequences of the mining operations under Section 32(3);

(d) Contain an assessment of the potential effect on the structure from subsidence of the subsurface strata resulting from past underground mining operations if underground mining has occurred;

(e) Include any geotechnical investigation, design, and construction requirements for the structure;

(f) Describe the operation and maintenance requirements for each structure; and

(g) Describe the timetable and plans to remove each structure, if appropriate.

(2) Sedimentation ponds.

(a) Sedimentation ponds, whether temporary or permanent, shall be designed in compliance with the requirements of 405 KAR 16:090. Any sedimentation pond or earthen structure which will remain on the proposed permit area as a permanent water impoundment shall also be designed to comply with the requirements of 405 KAR 16:100.

(b) Each plan shall, at a minimum, comply with the requirements of the MSHA, 30 CFR 77.216-1 and 77.216-2.

(3) Permanent and temporary impoundments. Permanent and temporary impoundments shall be

designed to comply with the requirements of 405 KAR 16:100. Each plan shall comply with the requirements of the MSHA, 30 CFR 77.216-1 and 77.216-2.

(4) Coal processing waste banks. Coal processing waste banks shall be designed to comply with the requirements of 405 KAR 16:140.

(5) Coal processing waste dams and embankments. Coal processing waste dams and embankments shall be designed to comply with the requirements of 405 KAR 16:160. Each plan shall comply with the requirements of MSHA, 30 CFR 77.216-1 and 77.216-2, and shall contain the results of a geotechnical investigation of the proposed dam or embankment foundation area, to determine the structural competence of the foundation which will support the proposed dam or embankment structure and the impounded material. The geotechnical investigation shall be planned and supervised by an engineer or engineering geologist, according to the following:

(a) The number, location, and depth of borings and test pits shall be determined using current prudent engineering practice for the size of the dam or embankment, quantity or material to be impounded, and subsurface conditions.

(b) The character of the overburden and bedrock, the proposed abutment sites, and any adverse geotechnical conditions which may affect the particular dam, embankment, or reservoir site shall be considered.

(c) All springs, seepage, and groundwater flow observed or anticipated during wet periods in the area of the proposed dam or embankment shall be identified on each plan.

(d) Consideration shall be given to the possibility of mudflows, rock-debris falls, or other landslides into the dam, embankment, or impounded material.

(6) If the structure is twenty (20) feet or higher or impounds more than twenty (20) acre-feet, each plan under subsections (2), (3), and (5) of this section shall include a stability analysis of each structure. The stability analysis shall include, but not be limited to, strength parameters, pore pressures, and long-term seepage conditions. The plan shall also contain a description of each engineering design assumption and calculation with a discussion of each alternative considered in selecting the specific design parameters and construction methods.

Section 35. MRP; Air Pollution Control. For all surface mining activities the application shall contain an air pollution control plan which includes the following:

(1) An air quality monitoring program, if required by the cabinet, to provide sufficient data to evaluate the effectiveness of the fugitive dust control practices under subsection (2) of this section to comply with applicable federal and state air quality standards; and

(2) A plan for fugitive dust control practices, as required under 405 KAR 16:170.

Section 36. MRP; Fish and Wildlife. Permit applications shall not be required under this section to contain a fish and wildlife plan unless and until federal regulations requiring such plan have been promulgated and this regulation has been amended as necessary to be consistent with the corresponding federal regulations.

Section 37. MRP; Postmining Land Use. (1) Each plan shall contain a description of the proposed use, following reclamation, of the land within the proposed permit area, including a discussion of the utility and capacity of the reclaimed land to support a variety of alternative uses, and the relationship of the proposed use to existing land use policies and plans. This description shall explain:

(a) How the proposed postmining land use is to be achieved and the necessary support activities which may be needed to achieve the proposed land use;

(b) Where a land use different from the pre-mining land use is proposed, all supporting documentation submitted for approval of the proposed use under 405 KAR 16:210;

(c) The consideration which has been given to making all of the proposed surface mining activities consistent with surface owner plans and applicable state and local land use plans and programs; and

(d) Where grazing is the proposed postmining land use, the detailed management practices necessary to properly implement the postmining use for grazing.

(2) The description shall be accompanied by a copy of the comments concerning the proposed use by the legal or equitable owner of record of the surface of the proposed permit area and the state and local government agencies, if any, which would have to initiate, implement, approve, or authorize the proposed use of the land following reclamation.

(3) Approval of the initial postmining land use plan pursuant to this section, shall not preclude subsequent consideration and approval of a revised postmining land use plan in accordance with the applicable requirements of this Title.

Section 38. MRP; Transportation on Public Roads. The application shall include or be accompanied by a public roads transportation plan and map (at least the scale and detail of the separate county maps published by the Kentucky Transportation Cabinet) which shall set forth the portions of the public road system, if any, over which the applicant proposes to transport coal extracted in the surface coal mining operation.

(1) The plan shall specify the legal weight limits for each portion of any such road or bridge over which the applicant proposes to transport coal.

(2) The plan shall include any proposal by the applicant to obtain a special permit pursuant to the provisions of KRS 189.271 to exceed the weight limits on any road or bridge.

(3) The plan shall contain a certification by a duly authorized official of the Kentucky Transportation Cabinet attesting the accuracy of the plan in regard to the locations and identities of roads and bridges on the public road system and the accuracy of the specifications of weight limits on such roads and bridges.

CHARLOTTE E. BALDWIN, Secretary
APPROVED BY AGENCY: November 14, 1985
FILED WITH LRC: November 15, 1985 at 11 a.m.
PUBLIC HEARING SCHEDULED: A public hearing on this regulation has been scheduled for December 30, 1985, at 10 a.m. in Room G-1 of the Capital Plaza Tower. Written comments may be submitted

on or before the scheduled hearing date. However, if no written notice of intent to attend and testify at the public hearing is received within five (5) days before the scheduled hearing, the hearing will be cancelled. Those interested in attending and testifying at this hearing shall notify in writing: George Risk, Department for Surface Mining Reclamation and Enforcement, 3rd Floor Capital Plaza Tower, Frankfort, Kentucky 40601.

REGULATORY IMPACT ANALYSIS

Agency Contact Person: George Risk
(1) Type and number of entities affected: These amendments affect applicants seeking permits to conduct surface coal mining activities. There are approximately 1,200 surface mining activities currently permitted under the permanent program. These amendments concern the procedures to determine if the proposed permit area contains prime farmland. In that regard, the amendments also affect the surface owners of mining areas which contain prime farmland.
(a) Direct and indirect costs or savings to those affected:
1. First year: To the extent that these amendments provide for a more accurate determination of the existence of prime farmland, some operations will incur additional costs to comply with the prime farmland requirements, and those surface owners affected will be better protected.
2. Continuing costs or savings: Same as first year.
3. Additional factors increasing or decreasing costs (note any effects upon competition): None.
(b) Reporting and paperwork requirements: The landowner affidavit concerning cropping history will be modified. No additional cost will be incurred.
(2) Effects on the promulgating administrative body:
(a) Direct and indirect costs or savings:
1. First year: There will be an additional workload on the cabinet's personnel to examine crop history records available from the Agricultural Stabilization and Conservation Service. However, this should not be a significant increase.
2. Continuing costs or savings: Same as first year.
3. Additional factors increasing or decreasing costs: None.
(b) Reporting and paperwork requirements: None.
(3) Assessment of anticipated effect on state and local revenues: None.
(4) Assessment of alternative methods; reasons why alternatives were rejected: None.
(5) Identify any statute, administrative regulation or government policy which may be in conflict, overlapping, or duplication: None.
(a) Necessity of proposed regulation if in conflict: Not applicable.
(b) If in conflict, was effort made to harmonize the proposed administrative regulation with conflicting provisions: Not applicable.
(6) Any additional information or comments: None.

Tiering:
Was tiering applied? No. Under federal and state laws, these requirements must apply equally to all applicants seeking permits for surface mining activities under 405 KAR Chapters 7 through 24.
A fiscal note is not required for this regulation because it will have no impact on local government.

NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION CABINET
Department for Surface Mining Reclamation and Enforcement
(Proposed Amendment)

405 KAR 8:040. Underground coal mining permits.

RELATES TO: KRS 350.060, 350.151
PURSUANT TO: KRS Chapter 13A, 350.020, 350.028, 350.060, 350.151, 350.465
NECESSITY AND FUNCTION: KRS Chapter 350 in pertinent part requires the cabinet to promulgate rules and regulations pertaining to permits for underground mining activities. This regulation recognizes the distinct differences between surface mining activities and underground mining activities. This regulation specifies certain information to be shown by the applicant related to legal and compliance status, environmental resources, and his mining and reclamation plan. This regulation further specifies certain showings to be made by the applicant to obtain a permit.

Section 1. General. (1) Applicability.
(a) This regulation applies to any person who applies for a permit to conduct underground mining activities.
(b) The requirements set forth in this regulation specifically for applications for permits to conduct underground mining activities, are in addition to the requirements applicable to all applications for permits to conduct surface coal mining and reclamation operations as set forth in 405 KAR 8:010.
(c) This regulation sets forth information required to be contained in applications for permits to conduct underground mining activities, including:
1. Legal, financial, compliance, and related information;
2. Environmental resources information; and
3. Mining and reclamation plan information.
(2) The permit applicant shall provide to the cabinet in the application all the information required by this regulation.

Section 2. Identification of Interests. (1) Each application shall contain the names and addresses of:
(a) The permit applicant, including his or her telephone number;
(b) Every legal or equitable owner of record of the areas to be affected by surface operations and facilities and every legal or equitable owner of record of the coal to be mined;
(c) The holders of record of any leasehold interest in areas to be affected by surface operations or facilities and the holders of record of any leasehold interest in the coal to be mined;
(d) Any purchaser of record under a real estate contract of areas to be affected by surface operations and facilities and any

purchaser of record under a real estate contract of the coal to be mined;

(e) The operator, if different from the applicant, who will conduct underground coal mining activities on behalf of the applicant, including his or her telephone number; and

(f) The resident agent of the applicant who will accept service of process, including his or her telephone number.

(2) If any owner, holder, purchaser, or operator, identified under subsection (1) of this section, is a business entity other than a single proprietor, the application shall contain the names and addresses of their respective principals, officers, and resident agents.

(3) Each application shall contain a statement of whether the applicant is a corporation, partnership, single proprietorship, association, or other business entity. For businesses other than single proprietorships, the application shall contain the following information where applicable:

(a) Names and addresses of every officer, partner, director, or other person performing a function similar to a director of the applicant;

(b) Name and address of any person who is a principal shareholder of the applicant;

(c) Names under which the applicant, partner, or principal shareholder previously operated a surface coal mining operation in the United States within the five (5) years preceding the date of application;

(d) If a partnership, a certified copy of the partnership agreement; and

(e) If a domestic corporation, a certified copy of the certificate of incorporation from the Secretary of State, and if a foreign corporation, a certified copy of the Certificate of Authority to conduct business within the Commonwealth of Kentucky.

(4) Each application shall contain a statement of any current or previous coal mining permits in the United States held by the applicant during the five (5) years preceding the application, and by any person identified in subsection (3)(c) of this section and of any pending permit application to conduct surface coal mining and reclamation operations in the United States. The information shall be listed by permit or application number and identify the regulatory authority for each of those coal mining operations.

(5) Each application shall contain the names and addresses of the owners of record of all surface and subsurface areas contiguous to any part of the proposed permit area.

(6) Each application shall contain the name of the proposed mine and all MSHA identification numbers that have been assigned for the mine and all sections.

(7) Each application shall contain proof, such as a power of attorney or resolution of the board of directors, that the individual signing the application has the power to represent the applicant in the permit matter.

(8) Each application shall contain a statement of all lands, interests in lands, options, or pending bids on interests held or made by the applicant for lands which are contiguous to the area to be covered by the permit.

Section 3. Compliance Information. (1) Each application shall contain: a statement of whether the applicant, any subsidiary, affiliate, or persons controlled by or under common control with the applicant has:

(a) Had a coal mining permit of the United States or any state suspended or revoked in the last five (5) years; or

(b) Forfeited a coal mining performance bond or similar security deposited in lieu of bond.

(2) If any such suspension, revocation, or forfeiture, as described in subsection (1) of this section, has occurred, the application shall contain a statement of the facts involved, including:

(a) Identification number and date of issuance of the permit, and date and amount of bond or similar security;

(b) Identification of the authority that suspended or revoked a permit or forfeited a bond and the stated reasons for that action;

(c) The current status of the permit, bond, or similar security involved;

(d) The date, location, and type of any administrative or judicial proceedings initiated concerning the suspension, revocation, or forfeiture; and

(e) The current status of these proceedings.

(3) Each application shall contain a list of each violation notice pertaining to SMCRA (PL 95-87) or KRS Chapter 350 and regulations promulgated pursuant thereto, received by the applicant in connection with any surface coal mining operation during the three (3) year period before the application date. Each application shall also contain a list of each violation notice pertaining to air or water environmental protection received by the applicant in connection with any surface coal mining operation during the three (3) year period before the application date, for violations of any law, rule, or regulation of the United States, or of any state law, rule, or regulation enacted pursuant to federal law, rule or regulation. The application shall also contain a statement regarding each violation notice, including:

(a) The date of issuance and identity of the issuing regulatory authority, department, or agency;

(b) A brief description of the particular violation alleged in the notice;

(c) The final resolution of each violation notice, if any;

(d) For each violation notice that has not been finally resolved:

1. The date, location, and type of any administrative or judicial proceedings initiated concerning the fact of the violation, including, but not limited to, proceedings initiated by the applicant to obtain administrative or judicial review of the fact of the violation and the current status of the proceedings; and

2. The actions, if any, taken or being taken by the applicant to abate the violation.

(4) Upon request by a small operator as defined in KRS 350.450(4)(d), the cabinet will provide to the small operator, with regard to persons under subsection (1) of this section which are identified by the small operator, the compliance information required by this section regarding suspension and revocation of permits and forfeiture of bonds under KRS Chapter 350, and information pertaining to violations of KRS Chapter 350 and regulations promulgated thereunder.

Section 4. Right of Entry and Right to Mine. (1) Each application shall contain a description of the documents upon which the applicant bases his or her legal right to enter and begin underground mining activities in the permit area and whether that right is the subject of pending litigation. The description shall identify those documents by type and date of execution, identify the specific lands to which the document pertains, and explain the legal rights claimed by the applicant.

(2) For underground mining activities where the associated surface operations involve the surface mining of coal and the private mineral estate to be mined has been severed from the private surface estate, the application shall also provide, for lands to be affected by those operations within the permit area, a copy of the document of conveyance that grants or reserves the right to extract the coal by surface mining methods.

(3) Nothing in this section shall be construed to afford the cabinet the authority to adjudicate property title disputes.

Section 5. Relationship to Areas Designated Unsuitable for Mining. (1) Each application shall contain a statement of available information on whether the proposed permit area is within an area designated unsuitable for underground mining activities under Title 405, Chapter 24, or designated unsuitable for surface mining activities if the proposed underground mining activities also involve surface mining of coal, or under study for designation in an administrative proceeding initiated under that chapter.

(2) If an applicant claims the exemption in 405 KAR 8:010, Section 14(4)(b), the application shall contain information supporting the applicant's assertion that it made substantial legal and financial commitments before January 4, 1977, concerning the proposed underground mining activities.

(3) If an applicant proposes to conduct or locate surface operations or facilities within 300 feet of an occupied dwelling, the application shall include the waiver of the owner of the dwelling as required in 405 KAR 24:040, Section 2(5).

Section 6. Permit Term Information. (1) Each application shall state the anticipated or actual starting and termination date of each phase of the underground mining activities and the anticipated number of acres of surface lands to be affected, and the horizontal and vertical extent of proposed underground mine workings including the surface acreage overlying such underground workings, for each phase of mining and over the total life of the permit.

(2) If the applicant proposes to conduct the underground mining activities in excess of five (5) years, the application shall contain the information needed for the showing required under 405 KAR 8:010, Section 17(1).

Section 7. Personal Injury and Property Damage Insurance Information. Each application shall contain a certificate of liability insurance according to 405 KAR 10:030, Section 4.

Section 8. Identification of Other Licenses and Permits. Each application shall contain a list of all other licenses and permits needed by the applicant to conduct the proposed underground mining activities. This list shall identify each license and permit by:

(1) Type of permit or license;

(2) Name and address of issuing authority;

(3) Identification numbers of applications for those permits or licenses or, if issued, the identification numbers of the permits or licenses; and

(4) If a decision has been made, the date of approval or disapproval by each issuing authority.

Section 9. Identification of Location of Public Office for Filing of Application. Each application shall identify, by name and address, the appropriate regional office of the cabinet where the applicant will file a copy of the complete application for public inspection under 405 KAR 8:010, Section 8(8).

Section 10. Newspaper Advertisement and Proof of Publication. A copy of the newspaper advertisement of the application and proof of publication of the advertisement shall be filed with the cabinet and made a part of the complete application not later than fifteen (15) days after the last date of publication required under 405 KAR 8:010, Section 8(2).

Section 11. Environmental Resource Information. (1) Each permit application shall include a description of the existing environmental resources either within the areas affected by proposed surface operations and facilities, or within the proposed permit area and adjacent areas, as required by Sections 11 through 23 of this regulation. The descriptions required by this regulation may, where appropriate, be based upon published texts or other public documents together with reasonable extrapolations from specific data available from existing permit areas or other appropriate areas.

(2) Each application shall describe and identify the nature of cultural and historic resources listed in or eligible for listing in the National Register of Historic Places and known archaeological sites within the proposed permit and adjacent areas. The description shall be based on all available information, including, but not limited to, data of state and local archaeological, historic, and cultural preservation agencies.

Section 12. General Requirements for Baseline Geologic and Hydrologic Information. (1) The application shall contain baseline geologic and hydrologic information which has been collected, analyzed, and submitted in the detail and manner acceptable to the cabinet, and which shall be sufficient to:

(a) Identify and describe protective measures pursuant to Section 32(1) of this regulation which will be implemented during the mining and reclamation process to assure protection of the hydrologic balance, or to demonstrate that protection of the hydrologic balance can be assured without the design and installation of protective measures; and to design necessary protective measures pursuant to Section 32(2) of this regulation.

(b) Determine the probable hydrologic consequences of the mining and reclamation

operations upon the hydrologic balance in the permit area and adjacent area pursuant to Section 32(3) of this regulation so that an assessment can be made by the cabinet pursuant to 405 KAR 8:010, Section 14(3) of the probable cumulative impacts of all anticipated mining on the hydrologic balance in the cumulative impact area;

(c) Determine pursuant to 405 KAR 8:010, Section 14(2) and (3) whether reclamation as required by KAR Title 405 can be accomplished and whether the proposed operation has been designed to prevent material damage to the hydrologic balance; and

(d) Design surface and ground water monitoring systems pursuant to Section 32(4) of this regulation for the during-mining and postmining time period which, together with the baseline data collected under Sections 14(1) and 15(1) of this regulation, will demonstrate whether the mining operation is meeting applicable effluent limitations and stream standards and protecting the hydrologic balance.

(2)(a) Geologic and hydrologic information pertaining to the area outside the permit and adjacent area but within the cumulative impact assessment area shall be provided to the applicant by the cabinet:

1. If this information is needed in preparing the cumulative impact assessment; and

2. If this information is available from an appropriate federal or state agency.

(b) If this information is needed by the cabinet for conducting the cumulative impact assessment and is not available from a federal or state agency, the applicant may gather and submit this information to the cabinet as part of the permit application.

(3) Interpolation, modeling, correlation or other statistical methods, and other data extrapolation techniques may be used if the applicant can demonstrate to the satisfaction of the cabinet that such data extrapolation techniques are valid and that information obtained through such techniques meets the requirements of subsection (1) of this section.

(4) All water quality analyses performed to meet the requirements of this chapter shall be conducted according to the methodology in the fourteenth edition of "Standard Methods for the Examination of Water and Wastewater," or the methodology in 40 CFR Parts 136 and 434. All water quality sampling shall be conducted according to either methodology listed above when feasible.

Section 13. Baseline Geologic Information. (1) The application shall contain baseline geologic information collected from the permit area which shall meet the requirements of Section 12(1) of this regulation and shall include at a minimum:

(a) The results of samples obtained from continuous cores; drill cuttings; channel cuttings from fresh, unweathered, rock outcrops; or other rock or soil material which has been collected using acceptable sampling techniques.

1. For those areas where overburden will be removed, the vertical extent of sampling shall include those strata from the surface down to and including the stratum immediately below the lowest coal seam to be mined; and

2. For those areas overlying underground workings where overburden will not be removed, the vertical extent of sampling shall include those strata above and below the coal seam to be mined which may be impacted by the mining operation.

3. Where aquifers within the permit area are located above or below the coal seam to be mined and such aquifers may be adversely affected by the mining operation, the vertical extent of sampling shall also include the aquifer and those strata which lie between the coal seam and the aquifer.

4. The areal and vertical density of sampling shall, at a minimum, be sufficient to determine the distribution of strata which have a potential to produce acid drainage and to determine the areal and vertical extent of aquifers which may be adversely affected.

5. If the vertical extent, and the areal and vertical density of sampling specified in subparagraphs 1 through 4 of this paragraph are not sufficient to locate suitable strata for use as a topsoil substitute, to determine the potential for subsidence, or for other required design or analysis, additional sampling shall be conducted as necessary to furnish adequate geologic information.

(b)1. To identify strata which have a potential to produce acid or toxic drainage for areas where overburden will be removed, chemical analyses including, but not limited to, maximum potential acidity and neutralization potential of each overburden stratum and the stratum immediately below the lowest coal seam to be mined; and

2. To identify strata which have a potential to produce acid or toxic drainage for areas overlying underground workings where overburden will not be removed, chemical analyses including, but not limited to, maximum potential acidity and neutralization potential of the strata immediately above and below the coal seam to be mined.

(c) Chemical analyses of the coal seam to be mined to determine the potential to produce acid or toxic drainage, including the parameters of total sulfur and pyritic sulfur; except that the cabinet will not require an analysis for pyritic sulfur if the applicant can demonstrate to the satisfaction of the cabinet that an analysis for total sulfur provides adequate information to assure protection of the hydrologic balance.

(d) For standard room and pillar mining operations, the engineering properties of clays or soft rock such as clay shale, if any, located immediately above and below each coal seam to be mined.

(e) Collection of geologic information from the permit area as required in this subsection may be waived in whole or in part if:

1. The applicant can demonstrate to the satisfaction of the cabinet through geologic correlation or other procedures that information collected from outside the permit area is representative of the permit area and is sufficient to meet the requirements of Section 12(1) of this regulation; or

2. Other information equivalent to that required by this subsection is available to the cabinet in a satisfactory form and is made a part of the permit application; and

3. The cabinet provides a written statement granting a waiver.

(2) The application shall contain a description of the geology of the proposed permit area and adjacent area which shall meet

the requirements of Section 12(1) of this regulation and be based on the information required in subsection (1) of this section or other appropriate geologic information. The description shall include, at a minimum, geologic logs, cross-sections, fence diagrams, or other appropriate illustrations and written descriptions depicting:

(a) Within the permit area:

1. The structural geology and lithology of overburden strata and the stratum immediately below the lowest coal seam to be mined for those areas where overburden will be removed; and the structural geology and lithology of strata which may be impacted by the mining operation for those areas overlying underground workings where overburden will not be removed.

2. The thickness and chemical characteristics of each overburden stratum and the stratum immediately below the lowest coal seam to be mined for those areas where overburden will be removed; or the thickness and chemical characteristics of each stratum which may be impacted by the mining operation for those areas overlying underground workings where overburden will not be removed.

3. Where aquifers may be adversely affected by the mining operation, the structural geology, lithology, thickness, and areal extent of such aquifers; and structural geology and lithology of strata, and thickness of each stratum, whether located above or below the coal seam to be mined, which lie between the coal seam and such aquifers.

4. For standard room and pillar mining operations, the thickness and engineering properties of clays or soft rock such as clay shale, if any, located immediately above and below each coal seam to be mined.

(b) Within the adjacent area, the approximate areal extent and approximate thickness of aquifers which may be adversely affected by the mining operation.

(3) If determined by the cabinet to be necessary to assure adequate reclamation and protection of the hydrologic balance, the cabinet may require geologic information and description in addition to that required by subsections (1) and (2) of this section including, but not limited to, leaching tests of material from strata which may be disturbed by the operation to determine the potential for the operation to produce drainage with elevated levels of acidity, sulfate, and total dissolved solids, and the collection of information to greater depths within the proposed permit area or the collection of information for areas outside the proposed permit area.

Section 14. Baseline Ground Water Information. (1) The application shall contain baseline ground water information for the permit area and adjacent area which shall be collected and submitted in a manner acceptable to the cabinet and shall be adequate to meet the requirements of Section 12(1) of this regulation.

(2) Ground water information shall include an inventory of wells, springs, underground mines, or other similar ground water supply facilities which are currently being used, have been used in the past, or have a potential to be used for domestic, agricultural, industrial, or other beneficial purpose. The inventory shall include the location, ownership, type of usage, and where possible, other relevant information such as the depth and diameter of wells and approximate rate of usage, pumpage or discharge from wells, springs, and other ground water supply facilities.

(3) Ground water information shall include seasonal ground water quantity and quality data collected from monitoring wells, springs, underground mines, or other appropriate ground water monitoring facilities, at a sufficient number of monitoring locations with adequate areal distribution to meet the requirements of Section 12(1) of this regulation. Seasonal ground water quantity and quality data shall be provided for each water transmitting zone above, and potentially impacted water transmitting zone below, the lowest coal seam to be mined including at a minimum:

(a) Ground water levels; and

(b) Total dissolved solids, or specific conductance corrected to twenty-five (25) degrees C; pH; dissolved iron; dissolved manganese; acidity; alkalinity; and sulfate. For data collectd prior to the effective date of these amendments, total iron and total manganese may be substituted for dissolved iron and dissolved manganese.

(4) The ground water information described in subsection (3) of this section will be required in whole or in part for coal seams in those cases where coal seams to be mined are serving as water supply sources or are otherwise significant in protecting the hydrologic balance.

(5) If additional information is needed to assess the need for protective measures, to design protective measures, to determine the probable hydrologic consequences of mining, or to conduct the cumulative impact assessment, the cabinet may require ground water information in addition to that described in subsections (2), (3), and (4) of this section including, but not limited to, information pertaining to aquifer storage, yield, discharge, recharge capacity, and additional water quality parameters.

Section 15. Baseline Surface Water Information. (1) The application shall contain baseline surface water information for the permit area and adjacent area which shall be collected and submitted in a manner acceptable to the cabinet and shall be adequate to meet the requirements of Section 12(1) of this regulation.

(2) Surface water information shall include an inventory of all streams, lakes, impoundments or other surface water bodies in the permit and adjacent area which are currently being used for domestic, agricultural, industrial, or other beneficial purpose. The inventory shall include the name of the surface water body which is being used as a water supply source; the location, drainage area, ownership, and type of usage for the withdrawal; and where possible other relevant information such as the rate of withdrawal and seasonal variation.

(3) Surface water information shall include:

(a) The name, location, and ownership where appropriate, of all streams, lakes, impoundments, and other surface water bodies which receive runoff from watersheds which will be disturbed by the operation; and

(b) The location and description of any existing facilities located in watersheds which will be disturbed by the mining operation which may contribute to surface water pollution, such

as existing or abandoned mining operations, oil wells, logging operations, or other similar facilities, including the location of any discharges which may be flowing from such facilities.

(4) Surface water information shall include seasonal quantity and quality data collected from a sufficient number of watersheds which will be disturbed by the operation with adequate areal distribution to meet the requirements of Section 12(1) of this regulation and include at a minimum:

(a) Flow rates; and

(b) Total dissolved solids, or specific conductance corrected to twenty-five (25) degrees C; total suspended solids; pH; total iron; total manganese; acidity; alkalinity; and sulfate.

(5) If additional information is needed to assess the need for protective measures, to design protective measures, to determine the probable hydrologic consequences of mining, or to conduct the cumulative impact assessment, the cabinet may require surface water information in addition to that described in subsections (2), (3), and (4) of this section including, but not limited to, information pertaining to flood flows and additional water quality parameters.

Section 16. Alternative Water Supply Information. If contamination, diminution, or interruption of an underground or surface source of water (for domestic, agricultural, industrial, or other legitimate use) within the proposed permit area or adjacent area may result from underground mining activities, then the applicant may identify, in the permit application, the alternative sources of water supply that could be developed to replace the existing sources.

Section 17. Climatological Information. (1) When requested by the cabinet, the application shall contain a statement of the climatological factors that are representative of the proposed permit area, including:

(a) The average seasonal precipitation;

(b) The average direction and velocity of prevailing winds; and

(c) Seasonal temperature ranges.

(2) The cabinet may request such additional data as deemed necessary to ensure compliance with the requirements of this chapter.

Section 18. Soil Resources Information. (1) If soil survey information for the proposed permit area is available from SCS, the application shall include such information as a part of the description of premining land use capability and productivity required by Section 22(1)(b) of this regulation.

(2) Where the applicant proposes to use selected overburden materials as a supplement or substitute for topsoil, the application shall provide results of the analyses, trials and tests required under 405 KAR 18:050, Section 2.

Section 19. Vegetation Information. (1) The permit application shall, as required by the cabinet, contain a map that delineates existing vegetative types and a description of the plant communities within the area affected by surface operations and facilities and within any proposed reference area. This description shall include information adequate to predict the potential for reestablishing vegetation.

(2) When a map or aerial photograph is required, sufficient adjacent areas shall be included to allow evaluation of vegetation as important habitat for fish and wildlife.

Section 20. Fish and Wildlife Resources Information. Permit applications shall not be required under this section to contain a study of fish and wildlife unless and until federal regulations requiring such study have been promulgated and this regulation has been amended as necessary to be consistent with the corresponding federal regulations.

Section 21. Prime Farmland Investigation. (1) The applicant shall conduct a pre-application investigation of the area proposed to be affected by surface operations or facilities to determine whether lands within the area may be prime farmland.

(2) Land shall not be considered prime farmland where the applicant can demonstrate, to the satisfaction of the cabinet, one (1) or more of the following:

(a) The land has not been historically used as cropland;

(b) The slope of the land is ten (10) percent or greater;

(c) Other relevant factors exist which would preclude the soils from being defined as prime farmland according to 7 CFR 657, such as a very rocky surface, or the land is frequently flooded during the growing season more often than once in two (2) years and the flooding has reduced crop yields; or

(d) On the basis of a soil survey of the lands within the permit area there are no soil map units that have been designated prime farmland by the U.S. SCS.

(3) If the investigation establishes that the lands are not prime farmland, the applicant shall submit with the permit application a request for a negative determination and results of the investigation which show that the land for which the negative determination is sought meets one (1) or more of the criteria in subsection (2) of this section.

(4) If the investigation indicates that lands within the proposed area to be affected by surface operations and facilities may be prime farmlands, the applicant shall contact the U.S. SCS to determine if these lands have a soil survey and whether the applicable soil map units have been designated prime farmlands. If no such soil survey has been made for these lands, the applicant shall request the SCS to conduct a soil survey [cause such a survey to be made].

(a) When a soil survey as required by this section contains soil map units which have been designated as prime farmlands, the applicant shall submit an application, in accordance with 405 KAR 8:050, Section 3 for such designated land.

(b) When a soil survey as required by this section contains no soil map units which have [not] been designated as prime farmland, after review by the U.S. SCS, the applicant shall submit with the permit application a request for negative determination under subsection (2)(d) of this section for such non-designated land.

(5) The cabinet shall decide to grant or deny a negative determination based upon

documentation provided by the applicant and any other pertinent information, such as cropping history, available to the cabinet from other sources.

(6) The cabinet shall consult with the SCS in deciding on a request for negative determination under subsection (2)(c) of this section.

(7) The cabinet shall examine any records on crop history available from the Agriculture Stabilization and Conservation Service when deciding on a request for negative determination under subsection (2)(a) of this section. Any such request for negative determination shall include signed, notarized affidavits from landowners identifying the uses of the land for each year of the ten (10) year period.

Section 22. Land-use Information. (1) The application shall contain a statement of the condition, capability and productivity of the land which will be affected by surface operations and facilities within the proposed permit area, including:

(a) A map and supporting narrative of the uses of the land existing at the time of the filing of the application. If the premining use of the land was changed within five (5) years before the date of application, the historic use of the land shall also be described.

(b) A narrative of land capability and productivity, which analyzes the land-use description in conjunction with other environmental resources information required under this regulation. The narrative shall provide analyses of:

1. The capability of the land before any mining to support a variety of uses, giving consideration to soil and foundation characteristics, topography, vegetative cover, and the hydrology of the area proposed to be affected by surface operations or facilities; and

2. The productivity of the area proposed to be affected by surface operations and facilities before mining, expressed as average yield of food, fiber, forage, or wood products from such lands obtained under high levels of management. The productivity shall be determined by yield data or estimates for similar sites based on current data from the U.S. Department of Agriculture, state agricultural universities or appropriate state natural resources or agricultural agencies.

(2) The application shall state whether the proposed permit area has been previously mined, and, if so, the following information, if available:

(a) The type of mining method used;

(b) The coal seams or other mineral strata mined;

(c) The extent of coal or other minerals removed;

(d) The approximate dates of past mining; and

(e) The uses of the land preceding mining.

(3) The application shall contain a description of the existing land uses and local government land use classifications, if any, of the proposed permit area and adjacent areas.

(4) The application shall contain a description identifying the extent to which cities, towns, and municipalities, or parts thereof, are located within the proposed permit area.

Section 23. Maps and Drawings. (1) The permit application shall include maps showing:

(a) The boundaries of all subareas which are proposed to be affected over the estimated total life of the underground mining activities, with a description of size, sequence and timing of the underground mining activities for which it is anticipated that additional permits will be sought;

(b) Any land within the proposed permit area and adjacent area which is within the boundaries of any units of the National System of Trails or the Wild and Scenic Rivers System, including study rivers designated under Section 5(a) of the Wild and Scenic Rivers Act (16 USC 1276(a)), or which is within the boundaries of a wild river established pursuant to KRS Chapter 146;

(c) The boundaries of any public park and locations of any cultural or historical resources listed in or eligible for listing in the National Register of Historic Places and known archaeological sites within the permit area and adjacent areas;

(d) The locations of water supply intakes for current users of surface waters within a hydrologic area defined by the cabinet, and those surface waters which will receive discharges from affected areas in the proposed permit area;

(e) All boundaries of lands and names of present owners of record of those lands, both surface and subsurface, included in or contiguous to the permit area;

(f) The boundaries of land within the proposed permit area upon which, or under which, the applicant has the legal right to conduct underground mining activities. In addition, the map shall indicate the boundaries of that portion of the permit area which the applicant has the legal right to enter upon the surface to conduct surface operations.

(g) The location of surface and subsurface manmade features within, passing through, or passing over the proposed permit area, including, but not limited to, major electric transmission lines, pipelines, and agricultural drainage tile fields;

(h) The location and boundaries of any proposed reference areas for determining the success of revegetation for the permit area;

(i) The location of all buildings in and within 1000 feet of the proposed permit area, with identification of the current use of the buildings;

(j) Each public road located in or within 100 feet of the proposed permit area;

(k) Each public or private cemetery or Indian burial ground located in or within 100 feet of the proposed permit area;

(l) Other relevant information required by the cabinet.

(2) The application shall include drawings, cross-sections, and maps showing:

(a) Elevations and locations of test borings and core samplings;

(b) Elevations and locations of monitoring stations or other sampling points in the permit area and adjacent areas used to gather data on water quality and quantity, fish and wildlife, and air quality, if required, in preparation of the application or which will be used for such data gathering during the term of the permit;

(c) All coal crop lines and the strike and dip of the coal to be mined within the proposed permit area;

(d) Location and extent of known workings of active, inactive, or abandoned underground mines, including mine openings to the surface within the proposed permit area and adjacent areas;

(e) Location and extent of subsurface water, if encountered, within the proposed permit area or adjacent areas;

(f) Location of surface water bodies such as streams, lakes, ponds, springs, constructed or natural drainage patterns, and irrigation ditches within the proposed permit area and adjacent areas;

(g) Location, and depth if available, of gas and oil wells within the proposed permit area and water wells in the permit area and adjacent areas;

(h) Location and dimensions of existing coal refuse disposal areas and dams, or other impoundments within the proposed permit area;

(i) Sufficient slope measurements to adequately represent the existing land surface configuration of the area to be affected by surface operations and facilities, measured and recorded according to the following:

1. Each measurement shall consist of an angle of inclination along the prevailing slope extending 100 linear feet above and below or beyond the coal outcrop or the area to be disturbed or, where this is impractical, at locations and in a manner as specified by the cabinet.

2. Where the area has been previously mined, the measurements shall extend at least 100 feet beyond the limits of mining disturbances, or any other distance determined by the cabinet to be representative of the premining configuration of the land.

3. Slope measurements shall take into account natural variations in slope, to provide accurate representation of the range of natural slopes and reflect geomorphic differences of the area to be disturbed.

(3) The permit application shall include the map information specified in Sections 22(1)(a), 24(3), 24(4)(c), 24(4)(h), 26, 27(1), 28, 31, 32, 33, 34, and 38 of this regulation and 405 KAR 8:010, Section 5(6).

(4) Maps, drawings and cross-sections included in a permit application and required by this section shall be prepared by, or under the direction of and certified by a qualified registered professional engineer, and shall be updated as required by the cabinet. The qualified registered professional engineer shall not be required to certify the true ownership of property.

Section 24. Mining and Reclamation Plan; General Requirements. (1) Each application shall contain a detailed mining and reclamation plan (MRP) for the proposed permit area as set forth in this section through Section 39 [38] of this regulation, showing how the applicant will comply with KRS Chapter 350 and Title 405, Chapters 16 through 20.

(2) Each application shall contain a description of the mining operations proposed to be conducted within the proposed permit area, including, at a minimum, the following:

(a) A narrative description of the type and method of coal mining procedures and proposed engineering techniques, anticipated annual and total production of coal, by tonnage, and the major equipment to be used for all aspects of those operations; and

(b) A narrative explaining the construction, modification, use, maintenance, and removal of the following facilities (unless retention of such facility is approved as necessary for postmining land use as specified in 405 KAR 18:220):

1. Dams, embankments, and other impoundments;

2. Overburden and topsoil handling and storage areas and structures;

3. Coal removal, handling, storage, cleaning, and transportation areas and structures;

4. Spoil, coal processing waste, mine development waste, and non-coal waste removal, handling, storage, transportation, and disposal areas and structures;

5. Mine facilities; and

6. Water pollution control facilities.

(3) Each application shall contain plans and maps of the proposed permit area and adjacent areas as follows:

(a) The plans, maps and drawings shall show the underground mining activities to be conducted, the lands to be affected throughout the operation, and any change in a facility or feature to be caused by the proposed operations, if the facility or feature was shown under Section 23 of this regulation.

(b) The following shall be shown for the proposed permit area:

1. Buildings, utility corridors, and facilities to be used;

2. The area of land to be affected within the proposed permit area, according to the sequence of mining and reclamation;

3. Each area of land for which a performance bond or other equivalent guarantee will be posted under Title 405, Chapter 10;

4. Each coal storage, cleaning and loading area;

5. Each topsoil, spoil, coal preparation waste, underground development waste, and non-coal waste storage area;

6. Each water diversion, collection, conveyance, treatment, storage and discharge facility to be used;

7. Each source of waste and each waste disposal facility relating to coal processing or pollution control;

8. Each facility to be used to protect and enhance fish and wildlife related environmental values;

9. Each explosive storage and handling facility;

10. Location of each sedimentation pond, permanent water impoundment, coal processing waste bank, and coal processing waste dam and embankment, in accordance with Section 34 of this regulation, and each disposal area for underground development waste and excess spoil, in accordance with Section 28 of this regulation;

11. Cross-sections, at locations as required by the cabinet, of the anticipated final surface configuration to be achieved for the affected areas;

12. Location of each water and any subsidence monitoring point;

13. Location of each facility that will remain on the proposed permit area as a permanent feature, after the completion of underground mining activities.

(c) Plans, maps and drawings required under this section shall be prepared by, or under the

direction of, and certified by a qualified registered professional engineer.

(4) Each plan shall contain the following information for the proposed permit area:

(a) A projected timetable for the completion of each major step in the mining and reclamation plan;

(b) A detailed estimate of the cost of the reclamation of the proposed operations required to be covered by a performance bond under Title 405, Chapter 10, with supporting calculations for the estimates;

(c) A plan for backfilling, soil stabilization, compacting and grading, with contour maps or cross-sections that show the anticipated final surface configuration of the proposed permit area, in accordance with 405 KAR 18:190;

(d) A plan for removal, storage, and redistribution of topsoil, subsoil, and other material to meet the requirements of 405 KAR 18:050 including a demonstration of suitability of any proposed topsoil substitutes or supplements;

(e) A plan for revegetation as required in 405 KAR 18:200, including, but not limited to, descriptions of the: schedule of revegetation; species and amounts per acre of seeds and seedlings to be used; methods to be used in planting and seeding; mulching techniques; irrigation, if appropriate, and pest and disease control measures, if any; measures proposed to be used to determine the success of revegetation as required in 405 KAR 18:200, Section 6; and a soil testing plan for evaluation of the results of topsoil handling and reclamation procedures related to revegetation;

(f) A description of the measures to be used to maximize the use and conservation of the coal resource as required in 405 KAR 18:010, Section 2;

(g) A description of measures to be employed to ensure that all debris, acid-forming and toxic-forming materials, and materials constituting a fire hazard are disposed of in accordance with 405 KAR 18:150 and 405 KAR 18:190, Section 3 and a description of the contingency plans which have been developed to preclude sustained combustion of such materials;

(h) A description, including appropriate drawings and maps, of the measures to be used to seal or manage mine openings, and to plug, case or manage exploration holes, other bore holes, wells and other openings within the proposed permit area, in accordance with 405 KAR 18:040; and

(i) A description of steps to be taken to comply with the requirements of the Clean Air Act (42 USC Sec. 7401 et seq.), the Clean Water Act (33 USC Sec. 1251 et seq.), and other applicable air and water quality laws and regulations and health and safety standards. This description shall, at a minimum, consist of identification of the permits or approvals required by these laws and regulations which the applicant has obtained, has applied for, or intends to apply for.

Section 25. MRP; Existing Structures. (1) Each application shall contain a description of each existing structure proposed to be used in connection with or to facilitate the surface coal mining and reclamation operation. The description shall include:

(a) Location;

(b) Plans of the structure which describe its current condition;

(c) Approximate dates on which construction of the existing structure was begun and completed; and

(d) A showing, including relevant monitoring data or other evidence, whether the structure meets the performance standards of Title 405, Chapters 16 through 20, or if the structure does not meet those performance standards, a showing whether the structure meets the interim performance standards of Title 405, Chapter 3.

(2) Each application shall contain a compliance plan for each existing structure proposed to be modified or reconstructed for use in connection with or to facilitate the surface coal mining and reclamation operation. The compliance plan shall include:

(a) Design specifications for the modification or reconstruction of the structure to meet the performance standards of Title 405, Chapters 16 through 20;

(b) A construction schedule which shows dates for beginning and completing interim steps and final reconstruction;

(c) Provisions for monitoring the structure as required by the cabinet to ensure that the performance standards of Title 405, Chapters 16 through 20 are met; and

(d) A showing that the risk of harm to the environment or to public health or safety is not significant during the period of modification or reconstruction.

Section 26. MRP; Subsidence Control. (1) The application shall include a survey which shall show whether structures or renewable resource lands exist within the proposed permit area and adjacent areas and whether subsidence, if it occurred could cause material damage or diminution of reasonably foreseeable use of such structures or renewable resource lands.

(2) If the survey shows that no such structures or renewable resource lands exist, or no such material damage or diminution could be caused in the event of mine subsidence, and if the cabinet agrees with such conclusion, no further information need be provided in the application under this section.

(3) In the event the survey shows such structures or renewable resource lands exist, or that subsidence could cause material damage or diminution of value or foreseeable use of the land, or if the cabinet determines that such damage or diminution could occur, the application shall include a subsidence control plan which shall contain the following information:

(a) A detailed description of the mining method and other measures to be taken which may affect subsidence, including:

1. The technique of coal removal, such as longwall mining, room and pillar with pillar removal, hydraulic mining or other methods; and

2. The extent, if any, to which planned and controlled subsidence is intended.

(b) A detailed description of the measures to be taken to prevent subsidence from causing material damage or lessening the value of reasonably foreseeable use of the surface, including:

1. The anticipated effects of planned subsidence, if any;

2. Measures, if any, to be taken in the mine to reduce the likelihood of subsidence, including such measures as backstowing or backfilling of voids; leaving support pillars of coal; and areas in which no coal removal is planned, including a description of the overlying area to be protected by leaving coal in place.

3. Measures to be taken on the surface to prevent material damage or lessening of the value or reasonably foreseeable use of the surface including such measures as reinforcement of sensitive structures or features; installation of footers designed to reduce damage caused by movement; change of location of pipelines, utility lines or other features; relocation of movable improvements to sites outside the angle-of-draw; and monitoring, if any, to determine the commencement and degree of subsidence so that other appropriate measures can be taken to prevent or reduce material damage.

(c) A detailed description of the measures to be taken to mitigate the effects of any material damage or diminution of value or foreseeable use of lands which may occur, including one (1) or more of the following as required by 405 KAR 18:210, Section 3:

1. Restoration or rehabilitation of structures and features, including approximate land-surface contours, to premining condition;

2. Replacement of structures destroyed by subsidence;

3. Purchase of structures prior to mining and restoration of the land after subsidence to condition capable of supporting and suitable for the structures and foreseeable land uses;

4. Purchase of non-cancellable insurance policies payable to the surface owner in the full amount of the possible material damage or other comparable measures.

(d) A detailed description of measures to be taken to determine the degree of material damage or diminution of value or foreseeable use of the surface, including such measures as:

1. The results of pre-subsidence surveys of all structures and surface features which might be materially damaged by subsidence;

2. Monitoring, if any, proposed to measure deformations near specified structures or features or otherwise as appropriate for the operation.

Section 27. MRP; Return of Coal Processing Waste to Abandoned Underground Workings. (1) Each plan shall describe the design, operation and maintenance of any proposed use of abandoned underground workings for coal processing waste disposal, including flow diagrams and any other necessary drawings and maps, for the approval of the cabinet and MSHA under 405 KAR 18:140, Section 7.

(2) Each plan shall describe the source and quality of waste to be stowed, area to be backfilled, percent of the mine void to be filled, method of constructing underground retaining walls, influence of the backfilling operation on active underground mine operations, surface area to be supported by the backfill, and the anticipated occurrence of surface effects following backfilling.

(3) The applicant shall describe the source of the hydraulic transport mediums, method of dewatering the placed backfill, retainment of water underground, treatment of water if released to surface streams, and the effect on the hydrologic regime.

(4) The plan shall describe each permanent monitoring well to be located in the backfilled area, the stratum underlying the mined coal, and gradient from the backfilled area.

(5) The requirements of this section shall also apply to pneumatic backfilling operations, except where the operations are exempted by the cabinet from requirements specifying hydrologic monitoring.

Section 28. MRP; Underground Development Waste and Excess Spoil. Each plan shall contain descriptions, including appropriate maps and cross-section drawings, of the proposed disposal methods and sites for placing underground development waste and excess spoil according to 405 KAR 18:130, 405 KAR 18:140, and 405 KAR 18:160 as applicable. Each plan shall describe the geotechnical investigation, design, construction, operation, maintenance, and removal, if appropriate, of the structures and be prepared according to 405 KAR 8:030, Section 27 and the applicable requirements of this regulation.

Section 29. MRP; Transportation Facilities. (1) Each application shall contain a description of each road, conveyor, and rail system to be constructed, used, or maintained within the proposed permit area. The description shall include a map, appropriate cross-sections, and the following:

(a) Specifications for each road width, road gradient, road surface, road cut, fill embankment, culvert, bridge, drainage ditch, and drainage structure.

(b) A report of appropriate geotechnical analysis, where approval of the cabinet is required for alternative specifications or for steep cut slopes under 405 KAR 18:230.

(c) A description of each measure to be taken to obtain approval of the cabinet for alteration or relocation of a natural drainageway under 405 KAR 18:230.

(d) A description of measures, other than use of a rock headwall, to be taken to protect the inlet end of a ditch relief culvert, for approval by the cabinet under 405 KAR 18:230.

(2) Each plan shall contain a general description of each road, conveyor, or rail system to be constructed, used, or maintained within the proposed permit area.

Section 30. MRP; Protection of Public Parks and Historic Places. For any public parks or historic places that may be adversely affected by the proposed operation, each plan shall describe the measures to be used to minimize or prevent these impacts and to obtain approval of the cabinet and other agencies as required in 405 KAR 24:040, Section 2(4).

Section 31. MRP; Relocation or Use of Public Roads. Each application shall describe, with appropriate maps and drawings the measures to be used to ensure that the interests of the public and landowners affected are protected if, under 405 KAR 24:040, Section 2(6), the applicant seeks to have the cabinet approve:

(1) Conducting the proposed underground mining activities within 100 feet of the right-of-way

line of any public road, except where mine access or haul roads join that right-of-way; or

(2) Relocating a public road.

Section 32. MRP; Protection of Hydrologic Balance. (1) Each application shall contain a description, as set forth in this subsection, of the measures to be taken to minimize disturbances to the hydrologic balance within the permit area and adjacent area and to prevent material damage to the hydrologic balance outside the permit area.

(a) The description shall be based upon the baseline geologic, hydrologic, and other information required by Sections 12 through 16 of this regulation and other appropriate information, shall be specific to local hydrologic conditions, and shall be prepared in a manner and detail acceptable to the cabinet.

(b) the description shall identify the protective measures to be taken to enable the operation to meet, at a minimum, each of the hydrologic requirements referenced in this paragraph, or shall demonstrate to the satisfaction of the cabinet that protective measures are not necessary in order to enable the operation to meet such requirements:

1. Meet applicable water quality statutes, regulations, standards, and effluent limitations as required by 405 KAR 18:060, Section 1(3);

2. Avoid acid or toxic drainage as required by 405 KAR 18:060, Sections 4, 5, and 6;

3. Control the discharge of sediment to streams located outside the permit area as required by 405 KAR 18:060, Section 2; and

4. Control the drainage and discharge of water within the permit area as required by 405 KAR 18:060, Sections 1(4), 3, 8 and 9 [5, and 7], and 405 KAR 18:080.

(c) The cabinet may require that the description include protective measures in addition to those identified under paragraph (b) of this subsection, if the cabinet determines that additional measures are needed to protect the hydrologic balance in accordance with 405 KAR 18:060.

(2) Each application shall include the design of any necessary protective measures identified under subsection (1) of this section. The design shall be prepared in a manner and detail acceptable to the cabinet including, as appropriate, calculations, maps, drawings, and written explanations as necessary to document the design.

(3) Each application shall include a determination of the probable hydrologic consequences of the mining and reclamation operations for the permit area and adjacent area.

(a) The determination shall be based upon the baseline geologic, hydrologic, and other information required by Sections 12 through 16 of this regulation and other appropriate information, and may include information statistically representative of the site.

(b) The determination shall be completed according to the parameters and in the detail required by the cabinet to enable the cabinet to prepare a cumulative impact assessment, and shall take into account the anticipated effects of protective measures required by this chapter.

(c) For surface water systems, the determination shall, at a minimum, include probable impacts on:

1. Peak discharge rates, emphasizing the potential for flooding;

2. Settleable solids at peak discharge;

3. Low-flow discharge rates, emphasizing the potential for water supply diminution;

4. Suspended solids at low flow;

5. pH, at low flow, emphasizing the potential for acid drainage conditions, including depressed levels of alkalinity and elevated levels of iron, manganese, acidity, sulfate, and total dissolved solids or specific conductance, which are generally associated with acid drainage conditions.

(d) For ground water systems, the determination shall, at a minimum, include probable impacts on:

1. Water quantity, emphasizing water levels and the potential for water supply diminution for existing users, and dewatering of aquifers which are not currently being used for water supply but have the potential to be developed as a water supply source.

2. pH, emphasizing the potential for acid drainage conditions, including depressed levels of alkalinity and elevated levels of iron, manganese, acidity, sulfate, and total dissolved solids or specific conductance, which are generally associated with acid drainage conditions.

(e) An application for a major revision to a permit shall be reviewed by the cabinet to determine whether a new or updated determination of the probable hydrologic consequences shall be required.

(4)(a) The application shall include a plan for the collection, recording, and reporting of ground water and surface water quantity and quality data to monitor the effects of the mining and reclamation operations on the hydrologic balance, according to 405 KAR 18:110.

(b) The monitoring plan shall be based on the geologic and hydrologic baseline information, the mining and reclamation plan, and the determination of probable hydrologic consequences; and shall:

1. Identify the quantity and quality parameters to be monitored, sampling frequency, and monitoring site locations; and

2. Describe how the data may be used to determine the impacts of the operation on the hydrologic balance.

(5) An application for a major revision to a permit shall be reviewed by the cabinet to determine whether a new or updated cumulative hydrologic impact assessment shall be made.

Section 33. MRP; Diversions. Each application shall contain descriptions, including maps and cross-sections, of stream channel diversions and other diversions to be constructed within the proposed permit area to achieve compliance with 405 KAR 18:080.

Section 34. MRP; Impoundments and Embankments. (1) General. Each application shall include detailed design plans for each proposed sedimentation pond, water impoundment, and coal processing waste bank, dam, or embankment within the proposed permit area. Each design plan shall:

(a) Be prepared by, or under the direction of, and certified by, a qualified registered professional engineer;

(b) Contain a description, map, and appropriate cross-sections and drawings of the structure and its location;

(c) Contain all hydrologic and geologic

information and computations necessary to demonstrate compliance with the design and performance standards of Title 405, Chapter 18; and all information utilized by the applicant to determine the probable hydrologic consequences of the mining operation under Section 32(3) of this regulation;

(d) Contain an assessment of the potential effect on the structure from subsidence of the subsurface strata resulting from past underground mining operations if underground mining has occurred;

(e) Include any geotechnical investigation, design, and construction requirements for the structure;

(f) Describe the operation and maintenance requirements for each structure; and

(g) Describe the timetable and plans to remove each structure, if appropriate.

(2) Sedimentation ponds.

(a) Sedimentation ponds, whether temporary or permanent, shall be designed in compliance with the requirements of 405 KAR 18:090. Any sedimentation pond or earthen structure which will remain on the proposed permit area as a permanent water impoundment shall also be designed to comply with the requirements of 405 KAR 18:100.

(b) Each plan shall, at a minimum, comply with the requirements of MSHA, 30 CFR 77.216-1 and 77.216-2.

(3) Permanent and temporary impoundments. Permanent and temporary impoundments shall be designed to comply with the requirements of 405 KAR 18:100. Each plan shall comply with the requirements of MSHA, 30 CFR 77.216-1 and 77.216-2.

(4) Coal processing waste banks. Coal processing waste banks shall be designed to comply with the requirements of 405 KAR 18:140.

(5) Coal processing waste dams and embankments. Coal processing waste dams and embankments shall be designed to comply with the requirements of 405 KAR 18:160. Each plan shall comply with the requirements of MSHA, 30 CFR 77.216-1 and 77.216-2, and shall contain the results of a geotechnical investigation of the proposed dam or embankment foundation area, to determine the structural competence of the foundation which will support the proposed dam or embankment structure and the impounded material. The geotechnical investigation shall be planned and supervised by an engineer or engineering geologist, according to the following:

(a) The number, location, and depth of borings and test pits shall be determined using current prudent engineering practice for the size of the dam or embankment, quantity of material to be impounded, and subsurface conditions.

(b) The character of the overburden and bedrock, the proposed abutment sites, and any adverse geotechnical conditions which may affect the particular dam, embankment, or reservoir site shall be considered.

(c) All springs, seepage, and ground water flow observed or anticipated during wet periods in the area of the proposed dam or embankment shall be identified on each plan.

(d) Consideration shall be given to the possibility of mudflows, rock-debris falls, or other landslides into the dam, embankment, or impounded material.

(6) If the structure is twenty (20) feet or higher or impounds more than twenty (20) acre-feet, each plan under subsection (2), (3), and (5) of this section shall include a stability analysis of each structure. The stability analysis shall include, but not be limited to, strength parameters, pore pressures, and long-term seepage conditions. The plan shall also contain a description of each engineering design assumption and calculation with a discussion of each alternative considered in selecting the specific design parameters and construction methods.

Section 35. MRP; Air Pollution Control. For all surface operations associated with underground mining activities, the application shall contain an air pollution control plan which includes the following:

(1) An air quality monitoring program, if required by the cabinet, to provide sufficient data to evaluate the effectiveness of the fugitive dust control practices, under subsection (2) of this section to comply with applicable federal and state air quality standards; and

(2) A plan for fugitive dust control practices, as required under 405 KAR 18:170.

Section 36. MRP; Fish and Wildlife. Permit applications shall not be required under this section to contain a fish and wildlife plan unless and until federal regulations requiring such plan have been promulgated and this regulation has been amended as necessary to be consistent with the corresponding federal regulations.

Section 37. MRP; Postmining Land Use. (1) Each plan shall contain a description of the proposed use, following reclamation, of the land to be affected within the proposed permit area by surface operations or facilities, including a discussion of the utility and capacity of the reclaimed land to support a variety of alternative uses, and the relationship of the proposed use to existing land use policies and plans. This description shall explain:

(a) How the proposed postmining land use is to be achieved and the necessary support activities which may be needed to achieve the proposed land use;

(b) Where a land use different from the premining land use is proposed, all supporting documentation submitted for approval of the proposed use under 405 KAR 18:220;

(c) The consideration given to making all of the proposed underground mining activities consistent with surface owner plans and applicable state and local land use plans and programs;

(d) Where grazing is the proposed postmining land use, the detailed management practices necessary to properly implement the postmining use for grazing.

(2) The description shall be accompanied by a copy of the comments concerning the proposed use from the legal or equitable owner of record of the surface areas to be affected by surface operations or facilities within the proposed permit area and the state and local government agencies, if any, which would have to initiate, implement, approve, or authorize the proposed use of the land following reclamation.

(3) Approval of the initial postmining land use plan pursuant to this section, shall not preclude subsequent consideration and approval

of a revised postmining land use plan in accordance with the applicable requirements of this Title.

Section 38. MRP; Transportation on Public Roads. The application shall include or be accompanied by a transportation plan and map (at least the scale and detail of the separate county maps published by the Kentucky Transportation Cabinet) which shall set forth the portions of the public road system, if any, over which the applicant proposes to transport coal extracted in the underground mining activities.

(1) The plan shall specify the legal weight limits for each portion of any such road or bridge over which the applicant proposes to transport coal.

(2) The plan shall include any proposal by the applicant to obtain a special permit pursuant to the provisions of KRS 189.271 to exceed the weight limits on any road or bridge.

(3) The plan shall contain a certification by a duly authorized official of the Kentucky Transportation Cabinet attesting the accuracy of the plan in regard to the locations and identities of roads and bridges on the public road system and the accuracy of the specifications of weight limits on such roads and bridges.

Section 39. MRP; Blasting. (1) Each application shall contain a blasting plan for the proposed permit area explaining how the applicant intends to comply with the requirements of 405 KAR 18:120. This plan shall include, at a minimum, information setting forth the limitations the permittee will meet with regard to ground vibration and airblast, the bases for the ground vibration and airblast limitations, and the methods to be applied in controlling the adverse effects of blasting operations.

(2) Each application shall contain a description of the systems to be used to monitor compliance with the standards for ground vibration and airblast including the types, capabilities, and sensitivities of blast monitoring equipment and identification of the monitoring procedures and locations.

(3) Blasting operations within 500 feet of active underground mines require approval of the cabinet, MSHA, and the Kentucky Department of Mines and Minerals.

CHARLOTTE E. BALDWIN, Secretary

APPROVED BY AGENCY: November 14, 1985

FILED WITH LRC: November 15, 1985 at 11 a.m.

PUBLIC HEARING SCHEDULED: A public hearing on this regulation has been scheduled for December 30, 1985, at 10 a.m. in Room G-1 of the Capital Plaza Tower. Written comments may be submitted on or before the scheduled hearing date. However, if no written notice of intent to attend and testify at the public hearing is received within five (5) days before the scheduled hearing, the hearing will be cancelled. Those interested in attending and testifying at this hearing shall notify in writing: George Risk, Department for Surface Mining Reclamation and Enforcement, 3rd Floor Capital Plaza Tower, Frankfort, Kentucky 40601.

REGULATORY IMPACT ANALYSIS

Agency Contact Person: George Risk

(1) Type and number of entities affected: These amendments affect applicants seeking permits to conduct underground coal mining activities. There are approximately 1,200 underground mining activities currently permitted under the permanent program. These amendments concern the procedures to determine if the proposed permit area contains prime farmland. In that regard, the amendments also affect the surfce owners of mining areas which contain prime farmland.

(a) Direct and indirect costs or savings to those affected:

1. First year: To the extent that these amendments provide for a more accurate determination of the existence of prime farmland, some operations will incur additional costs to comply with the prime farmland requirements, and those surface owners affected will be better protected.

2. Continuing costs or savings: Same as first year.

3. Additional factors increasing or decreasing costs (note any effects upon competition): None.

(b) Reporting and paperwork requirements: The landowner affidavit concerning cropping history will be modified. No additional cost will be incurred.

(2) Effects on the promulgating administrative body:

(a) Direct and indirect costs or savings:

1. First year: There will be an additional workload on the cabinet's personnel to examine crop history records available from the Agriculture Stabilization and Conservation Service. However, this should not be a significant increase.

2. Continuing costs or savings: Same as first year.

3. Additional factors increasing or decreasing costs: None.

(b) Reporting and paperwork requirements: None.

(3) Assessment of anticipated effect on state and local revenues: None.

(4) Assessment of alternative methods; reasons why alternatives were rejected: None.

(5) Identify any statute, administrative regulation or government policy which may be in conflict, overlapping, or duplication: None.

(a) Necessity of proposed regulation if in conflict: N/A

(b) If in conflict, was effort made to harmonize the proposed administrative regulation with conflicting provisions: N/A

(6) Any additional information or comments: None.

Tiering:

Was tiering applied? No. Under federal and state laws, these requirements must apply equally to all applicants seeking permits for underground mining activities under Title 405, Chapters 7 through 24.

A fiscal note is not required for this regulation because it will have not impact on local government.

NATURAL RESOURCES
AND ENVIRONMENTAL PROTECTION CABINET
Department for Surface Mining Reclamation
and Enforcement
(Proposed Amendment)

405 KAR 8:050. Permits for special categories of mining.

RELATES TO: KRS 350.093, 350.445, 350.450, 350.465
PURSUANT TO: KRS Chapter 13A, 350.020, 350.028, 350.060, 350.093, 350.151, 350.450, 350.465
NECESSITY AND FUNCTION: KRS Chapter 350 in pertinent part requires the cabinet to promulgate rules and regulations pertaining to permits for surface coal mining and reclamation operations, including certain special categories of mining. This regulation sets forth permit application requirements for special mining categories including mining on prime farmland, augering, in situ processes, offsite coal preparation plants, mountaintop removal mining, and mining on steep slopes. This regulation sets forth the only variance from the requirement to return to approximate original contour in steep slopes. This regulation sets forth the manner in which the contemporaneous reclamation requirements can be met for combined surface and underground mining activities.

Section 1. In Situ Processing Activities. (1) Applicability. This section applies to any person who conducts or intends to conduct surface coal mining and reclamation operations utilizing in situ processing activities.

(2) Application requirements. Any application for a permit for operations covered by this section shall be made according to all requirements of this chapter applicable to underground mining activities. In addition, the mining and reclamation operations plan for operation involving in situ processing activities shall contain information establishing how those operations will be conducted in compliance with the requirements of 405 KAR 20:080, including:

(a) Delineation of proposed holes and wells and production zone for approval of the cabinet;

(b) Specifications of drill holes and casing proposed to be used;

(c) A plan for treatment, confinement or disposal of all acid-forming, toxic-forming or radioactive gases, solids, or liquids constituting a fire, health, safety or environmental hazard caused by the mining and recovery process; and

(d) Plans for monitoring surface and ground water and air quality, as required by the cabinet.

(3) Criteria for approval. No permit shall be issued for operations covered by this section unless the cabinet first finds, in writing, upon the basis of a complete application made in accordance with subsection (2) of this section that the operation will be conducted in compliance with all requirements of this chapter relating to underground mining activities, and 405 KAR 20:080 and Title 405, Chapter 18.

Section 2. Augering. (1) General. This section applies to any person who conducts or intends to conduct surface coal mining and reclamation operations utilizing augering operations. Any application for a permit for operations covered by this section shall contain, in the mining and reclamation plan, a description of the augering methods to be used and the measures to be used to comply with 405 KAR 20:030. No permit shall be issued for any operations covered by this section unless the cabinet finds, in writing, that in addition to meeting all other applicable requirements of this chapter, the operation will be conducted in compliance with 405 KAR 20:030.

(2) Augering on previously mined lands.

(a) In addition to other requirements of Title 405, Chapter 8, each application for a permit to conduct auger mining on an area mined prior to May 3, 1978, and not reclaimed to the standards of Title 405 shall contain such information as the cabinet deems necessary to describe the proposed affected area and method of operation and show that the proposed method of operation will result in stable postmining conditions, and reduce or eliminate adverse environmental conditions created by previous mining activities.

(b) If the cabinet determines that the affected area cannot be stablized and reclaimed subsequent to augering or that the operation will result in adverse impact to the proposed permit area or adjacent area, the permit shall not be issued.

(c) The cabinet shall, consistent with all applicable requirements of KRS Chapter 350 and Title 405, Chapters 7 through 24, issue a permit if the applicant demonstrates that the proposed surface coal mining operations will provide for reduction or elimination of the highwall, or reduction or abatement of adverse impacts resulting from past mining activities, or stabilization or enhancement of the previously mined area.

(d) The cabinet shall ensure that all applicable performance standards can be met.

Section 3. Prime Farmlands. (1) Applicability. This section applies to any person who conducts or intends to conduct surface coal mining and reclamation operations on prime farmlands historically used for cropland. This section does not apply to [except]:

(a) Lands on which surface coal mining and reclamation operations are conducted pursuant to any permit issued prior to August 3, 1977.

(b) Lands on which surface coal mining and reclamation operations are conducted pursuant to any renewal or revision of a permit issued prior to August 3, 1977. For the purposes of this paragraph, "renewal" of a permit shall mean a decision by the cabinet to extend the time by which the permittee may complete mining within the boundaries of the original permit, and "revision" of the permit shall mean a decision by the cabinet to allow changes in the method of mining operations within the original permit area, or the decision of the cabinet to allow incidental boundary changes to the original permit. [; or]

(c) Lands included in any existing surface coal mining operation, for which a permit was issued for all or any part thereof prior to August 3, 1977, provided that:

1. Such lands are part of a single continuous surface coal mining operation [mining pit] begun under a permit issued before August 3, 1977; and

2. The permittee had a legal right to mine the lands prior to August 3, 1977 through ownership, contract, or lease but not including an option to buy, lease or contract; and

3. The lands contain[ed] part of a continuous recoverable coal seam that was being mined in a single continuous mining pit (or multiple pits if the lands are proven to be a part of a single continuous surface coal mining operation) [the pit] begun under a permit issued prior to August 3, 1977.

4. A single continuous surface coal mining operation is presumed to consist only of a single continuous mining pit under a permit issued prior to August 3, 1977, but may include non-contiguous parcels if the permittee can prove by clear and convincing evidence that, prior to August 3, 1977, the non-contiguous parcels were a part of a single permitted operation. For the purpose of this paragraph, clear and convincing evidence includes, but is not limited to, contracts, leases, deeds, or other properly executed legal documents (not including options) that specifically treat physically separate parcels as one (1) surface coal mining operation.

5. [(d)] For the purposes of this paragraph [subsection] a pit shall be deemed to be a single continuous mining pit even if portions of the pit are crossed by a road, pipeline, railroad or powerline or similar crossing.

(d) The following facilities associated with an underground mining activity, if the facilities affect a total of two (2) acres or less of prime farmland and if the facilities are actively used for a period of five (5) years or more:

1. Coal preparation plants;

2. Support facilities; and

3. Roads.

(2) Application requirements. If land within the proposed permit area is identified as prime farmland under 405 KAR 8:030, Section 21 or 405 KAR 8:040, Section 21, the applicant shall submit a plan for the mining and restoration of the land. Each plan shall contain, at a minimum:

(a) A soil survey of the permit area conducted by the SCS according to the standards of the National Cooperative Soil Survey and in accordance with the procedures set forth in U.S. Department of Agriculture Handbooks 436 "Soil Taxonomy" (SCS, 1975) as amended and 18 "Soil Survey Manual" (SCS, 1951) as amended. The SCS establishes the standards of the National Cooperative Soil Survey and maintains a National Soils Handbook which gives current acceptable procedures for conducting soil surveys. The National Soils Handbook is available for review at area and state SCS offices.

1. The soil survey shall include a soils map, a description of each soil mapping [map] unit, and [representative soil] profile descriptions of each soil using representative descriptions from the soil survey area as determined by the SCS including, but not limited to, soil-horizon depths, textures, pH values, and consistence for each prime farmland soil unit within the permit area [unless other representative descriptions from the locality, prepared in conjunction with the National Cooperative Soil Survey are available and their use is approved by the cabinet].

2. In addition to the representative soil profile description provided by the SCS, the applicant may submit site-specific soil profile descriptions of the permit area prime farmland soil mapping units. These descriptions shall be prepared by a soil scientist meeting the requirements for certification by the American Registry of Certified Professionals in Agronomy, Crops, and Soils (ARCPACS) as a Professional Soil Scientist or Professional Soil Classifier; however, actual certification by ARCPACS shall not be required. These descriptions must meet NCSS standards and shall include the name, address and qualifications of the soil scientist that prepared them. If such on-site descriptions are not obtained and included in the application, then the representative soil profile descriptions provided by the SCS shall be deemed by the cabinet as representative of the soils in the permit area and the soil-horizon depths and other data therein shall serve as a basis for determining whether reclaimed prime farmland areas have been restored to proper depth and meet other reconstruction standards of 405 KAR 20:040, Section 4.

3. Bulk density of the prime farmland soils prior to mining shall be documented and included in the application. These densities shall be obtained either by testing samples from each soil mapping unit by ten (10) inch soil layers or by using estimates provided for each soil series by the SCS.

4. The cabinet may require the applicant to provide information on other physical and chemical soil properties as needed to make a determination that the applicant has the technological capability to restore the prime farmland within the permit area to the soil reconstruction standards of 405 KAR 20:040.

(b) A detailed plan for soil removal, storage, and reconstruction which demonstrates that the applicant has the technological capability to comply with 405 KAR 20:040. The plan shall include at a minimum:

1. A description of the timing and sequence of soil removal and reconstruction in relation to mining operations which will provide for soil handling operations to be conducted during dry seasons and provide for continuous mining operations. This subparagraph shall apply to each permit issued and renewed and each mid-term review conducted on or after thirty (30) days after the effective date of this amendment to this regulation.

2. The proposed methods and types of equipment to be used for soil removal, storage, and reconstruction, including equipment operation patterns, use of ripping and chiseling, stockpile locations and erosion control measures, etc.

3. A description of measures to be taken to avoid excessive compaction of soils.

4. A description of any soil amendments to be applied.

5. Maps, plans, and cross-sections depicting the location and acreages of reconstructed prime farmland soil mapping units, final grading configuration, drainage and erosion control measures.

[(b) The proposed method and type of equipment to be used for removal, storage, and replacement of the soil in accordance with 405 KAR 20:040.]

[(c) A demonstration that excessive compaction will be avoided in replacement of the soil.]

[(d) The location of areas to be used for the separate stockpiling of the soil and plans for soil stabilization before redistribution.]

6. [(e)] If applicable, documentation, such as agricultural school studies or other scientific data from comparable areas, and a demonstration as is required for topsoil substitution or

supplementation in 405 KAR 16:050, Section 2(5) that supports the use of other suitable material, instead of the A, E, B, or C soil horizon, to create a final soil having a greater productive capacity than that which exists prior to mining [obtain on the restored area equivalent or higher levels of yield as non-mined prime farmlands in the surrounding area under equivalent levels of management].

[(f) Plans for seeding or cropping the final graded disturbed land and the conservation practices to be used to adequately control erosion and sedimentation and restoration of an adequate soil moisture regime, during the period from completion of regrading until release of the performance bond or equivalent guarantee under Title 405, Chapter 10. Proper adjustments for seasons must be proposed so that final graded land is not exposed to erosion during seasons when vegetation or conservation practices cannot be established due to weather conditions.]

7. [(g)] Available agricultural school studies or other scientific data for areas with comparable soils, climate, and management (including water management) that demonstrate that the proposed method of reclamation, including the use of soil mixtures, if any, will achieve, within a reasonable time, levels of yield equivalent to, or higher than, those of non-mined prime farmland in the surrounding area [equivalent or higher levels of yield after mining as existed before mining].

(c) A plan for revegetation, crop production and demonstration of restoration of soil productivity in conformance with 405 KAR 20:040, Section 5. The cabinet may allow detailed cropping plans, including items such as identification of reference crops, locations of test plots, and yield measurement methodologies, to be submitted after issuance of the permit, as a revision to the permit, provided that the permit is conditioned to required submission of the detailed plan at least one (1) year prior to initiation of crop production on the reclaimed area for the purpose of demonstration of compliance with 405 KAR 20:040. The initial revegetation plan, however, must be included in the application before the permit is issued. Permits issued prior to the effective date of this amendment shall be revised to comply with this paragraph at least one (1) year prior to initiation of crop production on the reclaimed area for the purpose of demonstration of compliance with 405 KAR 20:040.

(3) Cabinet consultation with the SCS [Secretary of Agriculture].

(a) Before any permit is issued for areas that include prime farmlands, the cabinet shall consult with the state conservationist, SCS [Secretary of Agriculture].

(b) The state conservationist shall [Secretary of Agriculture may] provide for the review of and comment on [of] the proposed method of soil reconstruction in the plan submitted under subsection (2) of this section. If the state conservationist considers those methods to be inadequate, he or she shall [The secretary may] suggest revisions to the cabinet resulting in more complete and adequate reconstruction.

[(c) Consultations shall be accomplished through the office of the State Conservationist of the U.S. SCS.]

(4) Criteria for approval. A permit for the mining and reclamation of prime farmland may be granted by the cabinet, if it first finds, in writing, upon the basis of a complete application, that:

(a) The approved proposed postmining land use of these prime farmlands will be cropland;

(b) The permit incorporates as specific conditions the contents of the plan submitted under subsection (2) of this section, after consideration of any revisions to that plan suggested by the state conservationist [Secretary of Agriculture] under subsection (3) of this section;

(c) There is a technologically feasible plan to restore the prime farmland, within a reasonable time, to equivalent or higher levels of yield as non-mined prime farmland in the surrounding area under equivalent levels of management; and

(d) The proposed operations will be conducted in compliance with the requirements of 405 KAR 20:040 and other environmental protection performance and reclamation standards for mining and reclamation of prime farmland of Title 405, Chapters 7 through 24.

Section 4. Mountaintop Removal Mining. (1) Applicability. This section applies to any person who conducts or intends to conduct surface mining activities by mountaintop removal mining.

(2) Mountaintop removal mining means surface mining activities, where the mining operation removes an entire coal seam or seams running through the upper fraction of a mountain, ridge, or hill, except as provided for in 405 KAR 20:050, Section 1(6), by removing substantially all of the overburden off the bench and creating a level plateau or a gently rolling contour, with no highwalls remaining, and capable of supporting postmining land uses in accordance with the requirements of this section.

(3) Criteria for approval. The cabinet may issue a permit for mountaintop removal mining, without regard to the requirements of 405 KAR 16:190 to restore the lands disturbed by such mining to their approximate original contour, if it first finds, in writing, on the basis of a complete application, that the following requirements are met:

(a) The proposed postmining land use of the lands to be affected will be an industrial, commercial, agricultural, residential, or public facility (including recreational facilities) use and, if:

1. After consultation with the appropriate land-use planning agencies, if any, the proposed land use is deemed by the cabinet to constitute an equal or better economic or public use of the affected land compared with the pre-mining use;

2. The applicant demonstrates compliance with the requirements for acceptable alternative postmining land uses of 405 KAR 16:210;

3. The proposed use would be compatible with adjacent land uses and existing state and local land use plans and programs; and

4. The cabinet has provided, in writing, an opportunity of not more than sixty (60) days to review and comment on such proposed use to the governing body of general purpose government in whose jurisdiction the land is located and any state or federal agency which the cabinet, in its discretion, determines to have an interest in the proposed use.

(b) The applicant has demonstrated that, in place of restoration of the land to be affected

to the approximate original contour under 405 KAR 16:190, the operation will be conducted in compliance with the requirements of 405 KAR 20:050.

(c) The requirements of 405 KAR 20:050 are made a specific condition of the permit.

(d) All other requirements of KRS Chapter 350 and Title 405, Chapters 7 through 24 are met by the proposed operations.

(e) The permit is clearly identified as being for mountaintop removal mining.

(4) Periodic review:

(a) Any permits issued under this section shall be reviewed by the cabinet to evaluate the progress and development of mining activities to establish that the permittee is proceeding in accordance with the terms of the permit:

1. Within the sixth month preceding the third year from the date of its issuance;

2. Before each permit renewal; and

3. Not later than the middle of each permit term.

(b) Any review required under paragraph (a) of this subsection need not be held if the permittee has demonstrated and the cabinet finds, in writing, within three (3) months before the scheduled review, that all operations under the permit are proceeding and will continue to be conducted in accordance with the terms of the permit and requirements of KRS Chapter 350 and Title 405, Chapters 7 through 24.

(5) Modifications of permit. The terms and conditions of a permit for mountaintop removal mining may be modified at any time by the cabinet, if it determines that more stringent measures are necessary to insure that the operation involved is conducted in compliance with the requirements of KRS Chapter 350 and Title 405, Chapters 7 through 24.

Section 5. Steep Slope Mining. (1) This section applies to any persons who conduct or intend to conduct steep slope surface coal mining and reclamation operations, except:

(a) Where an applicant proposes to conduct surface coal mining and reclamation operations on flat or gently rolling terrain, leaving a plain or predominantly flat area, but on which an occasional steep slope is encountered as the mining operation proceeds;

(b) Where a person obtains a permit under the provisions of Section 4 of this regulation; or

(c) To the extent that a person obtains a permit incorporating a variance under Section 6 of this regulation.

(2) Any application for a permit for surface coal mining and reclamation operations covered by this section shall contain sufficient information to establish that the operations will be conducted in accordance with the requirements of 405 KAR 20:060, Section 2.

(3) No permit shall be issued for any operations covered by this section, unless the cabinet finds, in writing, that in addition to meeting all other requirements of this chapter, the operation will be conducted in accordance with the requirements of 405 KAR 20:060, Section 2.

Section 6. Variances from Approximate Original Contour Restoration Requirements for Steep Slope Mining. (1) General.

(a) Applicability. This section applies to non-mountaintop removal, steep slopes surface coal mining and reclamation operations where the operation is not to be reclaimed to achieve the approximate original contour required by 405 KAR 16:190 or 405 KAR 18:190 and 405 KAR 20:060, Section 2(3).

(b) This section provides for a variance from approximate original contour restoration requirements on steep slopes for surface coal mining and reclamation operations to:

1. Improve watershed control of lands within the permit area and on adjacent lands, when compared to the watershed control which would exist were the area restored to the approximate original contour; and

2. Make land within the permit area, after reclamation, suitable for an industrial, commercial, residential, or public use, including receational facilities.

(2) Criteria for approval. The cabinet may issue a permit for surface mining activities incorporating a variance from the requirements for restoration of the affected lands to their approximate original contour only if it first finds, in writing, on the basis of a complete application, that all of the following requirements are met:

(a) The applicant has demonstrated that the purpose of the variance is to make the lands to be affected within the permit area suitable for an industrial, commercial, residential, or public use postmining land use.

(b) The proposed use, after consultation with the appropriate land-use planning agencies, if any, constitutes an equal or better economic or public use.

(c) The applicant has demonstrated compliance with the requirements for acceptable alternative postmining land uses of 405 KAR 16:210 or 405 KAR 18:220, as appropriate.

(d) The applicant has demonstrated that the watershed of lands within the proposed permit area and adjacent areas will be improved by the operations. The watershed will only be deemed improved if:

1. There will be a reduction in the amount of total suspended solids or other pollutants discharged to ground or surface waters from the permit area as compared to such discharges had the area been restored to approximate original contour, so as to improve public or private uses or the ecology of such waters; or, there will be reduced flood hazards within the watershed containing the permit area by reduction of the peak flow discharges from precipitation events or thaws; or, there will be an increase in streamflow during times of the year when the stream is normally at low flow or dry conditions and such increase in streamflow is determined by the cabinet to be beneficial to public or private users or the ecology of such streams; and

2. The total volume of flows from the proposed permit area, during every season of the year, will not vary in a way that adversely affects the ecology of any surface water or any existing or planned use of surface or ground water.

(e) The applicant has demonstrated that the owner of the surface of the lands within the permit area has knowingly requested, in writing, as part of the application, that a variance be granted. The request shall show an understanding that the variance could not be granted without the surface owner's request.

(f) The applicant has demonstrated that the proposed operations will be conducted in compliance with the requirements of 405 KAR 20:060, Section 3.

(g) All other requirements of KRS Chapter 350 and Title 405, Chapters 7 through 24 will be met by the proposed operations.

(3) If a variance is granted under this section:

(a) The requirements of 405 KAR 20:060, Section 3 shall be made a specific condition of the permit.

(b) The permit shall be specifically marked as containing a variance from approximate original contour.

(4) Periodic review.

(a) Any permits incorporating a variance issued under this section shall be reviewed by the cabinet to evaluate the progress and development of the mining activities, to establish that the permittee is proceeding in accordance with the terms of the variance:

1. Within the sixth month preceding the third year from the date of this issuance;

2. Before each permit renewal; and

3. Not later than the middle of each permit term.

(b) If the permittee demonstrates to the cabinet at any of the times specified in paragraph (a) of this subsection that the operations involved have been and continue to be conducted in compliance with the terms and conditions of the permit, the requirements of KRS Chapter 350 and Title 405, Chapters 7 through 24, the review required at that time need not be held.

(5) Modifications of permit. The terms and conditions of a permit incorporating a variance under this section may be modified at any time by the cabinet, if it determines that more stringent measures are necessary to insure that the operations involved are conducted in compliance with the requirements of KRS Chapter 350 and Title 405, Chapters 7 through 24.

Section 7. Variances for Delay in Contemporaneous Reclamation Requirement in Combined Surface and Underground Mining Operations. (1) Applicability.

(a) This section applies to any permittee or permittees who conduct or intend to conduct combined surface mining activities and underground mining activities where compliance with the time frames for reclamation as specified in [contemporaneous reclamation as required by] 405 KAR 16:020, Section 2, is not practicable and a delay is requested to allow underground mining activities to be conducted before the reclamation operations for the surface mining activities can be completed.

(b) This section provides only for delay in reclamation of surface mining activities, if that delay will allow underground mining activities to be conducted to ensure both maximum practical recovery of coal resources and to avoid multiple future disturbances of surface lands or waters.

(2) Application requirements. Any applicant who desires to obtain a variance under this section shall file with the cabinet complete applications for both the surface mining activities and underground mining activities which are to be combined. The mining and reclamation operation plans for these permits shall contain appropriate narratives, maps, and plans which:

(a) Show why the proposed underground mining activities are necessary or desirable to assure maximum practical recovery of coal;

(b) Show how multiple future disturbances of surface lands or waters will be avoided;

(c) Identify the specific surface areas for which a variance is sought and the particular sections of KRS Chapter 350 and Title 405, Chapters 7 through 24 from which a variance is being sought;

(d) Show how the activities will comply with 405 KAR 16:010, Section 3 [405 KAR 20:020] and other applicable requirements of Title 405, Chapters 7 through 24;

(e) Show why the variance sought is necessary for the implementation of the proposed underground mining activities;

(f) Provide an assessment of the adverse environmental consequences and damages, if any, that will result if the reclamation of surface mining activities is delayed; and

(g) Show how temporary off-site storage of spoil will be conducted to comply with the requirements of KRS Chapter 350 and 405 KAR 18:190, Section 6 [405 KAR 16:130].

(3) Criteria for approval. A permit incorporating a variance under this section may be issued by the cabinet if it first finds, in writing, upon the basis of a complete application filed in accordance with this section that:

(a) The applicant has presented, as part of the permit application, specific, feasible plans for the proposed underground mining activities;

(b) The proposed underground mining activities are necessary or desirable to assure maximum practical recovery of the mineral resources and will avoid multiple future disturbances of surface land or waters;

(c) The applicant has satisfactorily demonstrated that the applications for the surface mining activities and underground mining activities conform to the requirements of Title 405, Chapters 7 through 24 and that all other permits necessary for the underground mining activities have been issued by the appropriate authority;

(d) The surface area of surface mining activities proposed for the variance has [have] been shown by the applicant to be necessary for implementing the proposed underground mining activities;

(e) No substantial adverse environmental damage, either on-site or off-site, will result from the delay in completion of reclamation otherwise required by KRS Chapter 350 and 405 KAR 16:020;

(f) The operations will, insofar as a variance is authorized, be conducted in compliance with the requirements of 405 KAR 16:010, Section 3 and other applicable requirements of this Title [405 KAR 20:020];

(g) Temporary [Provisions for] off-site storage of spoil will comply with the requirements of KRS Chapter 350 and 405 KAR 18:190, Section 6 [405 KAR 16:130];

(h) Liability under the performance bond required to be filed by the applicant with the cabinet pursuant to Title 405, Chapter 10 will [shall] be for the duration of the underground mining activities and until all requirements of Title 405, Chapter 10 have been complied with; and

(i) The permit for the surface mining activities contains specific conditions:

1. Specifying [Delineating] the particular surface areas for which a variance is authorized; and

[2. Identifying the particular requirements of 405 KAR 20:020 which are to be complied with, in lieu of the otherwise applicable provisions of KRS Chapter 350 and Title 405, Chapter 16; and]

2. [3.] Providing a detailed schedule for reclamation in lieu of requirements of the time frames specified in 405 KAR 16:020, Section 2 [compliance with the particular requirements of 405 KAR 20:020 identified under subparagraph 2 of this paragraph].

(4) Periodic review. Variances granted under permits issued under this section shall be reviewed by the cabinet no later than three (3) years from the dates of issuance of the permit and any permit renewals.

Section 8. Coal Processing Plants [or Support Facilities] Not Located Within the Permit Area of a Specified Mine. (1) Applicability. This section applies to any person who operates or intends to operate coal processing plants [and associated support facilities] not within a permit area of a specific mine, other than such plants which are located at the site of ultimate coal use. Notwithstanding the provisions of 405 KAR 7:015, the provisions of RAM #33, "Coal Processing Operations and Crushing and Loading Facilities," are null and void.

(2) Permit required. Any person who operates or intents to construct or operate such a coal processing plant [or support facility] shall [have] obtain[ed] a permit from the cabinet under Title 405, Chapters 7 through 24.

(3) Previously exempted operations. This subsection applies only to those coal processing plants subject to 405 KAR 20:070, Section 5.

(a) Within sixty (60) days of the date specified in subsection (6) of this section, all persons operating a coal processing plant who intent to operate beyond eight (8) months from the date specified in subsection (6) of this section, shall file an initially complete (as defined in 405 KAR 8:010, Section 13(1)(a)) permit application under 405 KAR Chapters 7 through 24. No person may operate a coal processing plant beyond eight (8) months from the date specified in subsection (6) of this section unless that operation is being conducted under a permit issued under 405 KAR Chapters 7 through 24, except that a person may continue to operate a coal processing plant without a permit beyond the eight (8) month deadline if:

1. An initially complete permit application has been timely filed. "Timely filed" shall mean within sixty (60) calendar days of the date specified in subsection (6) of this section; or if filed within that time, but determined to be initially incomplete, resubmitted within fifteen (15) calendar days of being served notice by the cabinet that the application is initially incomplete. Such notice shall be served in accordance with 405 KAR 7:090, Section 6.

2. The cabinet has yet to issue or deny the permit; and

3. The person complies with the performance standards of 405 KAR 20:070.

(b) The applicant shall file a performance bond under 405 KAR Chapter 10 within sixty (60) calendar days of being served notice of the decision by the cabinet to issue the permit. Such notice shall be served in accordance with 405 KAR 7:090, Section 6. If the performance bond is not filed within that time the cabinet shall deny the permit application.

(c) Any time limits for cabinet action specified in 405 KAR 8:010 shall not apply to permit applications filed under this subsection; provided, however, the cabinet shall make every effort to timely review and issue or deny such permit applications within eight (8) months of the date specified in subsection (6) of this section.

[(3) Criteria for approval.]

(4) Application.

(a) Any application for a permit for operations covered by this section shall be in accordance with 405 KAR 8:030 and, as applicable, 405 KAR 8:050 and shall contain in the mining and reclamation plan, specific plans, including descriptions, maps and drawings of the construction, operation, maintenance, reclamation and removal of the coal processing plants [and associated support facilities]. The plan shall demonstrate that those operations will be conducted in compliance with 405 KAR 20:070.

(b) For permit applications for operations subject to subsection (3) of this section, the requirements of 405 KAR 8:030, Section 21, and 405 KAR 8:050, Section 3, shall not apply to lands disturbed by the coal processing plants prior to the date specified in subsection (6) of this section.

(c) Permit applications for operations subject to subsection (3) of this section, which were timely filed in accordance with subsection (3)(a)1 of this section, need not contain the information required under 405 KAR 8:030, Sections 12, 13, 14(3), and 15(4). Any such applicant failing to make a timely filing shall be required to submit this information.

(5) Criteria for approval. [(b)] No permit shall be issued for any operation covered by this section unless the cabinet finds, in writing, that, in addition to meeting all other applicable requirements of this chapter, the operations will be conducted in compliance with the requirements of 405 KAR 20:070.

(6) Applicability of amendments to this section. These amendments to this section shall become applicable upon the effective date of the federal rulemaking setting aside KRS 350.060(22), but not before December 1, 1985.

Section 9. Repeal of Regulation. 405 KAR 20:020, Concurrent surface and underground mining, is hereby repealed.

CHARLOTTE E. BALDWIN, Secretary
APPROVED BY AGENCY: November 14, 1985
FILED WITH LRC: November 15, 1985 at 11 a.m.

PUBLIC HEARING SCHEDULED: A public hearing on this regulation has been scheduled for December 30, 1985, at 10 a.m. in Room G-1 of the Capital Plaza Tower. Written comments may be submitted on or before the scheduled hearing date. However, if no written notice of intent to attend and testify at the public hearing is received within five (5) days before the scheduled hearing, the hearing will be cancelled. Those interested in attending and testifying at this hearing shall notify in writing: George Risk, Department for Surface Mining Reclamation and Enforcement, 3rd Floor Capital Plaza Tower, Frankfort, Kentucky 40601.

REGULATORY IMPACT ANALYSIS

Agency Contact Person: George Risk
(1) Type and number of entities affected:

These amendments primarily affect coal processing operations (such as crushing facilities) which do not separate coal from impurities and which were previously exempt from the provisions of SMCRA, KRS Chapter 350, and KAR Title 405. The cabinet has estimated that 600 to 800 existing operations will be affected in this regard. The proposed amendments establish a process for bringing these operations into compliance with Kentucky's permanent regulatory program for coal mining.

These amendments also affect persons who seek permits to conduct surface coal mining operations on prime farmland areas and current and future surface owners of such reclaimed prime farmland. There are approximately 190 coal mining operations on prime farmland currently permitted under 405 KAR Chapters 7 through 24.

The amendments to Section 7 (variances for combined surface and underground operations) have no significant impact.

By affecting those persons identified above, this regulation also affects, directly or indirectly and in varying degrees, persons living in, or with interests in, the coal field regions of Kentucky.

(a) Direct and indirect costs or savings to those affected:

1. First year: As noted above, with this rulemaking many existing, previously exempt operations will be brought under the jurisdiction of Kentucky's permanent program (KRS Chapter 350, and KAR Title 405). In order to comply with these laws and regulations, the majority of these existing operations will be required to obtain permits and conduct activities in accordance with certain requirements. The amendments, as proposed, establish a process, including a time frame, for bringing these operations into compliance with the Kentucky's permanent regulatory program for coal mining. Permanent-program applications will need to be prepared for the majority of these operations, and these applications will be processed by the cabinet with final actions (i.e., permit issuance or denial) for most, if not all, of the applications occurring within one year of the date of applicability of the amendments to Section 8 of the regulation.

For such operations (i.e., operations that process coal but do not separate coal from impurities) which are to be developed subsequent to the date of applicability of the amendments to Section 8 of 405 KAR 8:050, applications will be processed in accordance with 405 KAR 8:010, Section 16.

The amendments also affect application requirements for operations which proposed to disturb prime farmland. For such operations, these amendments require some additional information regarding soil descriptions; descriptions of the soil removal, storage and reconstruction plans; and cropping plans. This may require additional data gathering and advanced planning on the part of the operator, but should not have any significant effect on costs. In addition, the surface owner will be better protected because the new requirements will provide for a more comprehensive review of the mining and reclamation plan.

2. Continuing costs or savings: Same as first year with the exception that the majority of the applications for existing, previously exempt operations will be processed within the first year of the date on which the amendments to Section 8 of 405 KAR 8:050 become applicable.

3. Additional factors increasing or decreasing costs (note any effects upon competition): None.

(b) Reporting and paperwork requirements: See (1)(a)1 above.

(2) Effects on the promulgating administrative body:

(a) Direct and indirect costs or savings:

1. First year: Applications for an estimated 600 to 800 existing operations which were previously exempt from the requirements of SMCRA, KRS Chapter 350, and KAR Title 405 will be processed by the cabinet during the first year from the date on which the amendments to Section 8 of 405 KAR 8:050 become applicable. The cabinet will aso conduct inspections of these operations in accordance with 405 KAR Chapter 12. Thus, the cabinet's expenses and workload will increase as a result of the proposed amendments.

For such operations (i.e., operations that process coal but do not separate coal from impurities) which are to be developed subsequent to the date of applicability of the amendments to Section 8 of the regulation, the cabinet will process applications in accordance with 405 KAR 8:010, Section 16.

2. Continuing costs or savings: Same as first year, with the exception that the majority of the applications for existing, previously exempt operations will be processed within one year of the date of applicability of the amendments to Section 8 of 405 KAR 8:050.

3. Additional factors increasing or decreasing costs: None.

(b) Reporting and paperwork requirements: See (2)(a)1 above.

(3) Assessment of anticipated effect on state and local revenues: None.

(4) Assessment of alternative methods; reasons why alternatives were rejected: None.

(5) Identify any statute, administrative regulation or government policy which may be in conflict, overlapping, or duplication: KRS 350.060(22) is currently in conflict with the amendments proposed to 405 KAR 8:050, Section 8. However, the federal Office of Surface Mining (OSM) has proposed to preempt and supersede this subsection (see 50 FR 37699) pursuant to Section 505(b) of SMCRA and 30 CFR 730.11(a). It is anticipated that this preemption and supersession will, in effect, require the cabinet to apply the permanent-program requirements as is indicated in the proposed amendments to 405 KAR 8:050, Section 8. As is stated in these proposed amendments, the cabinet will not apply the amendments to Section 8 of 405 KAR 8:050 until OSM preempts and supersedes KRS 350.060(22), and, at that time, the amendments to 405 KAR 8:050, Section 8 will be consistent with KRS Chapter 350 as well as other statutes and regulations.

(a) Necessity of proposed regulation if in conflict: The amendments to Section 8 of 405 KAR 8:050 are necessary to maintain consistency between the federal laws and regulations for coal processing plants and Kentucky's regulations for similar operations. These amendments are also necessary to fulfill a requirement of the final judgment and order of the U.S. District Court in Sierra Club et al. vs. Watt et al., Civil Action No. 82-30.

(b) If in conflict, was effort made to harmonize the proposed administrative regulation with conflicting provisions: See (5) above.

(6) Any additional information or comments: None.

Tiering:
Was tiering applied? No. Under federal and state laws, these requirements must apply equally to all surface coal mining and reclamation operations conducted under 405 KAR Chapters 7 through 24.

A fiscal note is not required for this regulation because it will have no impact on local government.

NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION CABINET
Department for Surface Mining Reclamation and Enforcement
(Proposed Amendment)

405 KAR 16:010. General provisions.

RELATES TO: KRS 350.020, 350,090, 350.093, 350.151, 350.405, 350.410, 350.440, 350.445, 350.450, 350.465

PURSUANT TO: KRS Chapter 13A, 350.020, 350.028, 350.465

NECESSITY AND FUNCTION: KRS Chapter 350 in pertinent part requires the cabinet to promulgate rules and regulations establishing performance standards for protection of people and property, land, water and other natural resources, and aesthetic values, during surface mining activities and for restoration and reclamation of surface areas affected by mining activities. This regulation contains general performance standards for maximizing coal recovery, protection of underground mining, prevention and correction of landslides, temporary cessation of operations, and permanent abandonment of operations.

Section 1. Applicability. The provisions of this chapter are applicable to all surface mining activities conducted under 405 KAR Chapters 7 through 24. The provisions of this chapter also apply to those special categories of surface mining activities for which performance standards are set forth under 405 KAR 20:030 [20:020] through 405 KAR 20:080 except to the extent that a provision of those regulations specifically exempts a particular category from a particular requirement of this chapter.

Section 2. Coal Recovery. Surface mining activities shall be conducted so as to maximize the utilization and conservation of the coal, while utilizing the best appropriate technology currently available to maintain environmental integrity, so that reaffecting the land in the future through surface coal mining operations is minimized.

Section 3. Protection of Underground Mining. [(1)] No surface [coal] mining activity [activities] shall be conducted within [closer than] 500 feet of [to] any point of either an active or abandoned underground mine, unless [except to the extent that]:

(1) [(a)] If any of the workings of the underground mine are active, the nature, timing, and sequence of the surface mining activity [operations] are jointly approved by the cabinet, the MSHA, and the Kentucky Department of Mines and Minerals; and

(2) [(b)] For both active and abandoned underground mines, the surface mining activity [activities] results in improved resource recovery, abatement of water pollution, or elimination of hazards to the health and safety of the public.

[(2) Surface mining activities shall be designed to protect disturbed surface areas, including spoil disposal sites, so as not to endanger any present or future operations of either surface or underground mining activities.]

Section 4. Slide and Erosion Barriers. An undisturbed natural barrier shall be provided beginning at the elevation of the lowest coal seam to be mined and extending from the outslope for a minimum distance of fifteen (15) feet or greater distance as the cabinet may determine is necessary to assure stability. The barrier shall be retained in place to prevent slides and erosion.

Section 5. Slides. At any time a slide occurs which may have a potential adverse effect on property, health, safety, or the environment, the person who conducts the surface mining activities shall notify the cabinet by the fastest available means and comply with any remedial measures required by the cabinet.

Section 6. Permanent Abandonment of Operations. (1) Notice required. Not less than thirty (30) days prior to permanent abandonment of operations, the permittee shall provide written notice to the cabinet that such abandonment is intended.

(2) Prior to permanent abandonment, and prior to removal of necessary equipment from the site, all affected areas shall be closed, backfilled, and otherwise permanently reclaimed in accordance with the requirements of KRS Chapter 350, the regulations of this Title, and the permit.

(3) All equipment, underground openings, structures, or other facilities not required for monitoring shall be removed and the affected areas reclaimed unless the cabinet approves the retention of such equipment, openings, structures, or other facilities as compatible with the postmining land use or as beneficial to environmental monitoring.

Section 7. Temporary Cessation of Operations. (1) Notice required. Not less than three (3) days prior to a temporary cessation of operations which the permittee intends to last for thirty (30) days or more, or as soon as it is known to the permittee that an existing temporary cessation will last beyond thirty (30) days, the permittee shall provide written notice to the cabinet that such temporary cessation is anticipated. The notice shall state to what extent equipment will be removed from the site during the temporary cessation, and shall state the approximate date on which the permittee intends that operations will be resumed.

(2) Temporary cessation shall not relieve a permittee of the obligation to comply with 405 KAR 16:070, Section 1(1)(g) and the surface and groundwater monitoring requirements of 405 KAR 16:110, and the obligation to comply with all applicable conditions of the permit during the cessation.

(3) During temporary cessations, equipment and

facilities necessary to environmental monitoring or to compliance with performance standards shall be made secure to the extent practicable.

CHARLOTTE E. BALDWIN, Secretary
APPROVED BY AGENCY: November 14, 1985
FILED WITH LRC: November 15, 1985 at 11 a.m.
PUBLIC HEARING SCHEDULED: A public hearing on this regulation has been scheduled for December 30, 1985, at 10 a.m. in Room G-1 of the Capital Plaza Tower. Written comments may be submitted on or before the scheduled hearing date. However, if no written notice of intent to attend and testify at the public hearing is received within five (5) days before the scheduled hearing, the hearing will be cancelled. Those interested in attending and testifying at this hearing shall notify in writing: George Risk, Department for Surface Mining Reclamation and Enforcement, 3rd Floor Capital Plaza Tower, Frankfort, Kentucky 40601.

REGULATORY IMPACT ANALYSIS

Agency Contact Person: George Risk
(1) Type and number of entities affected: This regulation establishes general performance standards for surface mining activities which are conducted under Kentucky's permanent regulatory program for coal mining. In that regard, this regulation affects all persons who hold permanent-program permits to conduct surface mining activities (excluding those affecting areas which are two acres or less in size) under KAR Title 405. (Approximately 2,400 coal mining operations (exluding two-acre operations) have been permitted under Kentucky's permanent regulatory program for coal mining, and approximately one-half of these include surface mining activities.)

By affecting those persons identified above, this regulation also affects, directly or indirectly and in varying degrees, persons living in, or with interests in, the coal field regions of Kentucky as well as persons with interests in coal mining.

Due to the nature of the amendments proposed to this regulation, these amendments will primarily affect persons who are issued permanent program permits, for surface mining activities, subsequent to the effective date of these amendments. These amendments will also affect the federal Mine Safety and Health Administration and the Kentucky Department of Mines and Minerals by decreasing the number of surface mining proposals which these agencies are required to review.

(a) Direct and indirect costs or savings to those affected:

1. First year: The amendments as proposed will decrease the joint approval requirements currently imposed on persons proposing to conduct surface mining activities within 500 feet of underground mines. Under these amendments, persons proposing to conduct surface mining activities within 500 feet of an underground mine will only be required to obtain the joint approval of the cabinet, the MSHA, and the Kentucky Department of Mines and Minrals if the underground mine is active - joint approval for situations in which the underground workings are abandoned, as is required by current 405 KAR 16:010, will not be necessary after these amendments become effective and, for these situations, only the approval of the cabinet will be necessary. In addition to decreasing the joint approval requirements imposed on some applicants, these amendments will decrease the amount of review which is currently required of the MSHA and the Kentucky Department of Mines and Minerals. Paralleling these changes will be savings to applicants as well as to the MSHA and the Kentucky Department of Mines and Minerals.

2. Continuing costs or savings: See section (1)(a)1.

3. Additional factors increasing or decreasing costs (note any effects upon competition): None.

(b) Reporting and paperwork requirements: Paperwork requirements will decrease as a result of these amendments. These reduced requirements will largely be associated with the decrease in the need for obtaining joint approval from the MSHA and the Kentucky Department of Mines and Minerals prior to conducting surface mining activities within 500 feet of underground mines.

(2) Effects on the promulgating administrative body:

(a) Direct and indirect costs or savings:

1. First year: Under the requirements of current 405 KAR 16:010, the cabinet plays a coordinating role in the joint approval process discussed in section (1)(a)1. The cabinet anticipates a decrease in the need for obtaining these joint approvals, and therefore the coordination activities currently being conducted by the cabinet should decrease in a parallel manner. The cabinet anticipates that minor savings will result due to this reduction in workload.

2. Continuing costs or savings: See section (2)(a)1.

3. Additional factors increasing or decreasing costs: None.

(b) Reporting and paperwork requirements: The cabinet's paperwork requirements will decrease as a result of these amendments; however, these decreases will be minor. These decreases will largely be associated with the reduction in the coordination activities as discussed in section (2)(a)1.

(3) Assessment of anticipated effect on state and local revenues: None.

(4) Assessment of alternative methods; reasons why alternatives were rejected: None.

(5) Identify any statute, administrative regulation or government policy which may be in conflict, overlapping, or duplication: None.

(a) Necessity of proposed regulation if in conflict: N/A

(b) If in conflict, was effort made to harmonize the proposed administrative regulation with conflicting provisions: N/A

(6) Any additional information or comments: None.

Tiering:
Was tiering applied? No. Tiering is not applicable to these proposed amendments since these requirements must, pursuant to the federal and Kentucky surface mining laws and regulations, apply equally to all surface mining activities under 405 KAR Chapters 7-24.

A fiscal note is not required for this regulation because it will have no impact on local government.

NATURAL RESOURCES AND
ENVIRONMENTAL PROTECTION CABINET
Department for Surface Mining Reclamation
and Enforcement
(Proposed Amendment)

405 KAR 16:060. General hydrologic requirements.

RELATES TO: KRS 350.100, 350.410, 350.420, 350.421, 350.440, 350.465
PURSUANT TO: KRS Chapter 13A, 350.028, 350.100, 350.420, 350.465
NECESSITY AND FUNCTION: KRS Chapter 350 in pertinent part requires the cabinet to promulgate rules and regulations establishing performance standards for protection of people and property, land, water and other natural resources, and aesthetic values, during surface mining activities and for restoration and reclamation of surface areas affected by mining activities. This regulation sets forth general requirements for protection of the hydrologic balance, including general requirements for protection of surface and groundwater quantity and quality, control of erosion and sediment, protection of groundwater recharge capacity, protection of streams, and protection of water rights.

Section 1. General Requirements. (1) All surface mining activities shall be planned and conducted to minimize disturbance of [changes to] the [prevailing] hydrologic balance in both the permit area and adjacent areas, in order to: [prevent long-term adverse changes in that balance that could result from those activities.]
(a) Prevent material damage to the hydrologic balance outside the permit area;
(b) Assure the protection or replacement of water rights; and
(c) Support the approved postmining land uses in accordance with the terms and conditions of the approved permit and the performance standards of this regulation.
(2) Changes in water quality and quantity, in the depth to groundwater, and in the location of surface water drainage channels shall be minimized so that the approved postmining land use of the permit area is not adversely affected.
(3) In no case shall federal and state water quality statutes, regulations, standards, or effluent limitations be violated.
(4) Operations shall be conducted to minimize water pollution and, where necessary, treatment methods shall be used to control water pollution.
(a) Each permittee shall emphasize mining and reclamation practices that prevent or minimize water pollution. Changes in flow of drainage shall be used in preference to the use of water treatment facilities.
(b) Acceptable practices to control and minimize water pollution include, but are not limited to:
1. Stabilizing disturbed areas through land shaping;
2. Diverting runoff;
3. Achieving quickly germinating and growing stands of temporary vegetation;
4. Regulating channel velocity of water;
5. Lining drainage channels with rock or vegetation;
6. Mulching;
7. Selectively placing and sealing acid-forming and toxic-forming materials; [and]
8. Selectively placing waste materials in bankfill areas; and [.]
9. Implementing sediment control measures in Section 2 of this regulation.
[(c) If the practices listed in paragraph (b) of this subsection are not adequate to meet the requirements of this chapter, the permittee shall operate and maintain the necessary water treatment facilities for as long as treatment is required under this chapter.]

Section 2. Sediment Control Measures. (1) Appropriate sediment control measures shall be designed, constructed, and maintained using the best technology currently available to:
(a) Prevent, to the extent possible, additional contributions of sediment to streamflow or to runoff outside the permit area;
(b) Meet the requirements of 405 KAR 16:070, Section 1(1)(g); and
(c) Minimize erosion to the extent possible.
(2) Sediment control measures include practices carried out within and adjacent to the disturbed area. The sediment storage capacity of measures in and downstream from the disturbed areas shall reflect the degree to which successful mining and reclamation techniques are applied to reduce erosion and control sediment. Sediment control measures consist of the utilization of proper mining and reclamation methods and sediment control practices, singly or in combination. Sediment control methods include but are not limited to:
(a) Disturbing the smallest practicable area at any one (1) time during the mining operation through progressive backfilling, grading and prompt revegetation as required in 405 KAR 16:200, Section 1(2);
(b) Stabilizing the backfilled material to promote a reduction in the rate and volume of runoff, in accordance with the requirements of 405 KAR 16:190[, Section 1];
(c) Retaining sediment within disturbed areas;
(d) Diverting runoff away from disturbed areas;
(e) Diverting runoff using protected channels or pipes through disturbed areas so as not to cause additional erosion;
(f) Using straw dikes, riprap, check dams, mulches, vegetative sediment filters, dugout ponds, and other measures that reduce overland flow velocity, reduce runoff volume, or trap sediment; and
(g) Treating with chemicals; and [.]
(h) Using sedimentation ponds as required in 405 KAR 16:070.

Section 3. Discharge Structures. Discharge from sedimentation ponds, permanent and temporary impoundments, coal processing waste dams and embankments, and diversions shall be controlled, by energy dissipators, riprap channels, and other devices, where necessary, to reduce erosion, to prevent deepening or enlargement of stream channels, and to minimize disturbance of the hydrologic balance. Discharge structures shall be designed according to standard engineering design procedures.

Section 4. Acid-forming and Toxic-forming Materials [Spoil]. Acid drainage and toxic drainage [from acid-forming and toxic-forming spoil into ground and surface water] shall be avoided by:
(1) Identifying and burying and/or treating, in accordance with 405 KAR 16:190, Section 3,

materials which may adversely affect water quality, or be detrimental to vegetation or to public health and safety if not buried and/or treated [Identifying, burying, and treating where necessary, spoil which the cabinet determines, based on information in the permit application or other appropriate information, may be detrimental to vegetation or may adversely affect water quality if not treated or buried];

(2) Storage, burial or treatment practices consistent with other material handling and disposal provisions of this chapter [Preventing water from coming into contact with acid-forming and toxic-forming spoil in accordance with 405 KAR 16:190, Section 3, and other measures as required by the cabinet]; and

(3) Burying or otherwise treating all acid-forming or toxic-forming spoil within thirty (30) days after it is first exposed on the mine site, or within a lesser period required by the cabinet. Temporary storage of the spoil may be approved by the cabinet upon a finding that burial or treatment within thirty (30) days is not feasible and will not result in any material risk of water pollution or other environmental damage. Storage shall be limited to the period until burial or treatment first becomes feasible. Acid-forming or toxic-forming spoil to be stored shall be placed on impermeable material and protected from erosion and contact with surface water.

Section 5. Ground Water Protection and Recharge Capacity. In order to protect the hydrologic balance, surface mining activities shall be conducted according to 405 KAR 8:030, Section 32(1) and (2) and the following:

(1) Ground water quality shall be protected by handling earth materials and runoff in a manner that minimizes acidic, toxic, or other harmful infiltration to ground water systems and by managing excavations and other disturbances to prevent or control the discharge of pollutants into the ground water; and

(2) Ground water quantity shall be protected by handling earth materials and runoff in a manner that will restore the approximate premining recharge capacity of the reclaimed area as a whole, excluding coal mine waste disposal areas and excess spoil fills, so as to allow the movement of water to the ground water system.

[Section 5. Ground Water Protection. (1) Backfilled materials shall be placed so as to minimize contamination of ground water systems with acid, toxic, or otherwise harmful mine drainage, to minimize adverse effects of mining on ground water systems outside the permit area, and to support approved postmining land uses.]

[(2) To control the effects of mine drainage, pits, cuts, and other mine excavation or disturbance shall be located, designed, constructed, and utilized in such manner as to prevent or control discharge of acid, toxic, or otherwise harmful mine drainage waters into ground water systems and to prevent adverse impacts on such ground water systems or on approved postmining land uses.]

Section 6. Surface Water Protection. In order to protect the hydrologic balance, surface mining activities shall be conducted according to 405 KAR 8:030, Section 32(1) and (2) and the following:

(1) Surface water quality shall be protected by handling earth materials, ground water discharges, and runoff in a manner that:

(a) Minimizes the formation of acidic or toxic drainage;

(b) Prevents, to the extent possible using the best technology currently available, additional contribution of suspended solids to streamflow outside the permit area; and

(c) Will not cause or contribute to a violation of any federal or state effluent limitations or water quality standards.

(2) If drainage control, restabilization and revegetation of disturbed areas, diversion of runoff, mulching, or other reclamation and remedial practices are not adequate to meet the requirements of this section and 405 KAR 16:070, the operator shall continue to use and maintain the necessary water-treatment facilities or water quality controls for as long as treatment is required under this chapter; and

(3) Surface water quantity and flow rates shall be protected by handling earth materials and runoff in accordance with the steps outlined in the plan approved under 405 KAR 8:030, Section 32(1) and (2).

[Section 6. Protection of Ground Water Recharge Capacity. Groundwater quality shall be protected by handling earth materials and runoff in a manner tht will restore the approximate premining recharge capacity of the reclaimed area as a whole, excluding coal processing waste and underground development waste disposal areas and fills, so as to allow the movement of water to the underground system.]

Section 7. Transfer of Wells. Before final release of bond, exploratory or monitoring wells shall be sealed in a safe and environmentally sound manner in accordance with 405 KAR 16:040. With the prior approval of the regulatory authority, wells may be transferred to another party for further use. At a minimum, the conditions of such transfer shall comply with state and local law and the permittee shall remain responsible for the proper management of the well until bond release in accordance with 405 KAR 16:040. [(1) An exploratory or monitoring well may only be transferred by the permittee for further use as a water well with the prior approval of the cabinet. That person and the surface owner of the lands where the well is located shall jointly submit a written request to the cabinet for that approval.]

[(2) Upon an approved transfer of a well, the transferee shall:]

[(a) Assume primary liability for damages to persons or property from the well;]

[(b) Plug the well when necessary, but in no case later than abandonment of the well; and]

[(c) Assume primary responsibility for compliance with 405 KAR 16:040 with respect to the well.]

[(3) Upon an approved transfer of a well, the transferor shall be secondarily liable for the transferee's obligations under subsection (2) of this section, until release of the bond or other equivalent guarantee required by Title 405, Chapter 10 for the area in which the well is located.]

Section 8. Water Rights and Replacement. Any permittee shall replace the water supply of an

owner of interest in real property who obtains all or part of his or her supply of water for domestic, agricultural, industrial, or other legitimate use from an underground or surface source, where the water supply has been adversely impacted [affected] by contamination, diminution, or interruption proximately resulting from the surface mining activities. Baseline geologic and hydrologic information required in 405 KAR 8:030, Sections 12 through 16 shall be used to determine the extent of the impact of mining upon ground water and surface water.

Section 9. Discharges [of Water] Into an Underground Mine. [Surface water shall not be diverted or otherwise discharged into underground mine workings, unless the permittee demonstrates to the cabinet that the discharge:]

(1) Discharges into an underground mine are prohibited, unless specifically approved by the cabinet after a demonstration that the discharge will: [Will abate water pollution or otherwise eliminate public hazards resulting from surface mining activities; and]

(a) Minimize disturbance to the hydrologic balance on the permit area, prevent material damage outside the permit area and otherwise eliminate public hazards resulting from surface mining activities;

(b) Not result in a violation of applicable water quality standards or effluent limitations;

(c) Be at a known rate and quality which shall meet the effluent limitations of 405 KAR 16:070 for pH and total suspended solids, except that the pH and total suspended-solids limitations may be exceeded, if approved by the cabinet; and

(d) Meet with the approval of the Mine Safety and Health Administration.

(2) Discharges shall be limited to the following [Will be discharged as a controlled flow, meeting the effluent limitations of 405 KAR 16:070 for pH and total suspended solids or settleable solids, except that the pH and total suspended solids or settleable solids limitations may be exceeded, if approved by the cabinet, and is limited to]:

(a) Coal processing waste;

(b) Fly ash from a coal-fired facility;

(c) Sludge from an acid mine drainage treatment facility;

(d) Flue gas desulfurization sludge;

(e) Inert materials used for stabilizing underground mines; [or]

(f) Underground mine development wastes; and

(g) Water.

[(3) Not cause or contribute to a violation of applicable water quality standards or effluent limitations due to the resulting discharge from the underground mines to surface waters. The most likely points of discharge to surface waters, if any, shall be located on a map as a part of the permit application;]

[(4) Minimizes disturbance to the hydrologic balance; and]

[(5) Meets with the approval of the MSHA.]

Section 10. Postmining Rehabilitation of Sedimentation Ponds, Diversions, Impoundments, and Treatment Facilities. Before abandoning the permit area, the permittee shall renovate all permanent sedimentation ponds, diversions, impoundments, and treatment facilities as necessary to meet criteria specified in the detailed design plan for the permanent structures and impoundments.

Section 11. Stream Buffer Zones. (1) No land within 100 feet of an intermittent or perennial stream shall be disturbed by surface mining activities, unless the cabinet specifically authorizes surface mining activities closer to or through such a stream under the following conditions:

(a) Any temporary or permanent diversions shall comply with 405 KAR 16:080 and shall be constructed prior to any disturbance of the buffer zone;

(b) That the original stream channel will be restored or relocated in a manner satisfactory to the cabinet; and

(c) During and after the mining, the water quantity and quality of the stream shall not be adversely affected by the surface mining activities as determined by state and federal water quality standards.

(2) The area not to be disturbed shall be designated a buffer zone and marked as specified in 405 KAR 16:030.

Section 12. Discharges of Accumulated Water. (1) Any accumulated water to be removed from a pit, bench, or other disturbed area shall be pumped, siphoned, or otherwise conveyed in a controlled manner to a natural or constructed drainway as approved by the cabinet.

(2) Such accumulated water may be discharged from the permit area without treatment only if the untreated discharge meets the requirements of 405 KAR 16:070, Section 1(1)(g).

(3) The moving of spoil or overburden or the disturbance of the natural barrier required by 405 KAR 16:010, Section 4, in order to release such accumulated water is prohibited, except when specifically authorized by the cabinet.

CHARLOTTE E. BALDWIN, Secretary

APPROVED BY AGENCY: November 14, 1985

FILED WITH LRC: November 15, 1985 at 11 a.m.

PUBLIC HEARING SCHEDULED: A public hearing on this regulation has been scheduled for December 30, 1985, at 10 a.m. in Room G-1 of the Capital Plaza Tower. Written comments may be submitted on or before the scheduled hearing date. However, if no written notice of intent to attend and testify at the public hearing is received within five (5) days before the scheduled hearing, the hearing will be cancelled. Those interested in attending and testifying at this hearing shall notify in writing: George Risk, Department for Surface Mining Reclamation and Enforcement, 3rd Floor Capital Plaza Tower, Frankfort, Kentucky 40601.

REGULATORY IMPACT ANALYSIS

Agency Contact Person: George Risk

(1) Type and number of entities affected: These amendments and the amendments to 405 KAR 18:060 apply to approximately 2400 surface coal mining operations. This regulation also affects, directly or indirectly and in varying degrees, persons living in, or with interests in, the coal field regions of Kentucky as well as persons with interests in coal mining.

(a) Direct and indirect costs or savings to those affected:

1. First year: This amendment should not affect cost to the industry significantly.

2. Continuing costs or savings: Same as first

year.
3. Additional factors increasing or decreasing costs (note any effects upon competition): None.
(b) Reporting and paperwork requirements: No additional paperwork or reporting of any consequence is anticipated.
(2) Effects on the promulgating administrative body:
(a) Direct and indirect costs or savings:
1. First year: No additional cost will be incurred by the department.
2. Continuing costs or savings: Same as first year.
3. Additional factors increasing or decreasing costs: None.
(b) Reporting and paperwork requirements: None.
(3) Assessment of anticipated effect on state and local revenues: None.
(4) Assessment of alternative methods; reasons why alternatives were rejected: The amendment is in response to changes in the federal regulations which govern the requirements for this state program and no alternatives are possible.
(5) Identify any statute, administrative regulation or government policy which may be in conflict, overlapping, or duplication: None.
(a) Necessity of proposed regulation if in conflict: N/A
(b) If in conflict, was effort made to harmonize the proposed administrative regulation with conflicting provisions: N/A
(6) Any additional information or comments: None.

Tiering:
Was tiering applied? No. Tiering is not applicable to these proposed amendments since these requirements must, pursuant to the federal and Kentucky surface mining laws and regulations, apply equally to all applicants for and permittees of surface mining activities under 405 KAR Chapters 7-24.
A fiscal note is not required for this regulation because it will have no impact on local government.

NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION CABINET
Department for Surface Mining Reclamation and Enforcement
(Proposed Amendment)

405 KAR 16:080. Diversions.

RELATES TO: KRS 350.085, 350.100, 350.405, 350.420, 350.465
PURSUANT TO: KRS Chapter 13A, 350.028, 350.100, 350.420, 350.465
NECESSITY AND FUNCTION: KRS Chapter 350 in pertinent part requires the cabinet to promulgate rules and regulations establishing performance standards for protection of people and property, land, water and other natural resources, and aesthetic values, during surface mining activities and for restoration and reclamation of surface areas affected by mining activities. This regulation sets forth requirements for design and construction of temporary and permanent diversions of overland flow, shallow ground water flow, ephemeral streams, and intermittent and perennial streams.

Section 1. General Requirements. (1) Surface flow from mined areas abandoned before May 3, 1978 and any flow from undisturbed or reclaimed areas, after meeting the criteria of 405 KAR 16:070 and 405 KAR 16:090 for siltation structure removal, may be diverted around the disturbed area and water treatment facilities by means of temporary or permanent diversions.
(2) Diversions shall not be constructed or operated to divert water into underground mines without the approval of the cabinet under 405 KAR 16:060, Section 9.
(3) The design, construction, and maintenance of diversion ditches shall insure public health and safety, protect property, be stable, minimize adverse impacts to the hydrologic balance, and prevent additional contributions of suspended solids to streamflow and to runoff outside the permit area to the extent possible using the best technology currently available. The following criteria are to be incorporated in the design and construction of a diversion ditch:
(a) Freeboard shall be no less than three-tenths (0.3) foot. Protection shall be provided for transition of flows and for critical areas such as swales and curves. Where the area protected is a critical area as determined by the cabinet, the cabinet may require that the design freeboard be increased.
(b) Excess excavated material not necessary for diversion channel geometry or regrading of the channel shall be disposed of in accordance with 405 KAR 16:130 and 405 KAR 16:190.
(c) Topsoil shall be handled in compliance with 405 KAR 16:050.
(d) Channel linings shall be used to prevent erosion of the ditch. The following criteria is to be used unless the cabinet specifies otherwise:
1. All diversion ditches are to be fertilized, seeded, and mulched to comply with the requirements of 405 KAR 16:200 after the ditch is constructed.
2. Riprap shall be used when a diversion ditch is not located in solid rock or the design velocity is five (5) feet per second or greater for the peak discharge used in the design of the ditch. Material used for riprap shall be free of acid-forming material and toxic-forming material and shall comply with the durability requirements of 405 KAR 16:130, Section 1(6)(c)2, except that sand and gravel shall not be used.
(e) Side slopes shall be no steeper than 1h:4v for solid rock, 1h:1v for riprap lined, and 2h:1v for grass lined ditches.
(f) Diversion ditch design capacity shall comply with the provisions of this paragraph, except where a larger capacity is required by other regulations of 405 KAR Chapters 7 through 24 for specific types of diversions or where a larger capacity is required by the cabinet.
1. The channel of any diversion ditch which diverts runoff around a sediment control structure, water treatment facility, or impoundment shall be adequate to pass the peak discharge from the design storm for the hydraulic capacity of the sediment control structure, water treatment facility, or impoundment (i.e. if the impoundment is designed to pass the 100 year, twenty-four (24) hour storm event so shall the ditch).
2. The channel of any diversion ditch which diverts runoff to a sediment control structure or water treatment facility shall be adequate, at a minimum, to pass the peak discharge of a

ten (10) year, twenty-four (24) hour storm event.

3. The channel, bank, and flood plain configuration of any diversion ditch, which diverts a perennial or intermittent stream, shall be adequate to pass the peak discharge of a ten (10) year, twenty-four (24) hour storm event for temporary ditches and the 100 year, twenty-four (24) hour event for permanent ditches. However, the capacity of the channel itself shall be equal to or greater than the capacity of the unmodified stream channel immediately upstream and downstream of the diversion.

4. The channel of any other diversion ditch which diverts ephemeral streams or overland flow shall be adequate to pass the peak discharge of the two (2) year, twenty-four (24) hour storm for temporary ditches and the ten (10) year, twenty-four (24) hour storm for permanent ditches.

(4) No diversion shall be located so as to increase the potential for land slides. No diversion shall be constructed on existing land slides, unless approved by the cabinet.

(5) Diversions of perennial streams, intermittent streams and ditches classified under subsection (3)(f)1 of this section shall be designed and certified by a registered professional engineer and after construction shall be inspected and certified by the responsible registered professional engineer as having been constructed in accordance with the approved design plans.

(6) Diversion ditches shall be maintained to pass their respective design storms.

(7)(a) When no longer needed to achieve the purpose for which they were authorized, all temporary diversions shall be removed and the affected land regraded and revegetated, in accordance with 405 KAR 16:050, Sections 4 and 5; 405 KAR 16:190; and 405 KAR 16:200. At the time diversions are removed, downstream water treatment facilities previously protected by the diversion shall be modified or removed to prevent overtopping or failure of the facilities. This requirement shall not relieve the permittee from maintenance of a water treatment facility otherwise required under this Title or the permit.

(b) Each ephemeral stream channel affected by surface coal mining and reclamation operations shall be reclaimed or permanently diverted in a channel designed and constructed so as to restore or approximate the premining characteristics of the original stream channel (including natural riparian vegetation) to promote the recovery and enhancement of the aquatic habitats, except for situations in which a reach of a stream channel cannot be restored to such characteristics:

1. Because of the existence of an excess spoil fill, permanent stream-crossing, permanent impoundment, or coal mine waste disposal area constructed in accordance with 405 KAR 16:100, 405 KAR 16:130, 405 KAR 16:140, 405 KAR 16:160, and 405 KAR 16:220 as applicable; or

2. For areas affected by mountaintop removal, because such restoration is inconsistent with the requirements of 405 KAR 20:050.

Section 2. Diversions of Perennial and Intermittent Streams. (1) Flow from perennial and intermittent streams within the permit area may be diverted, if the diversions:

(a) Are approved by the cabinet after making the findings called for in 405 KAR 16:060, Section 11(1);

(b) Comply with other requirements of 405 KAR Chapters 7 through 24; and

(c) Comply with applicable local, state, and federal statutes and regulations.

(2) When permanent diversions are constructed or stream channels restored, after temporary divisions, the permittee shall:

(a) Restore, enhance where practicable, or maintain natural riparian vegetation on the banks of the stream;

(b) Establish or restore the stream to an environmentally acceptable meandering shape and gradient, as determined by the cabinet;

(c) Establish or restore the stream to a longitudinal profile and cross-section, including aquatic habitats (usually a pattern of riffles, pools, and drops rather than uniform depth) that approximate premining stream channel characteristics; and

(d) Comply with 405 KAR 16:180.

(3) Where the cabinet approves the placement of a coal refuse pile, coal waste impoundment, or an excess spoil fill in a intermittent or perennial stream under 405 KAR 16:060, Section 11, and it is not practicable to comply with subsection (2) of this section, then the diversion of the stream channel shall comply with the requirements for diversions set forth in the performance standards for those structures.

Section 3. Applicability of Amendments to This Regulation. (1) Except as provided in subsection (2) of this section, the amendments to this regulation shall apply to permits issued on or after ninety (90) days after the effective date of these amendments. Permittees conducting surface coal mining and reclamation operations under permits issued before that date shall comply with the requirements which preceded the amendments, the approved permit application and the conditions of permit issuance.

(2) The provisions of Section 1(3)(f)1 of this regulation shall apply on and after ninety (90) days after the effective date of these amendments to each surface coal mining and reclamation operation which includes an impoundment classified, pursuant to 405 KAR 7:040, Section 5, as a (B) or (C) structure. Permits issued before that date shall be revised as necessary.

[Section 1. Diversions and Conveyance of Overland Flow and Shallow Ground Water Flow, and Ephemeral Streams. Overland flow, including flow through litter, and shallow ground water flow from undisturbed areas, and flow in ephemeral streams, may be diverted away from disturbed areas by means of temporary or permanent diversions, if required or approved by the cabinet as necessary to minimize erosion, to reduce the volume of water to be treated, and to prevent or remove water from contact with acid-forming or toxic-forming materials. The following requirements shall be met for all diversions and for all collection drains that are used to transport water into water-treatment facilities and for all diversions of overland and shallow ground water flow and ephemeral streams:]

[(1) Temporary diversions shall be constructed to pass safely the peak runoff from a precipitation event with a two (2) year

recurrence interval, or a larger event as specified by the cabinet.]

[(2) To protect fills and property and to avoid danger to public health and safety, permanent diversions shall be constructed to pass safely the peak runoff from a precipitation event with a ten (10) year recurrence interval, or a larger event as specified by the cabinet. Permanent diversions shall be constructed with gently sloping banks that are stabilized by vegetation. Asphalt, concrete, or other similar linings shall be used only when approved by the cabinet to prevent seepage or to provide stability.]

[(3) Diversions shall be designed, constructed, and maintained in a manner which prevents additional contributions of suspended solids to streamflow and to runoff outside the permit area, to the extent possible using the best technology currently available. Appropriate sediment control measures for these diversions may include, but not be limited to, maintenance of appropriate gradients, channel lining, revegetation, roughness structures, and detention basins.]

[(4) No diversion shall be located so as to increase the potential for land slides. No diversion shall be constructed on existing land slides, unless approved by the cabinet.]

[(5) When no longer needed, each temporary diversion shall be removed and the affected land regraded, topsoiled, and revegetated in accordance with 405 KAR 16:050, Sections 4 and 5, 405 KAR 16:190, and 405 KAR 16:200.]

[(6) Diversion design shall incorporate the following:]

[(a) Channel lining shall be designed using standard engineering practices to pass safely the design velocities. Riprap shall comply with the requirements of 405 KAR 16:130, Section 2(2)(d), except that sand and gravel shall not be used.]

[(b) Freeboard shall be no less than 0.3 feet. Protection shall be provided for transition of flows and for critical areas such as swales and curves. Where the area protected is a critical area as determined by the cabinet, the design freeboard may be increased.]

[(c) Energy dissipators shall be installed when necessary at discharge points, where diversions intersect with natural streams and exit velocity of the diversion ditch flow is greater than that of the receiving stream.]

[(d) Excess excavated material not necessary for diversion channel geometry or regrading of the channel shall be disposed of in accordance with 405 KAR 16:130.]

[(e) Topsoil shall be handled in compliance with 405 KAR 16:050.]

[(7) Diversions shall not be constructed or operated to divert water into underground mines without the approval of the cabinet.]

[Section 2. Stream Channel Diversions. (1) Flow from perennial and intermittent streams within the permit area may be diverted, if the diversions:]

[(a) Are approved by the cabinet after making the findings called for in 405 KAR 16:060, Section 11(1);]

[(b) Comply with other requirements of Title 405, Chapters 16 through 20; and]

[(c) Comply with applicable local, state, and federal statutes and regulations.]

[(2) When streamflow is allowed to be diverted, the stream channel diversion shall be designed, constructed, and removed, in accordance with the following:]

[(a) The longitudinal profile of the stream, the channel, and the floodplain shall be designed and constructed to remain stable and to prevent, to the extent possible using the best technology currently available, additional contributions of suspended solids to streamflow or to runoff outside the permit area. These contributions shall not be in excess of requirements of state or federal law. Erosion control structures such as channel lining structures, retention basins, and artificial channel roughness structures shall be used in diversions only when approved by the cabinet as being necessary to control erosion. These structures shall be approved for permanent diversions only where they are stable and will require infrequent maintenance.]

[(b) The combination of channel, bank, and floodplain configurations shall be adequate to pass safely the peak runoff of a ten (10) year, twenty-four (24) hour precipitation event for temporary diversions, a 100-year, twenty-four (24) hour precipitation event for permanent diversions, or larger events specified by the cabinet. However, the capacity of the channel itself should be at least equal to the capacity of the unmodified stream channel immediately upstream and downstream of the diversion.]

[(3) When no longer needed to achieve the purpose for which they were authorized, all temporary stream channel diversions shall be removed and the affected land regraded and revegetated, in accordance with 405 KAR 16:050, Sections 4 and 5, 405 KAR 16:190, and 405 KAR 16:200. At the time diversions are removed, downstream water treatment facilities previously protected by the diversion shall be modified or removed to prevent overtopping or failure of the facilities. This requirement shall not relieve the permittee from maintenance of a water treatment facility otherwise required under this Title or the permit.]

[(4) When permanent diversions are constructed or stream channels restored, after temporary diversions, the permittee shall:]

[(a) Restore, enhance where practicable, or maintain natural raparian vegetation on the banks of the stream;]

[(b) Establish or restore the stream to an environmentally acceptable meandering shape and gradient, as determined by the cabinet; and]

[(c) Establish or restore the stream to a longitudinal profile and cross-section, including aquatic habitats (usually a pattern of riffles, pools, and drops rather than uniform depth) that approximate premining stream channel characteristics.]

CHARLOTTE E. BALDWIN, Secretary
APPROVED BY AGENCY: November 14, 1985
FILED WITH LRC: November 15, 1985 at 11 a.m.
PUBLIC HEARING SCHEDULED: A public hearing on this regulation has been scheduled for December 30, 1985, at 10 a.m. in Room G-1 of the Capital Plaza Tower. Written comments may be submitted on or before the scheduled hearing date. However, if no written notice of intent to attend and testify at the public hearing is received within five (5) days before the scheduled hearing, the hearing will be cancelled. Those interested in attending and testifying at this hearing shall notify in

writing: George Risk, Department for Surface Mining Reclamation and Enforcement, 3rd Floor Capital Plaza Tower, Frankfort, Kentucky 40601.

REGULATORY IMPACT ANALYSIS

Agency Contact Person: George Risk
(1) Type and number of entities affected: These proposed amendments and the amendments proposed to 405 KAR 18:080 will affect less than 100 surface coal mining operations in addition to all operations issued a permit on or after 90 days of the effective date of this amendment. This regulation also affects, directly or indirectly and in varying degrees, persons living in, or with interests in, the coal field regions of Kentucky as well as persons with interests in coal mining.
(a) Direct and indirect costs or savings to those affected:
1. First year: Additional cost to the industry will be minimal. The operators will be required to have a registered professional engineer certify the design and construction of some diversion ditches. Laboratory testing will be required to insure that rock durability requirements are met.
2. Continuing costs or savings: Same as first year.
3. Additional factors increasing or decreasing costs (note any effects upon competition): None.
(b) Reporting and paperwork requirements: Certification of design and certification of construction forms will have to be prepared and presented to the department.
(2) Effects on the promulgating administrative body:
(a) Direct and indirect costs or savings:
1. First year: No additional cost will be incurred by the department.
2. Continuing costs or savings: None.
3. Additional factors increasing or decreasing costs: None.
(b) Reporting and paperwork requirements: Processing the certification forms will require a minimal amount of time.
(3) Assessment of anticipated effect on state and local revenues: None.
(4) Assessment of alternative methods; reasons why alternatives were rejected: The amendment is in response to changes in the federal regulation which govern the requirements for the state program and no alternatives are possible.
(5) Identify any statute, administrative regulation or government policy which may be in conflict, overlapping, or duplication: None.
(a) Necessity of proposed regulation if in conflict: N/A
(b) If in conflict, was effort made to harmonize the proposed administrative regulation with conflicting provisions: N/A
(6) Any additional information or comments: None.

Tiering:
Was tiering applied? No. Tiering is not applicable to these proposed amendments since these requirements must, pursuant to the federal and Kentucky surface mining laws and regulations, apply equally to all applicants for and permittees of surface mining activities under 405 KAR Chapters 7-24.
A fiscal note is not required for this regulation because it will have no impact on local government.

NATURAL RESOURCES AND
ENVIRONMENTAL PROTECTION CABINET
Department for Surface Mining Reclamation
and Enforcement
(Proposed Amendment)

405 KAR 16:190. Backfilling and grading.

RELATES TO: KRS 350.020, 350.093, 350.100, 350.405, 350.410, 350.450, 350.465
PURSUANT TO: KRS Chapter 13A, 350.028, 350.100, 350.465
NECESSITY AND FUNCTION: KRS Chapter 350 in pertinent part requires the cabinet to promulgate rules and regulations establishing performance standards for protection of people and property, land, water and other natural resources, and aesthetic values, during surface mining activities and for restoration and reclamation of surface areas affected by mining activities. This regulation sets forth requirements for backfilling and grading, including requirements for highwall elimination, return to approximate original contour, timing of backfilling and grading, use of terraces, thick and thin overburden conditions, covering coal and acid and toxic materials, and regrading or stabilizing rills and gullies.

Section 1. Timing of Backfilling and Grading. Backfilling and grading shall be conducted in accordance with the requirements for contemporaneous reclamation as set forth in 405 KAR 16:020.

Section 2. General Backfilling and Grading Requirements. (1) [Method for backfilling and grading:
(a)] Except as provided in subsection (9) of this section, [specifically exempted in Title 405, Chapters 16 through 20,] all disturbed areas shall be returned to their approximate original contour. All spoil shall be transported, placed in a controlled manner, backfilled, compacted (where advisable to ensure stability or to prevent leaching of toxic materials), and graded to:
(a) Eliminate all highwalls (except as otherwise provided in Section 7 of this regulation), spoil piles, and depressions (excluding depressions and impoundments approved pursuant to subsection (5) or (6) of this section); [, and to]
(b) Ensure a long-term static factor of safety of at least 1.3 for all portions of the reclaimed land; and
(c) Achieve a postmining slope which does not exceed the angle of repose and which does prevent slides;
(d) [(b) Backfilled material shall be placed to] Minimize erosion and adverse effects on surface and ground water both on and off the site; [, minimize offsite effects,] and [to]
(e) Support the approved postmining land use.
[(c) Cut-and-fill terraces may be used only in those situations expressly identified in subsection (3) of this section.]
(2) Spoil, except excess spoil disposed of in accordance with 405 KAR 16:130, shall be returned to the excavated areas. [The final graded slopes shall not exceed slopes approved by the cabinet based on consideration of soil, climate, or other characteristics of the surrounding area. Postmining final graded slopes need not be uniform but shall approximate the

general nature of the premining topography.]

(3) Disposal of coal processing waste and underground development waste in the mined-out area shall be in accordance with 405 KAR 16:140, except that a long-term static safety factor of 1.3 shall be achieved.

(4) [(3)] On approval by the cabinet in order to conserve soil moisture, ensure stability, and control erosion on final graded slopes, cut-and-fill terraces may be allowed, if the terraces are compatible with the approved postmining land use and are appropriate substitutes for construction of lower grades on the reclaimed lands. The terraces shall meet the following requirements:

(a) The width of the individual terrace bench shall not exceed twenty (20) feet, unless specifically approved by the cabinet as necessary for stability, erosion control, or roads included in the approved postmining land use plan.

(b) The vertical distance between terraces shall be as specified by the cabinet, to prevent excessive erosion and to provide long-term stability.

(c) The slope of the terrace outslope shall not exceed 1v:2h (fifty (50) percent). Outslopes which exceed 1v:2h (fifty (50) percent) may be approved, if they have a minimum static safety factor of more than 1.3, provide adequate control over erosion, and closely resemble the surface configuration of the land prior to mining. In no case may highwalls be left as part of terraces.

(d) Culverts and underground rock drains shall be used on the terrace only when approved by the cabinet.

(5) [(4)] Small depressions may be constructed on backfilled areas, if the depressions [they]:

(a) Are needed [approved by the cabinet] to minimize erosion, conserve soil moisture, create or enhance wildlife habitat, or promote vegetation;

(b) Do not restrict normal access; [and]

(c) Are not inappropriate substitutes for lower grades on the reclaimed lands;

(d) Are approved by the cabinet;

(e) Do not adversely affect the stability of the backfilled area; and

(f) Are not located in steep-slope areas.

(6) Impoundments shall not be allowed on backfilled areas, unless the impoundments:

(a) Meet the applicable requirements of 405 KAR 16:060, Section 10 and 405 KAR 16:100;

(b) Are demonstrated, to the satisfaction of the cabinet in the permit application, to have no adverse effect on the stability of the backfilled area;

(c) Are consistent with and suitable for the approved postmining land use;

(d) Are specifically approved by the cabinet in the permit application; and

(e) Are not located in steep-slope areas.

(7) [(5)] All surface mining activities on slopes above twenty (20) degrees, or on lesser slopes that the cabinet defines as steep slopes, shall comply with the requirements [meet the provisions] of 405 KAR 20:060.

(8) [(6)] All final grading; preparation of overburden before replacement of topsoil, topsoil substitutes, and topsoil supplements; and placement of topsoil, topsoil substitutes, and topsoil supplements shall be done along the contour to minimize subsequent erosion and instability. If such grading, preparation, or placement along the contour is hazardous to equipment operators, then grading, preparation, and [or] placement in a direction other than generally parallel to the contour may be used. In all cases, grading, preparation, or placement shall be conducted in a manner which minimizes erosion and provides a surface for [re]placement of topsoil, topsoil substitutes, and topsoil supplements which will minimize slippage.

(9) The postmining slope may vary from the approximate original contour when approval is obtained from the cabinet for:

(a) The provisions for thin overburden in Section 4 of this regulation;

(b) The provisions for thick overburden in Section 5 of this regulation;

(c) Mountaintop removal operations in accordance with 405 KAR 8:050, Section 4;

(d) A variance from approximate original contour requirements in accordance with 405 KAR 8:050, Section 6; or

(e) Incomplete elimination of highwalls in previously mined areas in accordance with Section 7 of this regulation.

Section 3. Disposal of Acid-forming, Toxic-forming, and Combustible Materials and Coverage of Coal Seams. [Covering Coal and Acid- and Toxic-forming Materials.] (1) General. Exposed coal seams, acid-forming materials, toxic-forming materials, and combustible materials which are used, produced, or exposed during surface coal mining and reclamation operations shall be handled; disposed of; treated; and covered with nontoxic-forming, nonacid-forming, and noncombustible materials in a manner which:

(a) Minimizes adverse impacts on surface and ground water, minimizes disturbances to the hydrologic balance, and prevents material damage to the hydrologic balance;

(b) Ensures compliance with 405 KAR 16:060;

(c) Prevents sustained combustion;

(d) Minimizes adverse impacts on plant growth and the approved postmining land use;

(e) Ensures that the affected area is capable of sustaining sufficient vegetation to meet the revegetation requirements of 405 KAR 16:200; and

(f) Ensures that the affected area is capable of meeting the postmining land use requirements of 405 KAR 16:210.

(2) [(1)] Coverage and treatment. All exposed coal seams, acid-forming materials, toxic-forming materials, and combustible materials which are used, produced, or exposed during surface coal mining and reclamation operations shall be covered and treated as necessary to neutralize toxicity, acidity, and combustibility, in order to ensure long-term and short-term compliance with subsection (1) of this section.

(a) All exposed coal seams shall be covered with a minimum of four (4) feet of nontoxic-forming, nonacid-forming, and noncombustible materials. The cabinet shall require thicker amounts of cover, special compaction of cover, treatment, or other measures as necessary to ensure compliance with subsection (1) of this section and to prevent exposure of the coal seams by erosion.

(b) Excluding exposed coal seams, all acid-forming materials, toxic-forming materials, and combustible materials which are used, produced, or exposed during surface coal mining and reclamation operations shall be:

1. Selectively blended with nontoxic-forming, nonacid-forming, and noncombustible materials; treated; or selectively handled, or an appropriate combination of such measures shall be used, as necessary to ensure compliance with subsection (1) of this section; and

2. Covered with a minimum of four (4) feet of nontoxic-forming, nonacid-forming, and noncombustible materials. The cabinet shall require thicker amounts of cover, special compaction of cover, treatment, or other measures as necessary to ensure compliance with subsection (1) of this section and to prevent exposure of the toxic-forming, acid-forming, or combustible materials by erosion. The cabinet may approve lesser amounts of cover, or no cover (other than topsoil, topsoil substitutes, or topsoil supplements), if the applicant demonstrates, to the satisfaction of the cabinet in the permit application, that the lesser amounts are sufficient to ensure compliance with subsection (1) of this section and to maintain coverage of the toxic-forming, acid-forming, and combustible materials;

3. If required or approved by the cabinet, compacted and placed in an environment which minimizes the oxidation potential of the toxic-forming materials, acid-forming materials, and combustible materials; and

4. If required or approved by the cabinet, disposed so as to minimize surface and ground water contact with acid-forming materials, toxic-forming materials, and combustible materials. Such contact shall be minimized by the encasement of such materials in low-permeability substances and by the compaction and selective placement of such materials in locations other than surface drainage courses, ground water recharge areas, or areas of significant ground water flow. As an alternative to minimizing contact with surface and ground water and if feasible based on site conditions, the cabinet may require that acid-forming materials, toxic-forming materials, and combustible materials be placed below the permanent water table.

(3) The cabinet shall specify measures in addition to those identified in subsection (2) of this section if necessary to ensure protection of the environment or the health or safety of the public.

[(a) The permittee shall either cover, with a minimum of four (4) feet of the best available non-toxic and noncombustible material, or treat all exposed coal seams remaining after mining and all acid-forming, toxic-forming, combustible, or other materials identified by the cabinet as exposed, used or produced during mining. Cover or treatment shall be provided so as to neutralize toxicity, acidity and combustibility, in order to prevent water pollution and sustained combustion and to minimize adverse effects on plant growth and land uses.]

[(b) Where necessary to protect against upward migration of salts, exposure by erosion, formation of acid or toxic seeps, to provide an adequate depth for plant growth, or otherwise to meet local conditions, the cabinet shall specify thicker amounts of cover using non-toxic material, or special compaction and isolation from groundwater contact.]

[(c) Acid-forming or toxic-forming material shall not be buried or stored in proximity to a drainage course so as to cause or pose a threat of water pollution.]

[(2) Stabilization. Backfilled materials shall be selectively transported, placed in a controlled manner, and compacted, wherever necessary to prevent leaching of acid-forming and toxic-forming materials into surface or groundwaters and wherever necessary to ensure the stability of the backfilled materials. The method and design specifications of compacting material shall be approved by the cabinet before acid-forming or toxic-forming materials are covered.]

Section 4. Thin Overburden. (1) The provisions of this section apply only where the final thickness is less than 0.8 of the initial thickness. Initial thickness is the sum of the overburden thickness and coal thickness prior to removal of coal. Final thickness is the product of the overburden thickness prior to removal of coal times the bulking factor to be determined for each permit area. The provisions of this section apply only when surface mining activities cannot be carried out to comply with Section 1 of this regulation to achieve the approximate original contour.

(2) In surface mining activities carried out continuously in the same limited pit area for more than one (1) year from the day coal removal operations begin and where the volume of all available spoil and suitable waste materials over the permit area is demonstrated to be insufficient to achieve the approximate original contour of the lands disturbed, surface mining activities shall be conducted to meet, at a minimum, the following standards:

(a) Transport, backfill, and grade, using all available spoil and suitable waste materials from the entire mine area, to attain the lowest practicable stable grade, to achieve a static safety factor of 1.3, and to provide adequate drainage and long-term stability of the regraded areas and cover all acid-forming and toxic-forming materials;

(b) Eliminate highwalls by grading or backfilling to stable slopes not exceeding 1v:2h (fifty (50) percent), or such lesser slopes as the cabinet may specify to reduce erosion, maintain the hydrologic balance, or allow the approved postmining land use;

(c) Transport, backfill, grade, and revegetate in accordance with 405 KAR 16:200, to achieve an ecologically sound land use compatible with the prevailing use in unmined areas surrounding the permit area; and

(d) Transport, backfill, and grade, to ensure impoundments are constructed only where:

1. It has been demonstrated to the cabinet's satisfaction that all requirements of 405 KAR 16:060, 405 KAR 16:070, 405 KAR 16:080, 405 KAR 16:090, 405 KAR 16:100 and 405 KAR 16:110 have been met; and

2. The impoundments have been approved by the cabinet as suitable for the approved postmining land use and as meeting the requirements of this chapter and all other applicable federal and state laws and regulations.

Section 5. Thick Overburden. (1) The provisions of this section apply only where the final thickness is greater than 1.2 of the initial thickness. Initial thickness is the sum of the overburden thickness and coal thickness prior to removal of coal. Final thickness is the product of the overburden thickness prior to

removal of coal times the bulking factor to be determined for each permit area. The provisions of this section apply only when surface mining activities cannot be carried out to comply with Section 1 of this regulation to achieve the approximate original contour.

(2) In surface mining activities where the volume of spoil over the permit area is demonstrated to be more than sufficient to achieve the approximate original contour, surface mining activities shall be conducted to meet, at a minimum, the following standards:

(a) Transport, backfill, and grade all spoil and wastes, not required to achieve the approximate original contour of the permit area, to the lowest practicable grade, to achieve a static factor of safety of 1.3 and cover all acid-forming and other toxic-forming materials;

(b) Transport, backfill and grade excess spoil and wastes only within the permit area and dispose of such materials in accordance with 405 KAR 16:130;

(c) Transport, backfill, and grade excess spoil and wastes to maintain the hydrologic balance, in accordance with 405 KAR 16:060, 405 KAR 16:070, 405 KAR 16:080, 405 KAR 16:090, 405 KAR 16:100 and 405 KAR 16:110 and to provide long-term stability by preventing slides, erosion and water pollution;

(d) Transport, backfill, grade, and revegetate wastes and excess spoil to achieve an ecologically sound land use approved by the cabinet as compatible with the prevailing land uses in unmined areas surrounding the permit area;

(e) Eliminate all highwalls and depressions by backfilling with spoil and suitable waste materials; and

(f) Meet the revegetation requirements of 405 KAR 16:200 for all disturbed areas.

Section 6. Regrading or Stabilizing Rills and Gullies. When rills or gullies deeper than nine (9) inches form in areas that have been regraded and topsoiled, the rills and gullies shall be filled, graded, or otherwise stabilized and the area reseeded and [or] replanted according to 405 KAR 16:200. The cabinet may specify that rills or gullies of lesser size be stabilized and the area reseeded and [or] replanted, if the rills or gullies are disruptive to the approved postmining land use or to the establishment of vegetation. [or] may result in additional erosion and sedimentation, or may cause or contribute to the violation of a water quality standard.

Section 7. Remining Previously Mines Areas. (1) General requirements. Remining operations on previously mined areas, including steep slope areas, that contain a pre-existing highwall shall comply with Sections 1 through 6 of this regulation except as provided in this section.

(2) Definitions.

[(a) "Adverse physical impact" means, with respect to a highwall created or impacted by remining, conditions such as sloughing of material, subsidence, instability, or increased erosion of highwalls, which occur or can reasonably be expected to occur as a result of remining and which pose threats to property, public health, safety, or the environment.]

[(b) "Modified highwall" means either:]

[1. The highwall resulting from remining where the pre-existing highwall face is removed; or]

[2. The highwall resulting from remining where the pre-existing highwall is vertically enlarged.]

(a) [(c)] "Highwall remnant" means that portion of highwall that remains after backfilling and grading of a remining permit area.

(b) "Modified highwall" means either:

1. The highwall resulting from remining where the pre-existing highwall face is removed; or

2. The highwall resulting from remining where the pre-existing highwall is vertically enlarged.

(c) [(d)] "Previously mined area" means land which was disturbed or affected by coal mining operations that occurred prior to May 3, 1978, which was not reclaimed to the standards of this Title, and for which there is no continuing responsibility to reclaim to the standards of this Title. [disturbed or affected by earlier coal mining operations that was not reclaimed to the standards of this title, and there is no continuing responsibility to reclaim to such standards.]

(d) [(e)] "Reasonably available spoil" means spoil and suitable coal mine waste material generated by the remining operation and other spoil or suitable coal mine waste material located in the permit area that is accessible and available for use and that when rehandled will not cause a hazard to public safety or significant damage to the environment. For this purpose, the permit area shall include all such spoil in the immediate vicinity of the mining operation.

(e) [(f)] "Remining" means conducting surface coal mining and reclamation operations which affect previously mined areas.

[(3) Auger remining operations. The requirement within Section 2(1) of this regulation to completely eliminate the highwall shall not apply to auger remining operations where the volume of all reasonably available spoil is demonstrated in writing to the cabinet to be insufficient to completely backfill the pre-existing or modified highwall. The highwall shall be eliminated to the maximum extent technically practical in accordance with the following criteria:]

[(a) All reasonably available spoil shall be used to backfill the area, provided, however, that in all cases the coal seam mined shall be covered with a minimum of four (4) feet of noncombustible, non-acid, non-toxic forming material and all holes shall be sealed in accordance with 405 KAR 20:030.]

[(b) All spoil generated or handled by the remining operation shall be retained on the solid portion of existing or new benches.]

[(c) The backfill shall be graded to a slope which is compatible with the approved postmining land use and which provides adequate drainage and long-term stability.]

[(d) Any highwall remnant shall be made stable and not pose a hazard to public health and safety or to the environment. The permittee shall demonstrate to the satisfaction of the cabinet that the highwall remnant is stable.]

[(e) Spoil placed on the outslope during previous mining operations shall not be disturbed if such disturbance will cause instability of the remaining spoil or otherwise increase the hazard to the public health and safety or to the environment.]

(3) [(4)] Variances to backfilling and grading requirements for remining operations [other than

augering].

[(a)] The requirements within Section 2(1)(a) of this regulation to completely eliminate [the] highwalls shall [not] apply to remining operations, except for situations in which the volume of all reasonably available spoil is demonstrated, to the satisfaction of the cabinet in the permit application, to be insufficient to completely backfill and eliminate the pre-existing or modified highwall. The highwall shall be eliminated to the maximum extent technically practicable in accordance with the following criteria: [that are not reasonably expected to cause an adverse physical impact on the pre-existing or modified highwall. Such remining operations shall comply with the following:]

(a) [1.] All reasonably available spoil [generated by the remining operation] shall be used to backfill [and grade] the area.

(b) The backfill shall be graded to a slope which is compatible with the approved postmining land use and which provides adequate drainage and long-term stability (1.3 long-term static factor of safety), provided, however, that the exposed coal seam [mined] shall be covered in accordance with Section 3 of this regulation [with a minimum of four (4) feet of noncombustible, non-acid, non-toxic forming material].

(c) [2.] Spoil generated or handled by the remining operation shall not be placed on the fill section of any existing or new bench. [All spoil generated or handled by the remining operation shall be retained on the solid portion of existing or new benches.]

(d) [3.] Any highwall remnant shall be stable and not pose a hazard to the public health and safety or to the environment. The permittee shall demonstrate, to the satisfaction of the cabinet in the permit application, that the postmining highwall remnant will be [is] stable. If the highwall remnant is determined by the cabinet to be unstable or potentially unstable, the permittee shall perform any corrective measures required by the cabinet to stabilize the highwall remnant. [If unexpected adverse physical impacts do occur, the permittee shall stabilize the highwall remnant.]

(e) [4.] Spoil placed on the outslope during previous mining operations shall not be disturbed if such disturbance will cause instability of the remaining spoil or otherwise increase the hazard to the public health or [and] safety or to the environment.

[(b) Where the remining operation is reasonably expected to cause an adverse physical impact on the pre-existing or modified highwall, the requirement of Section 2(1) of this regulation to completely eliminate the highwall shall apply except where the volume of all reasonably available spoil is demonstrated in writing to the cabinet to be insufficient to completely backfill the highwall. In such case, the highwall shall be eliminated to the maximum extent technically practical in accordance with the following criteria:]

[1. All reasonably available spoil shall be used to backfill the area, provided, however, that the coal seam mined shall be covered with a minimum of four (4) feet of noncombustible, non-acid, non-toxic forming material.]

[2. All spoil generated or handled by the remining operation shall be retained on the solid portion of existing or new benches.]

[3. The backfill shall be graded to a slope which is compatible with the approved postmining land use and which provides adequate drainage and long-term stability.]

[4. Any highwall remnant shall be made stable and not pose a hazard to public health and safety or to the environment. The permittee shall demonstrate to the satisfaction of the cabinet that the highwall remnant is stable.]

[5. Spoil placed on the outslope during previous mining operations shall not be disturbed if such disturbance will cause instability of the remaining spoil or otherwise increase the hazard to the public health and safety or to the environment.]

CHARLOTTE E. BALDWIN, Secretary

APPROVED BY AGENCY: November 14, 1985

FILED WITH LRC: November 15, 1985 at 11 a.m.

PUBLIC HEARING SCHEDULED: A public hearing on this regulation has been scheduled for December 30, 1985, at 10 a.m. in Room G-1 of the Capital Plaza Tower. Written comments may be submitted on or before the scheduled hearing date. However, if no written notice of intent to attend and testify at the public hearing is received within five (5) days before the scheduled hearing, the hearing will be cancelled. Those interested in attending and testifying at this hearing shall notify in writing: George Risk, Department for Surface Mining Reclamation and Enforcement, 3rd Floor Capital Plaza Tower, Frankfort, Kentucky 40601.

REGULATORY IMPACT ANALYSIS

Agency Contact Person: George Risk

(1) Type and number of entities affected: This regulation sets forth requirements for backfilling and grading for surface mining activities which are conducted under Kentucky's permanent regulatory program for coal mining. In that regard, this regulation affects all persons who hold permanent-program permits to conduct surface mining activities (excluding those affecting areas which are two acres or less in size) under KAR Title 405. (Approximately 2,400 coal mining operations (excluding two-acre operations) have been permitted under Kentucky's permanent regulatory program for coal mining, and approximately one-half of these include surface mining activities.)

By affecting those persons identified above, this regulation also affects, directly or indirectly and in varying degrees, persons living in, or with interests in, the coal field regions of Kentucky as well as other persons with interests in coal mining.

The amendments to this regulation will affect surface mining activities in varying degrees. The extent to which such activities are affected is dependent on the site conditions and specific backfilling and grading plans for each operation. For example, the amendments to this regulation will affect surface mining activities which involve remining operations by requiring that all such activities use all reasonably available spoil to eliminate as much of the premining or modified highwall as is practicable; thus, the amendments will disallow the variance from this requirement for operations which are not expected to have an adverse physical impact on the highwall. It should be noted that relatively few of the surface mining activities permitted under the

permanent program include remining operations: therefore, the revised remining requirements should affect relatively few permanent-program operations.

(a) Direct and indirect costs or savings to those affected:

1. First year: The amendments as proposed will have a variety of economic effects on those persons identified above. These effects will be related to the site conditions and the specific plans for a particular operation. Some operations will not be affected by the amendments, other operations will incur additional costs as a result of the amendments, and still other operations will be saved expenses due to the amendments.

2. Continuing costs or savings: See section (1)(a)1.

3. Additional factors increasing or decreasing costs (note any effects upon competition): None.

(b) Reporting and paperwork requirements: Some permits will need to be revised or amended as a result of these amendments. This will result in additional paperwork and reporting for some, but not all, of the persons identified in section (1).

(2) Effects on the promulgating administrative body:

(a) Direct and indirect costs or savings:

1. First year: Additional expenses will be incurred by the cabinet as a result of the amendments. These expenses will largely be associated with the processing of the revisions and amendments which are discussed in section (1)(b).

2. Continuing costs or savings: See section (2)(a)1.

3. Additional factors increasing or decreasing costs: None.

(b) Reporting and paperwork requirements: Additional paperwork requirements will be imposed on the cabinet as a result of the amendments. These paperwork requirements will largely be associated with the processing of the revisions and amendments which are discussed in section (1)(b).

(3) Assessment of anticipated effect on state and local revenues: None.

(4) Assessment of alternative methods; reasons why alternatives were rejected: None.

(5) Identify any statute, administrative regulation or government policy which may be in conflict, overlapping, or duplication: None.

(a) Necessity of proposed regulation if in conflict: N/A

(b) If in conflict, was effort made to harmonize the proposed administrative regulation with conflicting provisions: N/A

(6) Any additional information or comments: None.

Tiering:
Was tiering applied? No. Tiering is not applicable to these proposed amendments since these requirements must, pursuant to the federal and Kentucky surface mining laws and regulations, apply equally to all surface mining activities conducted under 405 KAR Chapters 7-24.

A fiscal note is not required for this regulation because it will have no impact on local government.

NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION CABINET
Department for Surface Mining Reclamation and Enforcement
(Proposed Amendment)

405 KAR 18:060. General hydrologic requirements.

RELATES TO: KRS 350.100, 350.151, 350.420, 350.421, 350.440, 350.465

PURSUANT TO: KRS Chapter 13A, 350.028, 350.100, 350.151, 350.420, 350.465

NECESSITY AND FUNCTION: KRS Chapter 350 in pertinent part requires the cabinet to promulgate rules and regulations establishing performance standards for protection of people and property, land, water and other natural resources, and aesthetic values, during underground mining activities and for restoration and reclamation of surface areas affected by underground mining activities. This regulation sets forth general requirements for protection of the hydrologic balance, including general requirements for protection of surface and groundwater quantity and quality, prevention and control of drainage from underground workings, control of erosion and sediment, protection of streams, and control of discharges into underground workings.

Section 1. General Requirements. (1) All underground mining activities shall be planned and conducted to minimize disturbance of [changes to] the [prevailing] hydrologic balance in both the permit area and adjacent areas, in order to: [prevent long term adverse changes in that balance that could result from those activities.]

(a) Prevent material damage to the hydrologic balance outside the permit area;

(b) Support the approved postmining land uses in accordance with the terms and conditions of the approved permit and the performance standards of this regulation.

(2) Changes in water quality and quantity, in the depth to ground water, and in the location of surface water drainage channels shall be minimized so that the approved postmining land use of the permit area is not adversely affected.

(3) In no case shall federal and state water quality statutes, regulations, standards, or effluent limitations be violated.

(4) Operations shall be conducted to minimize water pollution and, where necessary, treatment methods shall be used to control water pollution.

(a) Each permittee shall emphasize mining and reclamation practices that prevent or minimize water pollution. Changes in flow of drainage shall be used in preference to the use of water treatment facilities.

(b) Acceptable practices to control and minimize water pollution include, but are not limited to:

1. Stabilizing disturbed areas through land shaping;

2. Diverting runoff;

3. Achieving quickly germinating and growing stands of temporary vegetation;

4. Regulating channel velocity of water;

5. Lining drainage channels with rock or vegetation;

6. Mulching;

7. Selectively placing and sealing acid-forming and toxic-forming materials;

8. Designing mines to prevent or control gravity drainage of acid waters;
9. Sealing;
10. Controlling subsidence; [and]
11. Preventing acid mine drainage; and
12. Implementing sediment control measures in Section 2 of this regulation.

[(c) If the practices listed at paragraph (b) of this subsection are not adequate to meet the requirements of this chapter, the permittee shall operate and maintain the necessary water treatment facilities for as long as treatment is required under this chapter.]

Section 2. Sediment Control Measures. (1) Appropriate sediment control measures shall be designed, constructed, and maintained using the best technology currently available to:

(a) Prevent, to the extent possible, additional contributions of sediment to streamflow or to runoff outside the permit area;

(b) Meet the requirements of 405 KAR 18:070, Section 1(1)(g); and

(c) Minimize erosion to the extent possible.

(2) Sediment control measures include practices carried out within and adjacent to the disturbed area. The sediment storage capacity of measures in and downstream from the disturbed areas shall reflect the degree to which successful mining and reclamation techniques are applied to reduce erosion and control sediment. Sediment control measures consist of the utilization of proper mining and reclamation methods and sediment control practices, singly or in combination. Sediment control methods include but are not limited to:

(a) Disturbing the smallest practicable area at any one (1) time during the mining operation through progressive backfilling, grading and prompt revegetation as required in 405 KAR 18:200, Section 1(2);

(b) Stabilizing the backfilled material to promote a reduction in the rate and volume of runoff, in accordance with the requirements of 405 KAR 18:190;

(c) Retaining sediment within disturbed areas;

(d) Diverting runoff away from disturbed areas;

(e) Diverting runoff using protected channels or pipes through disturbed areas so as not to cause additional erosion;

(f) Using straw dikes, riprap, check dams, mulches, vegetative sediment filters, dugout ponds, and other measures that reduce overland flow velocity, reduce runoff volume, or trap sediment;

(g) Treating with chemicals; [and]

(h) Treating mine drainage in underground sumps; and

(i) Using sedimentation ponds as required in 405 KAR 18:070.

Section 3. Discharge Structures. Discharge from sedimentation ponds, permanent and temporary impoundments, coal processing waste dams and embankments, and diversions shall be controlled, by energy dissipators, riprap channels, and other devices, where necessary, to reduce erosion, to prevent deepening or enlargement of stream channels, and to minimize disturbance of the hydrologic balance. Discharge structures shall be designed according to standard engineering design procedures.

Section 4. Acid-forming and Toxic-forming Materials. Acid drainage and toxic drainage [from acid-forming and toxic-forming underground development waste and spoil, if any, into ground and surface water] shall be avoided by:

(1) Identifying and burying and/or treating, in accordance with 405 KAR 18:190, Section 3, materials which may adversely affect water quality, or be detrimental to vegetation or to public health and safety if not buried and/or treated [Identifying, burying, and treating, where necessary, waste and spoil which the cabinet determines, based on information in the permit application or other appropriate information, may be detrimental to vegetation or may adversely affect water quality if not treated or buried];

(2) Storage, burial or treatment practices consistent with other material handling and disposal provisions of this chapter [Preventing water from coming into contact with acid-forming and toxic-forming materials in accordance with 405 KAR 18:190, Section 3, and other measures as required by the cabinet]; and

(3) Burying or otherwise treating all acid-forming or toxic-forming underground development waste and spoil within thirty (30) days after they are first exposed on the mine site, or within a lesser period required by the cabinet. Temporary storage of such materials may be approved by the cabinet upon a finding that burial or treatment within thirty (30) days is not feasible and will not result in any material risk of water pollution or other environmental damage. Storage shall be limited to the period until burial or treatment first becomes feasible. Acid-forming or toxic-forming underground waste and spoil to be stored shall be placed on impermeable material and protected from erosion and contact with surface water.

Section 5. Ground Water Protection. In order to protect the hydrologic balance, surface mining activities shall be conducted according to 405 KAR 8:040, Section 32(1) and (2) and ground water quality shall be protected by handling earth materials and runoff in a manner that minimizes acidic, toxic, or other harmful infiltration to ground water systems and by managing excavations and other disturbances to prevent or control the discharge of pollutants into the ground water.

[Section 5. Underground Mine Entry and Access Discharges. (1) Surface entries and accesses to underground workings, including adits and slopes, shall be located, designed, constructed, and utilized to prevent or control gravity discharge of water from the mine.]

[(2) Gravity discharge of water from an underground mine, other than a drift mine subject to subsection (3) of this section, may be approved by the cabinet if it is demonstrated that:]

[(a)1. The discharge, without treatment, satisfies the water quality effluent limitations of 405 KAR 18:070 and all applicable state and federal water quality standards; and]

[2. That discharge will result in changes in the prevailing hydrologic balance that are minimal and approved postmining land uses will not be adversely affected; or]

[(b)1. The discharge is conveyed to a treatment facility in the permit area in accordance with 405 KAR 18:070, Section 1(1);]

[2. All water from the underground mine discharged from the treatment facility meets the

effluent limitations of 405 KAR 18:070 and all other applicable state and federal statutes and regulations; and]

[3. Consistent maintenance of the treatment facility will occur throughout the anticipated period of gravity discharge.]

[(3) Notwithstanding anything to the contrary in subsections (1) and (2) of this section, for a drift mine first used after the date of applicability of this regulation and located in acid-producing or iron-producing coal seams, surface entries and accesses shall be located in such a manner as to prevent any gravity discharge from the mine.]

Section 6. Surface Water Protection. In order to protect the hydrologic balance, surface mining activities shall be conducted according to 405 KAR 8:040, Section 32(1) and (2) and the following:

(1) Surface water quality shall be protected by handling earth materials, ground water discharges, and runoff in a manner that:

(a) Minimizes the formation of acidic or toxic drainage;

(b) Prevents, to the extent possible using the best technology currently available, additional contribution of suspended solids to streamflow outside the permit area; and

(c) Will not cause or contribute to a violation of any federal or state effluent limitations or water quality standards.

(2) If drainage control, restabilization and revegetation of disturbed areas, diversion of runoff, mulching, or other reclamation and remedial practices are not adequate to meet the requirements of this section and 405 KAR 18:070, the operator shall continue to use and maintain the necessary water-treatment facilities or water quality controls for as long as treatment is required under this chapter; and

(3) Surface water quantity and flow rates shall be protected by handling earth materials and runoff in accordance with the steps outlined in the plan approved under 405 KAR 8:040, Section 32(1) and (2).

Section 7. [6.] Transfer of Wells. Before final release of bond, exploratory or monitoring wells shall be sealed in a safe and environmentally sound manner in accordance with 405 KAR 18:040. With the prior approval of the regulatory authority, wells may be transferred to another party for further use. At a minimum, the conditions of such transfer shall comply with state and local law and the permittee shall remain responsible for the proper management of the well until bond release in accordance with 405 KAR 18:040. [(1) An exploratory or monitoring well may only be transferred by the permittee for further use as a water well with the prior approval of the cabinet. That person and the surface owner of the lands where the well is located shall jointly submit a written request to the cabinet for that approval.]

[(2) Upon an approved transfer of a well, the transferee shall:]

[(a) Assume primary liability for damages to persons or property from the well;]

[(b) Plug the well when necessary, but in no case later than abandonment of the well; and]

[(c) Assume primary responsibility for compliance with 405 KAR 18:040 with respect to the well.]

[(3) Upon an approved transfer of a well, the transferor shall be secondarily liable for the transferee's obligations under subsection (2) of this section, until release of the bond or other equivalent guarantee required by Title 405, Chapter 10 for the area in which the well is located.]

Section 8. Gravity Discharges from Underground Mines. (1) Surface entries and accesses to underground workings, including adits and slopes, shall be located, designed, constructed, and managed to prevent or control gravity discharge of water from the mine.

(2) Gravity discharge of water from an underground mine, other than a drift mine subject to subsection (3) of this section, may be approved by the cabinet, if it is demonstrated that:

(a)1. The discharge, without treatment, satisfies the water quality effluent limitations of 405 KAR 18:070 and all applicable state and federal water quality standards; and

2. That discharge will result in changes in the prevailing hydrologic balance that are minimal and approved postmining land uses will not be adversely affected; or

(b)1. The discharge is conveyed to a treatment facility in the permit area in accordance with 405 KAR 18:070, Section 1(1);

2. All water from the underground mine discharged from the treatment facility meets the effluent limitations of 405 KAR 18:070 and all other applicable state and federal statutes and regulations; and

3. Consistent maintenance of the treatment facility will occur throughout the anticipated period of gravity discharge.

(c) The discharge meets any additional requirements in the KPDES permit.

(3) Notwithstanding anything to the contrary in subsections (1) and (2) of this section, for a drift mine first used after May 18, 1982 and located in acid-producing or iron-producing coal seams, surface entries and accesses shall be located in such a manner as to prevent any gravity discharge from the mine.

Section 9. [7.] Discharges [of Water] Into an Underground Mine. [Surface water shall not be diverted or otherwise discharged into underground mine workings, unless the permittee demonstrates to the cabinet that the discharge:]

(1) Discharges into an underground mine are prohibited, unless specifically approved by the cabinet after a demonstration that the discharge will: [Will abate water pollution or otherwise eliminate public hazards resulting from surface mining activities;]

(a) Minimize disturbance to the hydrologic balance on the permit area, prevent material damage outside the permit area and otherwise eliminate public hazards resulting from surface mining activities;

(b) Not result in a violation of applicable water quality standards or effluent limitations;

(c) Be at a known rate and quality which shall meet the effluent limitations of 405 KAR 18:070 for pH and total suspended solids, except that the pH and total suspended-solids limitations may be exceeded, if approved by the cabinet; and

(d) Meet with the approval of the Mine Safety and Health Administration.

(2) Discharges shall be limited to the following: [Will be discharged as a controlled flow;]

(a) Coal processing waste;
(b) Underground mine development waste;
(c) Fly ash from a coal-fired facility;
(d) Sludge from an acid mine drainage treatment facility;
(e) Flue gas desulfurization sludge; [or]
(f) Inert materials used for stabilizing underground mines; and
(g) Water.

(3) Water from one (1) underground mine may be diverted into other underground workings according to the requirements of this section and as approved in the permit. [Meets the effluent limitations of 405 KAR 16:070 for pH and total suspended solids or settleable solids, except that the pH and total suspended solids or settleable solids limitations may be exceeded, if approved by the cabinet, and is limited to]:

[(4) Will not cause or contribute to a violation of applicable water quality standards or effluent limitations due to the resulting discharge from the underground mines to surface waters (The most likely points of discharge to surface waters, if any, shall be located on a map as a part of the permit application);]

[(5) Minimizes disturbance to the hydrologic balance; and]

[(6) Meets with the approval of the MSHA.]

Section 10. [8.] Postmining Rehabilitation of Sedimentation Ponds, Diversions, Impoundments, and Treatment Facilities. Before abandoning the permit area, the permittee shall renovate all permanent sedimentation ponds, diversions, impoundments and treatment facilities as necessary to meet criteria specified in the detailed design plan for the permanent structures and impoundments.

Section 11. [9.] Stream Buffer Zones. (1) No surface area within 100 feet of an intermittent or perennial stream shall be disturbed by surface operations and facilities, unless the cabinet specifically authorizes underground mining activities closer to or through such a stream under the following conditions:

(a) Any temporary or permanent diversions shall comply with 405 KAR 18:080 and shall be constructed prior to any disturbance of the buffer zone;

(b) That the original stream channel will be restored or relocated in a manner satisfactory to the cabinet; and

(c) During and after the mining, the water quantity and quality of the stream shall not be adversely affected by the underground mining activities as determined by federal and state water quality standards.

(2) The area not to be disturbed shall be designated a buffer zone and marked as specified in 405 KAR 18:030.

CHARLOTTE E. BALDWIN, Secretary
APPROVED BY AGENCY: November 14, 1985
FILED WITH LRC: November 15, 1985 at 11 a.m.
PUBLIC HEARING SCHEDULED: A public hearing on this regulation has been scheduled for December 30, 1985, at 10 a.m. in Room G-1 of the Capital Plaza Tower. Written comments may be submitted on or before the scheduled hearing date. However, if no written notice of intent to attend and testify at the public hearing is received within five (5) days before the scheduled hearing, the hearing will be cancelled. Those interested in attending and testifying at this hearing shall notify in writing: George Risk, Department for Surface Mining Reclamation and Enforcement, 3rd Floor Capital Plaza Tower, Frankfort, Kentucky 40601.

REGULATORY IMPACT ANALYSIS

Agency Contact Person: George Risk
(1) Type and number of entities affected: These amendments and the amendments to 405 KAR 16:060 apply to approximately 2400 surface coal mining operations. This regulation also affects, directly or indirectly and in varying degrees, persons living in, or with interests in, the coal field regions of Kentucky as well as persons with interests in coal mining.

(a) Direct and indirect costs or savings to those affected:

1. First year: This amendment should not affect cost to the industry significantly.
2. Continuing costs or savings: Same as first year.
3. Additional factors increasing or decreasing costs (note any effects upon competition): None.

(b) Reporting and paperwork requirements: No additional paperwork or reporting of any consequence is anticipated.

(2) Effects on the promulgating administrative body:

(a) Direct and indirect costs or savings:

1. First year: No additional cost will be incurred by the department.
2. Continuing costs or savings: Same as first year.
3. Additional factors increasing or decreasing costs: None.

(b) Reporting and paperwork requirements: None.

(3) Assessment of anticipated effect on state and local revenues: None.

(4) Assessment of alternative methods; reasons why alternatives were rejected: The amendment is in response to changes in the federal regulations which govern the requirements for this state program and no alternatives are possible.

(5) Identify any statute, administrative regulation or government policy which may be in conflict, overlapping, or duplication: None.

(a) Necessity of proposed regulation if in conflict: N/A

(b) If in conflict, was effort made to harmonize the proposed administrative regulation with conflicting provisions: N/A

(6) Any additional information or comments: None.

Tiering:
Was tiering applied? No. Tiering is not applicable to these proposed amendments since these requirements must, pursuant to the federal and Kentucky surface mining laws and regulations, apply equally to all applicants for and permittees of underground mining activities under 405 KAR Chapters 7-24.

A fiscal note is not required for this regulation because it will have no impact on local government.