ADMINISTRATIVE REGISTER OF KENTUCKY

LEGISLATIVE RESEARCH COMMISSION
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MEETING NOTICE: The Administrative Regulation Review Subcommittee is **tentatively** scheduled to meet on May 2, 1994 at 10 a.m. See **tentative** agenda on pages 2959-2960 in this Administrative Register.

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

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

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ADMINISTRATIVE REGULATION REVIEW SUBCOMMITTEE
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Filing and Publication

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

Public Hearing

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

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

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

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

Review Procedure

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

EMERGENCY ADMINISTRATIVE REGULATIONS NOW IN EFFECT

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

STATEMENT OF EMERGENCY
415 KAR 1:114E

(1) 415 KAR 1:115, effective date March 1, 1994 was promulgated to assure that corrective action performed, in the Commonwealth of Kentucky, is supervised by persons meeting minimum qualifications. The current transition in cleanup levels imposed on the regulated community by the regulatory agency, Underground Storage Tank Branch, (USTB), substantially impacts the contractors' abilities to effectively demonstrate their knowledge of closure procedures and cleanup standards in an atmosphere of substantial change.

WHEREAS, a state of dual focus exists within the regulated contractor community embraced by this regulation since corrective action, at this time, may be conducted under the existing requirements that have been in place since the formation of the Underground Storage Tank Branch or under the emergency regulations (401 KAR 42:060E) which became effective February 15, 1994.

WHEREAS, 415 KAR 1:115, Contractor certification, became effective March 1, 1994 after the adoption of 401 KAR 42:060E, Release response and corrective action for UST systems containing petroleum or hazardous substances, the contractor certification testing conducted on the February 16-17, 1994 tested the contracting community on closure requirements that will, in the very near future, be nonapplicable.

WHEREAS, 415 KAR 1:115 prohibits retesting an applicant in less than ninety (90) days and an ordinary amendment of the regulation will not enable the commission to avert the repercussions or delay the impositions mandated by the regulation to accommodate the changes in cleanup standards and closure procedures effected by the adoption of 401 KAR 42:060.

WHEREAS, the need to test the contractors knowledge of the interim closure procedures implemented by 401 KAR 42:060E, effective date February 15, 1994, or the changes made to the ordinary regulation pursuant to peer review of the University of Kentucky study and scheduled public hearing will necessitate the restructuring of the certification test resulting in needless economic hardship on the regulated contractor community if recertification is deemed imperative.

WHEREAS, knowledge deficiencies and reeducation of the regulated contractor community pertaining to the procedures, documentation requirements, and reporting requirements in relation to the Underground Storage Tank Branch and the Petroleum Storage Tank Environmental Assurance Fund Commission which can be rectified by seminars conducted by the commission and the Underground Storage Tank Branch on their respective regulations prior to testing.

(2) It is necessary in the interest of fairness to the regulated contractor community that the effective date of this regulation coincide with the finalization of closure requirements implemented through 401 KAR 42:060 and that the commission be afforded the opportunity to more fully disseminate information on 415 KAR 1:050-1:120 prior to contractor testing. The adoption of this regulation as an emergency regulation shall allow the proposed reeducation of the contractor community to be performed prior to its effective date. This regulation will be replaced by an ordinary administrative regulation to be filed with the Legislative Research Commission.

BRERETON C. JONES, Governor
ROBERT LOGAN, Chairperson

PETROLEUM STORAGE TANK ENVIRONMENTAL ASSURANCE FUND COMMISSION

415 KAR 1:114E. Contractor certification.

RELATES TO: KRS 224.60-110, 224.60-130
STATUTORY AUTHORITY: KRS 224.60-130
EFFECTIVE: April 8, 1994
NECESSITY AND FUNCTION: KRS 224.60-130 requires the Petroleum Storage Tank Environmental Assurance Fund Commission to establish criteria to be met by persons who contract to perform corrective action to be eligible for reimbursement from the fund. This regulation sets forth the criteria for obtaining certification from the commission to be eligible to contract to perform corrective action for a release from an underground petroleum storage tank, and to be eligible to receive reimbursement or payment from the fund. This administrative regulation is necessary to set minimum standards for determining technical competency and proficiency in the performance of corrective action and general knowledge of cleanup standards required to obtain closure from the Underground Storage Tank Branch, health and safety standards, and Petroleum Storage Tank Environmental Assurance Fund regulations.

Section 1. Definitions. Except as defined in this section, the terms in this regulation shall have the same definition as in KRS 224.60-115 or 415 KAR 1:050.

(1) "Certified contractor" means an individual certified by the commission as qualified to engage in the performance or supervision of corrective action at a facility in the event of a release from a petroleum storage tank system.

(2) "Company" means a person, other than an individual, engaged in the business of performing corrective action for a release from a petroleum storage tank system and who employs one (1) or more certified contractors.

(3) "Interim contractor" means an individual who is not a certified contractor and is identified by a company to replace a certified contractor in accordance with Section 8 of this administrative regulation.

(4) "Participation in" means direct and substantial involvement in each aspect of corrective action, including site characterization, preparation of site investigation reports, preparation of proposed corrective action plans, and implementation of corrective action plans approved by the cabinet.

(5) "Supervise" means being physically on site and having the authority and responsibility for the performance of corrective action at a facility in the event of a release from petroleum storage tank system, and having the ability to exercise independent judgement and direct the activities of employees and subcontractors in the performance of corrective action to achieve compliance with the administrative regulations of the cabinet.

(6) "Cabinet" as used in this administrative regulation means the Cabinet for Natural Resources and Environmental Protection unless specified otherwise.

Section 2. Applicability. (1) Beginning September 1, 1994, costs for actions performed by a person who contracts to perform corrective action for a release from a petroleum storage tank system shall be eligible for reimbursement or payment from the fund if the corrective action is:

(a) Performed or supervised by an individual who is certified by

the commission; and

(b) Performed in compliance with 401 KAR Chapter 42.

(c) This requirement shall apply only to applications for assistance agreements made after September 1, 1994.

(2) Certified contractors shall perform or supervise corrective action, such as, site checks, site investigations, and preparation of corrective action plans, in accordance with the administrative regulations of the cabinet.

(3) To be eligible for reimbursement from the fund, the person who contracts to perform corrective action shall designate the certified contractor responsible for supervision of the corrective action prior to incurring costs by giving written notice to the owner or operator of the facility and the commission. If the certified contractor changes, a new notice shall be given.

(4) A person or company who installs, repairs, closes, or removes an underground storage tank, not involving the performance of corrective action, shall not be subject to this administrative regulation.

Section 3. Application Requirements. (1) An applicant for certified contractor shall:

(a) Submit an application to the commission on the Certified Contractor Application form; and

(b) Submit verification of experience by participation in the performance of corrective action at facilities where a release occurred from a petroleum storage tank system; and

(c) Complete the examination requirements of this administrative regulation.

(2) An application to take the certified contractor examination shall be denied by the commission if the applicant:

(a) Fails to provide the information required by the application form; or

(b) Fails to comply with the experience requirements of this administrative regulation; or

(c) Fails to successfully pass the examination required by this administrative regulation; or

(d) Makes a misrepresentation or submits false information in the application.

(3) An applicant, that has been assigned a testing date and time, shall request a change in their testing schedule in writing to the commission. If the request for a rescheduled testing date falls into another testing quarter, the applicant must reapply to the commission.

(4) An applicant requesting to resit the certified contractor examination shall reapply to the commission.

Section 4. Experience Requirements. (1) An applicant shall demonstrate participation in, as defined in Section 1(4) of this administrative regulation, the performance of corrective action at a minimum of six (6) petroleum storage tank facilities within three (3) years immediately prior to making application.

(2) Technical training approved by the commission shall reduce the experience requirement of participation in the performance of corrective action to a minimum of four (4) facilities.

(3) A professional engineer registration in Kentucky shall reduce the experience requirements of participation in the performance of corrective action to a minimum of two (2) facilities.

(4) A certified professional geologist registration in Kentucky shall reduce the experience requirements of participation in the performance of corrective action to a minimum of two (2) facilities.

Section 5. Examination Requirements. An applicant for certified contractor shall take and pass a written examination administered by the commission in compliance with this section.

(1) The examination for certification shall be a written multiple choice examination covering all aspects of:

(a) Corrective action for a release from a petroleum storage tank system - the examination shall test the applicant's knowledge of codes, standards, laws, regulations, current technology, and industry recommended practices with respect to performing corrective action where a release has occurred from a petroleum storage tank system; and

(b) Applicable occupational health and safety and public health and safety requirements - the examination shall test the applicant's knowledge of codes, standards, laws, regulations, current technology, and industry recommended practices with respect to applicable occupational health and safety and public health and safety requirements; and

(c) Knowledge of the reporting requirements, documentation requirements and procedures of the regulatory agency (Underground Storage Tank Branch) and the Petroleum Storage Tank Environmental Assurance Fund Commission - the examination shall test the applicant's knowledge of codes, laws and regulations with respect to these two (2) governmental agencies.

(2) A minimum score of seventy-five (75) percent on the examination shall be considered passing.

(3) Examinations shall be given quarterly through December 31, 1995, and semiannually thereafter.

(4) An application to take the examination shall be filed with the commission at least ten (10) working days in advance of the testing date to take the examination.

(5) All examinations shall be graded and the applicants shall be notified within fifteen (15) working days. Examination papers shall not be returned to or reviewed by the applicant, however, the applicant may review their test response sheet by appointment.

(6) The commission shall furnish the applicant with instructions for taking the examination upon receipt of a completed application. Instruction sheets shall refer the applicant to appropriate laws, regulations and industry publications.

Section 6. Certification and Renewal Procedures. (1) The commission shall issue a certificate to each individual who successfully complies with this administrative regulation. The certificate shall be renewed annually.

(2) An application for renewal shall be submitted to the commission on the Certified Contractor Application for Renewal form.

(3) The renewal of a certificate shall be denied by the commission if an applicant:

(a) Fails to provide the information required by the Certified Contractor Application for Renewal form; or

(b) Makes a misrepresentation or submits false information in the application for renewal; or

(c) Failed to supervise a corrective action during the year prior to renewal; or

(d) Fails to maintain a professional registration.

(4) An applicant denied the opportunity to take the certification test or denied the renewal of their contractor certification may appeal the determination by requesting a hearing pursuant to 415 KAR 1:120.

(5) The commission may require that a certified contractor take and pass a written examination to renew a certification if there has been a significant change in the laws, codes or industry recommended practices with respect to performing corrective action and/or procedures, reporting requirements and document requirements to be submitted to the Underground Storage Tank Branch or the Petroleum Storage Tank Environmental Assurance Fund Commission since the date of original certification.

(a) The commission may waive this requirement for professional engineers and certified professional geologists registered in Kentucky if the applicant has submitted proof of successful completion of pertinent training.

(b) The determination to waive this requirement rests solely in the commission.

Section 7. Revocation or Suspension of Certification. A certificate issued pursuant to this administrative regulation may be suspended

or revoked by the commission if the certified contractor:

(1) Negligently, incompetently, recklessly or intentionally violated any provision of this regulation or any required federal, state or local regulation, code or standard relating to corrective action; or

(2) Recklessly or intentionally caused or permitted a person under the contractor's supervision to perform corrective action in violation of standards of the State Fire Marshall or the cabinet; or

(3) Obtained the certification through fraud or misrepresentation; or

(4) Fails to perform a corrective action in a manner consistent with generally acceptable professional standards.

(5) A person whose certificate is suspended or revoked may appeal the determination by requesting a hearing pursuant to 415 KAR 1:120.

Section 8. Interim Contractor. (1) A company engaged in the performance of corrective action at a facility shall immediately notify the commission in writing of the extended absence of a certified contractor due to an emergency or unanticipated circumstances. The notice shall provide the commission with the following information:

(a) Name and qualifications of the individual replacing the certified contractor; and

(b) The length of time for which the company seeks to have the interim contractor fulfill the obligations of the certified contractor.

(2) The commission shall evaluate the qualifications of the designated interim contractor and shall notify the company of the commission's determination in writing within fifteen (15) days of receipt of the company's notice. The determination shall:

(a) Approve or deny the company's request for designation of the interim contractor;

(b) Specify conditions as appropriate to the facility and the interim contractor's qualifications.

Section 9. (1) The following forms are incorporated by reference:

(a) "Certified Contractor Application Form (March, 1994)"; and

(b) "Certified Contractor Application for Renewal Form (March, 1994)".

(2) These forms may be obtained, inspected and copied at the Petroleum Storage Tank Environmental Assurance Fund Commission, 911 Leawood Drive, Frankfort, Kentucky 40601, (502) 564-5981, 8 a.m. to 4:30 p.m. eastern time, Monday through Friday.

Section 10. Applicants certified under the provisions of 415 KAR 1:115, effective March 1, 1994, shall not be deprived of their certification granted pursuant to the test results from the February 16-17, 1994 certification examinations if the recipient of the certification attends the seminars conducted by the Underground Storage Tank Branch addressing the changes in cleanup standards and closure procedures. The holder of the certification shall submit written proof of seminar attendance, verified by the Underground Storage Tank Branch, to the commission.

Section 11. The provisions of this administrative regulation shall be enforced beginning September 1, 1994.

Section 12. 415 KAR 1:115 is repealed.

JACK HALL, Executive Director
APPROVED BY AGENCY: March 25, 1994
FILED WITH LRC: April 8, 1994 at 11 a.m.

STATEMENT OF EMERGENCY
815 KAR 45:025

The attached administrative regulation, 815 KAR 45:025, Commission meetings and proceedings, is submitted as an emergency regulation because an ordinary regulation will not suffice in that 815 KAR 45:020 was found deficient by a legislative subcommittee and will lapse by operation of law pursuant to KRS Chapter 13A. House Bill 62 was passed during the 1994 legislative session which cured the deficiency in this regulation. This new administrative regulation is necessary to continue publication of the rules and procedures governing the commission meetings. This administrative regulation will be replaced by an ordinary regulation.

BRERETON JONES, Governor
GERALD STEWART, Chairman
EDWARD J. HOLMES, Secretary

PUBLIC PROTECTION AND REGULATION CABINET
Department of Housing, Buildings and Construction
Commission on Fire Protection Personnel Standards and Education
State Fire Marshal's Office

815 KAR 45:025E. Commission meetings and proceedings.

RELATES TO: KRS 95A.040, 95A.050(1), HB 62
STATUTORY AUTHORITY: KRS 95A.050(1), (3)
EFFECTIVE: April 14, 1994
NECESSITY AND FUNCTION: This administrative regulation sets forth definitions as well as rules and procedures governing the manner and form of meetings and proceedings initiated and conducted by the Commission on Fire Protection Personnel Standards and Education.

Section 1. Definitions. (1) "Commission" means the Commission on Fire Protection Personnel Standards and Education.

(2) "Commissioner" means the Commissioner of the Department of Housing, Buildings and Construction.

(3) "Department" means the Department of Housing, Buildings and Construction.

(4) "Division" means the Division of Fire Prevention, State Fire Marshal's Office.

(5) "Fire department" means and includes a fire department organized under KRS Chapter 75, a fire protection district, a volunteer fire department, or a municipal, county or urban-government fire department.

(6) "Fire protection personnel" means an employee or member of a "fire department" whether paid or unpaid, who is engaged in any of the following:

(a) Fire prevention;

(b) Inspecting buildings for compliance with building, fire, energy and life-safety codes and compliance with the Architectural Barriers Act;

(c) Fire suppression;

(d) Fire and arson investigation;

(e) Fire-related emergency medical and rescue work;

(f) Other allied fields recognized and approved by the commission.

(7) "Fire protection instructor" or "fire service training officer" means any person certified, pursuant to KRS 95A.040(2)(b) as qualified to instruct fire protection personnel.

Section 2. (1) Voting on reports, recommendations, and contracts. In order for any of the following decisions or actions to be made, a majority of the commission members shall have cast affirmative votes.

(a) Recommending administrative regulations to the commissioner pursuant to KRS 95A.050(3) to establish procedures for certification that training and education programs meet minimum standards pursuant to KRS 95A.040(2)(a);

(b) Entering into contracts with other agencies or persons pursuant to KRS 95A.040(2);

(c) Recommending to the commissioner administrative regulations prescribing the qualifications and certification procedures for fire protection instructors pursuant to KRS 95A.040(2)(b); or

(d) Making studies, recommendations and reports to the governor or legislature pursuant to KRS 95A.040(1).

(2) Public meetings. It shall be the policy of the commission that all its proceedings shall be open to the public and to the press and other news media representatives, unless forbidden by law. This policy shall also apply to the proceedings of any subcommittee of the commission.

(3) Parliamentary rules. The commission shall adopt appropriate rules for the orderly conduct of commission or subcommittee meetings.

(4) Complaints; advisory opinions. At any regular meeting, the commission may receive complaints, render decisions, deliver advisory opinions, or authorize or request studies and reports by personnel in the State Fire Marshal's Office for any of the purposes set forth in KRS 95A.040, 95A.050, and any administrative regulation adopted thereunder.

(5) Subcommittees. The commission may establish and govern the subcommittees of its members as it may deem advisable or desirable for the orderly conduct of its business.

Section 3. Administrative Support for Commission. (1) Staff services. Personnel of the division shall provide administrative and technical services to the commission as the commissioner deems necessary or desirable, upon the request of the commission.

(2) Training services. The commission may contract with the Department for Adult and Technical Education to develop curricula and training delivery plans, in conjunction with that department's advisory committee, for the entire range of local fire department duties, technology and activities. In addition, the Department for Adult and Technical Education may furnish school facilities in and among the vocational and technical schools under its jurisdiction for this training. The Department for Adult and Technical Education may be awarded a sum from the commission's budgeted funds in order to pay the salary of a clerk to assist the Department for Adult and Technical Education with maintenance of records and files and the performance of other clerical tasks associated with training of fire protection personnel and instructors and the certification of fire protection personnel, instructors and training programs.

(3) Codes enforcement. The commission may contract with the division to provide training to fire protection personnel in building, fire and life-safety codes enforcement, energy code enforcement, Architectural Barriers Act enforcement, and the legal and administrative aspects of fire safety and building inspections.

Section 4. Coordination Among Agencies. Upon approval by the commission, the Department for Adult and Technical Education may provide on-job field training and classroom training of instructors and fire protection personnel and may be reimbursed by the commission for such functions as may be permitted by law. Jefferson Community College, Northern Kentucky University, Eastern Kentucky University, and any other qualified person or agency, may provide faculty or educational services, lodging, meals or other administrative support for the training of instructors and fire protection personnel, and may be reimbursed in accordance with a contract entered into by the commissioner pursuant to KRS 95A.050(2) and in furtherance of any purpose assigned by the law to the commissioner, the department, or the commission relating to the training or provision of technical assistance to fire protection personnel.

GERALD STEWART, Chairman
EDWARD J. HOLMES, Secretary
APPROVED BY AGENCY: April 7, 1994
FILED WITH LRC: April 14, 1994 at 10 a.m.

STATEMENT OF EMERGENCY
902 KAR 20:004E

Emergency regulation 902 KAR 20:004E is necessary in order to allow applications for certificate of need to establish day health care programs to be processed under the provision of nonsubstantive review and in order to give notice of the filing of certificate of need applications to local newspapers and county judge executives. This emergency regulation will be replaced by an ordinary administrative regulation which was filed on December 6, 1993, and which was amended in response to written comments to incorporate these provisions. The emergency regulation ensures that applications to establish day health programs will be processed under the provisions of nonsubstantive review and that notice of applications for certificate of need will be given to local newspapers and county judge executives, pending final action on the ordinary regulation.

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

CABINET FOR HUMAN RESOURCES
Interim Office of Health Planning & Certification

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

RELATES TO: KRS 216B.010 to 216B.130, 216B.990(1), (2)
STATUTORY AUTHORITY: KRS 13A.350, 216B.040, 216B.075, Executive Orders 92-419, 92-540
EFFECTIVE: March 28, 1994
NECESSITY AND FUNCTION: KRS 216B.040 and 216B.075 require the promulgation of administrative regulations relating to certificate of need applications and review procedures and requirements for batching, issuing advisory opinions, cost escalations and cost overruns and progress reports.

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

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

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

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

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

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

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

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

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

medical or dental services provided through the use of a mobile vehicle or performed at various locations.

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

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

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

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

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

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

(2) Need and accessibility.

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

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

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

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

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

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

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

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

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

2. Adjacent health service areas.

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

(3) Interrelationships and linkages.

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

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

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

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

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

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

(c) The availability of:

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

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

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

(e) For of construction or renovation projects the:

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

2. Probable impact of the project on the:

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

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

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

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

(5) Quality of services.

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

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

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

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

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

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

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

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

(3) If an application is denied, a new letter of intent shall be filed in order to resubmit an application.

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

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

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

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

(b) Provide an applicant with, as applicable:

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

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

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

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

1. Acknowledge receipt of the application; and

2. Notify the applicant whether the application is complete.

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

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

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

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

(a) Deem an application complete; and

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

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

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

(6)(a) The notification of the beginning of the review shall include the:

1. Schedule for the review; and

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

(b) Notice to members of the public, and third party payors, shall be provided through public information channels and notice mailed to local newspapers and county judge executives.

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

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

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

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

(3) The written notification shall include:

(a) Verification that the criteria have been met;

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

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

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

(e) Notice of appeal rights.

(4) If an application is not declared complete with a year from the

date of filing it shall expire and shall not be reviewed.

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

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

(a) Given to third party payors and members of the public through public information channels and notice mailed to local newspapers and county judge executives; and

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

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

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

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

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

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

(3) A hearing officer may:

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

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

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

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

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

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

(5) A hearing officer may:

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

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

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

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

(a) Final for evidentiary purposes; and

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

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

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

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

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

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

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

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

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

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

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

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

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

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

(h) Day health care programs.

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

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

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

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

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

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

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

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

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

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

2. Notify the applicant of the beginning of the review. [~~the requested additional information by the interim office, or upon receipt of a letter from the applicant that he elects for the application to be processed as originally submitted, the interim office shall declare the application to be deemed complete.~~]

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

1. Given to third party payors and members of the public through public information channels, and notice mailed to local newspapers and county judge executives; and

2. Mailed to other known affected persons.

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

(g) If a certificate of need is denied following a nonsubstantive review and a formal review is requested, no letter of intent shall be

required, but the filing of the request for nonsubstantive review shall be considered compliance with any requirement for a letter of intent.

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

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

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

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

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

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

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

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

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

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

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

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

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

(b) The requests shall include:

1. Amount of the escalation of overrun;

2. Factors causing the escalation or overrun; and

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

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

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

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

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

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

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

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

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

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

(b) The appropriate license has been obtained; and

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

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

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

(a) The submission of additional reports; or

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

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

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

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

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

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

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

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

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

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

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

(7) For projects not deemed complete a second progress report shall include the following:

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

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

(c) All construction or renovation projects shall include:

1. Schedule for project completion with projected dates;

2. Evidence of preliminary negotiation with financial agent; and

3. Evidence of preliminary negotiation with contractors.

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

(a) For construction or renovation projects:

1. Copy of deed or lease of land;

2. Documentation of final financing. If the source of capital is to be a financing agreement, the holder must have evidence that a final enforceable agreement or note has been executed;

3. Documentation that final plans have been submitted to the Department of Housing, Buildings and Construction and the Division of Licensing and Regulation;

4. Enforceable contract with construction contractor;

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

GREG LAWTHER, Acting Executive Director
FONTAINE BANKS, JR., Secretary
APPROVED BY AGENCY: February 23, 1994
FILED WITH LRC: March 28, 1994 at 1 p.m.

STATEMENT OF EMERGENCY
903 KAR 5:290E

Under KRS Chapter 13A, the administrative body is required to implement this regulation in order to have sufficient authority to establish 1994 contribution rates for Kentucky employers under the Unemployment Insurance Program. These rates are spelled out in 903 KAR 5:290 and per KRS 341.270, and predicated on the trust fund balance as of December 31 of any calendar year. An emergency regulation is needed because this information is necessary in assigning rates for first quarter, 1994 contribution reports which are due before promulgation of regulation through the normal process could occur. This emergency administrative regulation shall be replaced by an ordinary administrative regulation in accordance with KRS Chapter 13A. The ordinary administrative regulation will be filed with the Regulations Compiler on or before the effective date of the emergency administrative regulation.

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

CABINET FOR HUMAN RESOURCES
Department for Employment Services
Division of Unemployment Insurance

903 KAR 5:290E. Employer contribution rates.

RELATES TO: KRS 341.270
STATUTORY AUTHORITY: KRS 194.050, 341.270
EFFECTIVE: March 28, 1994
NECESSITY AND FUNCTION: KRS 341.270 requires the Secretary for Human Resources to determine the rate schedule for employer's contributions. The rate schedule in effect for each calendar year shall be determined by the "trust fund balance" as of December 31, of the preceding year. This administrative regulation applies the mathematical computation required by KRS 341.270 and sets forth the applicable rates to be in effect for the calendar year.

Section 1. Trust Fund Balance. The secretary finds the following to exist:

(1) The "trust fund balance" as of December 31, 1993 [~~1992~~], was $401,310,854.86 [~~364,286,605.73~~].

(2) There was no outstanding loan from the Federal Unemployment Trust Fund as of December 31, 1993 [~~1992~~].

Section 2. Rate Schedule. On the basis of the findings in Section 1 of this administrative regulation, and in accordance with KRS 341.270(3), Schedule A of Table A shall be in effect for calendar year 1994 [~~1993~~], because the "trust fund balance" equals or exceeds $350,000,000, on December 31, 1993 [~~1992~~]. Rates listed in Schedule A of Table A are listed below.

Employer Reserve Ratio	Rate Schedule
8.0% and over	0.30%
7.0% but under 8.0%	0.40%
6.0% but under 7.0%	0.50%
5.0% but under 6.0%	0.70%
4.6% but under 5.0%	1.00%
4.2% but under 4.6%	1.30%
3.9% but under 4.2%	1.50%
3.6% but under 3.9%	1.80%
3.2% but under 3.6%	2.00%
2.7% but under 3.2%	2.10%
2.0% but under 2.7%	2.20%
1.3% but under 2.0%	2.30%
0.0% but under 1.3%	2.40%
-0.5% but under -0.0%	6.50%
-1.0% but under -0.5%	6.75%
-1.5% but under -1.0%	7.00%
-2.0% but under -1.5%	7.25%
-3.0% but under -2.0%	7.50%
-4.0% but under -3.0%	7.75%
-6.0% but under -4.0%	8.25%
-8.0% but under -6.0%	8.50%
Less than 8.0%	9.00%

MARGARET WHITTET, Commissioner
FONTAINE BANKS, JR., Secretary
APPROVED BY AGENCY: February 23, 1994
FILED WITH LRC: March 28, 1994 at 1 p.m.

STATEMENT OF EMERGENCY
903 KAR 5:391E

A court order issued by the Franklin Circuit Court declared 903 KAR 5:390 to be an unlawful derogation of statute. An ordinary regulation will not suffice because the administrative regulation governing adjudication procedures for determining qualification of unemployment insurance benefits for claimants that are unemployed as a result of a reduction of work force initiated by the employer has been declared not in compliance with statute. This emergency administrative regulation shall be replaced by an ordinary regulation in accordance with KRS Chapter 13A. The ordinary administrative regulation will be filed with the Regulations Compiler on or before the effective date of the emergency administrative regulation.

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

CABINET FOR HUMAN RESOURCES
Department for Employment Services
Division of Unemployment Insurance

903 KAR 5:391E. Repeal of 903 KAR 5:390.

RELATES TO: KRS 341.370
STATUTORY AUTHORITY: KRS 13A.100, 341.115
EFFECTIVE: March 28, 1994
NECESSITY AND FUNCTION: This administrative regulation repeals 903 KAR 5:390 which delineates the proper adjudication procedures for determining qualifications of benefits for claimants that are unemployed as a result of a reduction of workforce initiated by the employer. An order issued by the Franklin Circuit Court as a result of Civil Action declared payment of unemployment benefits under this administrative regulation not in compliance with KRS 341.370 and thus, said administrative regulation was an unlawful derogation of said statute.

Section 1. 903 KAR 5:390, Reduction in workforce; no disqualification, is hereby repealed.

MARGARET WHITTET, Commissioner
FONTAINE BANKS, JR., Secretary
APPROVED BY AGENCY: March 15, 1994
FILED WITH LRC: March 28, 1994 at 1 p.m.

ADMINISTRATIVE REGULATIONS AS AMENDED BY PROMULGATING AGENCY AND REVIEWINGI SUBCOMMITTEE

KENTUCKY LEGISLATIVE ETHICS COMMISSION (As Amended)

2 KAR 2:030. Rules of procedure.

RELATES TO: KRS 6.601, 6.849
STATUTORY AUTHORITY: KRS 6.666(5)
NECESSITY AND FUNCTION: KRS 6.691 requires the Kentucky Legislative Ethics Commission to conduct adjudicatory proceedings in appropriate cases. The function of this administrative regulation is to regulate the proceedings of the commission, subject to KRS 6.691(1), which provides that the Kentucky Rules of Civil Procedure and the Kentucky Rules of Evidence apply to all commission adjudicatory proceedings.

Section 1. Definitions. (1) "Chair" means Chair of the Kentucky Legislative Ethics Commission, or vice-chair in the absence or disability of the chair.

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

(3) "Formal complaint" means a formal written statement issued by the commission accusing one (1) or more persons of a violation of the provisions of KRS 6.601 to 6.849.

(4) "Respondent" means a person accused of violating KRS 6.601 to 6.849.

Section 2. Right of a Respondent to Request an Adjudicatory Hearing. If, after an investigation, the commission determines that probable cause exists to support an alleged violation of KRS 6.601 to 6.849 and, due to mitigating circumstances set forth in KRS 6.686(5)(a), the commission issues a confidential reprimand, the respondent may file a written request, within five (5) days of receipt of the reprimand, requesting an adjudicatory proceeding. A respondent shall not file an appeal based on a confidential reprimand without having first filed a timely request for an adjudicatory proceeding.

Section 3. Formal Complaints. (1) If the commission determines that probable cause exists to support an alleged violation of KRS 6.601 to 6.849, and further decides that a confidential reprimand as defined by KRS 6.686(5)(a) is not appropriate, a formal complaint shall be issued against the respondent.

(2) The formal complaint shall be prepared in writing, stating the facts alleged to constitute a violation of KRS 6.601 to 6.849, and containing a general statement of the applicable law. The formal complaint shall be signed by the chair or another member authorized by the commission.

(3) Any number of acts or omissions, and any number of separate and distinct transactions alleged to constitute a violation of KRS 6.601 to 6.849 may be alleged in a single formal complaint, but each act or omission shall be set out in a separate paragraph.

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

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

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

Section 4. Notice of Filing of Formal Complaint: Time to Answer. Upon the filing of a formal complaint, the administrative secretary, by certified mail with return receipt requested shall furnish the respondent with a copy of the formal complaint and notify the respondent that within **thirty (30)** ~~[twenty (20)]~~ days after the receipt of the notice, he must file his answer with the administrative secretary and serve a copy of his answer on the attorney for the commission by mailing or delivering a copy to him.

Section 5. When a Formal Complaint Can be Taken as Confessed. The commission may take the allegations of the formal complaint as admitted or confessed if a respondent who was notified of the formal complaint by the commission files an answer admitting the allegations or fails to file an answer within the time provided in these rules. The commission may receive evidence if it deems that evidence would be of assistance in making its determination.

Section 6. Proceedings When Pleadings Present Only an Issue of Law. If the pleadings present only an issue of law, the commission shall fix a time for filing of briefs. The commission may receive evidence if it deems that evidence would be of assistance in making its determination.

Section 7. Rulings on Motions. (1) Dispositive motions shall be ruled on by the commission. Examples of dispositive motions are motions to dismiss, or motions to exclude essential evidence.

(2) The chair or another member authorized by the commission shall rule on procedural motions. An example of a procedural motion is a motion for a continuance.

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

Section 8. Authority for Settlement Negotiations. The attorney for the commission, with the approval of the chair, may attempt to negotiate a settlement with the respondent, and may recommend to the chair that an agreed stipulation of fact, finding of violation, and judgment be entered. The chair may accept or reject the ~~recommendation~~. If the recommendation is accepted the agreed stipulation, finding, and judgment shall be entered. If the recommendation is rejected the matter shall be heard by the commission without any reference to the offer of settlement by the respondent being made to any member of the commission, but the chair will decline to vote. However, the respondent shall have the right to appeal the rejection of the recommendation to the full commission but shall first sign a waiver of any objections to the commission conducting a hearing regarding the complaint in the event the respondent's proposed settlement is rejected by the commission.

Section 9. Witness Lists. At least ten (10) days before the date set for a hearing the attorneys for all parties, and for the commission, shall provide the names of all proposed witnesses to the commission. Copies of the witness lists shall be served upon opposing parties or their counsel as provided by the Kentucky Rules of Civil Procedure and additional witnesses may only be called for rebuttal, or with the permission of the commission for good cause shown.

Section 10. Prehearing Conference. The chair may order that a prehearing conference be held with reasonable notice to all parties.

Section 11. Amendments to Formal Complaint or Answer. The formal complaint may be amended to conform to the proof or to set forth additional facts, either occurring before or after the commence-

ment of the hearing. If an amendment is made, the respondent shall be given reasonable time to answer the amendment and to prepare and present his defense against the matters charged thereby.

Section 12. Hearing Additional Evidence. The commission may order a hearing for the taking of additional evidence at any time while the matter is pending before it. The order shall set the time and place of hearing and shall indicate matters on which the evidence is to be taken. A copy of the order shall be sent by mail to the respondent, and his attorney if any, at least ten (10) days prior to the date of the hearing.

Section 13. Deliberations. At the conclusion of the evidence, the deliberations of the commission shall be held in closed session, with only clerical staff present.

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

JUDGE GEORGE E. BARKER, Chair
APPROVED BY AGENCY: February 15, 1994
FILED WITH LRC: February 15, 1994 at 11 a.m.

EDUCATION, ARTS, AND HUMANITIES CABINET
Department of Education
Office of Chief State School Officer
(As Amended)

701 KAR 5:110. Use of local monies to reduce unmet technology need.

RELATES TO: KRS 156.670, 157.650, 157.655, 157.660, 157.665, 160.160
STATUTORY AUTHORITY: KRS 156.070, 156.160
NECESSITY AND FUNCTION: KRS 156.160(1)(b) requires that the State Board for Elementary and Secondary Education promulgate administrative regulations governing the acquisition and use of educational equipment for the schools as recommended by the Council for Education Technology. KRS 156.670(1) requires the development of the master plan for education technology to outline Commonwealth activities related to the purchase, development, and use of technology. The master plan requires districts to submit district technology plans which describe their unmet technology need. KRS 157.655 stipulates that a local public school district may participate in the education technology funding program based on the unmet technology need described in the local district plan and approved by the state board. Based on review of the unmet technology need in district technology plans, it has been determined that full implementation of KETS cannot be funded based solely on offers of assistance from the Education Technology Trust Fund. Therefore, this administrative regulation is promulgated to ensure that all school district technology procurements, in categories for which KETS standards for unmet need have been established, will reduce the unmet technology need regardless of source of funds.

Section 1. Definitions. As used in this administrative regulation, unless the context requires otherwise:
(1) "Department" means the Kentucky Department of Education.
(2) "District technology plan" means the plan developed by the local school district and the Department of Education and approved by the State Board for Elementary and Secondary Education.
(3) "Kentucky Education Technology System" or "KETS" means the statewide system set forth in the technology master plan issued by the State Board for Elementary and Secondary Education with the recommendation of the Council for Education Technology and approved by the Legislative Research Commission.
(4) "Master plan" means the long-range plan for the implementation of the Kentucky Education Technology System as developed by the Council on Education Technology and approved by the State Board for Elementary and Secondary Education and the Legislative Research Commission.
(5) "Unmet technology need" means the total cost of technology needed to achieve the capabilities outlined in the approved technology plan of the local school district.

Section 2. Determination of Unmet Need. A local school district shall determine its unmet technology need as part of the technology planning process. Unmet technology need shall be audited by the department and subject to the approval of the State Board for Elementary and Secondary Education as part of the state review and assistance calculation process, as provided by the master plan. [~~The district's unmet technology need shall be measured by comparing the district technology plan against standards established for KETS.~~]

Section 3. Reducing Unmet Need. (1) In categories [~~for which standards for~~] unmet technology need **as provided in the KETS Master Plan for Education Technology** [~~are established~~], districts shall limit procurements to those which will reduce unmet technology need until the district's unmet technology need no longer exists.
(2) To assist districts in selecting technology which will reduce the unmet technology need, the Department of Education shall develop suggested procurement guidelines for equipment, software, and services [~~based on KETS standards~~].

Section 4. Alternative Technology. Local school districts shall not be precluded from proposing alternative technologies in the local technology plan, particularly when the technology is proposed to achieve innovation.

Section 5. The KETS Master Plan for Education Technology, dated November 4, 1993, is hereby incorporated by reference and may be obtained from the Office of Education Technology, First Floor, Capital Plaza Tower, 500 Mero Street, Frankfort, Kentucky, Monday through Friday, 8 a.m. - 4:30 p.m.

This is to certify that the chief state school officer has reviewed and recommended this administrative regulation prior to its adoption by the State Board for Elementary and Secondary Education, as required by KRS 156.070(4).

Thomas C. Boysen
Commissioner of Education

JOSEPH W. KELLY, Chairman
APPROVED BY AGENCY: September 14, 1993
FILED WITH LRC: September 15, 1993 at 11 a.m.

PUBLIC PROTECTION AND REGULATION CABINET
Department of Housing, Buildings and Construction
Division of Fire Prevention
(As Amended)

815 KAR 15:010. Definitions.

RELATES TO: KRS Chapter 236 [~~236.030~~]
STATUTORY AUTHORITY: KRS 236.030, 236.040 [~~Chapter 13A~~]

NECESSITY AND FUNCTION: KRS 236.030 authorizes [~~requires~~] the commissioner, through [~~upon advisement of~~] the Board of Boiler and Pressure Vessel Rules, to fix reasonable standards for the safe construction, installation, inspection and repair of boilers, pressure vessels and pressure piping. This administrative regulation sets forth the definitions used in the boiler and pressure vessel safety rules. This amendment is necessary to meet KRS Chapter 13A as determined by quadrennial review, as well as to clarify how newer codes are utilized. [~~boiler safety regulations. This amendment alphabetizes these definitions and no substantive changes were made.~~]

Section 1. Definitions[~~, as used in the Boiler and Pressure Vessel Safety Rules~~]. (1) "Act" [~~shall~~] means the Kentucky Boiler and Pressure Vessel Safety Act, KRS Chapter 236.

(2) "ANSI" means the American National Standards Institute.

(3) "Approved" [~~shall~~] means approved by the Board of Boiler and Pressure Vessel Rules and the commissioner of the department or the chief boiler inspector.

(4) "ASME" means the American Society of Mechanical Engineers.

(5) "ASME Boiler and Pressure Vessel Code or ASME Code" [~~shall~~] means the American Society of Mechanical Engineers Boiler and Pressure Vessel Codes as follows, including all cited code cases, appendices and addenda, **which is incorporated by reference in Section 1(1) of 815 KAR 15:025**:

(a) Section I, rules for construction of power boilers;

(b) Section II, material specifications;

1. Part A for ferrous materials;

2. Part B for nonferrous materials; and

3. Part C for welding rods, electrodes and filler metals;

(c) Section III, Nuclear Vessel Code;

(d) Section IV, Rules for construction of heating boilers;

(e) Section V, nondestructive examination;

(f) Section VIII, rules for construction of pressure vessels, Division 1 and Division 2; and

(g) Section IX, welding and brazing qualifications. [~~1980 edition of the: Power Boiler Code Section I; the Nuclear Vessel Code, Section III; Heating Boiler Code, Section IV; Pressure Vessel Code, Section VIII, Division I; plus referencing Codes Section II, Material Specifications; Section IX, Welding and Brazing; and Section V, Nondestructive Examination; including all code cases and addenda of the American Society of Mechanical Engineers United Engineering Center. Said copies shall be on file for review at the department's offices, U.S. 127 South Building, Frankfort, Kentucky, Monday through Friday from 8 a.m. to 4:30 p.m.~~]

(6) [~~(5)~~] "Board of Boiler and Pressure Vessel Rules" as defined by KRS 236.010(6).

(7) [~~(6)~~] "Boiler" as defined by KRS 236.010(1).

(8) [~~(7)~~] "Boiler Inspection Section" [~~shall~~] means the agency, within the Division of Fire Prevention (Office of State Fire Marshal), Department of Housing, Buildings and Construction which supervises the implementation of KRS Chapter 236.

(9) [~~(8)~~] "Boiler inspector" [~~shall~~] means any person employed by the Commonwealth of Kentucky for the purpose of inspecting boilers and pressure vessels in accordance with provisions of KRS 236.070. [~~the Act. Qualifying requirements are set forth in KRS 236.070 and 236.090. These requirements shall determine the applicant's ability to pass the National Board of Boiler and Pressure Vessel Inspectors examination. Successful completion of this written examination and granting of a National Board Commission is a requisite for permanent appointment as boiler inspector employed by the Commonwealth of Kentucky.~~]

(10) [~~(9)~~] "Boiler safety regulations" [~~or "boiler safety rules" shall~~] means 815 KAR 15:010 to 815 KAR 15:080 [~~085~~].

(11) [~~(10)~~] "Certificate of inspection" as defined by KRS 236.010(7).

(12) [~~(11)~~] "Chief boiler inspector" [~~shall~~] means the person employed by the Commonwealth of Kentucky who shall supervise the work of the boiler inspectors and office staff under the general supervision of the State Fire Marshal and perform [~~such~~] other duties as may be prescribed.

(13) [~~(12)~~] "Code boiler or pressure vessel (or standard boiler or pressure vessel)" [~~shall~~] means a boiler or pressure vessel which bears the ASME Code Symbol stamp or the National Board stamp. (See also "state special".)

(14) [~~(13)~~] "Commission" [~~shall~~] means the written credential issued by the department to an inspector or special inspector under the provisions of KRS 236.070 or 236.080.

(15) [~~(14)~~] "Commissioner" as defined by KRS 236.010(3).

(16) [~~(15)~~] "Condemned boiler or pressure vessel" [~~shall~~] means a boiler or pressure vessel that has been inspected and declared unsafe or disqualified by legal requirements by a qualified inspector [~~an inspector, qualified to take such action,~~] who has applied a stamping or marking designating its rejection.

(17) [~~(16)~~] "Department" as defined by KRS 236.010(4).

(18) [~~(17)~~] "Electric boiler" means a power boiler, heating boiler, high or low-temperature water boiler in which the source of heat is electricity.

(19) [~~(18)~~] "Existing installations" [~~shall~~] means and includes any boiler or pressure vessels constructed, installed, placed in operation, or contracted for before the effective date of this administrative regulation [~~June 1, 1962 and July 15, 1980, respectively~~].

(20) [~~(19)~~] "Expansion tank" [~~shall~~] means a pressure vessel, unfired but directly connected to a hot water heating boiler, to absorb or cushion expansion therein and subject to comparable pressure with the boiler itself.

(21) [~~(20)~~] "External inspection" [~~shall~~] means an inspection made when a boiler or pressure vessel is in operation and under pressure.

(22) [~~(21)~~] "Fired jacketed steam kettles" [~~shall~~] means vessels in which steam pressure is generated and shall be classed as a boiler.

(23) [~~(22)~~] "Heat recovery boiler" (see "process steam generator").

(24) "Heating boiler" as defined by KRS 236.010(1)(c).

(25) [~~(23)~~] "High pressure, high temperature water boiler" as defined by KRS 236.010(1)(b).

(26) [~~(24)~~] "Hot water heating boiler" means a nonsteam generating boiler [~~in which no steam is generated,~~] from which hot water is circulated for heating purposes and [~~then~~] returned to the boiler, and which operates at a pressure not exceeding 160 psig or a temperature of 250 degrees Fahrenheit at or near the boiler outlet.

(27) [~~(25)~~] "Hot water storage tank" [~~shall~~] means a pressure vessel, unfired but directly connected to and subject to the same pressures as a companion hot water supply boiler, the combination being used to heat and store hot water for use externally to itself.

(28) [~~(26)~~] "Hot water supply boiler" [~~shall~~] means a boiler completely filled with water that furnishes hot water to be used externally to itself at pressures not exceeding 160 psig or at temperatures not exceeding 210 [~~250~~] degrees Fahrenheit at or near the boiler outlet.

(29) "Hydrostatic test" means the activity of filling a boiler and associated piping with water and raising the pressure within the system to check for tightness or safety.

(30) [~~(27)~~] "Inspector" [~~shall~~] means either "boiler inspector" or "special boiler inspector."

(31) [~~(28)~~] "Internal inspection" [~~shall~~] means an inspection made under circumstances that the [~~when a~~] boiler or pressure vessel is not operating, [~~shut down~~] and handholes or manways are open for inspection of internal portions of the boiler or pressure vessel [~~insofar~~] as construction permits.

(32) [~~(29)~~] "Lined potable water heater" means a water heater with a corrosion resistant lining used to supply potable hot water.

(33) [~~(30)~~] "Major repair" [~~shall~~] means [~~such~~] repairs that [~~as would~~] affect the strength of a boiler or pressure vessel by cutting and welding on any pressure part.

(34) [~~(31)~~] "Miniature boiler" [~~shall~~] means a power boiler or high

temperature water boiler [~~which does~~] not exceeding any of the following:

(a) Sixteen (16) inches inside diameter of shell (not applicable to electric boilers); or

(b) Twenty (20) square feet heating surface; or

(c) Five (5) cubic feet gross exclusive of casing and insulation; or

(d) 100 pounds PSI maximum allowable working pressure.

(35) [~~(32)~~] "National Board (NB)" [~~shall~~] means the National Board of Boiler and Pressure Vessel Inspectors, [~~whose headquarters are at~~] 1055 Crupper Avenue, Columbus, Ohio 43229, which group has [~~and who have~~] also issued a National Board Inspection Code.

(36) "Nationally recognized testing agency (NRTL)" means one (1) of the following laboratories or any other nationally recognized testing laboratory approved by the board whose label shall be used for all electric boilers and other electrical equipment after testing according to an established standard and by the prescribed procedure.

(a) Nationwide Consumer Testing Institute, Inc.;

(b) Underwriters Laboratories, Inc. (UL);

(c) Factory Mutual Research Corp. (FM);

(d) Met Electrical Testing Co., Inc.;

(e) Dash, Straus and Goodhue, Inc. of Boxborough, MA;

(f) ETL Testing Laboratories, Inc. of Cortland, NY;

(g) Communication Certification Laboratory of Salt Lake City;

(h) Canadian Standards Association's Toronto facility;

(i) The American Gas Associations Laboratories, Inc. of Cleveland; and

(j) California Air Resources Board.

(37) [~~(33)~~] "Noncode boiler or pressure vessel (or nonstandard boiler or pressure vessel)" [~~shall~~] means a boiler or pressure vessel that does not bear the ASME, or the National Board stamp. (See also "state special").

(38) [~~(34)~~] "Nuclear energy system" [~~shall~~] means that portion of a power plant that serves the purpose of producing and controlling output of thermal energy from nuclear fuel.

(39) [~~(35)~~] "Nuclear power plant" means a nuclear power plant consisting of one (1) or more nuclear power systems and containment systems.

(40) [~~(36)~~] "Nuclear power systems" means a system which serves the purpose of producing and controlling an output of thermal energy from nuclear fuel and those associated systems essential to the functions of the power system. The components of the system include such items as pressure vessels, piping system, pumps, valves and storage tanks.

(41) [~~(37)~~] "Nuclear vessel" [~~shall~~] means a pressure vessel designed and constructed in accordance with Section III of ASME Boiler and Pressure Vessel Code.

(42) [~~(38)~~] "Owner or user" [~~shall~~] means any person, firm, or corporation owning or operating a [~~any~~] boiler or pressure vessel within this Commonwealth.

(43) [~~(39)~~] "Power boiler" [~~shall~~] means as defined by KRS 236.010(1)(a).

(44) [~~(40)~~] "Pressure piping" [~~shall~~] means the boiler and pressure vessel external and connecting (steam, vapor or water) [~~any~~] piping[~~, (steam, vapor or water) carrying pressures~~] emanating from the associated [~~a power or heating~~] boiler or pressure vessel and [~~of substantially the same pressures and temperatures as encountered in the boiler or pressure vessel. It~~] includes code piping as covered under the ASME Boiler and Pressure Vessel Code, Sections I and IV; Unfired Pressure Vessel Code, Section VIII, Division I, [~~and~~] the Power Piping Code ANSI B-31.1.

(45) [~~(41)~~] "Pressure vessel" as defined by KRS 236.010(2).

(46) [~~(42)~~] "Process steam generator" means a vessel or system of vessels comprised of one (1) or more drums and one (1) or more heat exchange surfaces as used in waste heat or heat recovery type steam boilers.

(47) [~~(43)~~] "PSI (psi)" means pounds per square inch.

(48) [~~(44)~~] "PSIG (psig)" means pounds per square inch gauge.

(49) [~~(45)~~] "Reinstalled boiler or pressure vessel" [~~shall~~] means a boiler or pressure vessel removed from its original setting and reerected at the same location or erected at a new location without change of ownership.

(50) [~~(46)~~] "Secondhand boiler or pressure vessel" [~~shall~~] means a boiler or pressure vessel in [~~of~~] which both the location and ownership have been changed after initial [~~primary~~] use.

(51) [~~(47)~~] "Special boiler inspector" [~~shall~~] means any person employed by an insurance company authorized to insure boilers and pressure vessels in this Commonwealth and who holds a commission as provided for in KRS 236.080.

[~~(48) "State" or "Commonwealth" as used herein shall be synonymous.~~]

(52) [~~(49)~~] "State special" [~~shall~~] means a boiler or pressure vessel [~~of any type or size defined under this section or under these regulations and~~] which carries neither the ASME Boiler and Pressure Vessel Code symbol nor National Board stamping but has been accepted by the Department of Housing, Buildings and Construction upon advice of the board as meeting standards [~~may be acceptable to the boiler inspection section provided the manufacturer, installer, or owner can prove conclusively to the satisfaction of the chief boiler inspector that the standard to which the boiler or pressure vessel is built is at least~~] equivalent to the applicable ASME Boiler and Pressure Vessel Code, pursuant to [~~. Acceptable methods of proof will be as set forth in~~] 815 KAR 15:025 [~~020~~], Section 5(1) [~~1(2)~~].

[~~(50) "Underwriters laboratory label" shall mean the label of the Underwriters Laboratories, Inc., or other electrical testing laboratories, approved by the Board of Boiler Rules which must be affixed to all electric fired boilers. Other electrical testing laboratories labeling may be affixed to an electrical boiler provided they are approved by the department.~~]

(53) [~~(51)~~] "Unfired steam boiler" means a vessel or system of vessels intended for operation at a pressure in excess of fifteen (15) psig for the purpose of producing and controlling an output of thermal energy.

(54) "V-R stamp holder" means the holder of a certificate issued by the National Board to repair pressure relief valves.

(55) [~~(52)~~] "Water heater" means a closed vessel in which water is heated by the combustion of fuels, electricity or any other source and withdrawn for use external to the system at pressures not exceeding 160 psig and shall include all controls and devices necessary to prevent water temperatures from exceeding 210 degrees Fahrenheit.

(56) [~~(53)~~] "Waste heat boiler" (see "unfired steam boiler").

CHARLES A. COTTON, Commissioner
EDWARD J. HOLMES, Secretary
APPROVED BY AGENCY: February 3, 1994
FILED WITH LRC: February 8, 1994 at 2 p.m.

PUBLIC PROTECTION AND REGULATION CABINET
Department of Housing, Buildings and Construction
Office of State Fire Marshal
(As Amended)

815 KAR 15:025. New installations, general design, construction and inspection criteria for boilers, pressure vessels and pressure piping.

RELATES TO: KRS Chapter 236
STATUTORY AUTHORITY: KRS 236.030, 236.120
NECESSITY AND FUNCTION: KRS 236.030 and 236.120 authorizes the commissioner, through the Board of Boiler Rules, to fix reasonable fees and standards for the safe construction, installation, inspection and repair of boilers, pressure vessels and associated

pressure piping. This administrative regulation is necessary to establish the design, construction and inspection criteria requirements of the boiler inspection section for all boilers and pressure vessels not exempted by KRS 236.060. This administrative regulation incorporates provisions contained in other 815 KAR Chapter 15 administrative regulations which are being repealed simultaneously.

Section 1. Minimum Standards. (1) Boiler and pressure vessels. All new boilers and pressure vessels, except those approved pursuant to Section 5 of this administrative regulation as "state specials," shall comply with applicable provisions of 815 KAR Chapter 15 of the Kentucky administrative regulations and the ASME Boiler and Pressure Vessel Code/1989, which is hereby **incorporated** [~~adopted~~] by reference.

(a) It is published by and available from the American Society of Mechanical Engineers (ASME), United Engineering Center, 345 East 47th Street, New York, New York 10017.

(b) A copy is also available to be inspected at the Department of Housing, Buildings and Construction, 1047 U.S. 127 South, Suite #1, Frankfort, Kentucky, Monday through Friday from 8 a.m. to 4:30 p.m.

(c) Compliance with a later edition of this code shall be deemed equivalent and may be used in lieu of the edition specified.

(2) Details of vessels of special design not covered by the code or not fully complying with the ASME Code shall be submitted to the Boiler Section of the State Fire Marshal's Office and approval secured before field erection or construction shall begin.

(3) Pressure piping.

(a) All new pressure piping installations connected to the boiler or pressure vessel shall conform to the standards set forth in the ASME Code for Power Piping, B.31.1, 1989 edition, an American National Standard, which is hereby **incorporated** [~~adopted~~] by reference. For low pressure boilers, the metallic piping material allowed by B.31.9 shall be acceptable.

1. The Power Piping Code is published by and available from the American Society of Mechanical Engineers, United Engineering Center, 345 East 47th Street, New York, New York 10017.

2. Copies are also available to be inspected at the Department of Housing, Buildings and Construction, 1047 U.S. 127 South, Suite #1, Frankfort, Kentucky, Monday through Friday from 8 a.m. to 4:30 p.m.

3. Compliance with a later edition of this code shall be deemed equivalent and may be used in lieu of the edition specified.

(b) The maximum allowable design temperature and pressure of the piping system and all of its component parts shall meet or exceed the operating control settings of the boiler itself.

(c) If the maximum allowable design temperature or pressure of the boiler exceeds the maximum design limits of the piping system or any of its component parts, the pipe or its components shall not be used unless the temperature and pressure controls on the boiler are permanently set to prevent operation in excess of the design limits of the piping system and safety valves are added to activate at the maximum design limits of the piping system.

(4) Welded joints. Welded joints shall be installed by qualified welders in accordance with the ASME Code, Section IX. Welded joints shall be visually inspected for complete and full root penetration, soundness of the weld and freedom from undercutting, cracking and other surface imperfections in accordance with Section 3(5) of this administrative regulation.

Section 2. Manufacturer's Data Report. A manufacturer's data report on all boilers of steel construction and all pressure vessels conducted in accordance with ASME Boiler and Pressure Vessel Code shall be filed with the National Board of Boiler and Pressure Vessel Inspectors unless the boiler or pressure vessel is exempted by KRS 236.060.

Section 3. Installation Inspection or First Inspection and Stamping of New Boilers and Pressure Vessels. (1) Stamping. Upon completion of the installation or at the time of first inspection, a Commonwealth of Kentucky serial number shall be assigned to the boiler or pressure vessel and shall be applied to the boiler or pressure vessel as follows:

(a) Steel boilers shall be stamped with the letters, "KY" followed by the state serial number assigned, and pressure vessels shall be stamped with the letters "KY" followed by the numeral "K" and the remainder of the state serial number assigned. The stamping shall be accomplished as follows:

1. Stamping shall be applied in the immediate area of code stamping on the boiler or pressure vessel and shall be in letters and figures not less than five-sixteenths (5/16) inch in height.

2. A metal tag may additionally be used showing identical lettering and serial number as used in the stamping, this tag shall be securely affixed in the area of the manufacturer's name plate or data plate.

(b) Cast iron boilers shall have securely attached to the boiler (preferably adjacent to the manufacturer's data plate or in the most conspicuous area) a metal tag not less than one (1) inch in height on which the letters "KY" and the state serial number shall be stamped.

(c) Hot water supply boilers shall have securely attached to the heater (preferably adjacent to the manufacturer's data plate or in the most conspicuous area) a metal tag not less than one (1) inch in height on which the letters "KY" and the state serial number shall be stamped.

(d) A boiler or pressure vessel having the standard stamping of another state that has adopted a standard of construction equivalent to the standard of the Commonwealth of Kentucky may be accepted by the department if the person desiring to install the boiler or pressure vessel shall make application for the installation and shall file with this application the manufacturer's data report covering the construction of the boiler in question.

(2) Shop or field inspection. Any new power boiler, steel heating boiler, pressure vessel or piping being constructed for installation in the Commonwealth of Kentucky shall be shop or field inspected in accordance with the provisions of the applicable section of the ASME Boiler and Pressure Vessel Code and shall be stamped with the applicable ASME code stamp and the applicable national board registration number. Applicable copies of the data sheets shall be supplied to the Boiler Inspection Section.

(3) Installation inspection. New installations of boilers and of unfired pressure vessels and associated pressure piping shall be inspected by the department for compliance with applicable ASME Boiler and Pressure Vessel Code requirements and this administrative regulation.

(4) General welding. If welded assembly has been used, the installing contractor shall present for the inspector's review his welding procedures and proof of qualification of his welding operators. The contractor shall be responsible for the quality of the welding done by his organization.

(5) Welded joints. If applicable codes or engineering specifications require additional tests or if the visual inspection reveals a potential defect or if joints have been insulated prior to inspection, the inspector may require other nondestructive tests, such as radiography, to be performed by the contractor to verify the soundness of the weld. All tests or retests required by the inspector shall be at the owner's or contractor's expense.

(6) Hydrostatic pressure test. A hydrostatic pressure test, when applied to a boiler or unfired pressure vessel of riveted or welded construction, shall not exceed one and one-half (1 1/2) times the maximum allowable working pressure. The pressure shall be under proper control so that in no case shall the required test pressure be exceeded by more than two (2) percent. During the hydrostatic pressure test, the safety valve or valves shall be removed or each valve disc shall be held down by means of a testing clamp (hand tight) and not by screwing down the compression screw upon the spring. The minimum temperature of the water used to apply a hydrostatic test shall not be less than ambient temperature, but in no

case less than seventy (70) degrees Fahrenheit and the maximum temperature shall not exceed 120 degrees Fahrenheit. If the only purpose of the test is to determine tightness, the test pressure shall be equal to the relieving pressure of the safety valve having the lowest relief setting.

(7) Pressure piping systems installed in association with the boiler or pressure vessel shall be inspected for proper materials, adequate pressure and temperature ranges for the boiler operation and for adequate support and tightness as follows:

(a) Hydrostatic tests. Hydrostatic tests shall be preformed on the pressure piping system connected to the boiler at one and one-half (1 1/2) times the maximum allowable pressure of the boiler when the installation is complete.

(b) Code compliance. Pressure piping inspection shall include determining compliance with design plans, material specifications and ASME Code for the piping and component parts. The contractor shall document to the inspector that:

1. That the piping installation and each of its component parts conforms to the design;

2. That the materials used and method of construction meets the manufacturer's procedures and specifications; and

3. That the system is utilizing the materials and equipment specified within the temperature and pressure ranges set forth in the design and as required by Section 1(3)(c) of this administrative regulation.

Section 4. Notification of Inspection. The owner or user shall prepare each boiler for internal inspection and shall prepare for and apply a hydrostatic pressure test on the date specified by the inspector. The inspection shall not be less than seven (7) days after the date of notification.

Section 5. State Special. (1) Boilers and pressure vessels of special design equivalent to the ASME Code and vessels designed and fabricated according to the standards of the applicable sections of the ASME Boiler and Pressure Vessel Code, but not stamped with the ASME symbol stamp, shall meet the requirements of this section. The prospective owner or user who desires approval of the boiler installation as a state special shall pursue the following procedure in each individual case.

(a) Prior to installation and operation of the boiler or pressure vessel, the proposed owner, user, or his authorized agent shall make written application for permission to install the boiler or pressure vessel in the state of Kentucky. The application shall be directed to the Chief Boiler Inspector, Office of the State Fire Marshal, Department of Housing, Buildings and Construction, 1047 U.S. 127 South, Suite #1, Frankfort, Kentucky 40601.

(b) To establish ASME Boiler and Pressure Vessel Code equivalency, the following data, material and information shall be submitted with the application for permit and approved by the Boiler Inspection Section, Department of Housing, Buildings and Construction:

1. Detailed shop drawings and welding details of the proposed construction. All materials shall be in the English language and United States units of measurements listed in the ASME Code.

2. Design calculations and supporting data which shall include pressure (psi), temperature (deg. F.), use and other service conditions.

3. Specifications for all construction materials. The specifications shall conform to the applicable ASME Code standards or their suitable equivalent. If reference is made to a standard or specification of a country other than the United States, a copy shall be attached to indicate how the material is considered equivalent.

4. Copies of the welding procedures to be used and welding qualification test reports for each welding operator or welder to be used. The procedures and tests required in this paragraph shall be made in accordance with the ASME Boiler and Pressure Vessel Code, Section IX, "Welding Qualifications."

5. If the design exceeds ASME Boiler and Pressure Vessel Code limitation, recognized engineering practices shall be used and identified in the submittal.

6. Design drawings and calculations shall be certified by a professional engineer holding a license acceptable to the boiler inspection section.

7. The manufacturer of the vessel shall identify the inspection agency responsible for the shop inspections and manufacturer's data reports for the proposed vessel.

8. The shop inspection agency shall furnish the qualifications and experience of the individual inspector or inspectors assigned to make the shop inspections and shall give his jurisdiction commission number.

(2) When the boiler or pressure vessel is completed, a manufacturer's data report, signed by the manufacturer and shop inspector, shall be submitted to the jurisdictional authorities containing the equivalent type data required by the ASME Boiler and Pressure Vessel Code. ASME Boiler and Pressure Vessel Code data report forms shall not be used.

(3) Upon arrival in the state of Kentucky, the boiler or pressure vessel shall be inspected before installation by a qualified boiler and pressure vessel inspector in the employ of the department to verify that the above provisions have been complied with and that the vessel is properly marked and stamped for identification.

Section 6. General Requirements. (1) Low water fuel cutoff or water-feeding device (low pressure boilers).

(a) Automatically fired steam or vapor-system boilers shall have an automatic low-water fuel cutoff located to automatically cut off the fuel supply when the water falls to the lowest part of the water gauge glass. If a water-feeding device is installed, it shall be constructed so that the water inlet valve cannot feed water into the boiler through the float chamber and located to supply requisite feed water.

(b) A fuel cutoff or water-feeding device may be attached directly to a boiler.

(c) A fuel cutoff or water-feeding device may also be installed in the tapped openings available for attaching a water glass directly to a boiler under the following conditions:

1. The connections shall be made to the boiler with nonferrous tees or Y's not less than one-half (1/2) inch pipe size between the boiler and the water glass so that the water glass is attached directly and as close as possible to the boiler;

2. The run of the tee and Y shall take the water glass fittings and the side outlet or branch of the tee or Y shall take the fuel cutoff or water-feeding device.

(d) The ends of all nipples shall be reamed to full-size diameter.

(e) Fuel cutoffs and water-feeding devices embodying a separate chamber shall have a vertical drain pipe and a blowoff valve not less than three-fourths (3/4) inch pipe size and located at the lowest point in the water equalizing pipe connections so that the chamber and the equalizing pipe can be flushed and the device tested.

(2) Safety appliances. The safety appliances prescribed by these administrative regulations shall not be removed or tampered with except for the purpose of making repairs. The resetting of safety valves shall be done by a V-R stamp holder.

(3) Location of discharges to atmosphere. The discharge of safety valves, blowoff pipes, and other outlets shall be located so as to prevent injury to personnel.

(4) Pressure reducing valves (high pressure boilers).

(a) If pressure reducing valves are used, one (1) or more relief or safety valves shall be provided on the low pressure side of the reducing valve in case the piping or equipment on the low pressure side does not meet the requirements for the full initial pressure. The relief or safety valves shall be located either adjoining or as close as possible to the reducing valve. Proper protection shall be provided to prevent injury or damage caused by the escaping steam from the

discharge or safety valves if vented to the atmosphere. The combined discharge capacity of the relief valve shall be such that the pressure rating of the lower pressure piping or equipment shall not be exceeded in case the reducing valve sticks open.

(b) The use of hand-controlled bypasses around reducing valves shall be permissible. The bypass, if used around a reducing valve, shall not be greater in capacity than the reducing valve unless the piping or equipment is adequately protected by relief valves or meets the requirements of the high pressure system.

(c) A pressure gauge shall be installed on the low pressure side of a reducing valve.

(5) Electric boilers. All appliances required for electric boilers shall be attached in accordance with the National Electrical Code and the following requirements:

(a) The grounding of the shell shall be permanently fastened on some part of the boiler and shall be grounded in accordance with the edition of the National Electrical Code in effect at the time the permit for the installation was made.

(b) A suitable screen or guard shall be provided around high tension bushings and a high voltage warning sign shall be posted. This screen or guard shall be located to prohibit anyone working around the boiler to accidentally come in contact with the high tension circuits. When adjusting safety valves, the power circuit to the boiler shall be open.

(c) The boiler may be under pressure, but the power line shall be open while the operator is making the necessary adjustments.

(d) Each KW of electrical energy consumed by an electric boiler operating at maximum rating shall be considered the equivalent of one (1) square foot of heating surface.

(6) Clearance.

(a) If boilers are replaced or new boilers installed in either existing or new buildings, a minimum of two (2) feet shall be provided on all service sides, unless the installation allows for proper maintenance without the separation. Vessels having manholes shall have five (5) feet clearance from the manhole opening and any wall, ceiling or piping that will prevent a person from entering the boiler or vessel.

(b) Boilers shall be installed to:

1. Allow adequate space for their proper operation and their appurtenances;

2. Allow inspection of all surfaces, tubes, water walls, economizer, piping, valves, and other equipment; and

3. Allow for necessary maintenance and repair.

(7) Emergency devices for certain installations. Installations of power boilers or heating boilers in hospitals, rest homes, schools, mental institutions or similar institutional facilities shall comply with provisions of ASME Boiler and Pressure Vessel Code, Section IV, Article HG-634, regarding remote emergency cutoff switches. These installations shall be judged on their own merits from a standpoint of accessibility of electrical power cutoffs to the boiler or boilers in case of fire or heavy smoke emission. If installed cutoff switches are not adjacent to boiler room entryways, emergency cutoff switches shall be provided as outlined in Article HG-634, of Section IV, ASME Boiler and Pressure Vessel Code.

CHARLES A. COTTON, Commissioner
EDWARD J. HOLMES, Secretary
APPROVED BY AGENCY: February 3, 1994
FILED WITH LRC: February 8, 1994 at 2 p.m.

PUBLIC PROTECTION AND REGULATION CABINET
Department of Housing, Buildings and Construction
Office of the State Fire Marshal
(As Amended)

815 KAR 15:026. Existing boilers and pressure vessels; testing, repairs, inspection and safety factors.

RELATES TO: KRS Chapter 236, 815 KAR 15:010-080
STATUTORY AUTHORITY: KRS 236.030
NECESSITY AND FUNCTION: KRS 236.030 authorizes the commissioner, through the Board of Boiler and Pressure Vessel Rules, to fix reasonable standards for the inspection and repair of boilers and pressure vessels. This administrative regulation contains the requirements for safe maintenance of those vessels.

Section 1. Frequency of Inspection of Existing Vessels. Inspection frequency. Upon notification by an inspector, all boilers and pressure vessels which are subject to annual or semiannual inspections pursuant to KRS 236.110 shall be prepared for the inspection or hydrostatic test by the owner or user.

Section 2. Preparation for Inspections and Tests. (1) The owner or user shall prepare each boiler **or** *[/]* pressure vessel for internal inspection and shall prepare for and apply required hydrostatic tests on the date specified by the inspector. The date set for inspection shall be not less than seven (7) days after the date of notification by the inspector.

(2) The owner or user shall prepare a boiler for internal inspection in the following manner:

(a) Water shall be drawn off and the boiler thoroughly washed.

(b) All manhole and handhole plates, washout plugs, and plugs in water column connections shall be removed and the furnace and combustion chambers thoroughly cooled and cleaned.

(c) All grates of internally fired boilers shall be removed.

(d) At each annual inspection, brickwork shall be removed as required by the inspector in order to determine the condition of the boilers, headers, furnace, supports or other parts.

(e) The steam gauge shall be removed for testing.

(f) Any leakage of steam or hot water into the boiler shall be cut off by disconnecting the pipe or valve at the most convenient point.

(3) If the boiler is jacketed and the longitudinal seams of shells, drums or domes are not visible, enough of the jacketing, setting wall or other forms, casing or housing shall be removed so that the size of the rivets, pitch of the rivets and other data necessary to determine the safety of the boiler may be obtained, if the information cannot be determined by other means.

(4) If a boiler has not been properly prepared for an internal inspection or the owner or user fails to comply with the requirements for hydrostatic test as set forth in this administrative regulation, the inspector may decline to make the inspection or test and the inspection certificate shall be withheld until the owner or user complies with the requirements.

(5) Lap seam crack. A crack in the lap seam extending parallel to the longitudinal joint between or adjacent to rivet holes of the shell or drum of a boiler **or** *[/]* pressure vessel shall cause the vessel to be immediately discontinued from use. If the boiler **or** *[/]* pressure vessel is not more than fifteen (15) years of age, a complete new course of the original thickness may be installed at the discretion of the inspector and after approval by the chief inspector. Patching shall be prohibited.

(6) Hydrostatic pressure tests. If hydrostatic tests shall be applied to existing installations, the pressure shall be as follows:

(a) For determining tightness, the pressure shall be equal to the release pressure of the safety valve or valves having the lowest release setting.

(b) For determining safety or the strength of a vessel and related

piping as well as tightness, the pressure shall be equal to one and one-half (1 1/2) times the maximum allowable working pressure, except for locomotive type boilers in which case it shall be one and one-fourth (1 1/4) times the maximum allowable working pressure. The pressure shall be under proper control so that in no case shall the required test pressure be exceeded by more than two (2) percent.

(c) The temperature of the water used for the hydrostatic test shall be no less than ambient temperature, but in no case less than seventy (70) degrees Fahrenheit, or high enough to allow the metal temperature to exceed 120 degrees Fahrenheit.

Section 3. Safety Factors in Existing Boilers and Pressure Vessels. (1) Maximum pressure and temperature. The maximum allowable working pressure for standard pressure vessels and the maximum allowable temperature and pressure for standard boilers shall be determined in accordance with the ASME Code Edition under which they were constructed and stamped.

(2) Notice of accident or malfunction. If an accident or malfunction occurs, which renders the boiler inoperative, the owner, user, or insurer shall immediately notify the Boiler Inspection Section and submit a detailed report of the accident or malfunction. In case of serious accident, such as explosion, notice shall be given immediately by telephone. telegraph, or messenger and neither the boiler, pressure vessel nor any of the parts shall be removed or disturbed before an inspection has been made by an inspector, except for the purpose of saving a human life.

(3) Condemned boilers. A boiler or pressure vessel inspected and found unsafe for further use by the chief boiler inspector or boiler inspector shall be stamped by the inspector with the letters "XX" and the letters "KY," to designate a condemned boiler or pressure vessel, i.e., XX KY 12345 XX.

(4) A person, firm, partnership or corporation using or offering for sale a condemned boiler or pressure vessel for operation within this Commonwealth shall be subject to the penalties in KRS 236.990.

(5) Nonstandard boilers and pressure vessels. Shipment of nonstandard boilers, pressure vessels or hot water supply boilers into this state shall be prohibited, unless exempted under KRS Chapter 236.

(6) Used boilers. Nonstandard boilers, pressure vessels or hot water supply boilers, once removed from use, shall not be reinstalled.

(7) Removal of safety appliances. A person shall not attempt to remove or work on any safety appliance while a boiler is in operation unless under the direction of an inspector. If any safety appliance is repaired during an outage of a boiler or pressure vessel, the appliance shall be reinstalled and in proper working order before the vessel shall be returned to service.

(8) All boilers, pressure vessels and pressure piping shall be maintained in accordance with the minimum requirements of the edition of the ASME Code which was in effect when it was constructed and installed.

Section 4. Used Vessels. (1) Used boilers or pressure vessels. Before any vessel is brought into Kentucky for use, it shall be inspected by a boiler inspector or a special boiler inspector and the data shall be filed by the owner or user of the boiler or pressure vessel with the Boiler Inspection Section for approval.

(2) Reinstalled boilers or pressure vessels. If a boiler or pressure vessel is moved and reinstalled, the fittings and appliances shall comply with the ASME Boiler and Pressure Vessel Code **incorporated in 815 KAR 15:025, Section 1(1),** and the administrative regulations adopted in 815 KAR Chapter 15.

(3) Unsafe conditions. The inspector shall order increases in the factors of safety, pursuant to the ASME Boiler and Pressure Vessel Code, if the condition of the boiler is unsafe. If the owner or user does not concur with the inspector's decision, he may appeal to the commissioner who may request a joint inspection by the chief inspector and the boiler inspector or special boiler inspector. Each inspector shall render his report to the commissioner, who shall render the final decision, based upon the data contained in all the inspector's reports.

Section 5. Major Repairs. (1) Major repairs shall require prior approval of an inspector and permits as required by KRS 236.240 and 236.250. Repairs to all boilers, pressure vessels and their appurtenances shall conform to the requirements of the National Board Inspection Code, 1989 edition, which is hereby **incorporated** ~~[adopted]~~ by reference.

(a) The National Board Inspection Code is published by and available from the National Board of Boiler and Pressure Vessel Inspectors, 1055 Crupper Avenue, Columbus, Ohio 43229.

(b) A copy is also available to be inspected at the Department of Housing, Buildings and Construction, 1047 U.S. 127 South, Frankfort, Kentucky, Monday through Friday from 8 a.m. to 4:30 p.m.

(c) Compliance with a later edition of this code shall be deemed equivalent and may be used in lieu of the edition specified.

(2) Repairs. Repairs to any safety valve, safety relief valve, relief valve or liquid relief valve shall be made by a firm possessing the National Board Certificate of Authorization for Use of the Valve Repair (VR) Stamp and shall be stamped with the VR stamp upon completion of the repair.

Section 6. Inspection by Special Inspectors. (1) Special inspectors shall submit inspection reports to the Boiler Inspection Section of the State Fire Marshal's Office on the following form:

HBC-BI-220
INSURANCE NO.

COMMONWEALTH OF KENTUCKY
DEPT. OF HOUSING, BUILDINGS AND CONSTRUCTION
OFFICE OF STATE FIRE MARSHAL
BOILER OR PRESSURE VESSEL INSPECTION

( ) ADD
( ) CHANGE
( ) REINSPECTION

1 INSP DT: EXP DT: YR 1 ( ) TYPE 2 ( ) STATUS ST OWN ( ) STATE NO: KY NAT BOARD NUMBER:

2 OWNER: ADDRESS:

ADDRESS: CITY: ST: ZIP:

3 USER: ( ) ADDRESS:

ADDRESS: CITY: ST: ZIP:

4 USER PHONE: NATURE OF BUSINESS: COUNTY: SPECIFIC LOCATION IN PLANT:

5 TYPE: YR BLT: MANUFACTURER:
CIS ( ) FT ( ) OTH ( ) HFB ( ) HSM ( ) WT ( )

6 USER: FUEL: INSP TYPE: CERT INSP:
POWER ( ) PROCESS ( ) STEAM ( ) HTG ( ) HWH ( ) HWS ( ) UNFIRED ( ) INT ( ) EXT ( ) YES ( ) NO ( )

7 PRESSURE ALLOWED: SAF RELIEF VALVE: SAF VALVE CAP: MIM SAF VALVE CAP:
THIS INSP PREV INSP
SET AT:

8 HYDRO TEST PSI TEST DATE:

VIOLATIONS TO BE CORRECTED ARE BELOW

CODE

1
2
3
4
5
6
7

FEE:

INSP. _____ COMP. DATE: _____ KY COMM. _____
CONTACT PERSON_____ CERT. _____

TOTAL_____ CO. NO._____ INSPECTOR SIGNATURE_____

CHECK BOX IF ADDITIONAL REMARKS ARE ON BACK ☐
EMPLOYED BY_____

****

(2) Insurance companies shall notify the Boiler Inspection Section of new, cancelled or suspended risks. All insurance companies shall notify the Boiler Inspection Section within thirty (30) days of all boiler or pressure vessel risks written, cancelled, not renewed or suspended because of unsafe conditions.

(3) Insurance companies shall notify the Boiler Inspection Section of defective boilers or pressure vessels. If a special boiler inspector finds, upon the first inspection of a boiler or pressure vessel, the boiler or pressure vessel or any of the appurtenances in a condition causing his company to refuse insurance, the company shall immediately notify the Boiler Inspection Section and submit a report of the defects.

(4) Defective conditions disclosed at time of external inspections. If, upon an external inspection, there is evidence of a leak or crack, enough of the covering of the boiler or pressure vessel shall be removed to satisfy the inspector of its safety. If the covering cannot be removed at that time, the special inspector shall order the operation stopped until the covering may be removed and a proper examination made.

CHARLES A. COTTON, Commissioner
EDWARD J. HOLMES, Secretary
APPROVED BY AGENCY: February 3, 1994
FILED WITH LRC: February 8, 1994 at 2 p.m.

PUBLIC PROTECTION AND REGULATION CABINET
Department of Housing, Buildings and Construction
Office of State Fire Marshal
(As Amended)

815 KAR 15:040. Power boiler and pressure vessel supplemental requirements.

RELATES TO: KRS 236.030
STATUTORY AUTHORITY: KRS **236.030** [~~Chapter 13A~~]
NECESSITY AND FUNCTION: KRS 236.030 authorizes [~~requires~~] the commissioner, through [~~upon advisement of~~] the Board of Boiler Rules, to fix reasonable standards for the safe construction, installation, inspection and repair of boilers and pressure piping. This administrative regulation sets forth the specific [~~basic~~] requirements for power boilers which are within the scope of Section I of the ASME Boiler and Pressure Vessel Code. This amendment is necessary to comply with KRS Chapter 13A and to set forth additional specific requirements for new and existing power boilers which do not apply to other vessels. [~~This amendment is necessary to comply with KRS 236.030 by specifying requirements of pressure vessels as well as boilers in appropriate sections; it cites the specific edition of ASME Code for Power Boilers which has been in effect for years and provides for alternative safety relief valve for gas boilers.~~]

Section 1. [~~Definitions. "ASME" means the American Society of Mechanical Engineers.~~

~~Section 2.~~] New Installations[~~, Power Boilers. Requirements~~]. (1) Power boilers. All power boilers shall be constructed in accordance with applicable provisions of the ASME Boiler and Pressure Vessel Code **incorporated in 815 KAR 15:025, Section 1(1),** and Title 815 Chapter 15 of the Kentucky administrative regulations. Pressure piping beyond the first (or second) stop valve shall comply with the ASME Code for Pressure Piping adopted by reference in 815 KAR 15:025, Section 1(3). [~~No boiler or pressure vessel, except reinstalled boilers or pressure vessels and those exempted by the Act, shall hereafter be installed in this Commonwealth unless it has been constructed, inspected and stamped in conformity with ASME Boiler and Pressure Vessel Code for power boilers or pressure vessels and is approved, registered, and inspected in accordance with the requirements of the boiler safety regulations.~~]

(2) Installation:

(a) Vessels subject to external corrosion shall be so installed that there is sufficient access to all parts of the exterior to permit proper inspection of the exterior surfaces, otherwise sufficient protection against corrosion shall be provided, or the vessel shall be of such size, dimension and connected that it can be readily removed from its location for inspection.

(b) Vessels having handholes, manholes, or cover plates to permit inspection of interior surfaces shall be so installed that these openings are readily accessible.

(c) When cylindrical vessels are installed in a vertical position and subject to corrosion, the bottom head, if dished, should be concave to pressure to facilitate proper drainage.

(d) The installed vessel shall be so located that the stamping or marking shall be accessible to the inspector and shall not be obliterated by insulation or other covering not readily removable.

(3) Pressure relieving devices (pressure vessels):

(a) Single pressure relieving devices shall be set to operate at a pressure not exceeding the maximum allowable working pressure (MAWP) of the vessel.

(b) All pressure vessels other than unfired steam boilers shall be protected by a pressure relieving device that shall prevent the pressure within the vessel from rising more than five (5) percent above the maximum allowable working pressure (MAWP) when full open and discharging, except as in paragraphs (c) and (d) of this subsection. Unfired steam boilers shall have protective devices as required by this administratie regulation.

(c) The aggregate capacity of the pressure relieving devices connected to any vessel or system of vessels for the release of a liquid, air, steam, or other vapor shall be sufficient to discharge the maximum quantity that can be generated or supplied to the attached equipment without permitting a rise in pressure within the vessel or more than sixteen (16) percent above the maximum allowable working pressure (MAWP) of the vessel when all pressure relieving devices are full open and discharging.

(d) Where an additional hazard can be created by exposure of a pressure vessel to fire or other unexpected sources of external heat, supplemental pressure relieving devices shall be installed capable of protecting against excessive pressure. These supplemental pressure relieving devices shall be capable of preventing the pressure from rising more than twenty-one (21) percent above the maximum allowable working pressure.

(e) Pressure relieving devices shall be constructed, located, and installed so that they are readily accessible for inspection and repair and so that they cannot be readily rendered inoperative and shall be selected on the basis of their intended service.

(f) Safety, safety relief, and relief valves shall be of the direct spring loaded type.

(g) Pilot operated pressure relief valves may be used, provided that the pilot is self-actuated and the main valve will open automatically at not over the set pressure and will discharge its full rated capacity if some essential part of the pilot should fail.

(h) The spring in a pressure relief valve in service for pressures up to and including 250 psi shall not be reset for any pressure more than ten (10) percent above or below that for which the valve is marked. For higher pressures, the spring shall not be reset for any pressure more than five (5) percent above or five (5) percent below that for which the safety or relief valve is marked.

(i) The set pressure tolerances, plus or minus, of pressure relief valves shall not exceed two (2) psi for pressures up to and including seventy (70) psi and three (3) percent for pressures above seventy (70) psi. All other requirements regarding over pressure protection devices shall be in accordance with UG 125 through UG 136 of ASME Pressure Vessel Code, Section VIII, Division 1. [~~A boiler having the standard stamping of another state that has adopted a standard of construction equivalent to the standard of the Common-~~

~~wealth of Kentucky may be accepted by the department; provided, however, that the person desiring to install the boiler or pressure vessel shall make application for the installation and shall file with this application the manufacturer's data report covering the construction of the boiler in question (see also "State Specials" 815 KAR 15:010, Section 1).~~

~~(3) All new boiler or pressure vessel installations, including reinstalled boilers or pressure vessels, shall be installed in accordance with the requirements of the latest revision of the ASME Boiler and Pressure Vessel Code for power boilers and the boiler safety regulations.~~

~~(4) Where special designs are not covered by said code, their construction may be determined by the manufacturer in cooperation with the purchaser, subject to the approval of the chief boiler inspector and the Board of Boiler Rules. Upon completion of the installation, all boilers and pressure piping shall be inspected as set forth in 815 KAR 15:020.~~]

Section 2. Maximum Allowable Working Pressure for [~~3.~~] Existing Installations[~~, Power Boilers and Pressure Vessels~~]. (1) Maximum allowable working pressure for standard boilers and pressure vessels. The maximum allowable working pressure for standard boilers and pressure vessels shall be determined in accordance with the applicable provision of the edition of ASME Boiler and Pressure Vessel Code under which they were constructed and stamped.

(2) Maximum allowable working pressure for nonstandard boilers.

(a) The maximum allowable working pressure on the shell of a nonstandard boiler, pressure vessel or drum shall be determined by the strength of the weakest section of the structure, computed from the thickness of the plate, the tensile strength of the plate, the efficiency of the longitudinal joint or tube ligaments, the inside diameter of the weakest course and the factor of safety allowed by subsection (h) of this section. [~~the boiler safety regulations:~~]

(b) Formulas. (TS times t times E) divided by (R times FS) equals maximum allowable working pressure in psig; where, [~~:~~

~~Where:~~]

1. TS = ultimate tensile strength of shell plates psi.

2. t = minimum thickness of shell plate, of weakest course, in inches.

3. E = efficiency of longitudinal joint.

(c) For riveted construction, E may [~~shall~~] be determined under [~~by rules given in~~] Paragraph PR-15 of ASME Boiler and Pressure Vessel Code for Power Boilers[~~, 1971 Edition, adopted by reference herein, which is published by and copies available from American Society of Mechanical Engineers, United Engineering Center, 345 East 47th Street, New York, New York 10017. This document is also available for review Monday through Friday from 8 a.m. to 4:30 p.m. at the Department of Housing, Buildings and Construction, U.S. 127 South, Frankfort, Kentucky~~].

(d) For tube ligaments, E shall be determined by rules given in Paragraphs PG-52 and 53 of ASME Boiler and Pressure Vessel Code for Power Boilers.

For seamless construction, E shall be considered 100 percent.

R = inside radius of the weakest course of the shell or drum in inches.

FS = factor of safety permitted.

(e) [~~(b)~~] Tensile strength. When the tensile strength of steel or wrought iron shell plates is not known, it shall be taken at 55,000 psi for steel and 45,000 psi for wrought iron.

(f) [~~(c)~~] Crushing strength of mild steel. The resistance to crushing of mild steel shall be taken at 95,000 psi of cross section area.

(g) [~~(d)~~] Strength of rivets in shear. When computing the ultimate strength of rivets in shear, the following values in pounds psi of the cross sectional area of the rivet shank shall be used:

Iron rivets in single shear	38,000 lbs.
Iron rivets in double shear	76,000 lbs.
Steel rivets in single shear	44,000 lbs.
Steel rivets in double shear	88,000 lbs.

When the diameter of the rivet holes in the longitudinal joints of a boiler is not known, the diameter and cross sectional area of rivets, after driving, may be selected from the following table or as ascertained by cutting out one (1) rivet in the body of the joint:

SIZES OF RIVETS BASED ON PLATE THICKNESS
(In Inches)

Thickness of plate	1/4	9/32	5/16	11/32	3/8	13/32
Diameter of rivet after driving	11/16	11/16	3/4	3/4	13/16	13/16
Thickness of plate	7/16	15/32	1/2	9/16	5/8	-----
Diameter of rivet after driving	15/16	15/16	15/16	1 1/16	1 1/16	-----

(h) [~~(e)~~] Factors of safety. The following factors of safety shall be increased by the inspector if the condition and safety of the boiler demand it:

1. The lowest factor of safety permissible on existing installations shall be four and five-tenths (4.5) except[~~ing~~] for horizontal return tubular boilers having continuous longitudinal lap seams more than twelve (12) feet in length where the factor of safety shall be eight (8), but [~~and~~] when the [~~this latter type of~~] boiler is removed from its existing setting, it shall not be reinstalled for pressure in excess of fifteen (15) lbs. psig.

2. Reinstalled or secondhand nonstandard boilers shall have a minimum factor of safety of six (6) when the longitudinal seams are of lap riveted construction and minimum factor of safety of five (5) when the longitudinal seams are of butt and double strap construction.

(3) Age limit of fire tube boilers. The age limit of a horizontal return tubular, flue or cylinder boiler having a longitudinal lap joint and operating at a pressure in excess of fifty (50) lbs. psig shall be twenty (20) years.

(4) Welded boilers. Boilers having either longitudinal or circumferential seams of fusion welded construction shall have been constructed and stamped in accordance with the rules and regulations of the ASME Boiler and Pressure Vessel Code for [~~of~~] Power Boilers or shall have the standard stamping of a state that has adopted a standard of construction equivalent to the standards of the ASME [~~Boiler and Pressure Vessel~~] Code for Power Boilers and Pressure Vessels.

(5) Cast iron headers and mud drums. The maximum allowable working pressure on a water tube boiler, the tubes of which are secured to cast iron or malleable iron headers, or which have cast iron mud drums, shall not exceed 160 lbs. psig.

(6) Pressure on cast iron boilers. The maximum allowable working pressure for any cast iron boiler, except for hot water boilers, shall be fifteen (15) lbs. psig.

(7) Safety valve requirements for power boilers:

(a) The use of weight-level safety valves shall not be used [~~is prohibited~~] and the [~~these~~] valves shall be replaced by safety valves that conform to the requirements of the ASME [~~Boiler and Pressure Vessel~~] Code for Power Boilers.

(b) Safety valves having either the seat or disc of cast iron shall not be used.

(c) Each boiler shall have at least one (1) safety valve, and, if it has more than 500 square feet of water heating surface, it shall have two (2) or more safety valves.

(d) Safety valves and safety relief valves shall be installed with their spindles vertical.

(e) The method of computing the steam generating capacity of

the boiler shall be as given in paragraph A-12 of the ASME Boiler and Pressure Vessel Code for Power Boilers. The safety valve or valves shall be connected to the boiler, independent of any other steam connection, and attached to the boiler, without intervening pipe or fittings. If [Where] alteration is required to conform to this requirement [rule and regulation], owners and users shall be allowed one (1) year in which to complete the work. [No] Valves [of any description] shall not be placed between the safety valve and the boiler or [, nor] on the discharge pipe (if used) between the safety valve and the atmosphere. If [When] a discharge pipe is used, it shall be full sized and fitted with an open drain to prevent water lodging in the upper part of the safety valve or discharge pipe and supported independently of the safety valve. If [When] an elbow is placed on a safety valve or discharge pipe, it shall be located close to the safety valve outlet. All safety valve discharges shall be [so] located or piped to avoid [so as not to] endangering persons using walkways or platforms used to control the main valves of boilers or steam headers.

(f) The safety valve capacity of each boiler shall be sufficient to allow [such that] the safety valve or valves to [will] discharge all the steam [that can be] generated by the boiler without allowing the pressure to rise more than six (6) percent above the maximum allowable working pressure.

(g) For each boiler, one (1) or more safety valves on the boiler [proper] shall be set at or below the maximum allowable working pressure. If additional valves are used, the highest pressure setting shall not exceed the maximum allowable working pressure by more than three (3) percent. The complete range of pressure settings of all of the saturated steam safety valves on a boiler shall not exceed ten (10) percent of the highest pressure to which any valve is set. If [When] two (2) or more boilers operating at different pressures and safety valve settings are interconnected, the lower pressure boilers or interconnected piping shall be equipped with safety valves of sufficient capacity to prevent overpressure considering the generating capacity of all boilers. If [In those cases where] the boiler is supplied with feed water directly from pressure mains without the use of feeding apparatus (not to include return taps), [no] safety valve shall not be set at a pressure greater than ninety- four (94) percent of the lowest pressure obtained in the supply main feeding the boiler.

(h) The relieving capacity of the safety valves on any boiler may be checked by one (1) of the three (3) following methods; and, if found to be insufficient, additional capacity shall be provided.

1. By making the accumulation test, which consists of shutting off all other steam discharge outlets from the boiler and forcing the fires to the maximum. The safety valve capacity shall be sufficient to prevent a pressure in excess of six (6) percent above the maximum allowable working pressure. This method shall [should] not be used on a boiler with a superheater or reheater.

2. By measuring the maximum amount of fuel that can be burned and computing the corresponding evaporative capacity (steam generating capacity) upon the basis of the heating valve of this fuel. This computation may [These computations shall] be made as outlined in the Appendix of the ASME [Boiler and Pressure Vessel] Code for Power Boilers.

3. By determining the maximum evaporative capacity by measuring the feed water.

4. If [When] either of the methods outlined above [in subparagraph 2 or 3 of this paragraph] is employed, the sum of the safety valve capacity shall be equal to or greater than the maximum evaporative capacity (maximum steam generating capacity) of the boiler. The minimum safety valve or safety relief valve relieving capacity for other than electric boilers shall be determined on the basis of the pounds of steam generated per hour per square foot of boiler heating surface and water wall heating surface, as given in the following table:

MINIMUM POUNDS OF STEAM PER HOUR PER SQUARE FOOT OF SURFACE

	Fire Tube Boilers	Water Tube Boilers
Boiler heating surface		
Hand-fired	5	6
Stoker-fired	7	8
Oil-, gas-, or pulverized-fuel-fired	8	10
Waterwall heating surface		
Hand-fired	8	8
Stoker-fired	10	12
Oil-, gas-, or pulverized-fuel-fired	14	16

a. If [When] a boiler is fired only by a gas having a heat value in excess of 200 BTU per cubic foot, the minimum safety valve or safety relief valve relieving capacity may be based on the values given for hand-fired boiler above.

b. The minimum safety valve or safety relief valve relieving capacity for electric boilers shall be three and one-half (3 1/2) pounds per hour per kilowatt input.

(8) Boiler feeding and feed piping: Except as allowed by paragraphs (b) through (f) of this subsection, boilers having more than 500 square feet of water-heating surface shall have at least two (2) means of feeding water. Each source of feeding shall be capable of supplying water to the boiler at a pressure of three (3) percent higher than the highest setting of any safety valve on the boiler.

(a) All boilers shall have a feed supply which allows [will permit] the boiler to be fed at any time while under pressure.

(b) [Except as provided for below, boilers having more than 500 square feet of water-heating surface shall have at least two (2) means of feeding water. Each source of feeding shall be capable of supplying water to the boiler at a pressure of three (3) percent higher than the highest setting of any safety valve on the boiler.

(c) For] Boilers that are fired with solid fuel not in suspension and for boilers whose setting or heat source can continue to supply sufficient heat to cause damage to the boiler if the feed supply is interrupted, one (1) such means of feeding shall be steam operated.

(c) [(d)] Boilers fired by gas[eous], liquid, or solid fuel in suspension, may be equipped with a single means of feeding water if [; provided, means are] furnished for the immediate shut off of the heat input if the water feed is interrupted. If the boiler has [For boilers having] a water-heating surface of not more than 100 square feet, the feed piping and connection to the boiler shall not be smaller than one-half (1/2) inch pipe size. If the boiler has [For boilers having] a water-heating surface more than 100 square feet, the feed piping and connection to the boiler shall not be less than three-fourths (3/4) inch pipe size.

(d) [(e)] High temperature water boilers shall be provided with means of adding water to the boiler or system while under pressure. The feed water shall be introduced into the boiler to prevent its discharge [in such a manner that it will not be discharged] close to riveted joints of the shell, [or] furnace sheets, [or] directly against surfaces exposed to gases at high temperature or direct radiation from the fire.

(e) [(f)] The feed pipe to the boiler shall be provided with a check valve near the boiler and a valve or cock between the check valve and the boiler. If [When] two (2) or more boilers are fed from a common source, there shall also be a globe or regulating valve on the branch to each boiler between the check valve and source of supply. If [Whenever] globe valves are used on feed piping, the inlet shall be under the disc of the valve. The valve shall be located as close to the boiler as is practicable.

(f) If [(g) When] de-aerating heaters are not employed, it is recommended that the temperature of the feed water be no less than 120 degrees Fahrenheit to avoid the possibility of setting up localized

stress. If [Where] de-aerating heaters are employed, it is recommended that the minimum feed water temperature be no less than 215 degrees Fahrenheit so that dissolved gases may be thoroughly released.

(9) Fusible plugs. Fire-actuated fusible plugs, if used, shall conform to the requirements of the ASME Boiler and Pressure Vessel Code for Power Boilers, Sections A-19, A-20 and A-21.

(10) Water columns, gauge glasses, and gauge cocks.

(a) [No] Outlet connections, except for damper regulator, feed water regulator, low-water fuel cutout, drains, steam gauges, or [such] apparatus that does not permit the escape of an appreciable amount of steam or water [therefrom] shall not be placed on the piping that connects the water column to the boiler. The minimum size of the steam and water connection to the water column shall be one (1) inch pipe size, and each water column shall be provided with a valved drain of at least three-fourths (3/4) inch pipe size. [.] The drain shall be [to be] piped to a safe location.

(b) Each boiler shall have three (3) or more gauge cocks located within the range of the visible length of the water glass, except when the boiler has two (2) water glasses with independent connections to the boiler located on the same horizontal lines and not less than two (2) feet apart. Two (2) gauge cocks are sufficient for boilers not over thirty-six (36) inches in diameter in which the heating surface does not exceed 100 square feet [have but two (2) gauge cocks].

(c) Gauge cocks are not required for electric boilers operating at pressures not exceeding 400 psi [need not be fitted with gauge cocks]. The gauge cock connections shall be not less than one-half (1/2) inch pipe size.

(d) For all installations where the water gauge glass or glasses are more than thirty (30) feet from the boiler operating floor, it is recommended that water level indicating or recording gauges be installed at eye height from the operating floor.

(11) Pressure gauges.

(a) Each boiler shall have a pressure gauge connected to the steam space or to the water column or its steam connection. The pressure gauge shall be connected to a siphon or equivalent device of sufficient capacity to keep the gauge tube filled with water and so arranged that the gauge cannot be shut off from the boiler except by a cock placed near the gauge and provided with a tee or lever handle arranged to be parallel to the pipe in which it is located when the cock is open. The dial of the pressure gauge shall be graduated to approximately double the pressure at which the safety valve is set, but, in no case to less than one and one-half (1 1/2) times the pressure.

(b) If [When] a pressure gauge connection longer than eight (8) feet becomes necessary, a shutoff valve may be used near the boiler provided the valve is of the outside screw and yoke type and is locked or wired open. The line shall be ample size with provisions for free blowing.

(c) Each boiler shall be provided with a one-fourth (1/4) inch nipple and globe valve connected to the steam space for the exclusive purpose of attaching a test gauge when the boiler is in service so that the accuracy of the boiler pressure gauge may be ascertained.

(12) Stop valves.

(a) Each outlet from a boiler (except safety valve connections) shall be fitted with a stop valve located as close as practicable to the boiler.

(b) If [When] boilers provided with manholes are connected to a common main, the steam or high temperature water connection from each boiler shall be fitted with two (2) stop valves having an ample free blow drain between them. The discharge of this drain shall be visible to the operator while manipulating the valves and shall be piped clear of the boiler setting. The stop valves shall consist [preferably] of one (1) automatic nonreturn valve (set next to the boiler) and a second valve of the outside screw and yoke type shall [to] be installed in accordance with Section I of the ASME Boiler and Pressure Vessel Code.

(13) Blow-off piping.

(a) The construction of the setting around each blow-off pipe shall permit free expansion and contraction. Careful attention shall be given to the problem of sealing these setting openings without restricting the movement of the blow-off piping. All blow-off piping, when exposed to furnace heat, shall be protected by firebrick or other heat resisting material[, so] constructed to allow close inspection of [that] the piping [may be readily inspected].

(b) When the maximum allowable working pressure exceeds 100 psig, blow-off piping shall be extra heavy from the boiler to the valve or valves, and shall be run full size without use of reducers or bushings. The piping shall be of extra heavy wrought iron or steel and shall not be galvanized. All fittings between the boiler and blow-off valve shall be steel or extra heavy fittings of malleable iron. In case of renewal of blow-off pipe or fittings, they shall be installed in accordance with rules and regulations for new installations.

(14) Blowdown [Blow-off] valves.

(a) Ordinary type straight-run globe valves in which [of the ordinary type and valves of such types that] dams or pockets may [can] exist for the collection of sediment shall not be used on these [such] connections. Straightway Y-type globe valves or angle valves may be used in vertical pipes, or they may be used in horizontal runs of piping provided they are so constructed or installed allowing [that] the lowest edge of the opening through the seat to be [is] at least twenty-five (25) percent of the inside diameter below the center line of the valve.

(b) The blow-off valve or valves and the pipe between them and the boiler shall be of the same size except where a larger pipe for the return of condensation is used as provided for by the ASME Boiler and Pressure Vessel Code for Power Boilers. On all boilers, except those used for high temperature water, traction or portable purposes, when the allowable working pressure exceeds 100 psi, each bottom blow-off pipe shall have two (2) slow-opening valves, or one (1) slow-opening valve and a quick-opening valve, or a cock complying with the requirements of the ASME Boiler and Pressure Vessel Code for Power Boilers.

(c) If a blow-off cock is used, the plug shall be held in place by a guard or gland. The plug shall be distinctly marked in line with the passage. A [By] slow-opening valve [is meant a valve which] requires at least five (5) 360-degree turns of the operating mechanism to change from full-closed to full-opening, or [and] vice versa.

(d) If [On] a boiler has [having] multiple blow-off pipes, a single master valve may be placed on the common blow-off pipe from the boiler, in which case only one (1) valve on each individual blow-off shall be [is] required. In this [such a] case, either the master valve or the individual valves or cocks shall be of the slow-opening type [valves], or a slow-opening valve and a quick-opening valve or cock may be combined in one (1) body and may be used if [provided] the combined fitting is the equivalent of two (2) independent slow-opening valves or a slow-opening valve and a quick-opening valve or cock and if [provided further that] the failure of one (1) to operate cannot affect the operation of the other. The bottom blow-off pipes of every traction engine or portable boiler shall have at least one (1) slow-opening or quick-opening blow-off valve or cock conforming to the requirements of Section I of the ASME Boiler and Pressure Vessel Code. Only one (1) blow-off valve, which shall be of a slow- opening type, shall be [is] required on forced circulation and electric boilers having a normal water content not exceeding 100 gallons.

(15) Boiler blowoff equipment. The blowdown from a boiler or boilers that enters a sanitary sewer system or blowdown which is considered a hazard to life or property shall pass through some form of blowoff equipment that will reduce pressure and temperature as required hereinafter.

(a) The temperature of the water leaving the blowoff equipment shall not exceed 150 degrees Fahrenheit.

(b) The pressure of the blowdown leaving any type of blowoff

equipment shall not exceed five (5) psig.

(c) The blowoff piping and fittings between the boiler or boilers and the blowoff tank(s) shall comply with Paragraphs PG-58 and PG-59 of the ASME Boiler and Pressure Vessel Code, Section I.

(d) The blowoff tank construction shall comply with ASME Pressure Vessel Code, Section VIII (Division I).

(e) All materials used in the fabrication of boiler blowoff equipment shall comply with Material Section II of the ASME Boiler and Pressure Vessel Code.

(f) When a steam separator is used, it shall be designed to withstand at least twice the operating pressure of the separator and it shall be equipped with a vent, inlet, outlet and a pressure gauge.

(g) All blowoff equipment shall be fitted with openings to facilitate cleaning and inspection.

(h) A copy of a booklet for the design, construction and arrangement of boiler blowoff equipment may be obtained from the National Board of Boiler and Pressure Vessel Inspectors, whose address is 1055 Crupper Avenue, Columbus, Ohio 43229.

(16) Piping.

(a) Piping connected to the outlet of a boiler, which comes with the ASME Boiler and Pressure Vessel Code requirements, shall be attached as follows:

1. Screwing into a tapped opening with a screwed fitting or a valve at the other end.

2. Screwing each end into tapered flanges, fittings, or valves with or without rolling or peening.

3. Bolted joints, including those of the Van Stone type.

4. Expanding into grooved holes, seal welding, if desired. Pipe which is expanded, rolled, or peened shall be made from open-hearth or electric-furnace steel.

(b) If exposed to products of combustion, blow-off piping of fire-tube boilers shall be attached as outlined in paragraph 1 of subsection (a) of this section. [~~by paragraph (a)1 of this subsection if exposed to products of combustion, or by paragraph (a)1, 2, or 3 of this subsection,~~] If not so exposed to products of combustion, the piping shall be attached as outlined in paragraph (a)1, 2 or 3 of this subsection. Fusion welding for sealing purposes at the junction of bolted joints may be used.

(c) Welding may be used to attach piping to nozzles or fittings if the rules for fusion welding or forge welding are followed. If two (2) or more boilers with manholes are connected to a common steam or high temperature water main or header, all welded external piping [~~external to the boiler,~~] from the boiler out to the second stop valve [~~when two (2) or more boilers with manholes are connected to a common steam or high temperature water main or header,~~] shall be installed by a manufacturer or contractor authorized to use any one (1) of the American Society of Mechanical Engineers Code symbol stamps for pressure piping, power boilers or assembly stamps. The piping or [~~of~~] fittings, adjacent to the welded joint farthest from the boiler, shall be stamped with the pressure piping, power boiler or assembly code symbol stamp of the American Society of Mechanical Engineers when approved by the inspector.

CHARLES A. COTTON, Commissioner
EDWARD J. HOLMES, Secretary
APPROVED BY AGENCY: February 3, 1994
FILED WITH LRC: February 8, 1994 at 2 p.m.

PUBLIC PROTECTION AND REGULATION CABINET
Department of Housing, Buildings and Construction
Office of State Fire Marshal
(As Amended)

815 KAR 15:051. Heating boiler supplemental requirements [~~Installations of~~] steam heating, hot water heating and hot water supply boilers.

RELATES TO: KRS 236.030
STATUTORY AUTHORITY: KRS **236.030** [~~Chapter 13A~~]
NECESSITY AND FUNCTION: KRS 236.030 authorizes [~~provides~~] the commissioner, through [~~upon advisement of~~] the Board of Boiler Rules, to fix reasonable standards for the safe construction, installation, inspection and repair of boilers and pressure piping. This administrative regulation sets forth [~~the basic~~] requirements for heating boilers which supplement the basic requirements for all vessels set forth in 815 KAR 15:025 and 815 KAR 15:026. Many of the provisions have been in effect for some time under the administrative regulation which preceded this one. This amendment is necessary to codify additional safety measure applicable only to heating boilers; to comply with the requirements of KRS Chapter 13A that the administrative regulation be separated and deal with one (1) topic; and also to allow mechanical couplings to be used where appropriate.

Section 1. New Installations. (1) All hot water supply, hot water and steam [~~, Heating Boilers. (1) Requirements.~~

~~(a) No~~] heating boilers, except reinstalled boilers and those approved under the "special design" provisions of 815 KAR 15:025, Section 5, shall be [~~exempted by these rules and regulations, shall hereafter be installed in this Commonwealth unless it has been~~] constructed, stamped, [~~and~~] inspected and installed in conformity with the ASME Boiler and Pressure Vessel Code, Section IV **incorporated in 815 KAR 15:025, Section 1(1)**. All boilers and pressure vessels shall comply with other applicable provisions of 815 KAR Chapter 15 of the Kentucky administrative regulations. [~~for heating boilers, and is approved, registered, and inspected in accordance with the requirements of the boiler safety regulations (see also "State specials" 815 KAR 15:010, Section 1(37)).~~

~~(b) All new heating boiler installations, including reinstalled boilers, must be installed in accordance with the requirements of the latest revision of the ASME Boiler and Pressure Vessel Code for heating boilers and the boiler safety regulations.~~]

(2) Safety valve requirements for steam boilers.

(a) Each steam boiler shall have one (1) or more officially rated safety valve[~~s~~] of the spring-pop type adjusted and sealed to discharge at a pressure not to exceed fifteen (15) psi. Seals shall be attached in a manner to prevent the valve from being taken apart without breaking the seal. The safety valves shall be arranged so that they cannot be reset to relieve at a higher pressure than the maximum allowable working pressure of the boiler. A body drain connection below seat level shall be provided by the manufacturer and this drain shall not be plugged during or after field installation. For iron and steel bodied valves exceeding two (2) inch pipe size, the drain hole, or holes, shall be tapped not less than three-eighths (3/8) inch pipe size. For valves two (2) inch pipe size or less, the drain hole shall not be less than one-fourth (1/4) inch in diameter.

(b) [~~No~~] Safety valves for a steam boiler shall not be smaller than one-half (1/2) inch. [~~No~~] Safety valves shall not be larger than four and one-half (4 1/2) inches. The inlet opening shall have an inside diameter equal to, or greater than, the seat diameter.

(c) The minimum relieving capacity of valve, or valves, shall be governed by the capacity-marking on the boiler.

(d) The minimum valve capacity in pounds per hour shall be the greater of that determined by dividing the maximum BTU output at the boiler nozzle obtained by the firing of any fuel for which the unit is

installed by 1000, or shall be determined on the basis of the pounds of steam generated per hour per square foot of boiler heating surface as given in Table "A." In many cases, a greater relieving capacity of valves will have to be provided than the minimum specified by the Table [these rules]. In every case, the requirements of paragraph (e) of this subsection shall be met.

TABLE A
MINIMUM POUNDS OF STEAM PER HOUR PER SQUARE FOOT OF HEATING SURFACE

	Fire Tube Boilers	Water Tube Boilers
Boiler Heating Surface		
Hand fired	5	6
Stoker fired	7	8
Oil, gas or pulverized fuel fired	8	10
Waterwall Heating Surfaces		
Hand fired	8	8
Stoker fired	10	12
Oil, gas or pulverized fuel fired	14	16

1. When a boiler is fired only by a gas having a heat valve not in excess of 200 BTU per cubic foot, the minimum safety valve or safety relief valve relieving capacity may be based on the values given for hand fired boilers.

2. The minimum safety valve or safety relief valve relieving capacity for electric boilers shall be three and one-half (3 1/2) pounds per hour kilowatt input.

3. For heating surface determination, see ASME Code for Heating Boilers, paragraph HG403.

(e) The safety valve capacity for each steam boiler shall be sufficient to prevent [such that with the fuel burning equipment installed and operated at maximum capacity,] the pressure from rising [cannot rise] more than five (5) psi above the maximum allowable working pressure when the fuel-burning equipment is installed and operated at maximum capacity.

(f) If [When] operating conditions are changed or additional boiler heating surface is installed, the valve capacity shall be increased, if necessary, to meet the new conditions and be in accordance with paragraph (e) of this subsection. If [The] additional valves are required, they [on account of changed conditions,] may be installed on the outlet piping, if [provided] there is no intervening valve.

(3) Safety relief valve requirements for hot water heating boilers and hot water supply boilers.

(a) Each hot water heating boiler shall have at least one (1) officially rated pressure relief valve set to relieve at or below the maximum allowable working pressure of the boiler.

(b) Each hot water supply boiler shall have at least one (1) officially rated pressure/temperature safety relief valve of the automatic-reseating type, set to relieve at or below the maximum allowable pressure of the boiler.

(c) Safety relief valves officially rated as to capacity shall have pop action when tested by steam.

(d) If [When] more than one (1) safety relief valve is used on either hot water heating or hot water supply boilers, the additional valve or valves shall be officially rated and may be set within a range not to exceed six (6) psi above the maximum allowable working pressure up to and including exceeding sixty (60) psi and five (5) percent for those having a maximum allowable working pressure exceeding sixty (60) psi. [. Safety relief valves] shall be spring loaded and [. Safety relief valves] shall be [so] arranged to prevent resetting [that they cannot be reset] at a higher pressure than the maximum permitted in this subsection [paragraph].

(e) [(b) No] Materials which are likely [liable] to fail due to deterioration or vulcanization when subjected to saturated steam temperature corresponding to capacity test pressure shall not be used for any part.

(f) [(c) No] Safety relief valves shall not be smaller than three-fourths (3/4) inch, nor larger than four and one-half (4 1/2) inches, standard pipe size, except that boilers having a heat input not greater than 15,000 BTU per hour may be equipped with a rated safety relief valve of one-half (1/2) inch, standard pipe size; [,] the inlet opening shall have an inside diameter approximately equal to, or greater than, the seat diameter; and [. In no case shall] the minimum opening through any part of the valve shall not be less than one-fourth (1/4) inch diameter, or its equivalent area.

(g) [(d)] The required steam relieving capacity, in pounds per hour, of the pressure relieving device, or devices, on a boiler shall be the greater of that determined by dividing the maximum output in BTU at the boiler nozzle obtained by the firing of any fuel for which the unit is installed by 1000, or shall be determined on the basis of pounds of steam generated per hour, per square foot of boiler heating surface, as given in Table A. In many cases a greater relieving capacity of valves will have to be provided than the minimum specified by the Table [these rules]. In every case, the requirements of paragraph (i) [(f)] of this subsection shall be met.

(h) If [(e) When] operating conditions are changed or additional boiler heating surface is installed, the valve capacity shall be increased, if necessary, to meet the new conditions and shall be in accordance with paragraph (i) [(f)] of this subsection. The additional valves required[, on account of changed conditions,] may be installed on the outlet piping if [provided] there is no intervening valve.

(i) [(f)] Safety relief valve capacity for each boiler with a single safety relief valve shall be such that, with the fuel burning equipment installed and operated at maximum capacity, the pressure cannot rise more than ten (10) percent above the maximum allowable working pressure when more than one (1) safety relief valve is used, the over pressure shall be limited to ten (10) percent above the set pressure of the highest set valve allowed by subsection (2) of this section.

[(4) New installations of heating boilers. All new installations of heating boilers shall comply with Section 4 of the ASME Code.]

Section 2. Mechanical Couplings for Heating Boilers. (1) Design limits. If mechanical pipe couplings are used, the pipe, fittings, couplings and gaskets shall have design ratings by the manufacturer which meet or exceed the operating control settings of the boiler itself and shall comply with this section.

(2) Materials used and location.

(a) Piping materials listed in the ASME Code, Section IV, shall be used up to the first stop valve on supply and return piping.

(b) Mechanical pipe couplings tested and listed by a nationally recognized testing laboratory may then be used in lieu of flanged, threaded or welded joints within the complete pressure piping system of boilers in which the operating temperatures shall not exceed 200 degrees Fahrenheit and operating pressures shall not exceed 100 psig.

(c) All mechanical pipe couplings shall be fabricated and installed with strict adherence to manufacturers written procedures and using only factory approved tooling.

(d) Mechanical couplings shall not be installed unless the temperature controls on the boiler shall be permanently set to prevent operation in excess of 200 degrees Fahrenheit.

(3) Tests. The mechanical coupling shall be subjected to the same hydrostatic pressures as are applied to test the strength of the boiler (i.e., up to one and one-half (1 1/2) times the maximum allowable pressure of the boiler).

(4) Certification by the contractor. The contractor shall document to the inspector that the mechanical joints conform to the design and were installed to comply with the manufacturer procedures, utilizing the materials and equipment specified and that the temperature and pressure ranges comply with subsection (2)(b) of this section.

Section 3. Existing Installations, Heating Boilers. (1) ASME Code

boilers. The maximum allowable working pressure of a boiler built in accordance with the ASME Code shall not [~~, in no case,~~] exceed the pressure indicated by the manufacturer's identification stamped or cast upon the boiler or upon a plate secured to it.

(2) Noncode riveted boilers. The maximum allowable working pressure on the shell of a noncode riveted heating boiler shall be determined in accordance with 815 KAR 15:040, Section 2 [~~806 KAR 50:165, Section 2(1), covering existing installations~~] (power boiler[~~s~~] installations) except that[~~, in no case, shall~~] the maximum allowable working pressure of a steam boiler shall not exceed fifteen (15) psi or a hot water boiler shall not exceed 160 psi at a temperature not to exceed 250 degrees Fahrenheit.

(3) Noncode welded boilers. The maximum allowable working pressure of a noncode steel or wrought iron heating boiler of welded construction shall not exceed fifteen (15) psi. For other than steam service, the maximum allowable working pressure shall be calculated in accordance with Section IV of the ASME Boiler and Pressure Vessel Code.

(4) Noncode cast iron boilers.

(a) The maximum working pressure of a noncode boiler, composed principally of cast iron, shall not exceed fifteen (15) psi for steam service or thirty (30) psi for hot water service.

(b) The maximum allowable working pressure of a noncode boiler having cast iron shell or heads and steel or wrought iron tubes shall not exceed fifteen (15) psi for steam service or thirty (30) psi for water service.

(5) Hydrostatic tests.

(a) If [~~Where~~] repairs are necessary which [~~in any way~~] affect the working pressure or safety of a boiler, it shall be subjected to a hydrostatic test of the greater of sixty (60) psig or one and one-half (1 1/2) times the maximum allowable working pressure that is stamped on the boiler with the exception that cast iron steam boilers shall be subjected to a hydrostatic test of not less than forty-five (45) psig.

(b) In making hydrostatic pressure tests, the pressure shall be controlled to prevent [~~under such control that in no case shall~~] the required test[~~s~~] pressure from being be exceeded by more than ten (10) psig.

(c) Hydrostatic test[~~s~~] water shall be at no less than ambient room temperature, but in no case less than seventy (70) degrees Fahrenheit, nor high enough to allow the metal temperature to exceed 120 degrees Fahrenheit.

(d) The safety valve[~~(s)~~] or safety relief valve[~~(s)~~] shall be removed or each valve disc shall be held to its seat by means of a testing clamp.

(e) To test for [~~all cases involving the question of~~] tightness, the test pressure shall be equal to the relieving pressure of the safety valve[~~(s)~~] having the lowest relief setting.

(6) General. If[~~, in~~] the inspector finds that [~~judgment of the inspector,~~] a steam heating boiler is unsafe for operation at the pressure previously approved, the pressure shall be reduced, proper repair made, or the boiler retired from service.

CHARLES A. COTTON, Commissioner
EDWARD J. HOLMES, Secretary
APPROVED BY AGENCY: February 3, 1994
FILED WITH LRC: February 8, 1994 at 2 p.m.

ADMINISTRATIVE REGULATIONS AMENDED AFTER PUBLIC HEARING OR WRITTEN COMMENTS RECEIVED

NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION CABINET
Department for Environmental Protection
Division of Waste Management
(Amended After Hearing)

401 KAR 42:060. Release response and corrective action for UST systems containing petroleum or hazardous substances.

RELATES TO: KRS 224.01, 224.10, 224.40, 224.43, 224.46, 224.60, 40 CFR Part 280 Subpart F, 40 CFR Part 281, 42 USC 6991 to 6991i [e]

STATUTORY AUTHORITY: KRS 224.10-100, 224.60-105, 224.60-137, 40 CFR Part 280 Subpart F[~~, 40 CFR Part 281, 42 USC 6991e~~]

NECESSITY AND FUNCTION: KRS 224.10-100 requires the Natural Resources and Environmental Protection Cabinet to develop and conduct programs which provide for the prevention, abatement, and control of contaminants which may threaten the environment. KRS 224.60-105(2) requires the cabinet to regulate underground storage tanks by requiring notification, minimum construction and performance standards, leak detection, recordkeeping, reporting releases, corrective actions, closure, financial responsibility, and other requirements to protect public health and the environment. KRS 224.60-105(3) requires the cabinet to establish a regulatory program which implements federal requirements for underground storage tanks and to promulgate administrative regulations for underground storage tanks which shall be submitted for approval to the United States Environmental Protection Agency pursuant to federal regulations. This chapter identifies requirements for underground storage tanks. This administrative regulation establishes the requirements for release response, site characterization, corrective action, and public participation.

Section 1. Adoption of Federal Regulation. The requirements for release response, site characterization, corrective action and public participation for underground storage tanks are governed by 40 CFR Part 280 Subpart F (1990).

Section 2. Incorporation by Reference. (1) The following documents are hereby incorporated by reference:

(a) "Underground Storage Tank System Site Check Outline" (**April** [~~January~~] 1994); and

(b) "Underground Storage Tank System Site Investigation Outline" (**April** [~~January~~] 1994).

(2) The documents referenced in subsection (1) of this section are available for inspection and copying, subject to copyright law, at the Division of Waste Management, 14 Reilly Road, Frankfort, Kentucky 40601, (502)564-6716, from 8 a.m. to 4:30 p.m. eastern time, Monday through Friday, excluding state holidays.

Section 3. Applicability of Section 2 of this Administrative Regulation. (1)(a) Section 2 of this administrative regulation shall apply to any owner or operator of an underground storage tank system for which a release is reported to the cabinet or a "Notice of Intent to Permanently Close Underground Storage Tank(s) Form", DEP Form 5025, is received by the cabinet on or after April 18, 1994.

(b) Section 2 of this administrative regulation shall apply to any owner or operator of an underground storage tank system for which a release was reported to the cabinet or DEP Form 5025 (or similar notice as provided for in 40 CFR 280.71) was received by the cabinet prior to April 18, 1994, if the owner or operator submits a letter to the cabinet indicating a desire to have the tank system classified pursuant to 401 KAR 42:080. Section 2 of this administrative regulation shall not apply to the owner or operator of such an underground storage tank system unless this letter is submitted to the cabinet.

(2) The letter referenced in subsection (1)(b) of this section shall contain the identification number for the site; the identification number of the tank for which the request is being made; the name, address, and phone number of the facility or company at which the tanks are located; the name, address, and phone number of the tank owner; and an explicit statement of the action being requested. The letter shall be signed by the owner or operator.

PHILLIP J. SHEPHERD, Secretary
E. DOUGLAS STEPHAN, Commissioner
APPROVED BY AGENCY: April 7, 1994
FILED WITH LRC: April 7, 1994 at 11 a.m.

NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION CABINET
Department for Environmental Protection
Division of Waste Management
(Amended After Hearing)

401 KAR 42:070. Out-of-service UST systems and closure.

RELATES TO: KRS 224.01, 224.10, 224.40, 224.43, 224.46, 224.60, 40 CFR Part 280 Subpart G, 40 CFR Part 281, 42 USC 6991 to 6991i [e]

STATUTORY AUTHORITY: KRS 224.10-100, 224.60-105, 224.60-137, 40 CFR Part 280 Subpart G[~~, 40 CFR Part 281, 42 USC 6991e~~]

NECESSITY AND FUNCTION: KRS 224.10-100 requires the Natural Resources and Environmental Protection Cabinet to develop and conduct programs which provide for the prevention, abatement, and control of contaminants which may threaten the environment. KRS 224.60-105(2) requires the cabinet to regulate underground storage tanks by requiring notification, minimum construction and performance standards, leak detection, recordkeeping, reporting releases, corrective actions, closure, financial responsibility, and other requirements to protect public health and the environment. KRS 224.60-105(3) requires the cabinet to establish a regulatory program which implements federal requirements for underground storage tanks and to promulgate administrative regulations for underground storage tanks which shall be submitted for approval to the United States Environmental Protection Agency pursuant to federal regulations. This chapter identifies requirements for underground storage tanks. This administrative regulation establishes the requirements for **out-of-service UST systems and closure of UST systems** [~~release detection and recordkeeping for all UST systems~~].

Section 1. Adoption of Federal Regulations. [~~(1)~~] The requirements for out-of-service UST systems and closure are governed by 40 CFR Part 280 Subpart G (1990).

Section 2. Incorporation by Reference. (1) The following documents are hereby incorporated by reference:

(a) "Underground Storage Tank System Closure Outline" (**April** [~~January~~] 1994);

(b) "Notice of Intent to Permanently Close Underground Storage Tank(s) Form", DEP Form 5025 (January 1994); and

(c) "Closure Assessment Report Form", DEP Form 4058 (November 1990).

(2) The documents referenced in subsection (1) of this section are available for inspection and copying, subject to copyright law, at the Division of Waste Management, 14 Reilly Road, Frankfort, Kentucky 40601, (502)564-6716, from 8 a.m. to 4:30 p.m. eastern time, Monday through Friday, excluding state holidays. ~~[(2) The forms for the notice of intent to permanently close underground storage tanks and the closure assessment report are being incorporated by reference into this section. These forms became effective in November 1990, and are available for distribution and inspection from the Underground Storage Tank Program, Division of Waste Management, 18 Reilly Road, Frankfort, Kentucky 40601. The business hours of the division are from 8 a.m. to 4:30 p.m. Monday through Friday.]~~

Section 3. Applicability of Section 2 of this Administrative Regulation. (1)(a) The amendments to Section 2 of this administrative regulation adopted in 1994 shall apply to any owner or operator of an underground storage tank system for which a release is reported to the cabinet or a Notice of Intent to Permanently Close Underground Storage Tank(s) Form, DEP Form 5025, is received by the cabinet on or after April 18, 1994.

(b) The amendments to Section 2 of this administrative regulation adopted in 1994 shall apply to any owner or operator of an underground storage tank system for which a release was reported to the cabinet or DEP Form 5025 (or similar notice as provided for in 40 CFR 280.71) was received by the cabinet prior to April 18, 1994, if the owner or operator submits a letter to the cabinet indicating a desire to have the tank system classified pursuant to 401 KAR 42:080. Section 2 of this administrative regulation shall not apply to the owner or operator of such an underground storage tank system unless this letter is submitted to the cabinet.

(2) The letter referenced in subsection (1)(b) of this section shall contain the identification number for the site; the identification number of the tank for which the request is being made; the name, address, and phone number of the facility or company at which the tanks are located; the name, address, and phone number of the tank owner; and an explicit statement of the action being requested. The letter shall be signed by the owner or operator.

PHILLIP J. SHEPHERD, Secretary
E. DOUGLAS STEPHAN, Commissioner
APPROVED BY AGENCY: April 7, 1994
FILED WITH LRC: April 7, 1994 at 11 a.m.

NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION CABINET
Department For Environmental Protection
Division Of Waste Management
(Amended After Hearing)

401 KAR 42:080. Classification of petroleum underground storage tank systems and listing of associated cleanup levels.

RELATES TO: KRS 224.01, 224.10, 224.40, 224.43, 224.46, 224.60, 40 CFR Part 280 Subparts F, G, Part 281, 42 USC 6991 to 6991i

STATUTORY AUTHORITY: KRS 224.10-100, 224.60-105, 224.60-137

NECESSITY AND FUNCTION: KRS 224.60-105 requires the cabinet to promulgate administrative regulations on underground storage tanks to protect public health and the environment. The statute recognizes that the administrative regulations may distinguish between types, classes, and ages of underground storage tanks. KRS 224.60-137 requires the cabinet to adopt standards for corrective action for a release into the environment from a petroleum storage tank. The corrective action standards are to be protective of human health and the environment and based upon a study performed for the Petroleum Storage Tank Environmental Assurance Fund Commission, unless the cabinet states in detail why it did not accept a recommendation from the study. This administrative regulation complies with these requirements by establishing a classification scheme for petroleum underground storage tank systems and cleanup levels for benzene, toluene, ethylbenzene, and xylene released into the environment from tank systems containing gasoline, kerosene, jet fuel, or aviation fuel. The classification scheme and the cleanup levels are consistent with recommendations contained in the study performed for the Petroleum Storage Tank Environmental Assurance Fund Commission, except as specified in the Regulatory Impact Analysis for this administrative regulation.

Section 1. Scope and Applicability. (1) The document incorporated by reference in Section 2 of this administrative regulation sets forth a classification scheme for all petroleum underground storage tanks systems. The document also establishes cleanup levels for benzene, toluene, ethylbenzene, and xylene released into the environment from tank systems containing gasoline, kerosene, jet fuel, or aviation fuel. Specific cleanup levels for these petroleum constituents at a particular petroleum underground storage tank system are dependent upon the particular category into which the tank system is classified.

(2)(a) This administrative regulation shall apply to any owner or operator of a petroleum underground storage tank system for which a release is reported to the cabinet or a "Notice of Intent to Permanently Close Underground Storage Tank(s) Form", DEP Form 5025, is received by the cabinet on or after April 18, 1994.

(b) This administrative regulation shall apply to any owner or operator of a petroleum underground storage tank system for which a release was reported to the cabinet or DEP Form 5025 was received by the cabinet prior to April 18, 1994, if the owner or operator submits a letter to the cabinet indicating a desire to have the tank system classified pursuant to this administrative regulation. This administrative regulation shall not apply to the owner or operator of such a petroleum underground storage tank system unless this letter is submitted to the cabinet.

(3) The letter referenced in subsection (2)(b) of this section shall contain the identification number for the site; the identification number of the tank for which the request is being made; the name, address, and phone number of the facility or company at which the tanks are located; the name, address, and phone number of the tank owner; and an explicit statement of the action being requested. The letter shall be signed by the owner or operator and shall be accompanied by a signed and completed Classification Guide from the document incorporated by reference in Section 2 of this administrative regulation.

~~[(2) The provisions of this administrative regulation shall apply to any "Notice of Intent to Permanently Close Underground Storage Tank(s) Form" (DEP Form 5025) received by the cabinet on or after April 18, 1994, and to those closure notices received prior to April 18, 1994 for which a request was submitted pursuant to 401 KAR 42:080E Section 1(2).]~~

Section 2. Incorporation by Reference. (1) The following document is hereby incorporated by reference: "Petroleum Underground Storage Tank System Facility Classification Outline" (**April** ~~[January]~~ 1994).

(2) The document referenced in subsection (1) of this section is available for inspection and copying, subject to copyright law, at the Division of Waste Management, 14 Reilly Road, Frankfort, Ky 40601, (502) 564-6716, from 8 a.m. to 4:30 p.m. eastern time, Monday

through Friday, excluding state holidays.

PHILLIP J. SHEPHERD, Secretary
E. DOUGLAS STEPHAN, Commissioner
APPROVED BY AGENCY: April 7, 1994
FILED WITH LRC: April 7, 1994 at 11 a.m.

PROPOSED AMENDMENTS RECEIVED THROUGH NOON, APRIL 15, 1994

GENERAL GOVERNMENT CABINET
Board of Embalmers and Funeral Directors
(Proposed Amendment)

201 KAR 15:010. Definitions.

RELATES TO: KRS 316.010, 316.040, 316.090
STATUTORY AUTHORITY: KRS 316.210(4)
NECESSITY AND FUNCTION: Defines terms used throughout KRS Chapter 316 and the administrative regulations governing the Kentucky Board of Embalmers and Funeral Directors.

Section 1. Definitions. (1) "All his working hours" for an apprentice means regular employment in a licensed funeral establishment in this state. Regular employment shall involve at least forty (40) working hours per week to be accumulated under actual working conditions and under the personal supervision of a licensed embalmer and licensed funeral director holding a valid Kentucky license. Employment shall be regular and steady employment and shall not be secondary to any other employment or educational pursuit. Working hours shall not include time spent by an apprentice "on call".

(2) "Dishonest dealings" means any statement or act by a licensee which demonstrates a lack of integrity.

(3) "Fraudulent dealings" means any statement or act by a licensee that is a violation of any state or federal law governing funeral directing or embalming practices.

(4) "Operation of a funeral establishment" means the management of a funeral establishment including, but not limited to, the daily activities of funeral directing, embalming, bookkeeping, and supervision of employees.

(5) "Unprofessional dealings" means any statement or act by a licensee which is unfair, false, misleading, or deceptive to the public.

EDD PRESTON, President
APPROVED BY AGENCY: March 15, 1994
FILED WITH LRC: March 15, 1994 at 1 p.m.
PUBLIC HEARING: A public hearing on this administrative regulation shall be held the 23rd day of May, 1994, at 9 a.m. in Room 127, Capitol Annex, Frankfort, Kentucky 40601. Individuals interested in attending this hearing shall notify this agency in writing by the 18th day of May, 1994, five days prior to the hearing, of their intent to attend. If no notification of intent to attend the hearing is received by that date, the hearing may be cancelled. This hearing is open to the public. Any person who attends will be given an opportunity to comment on the proposed administrative regulation. A transcript of the public hearing will not be made unless a written request for a transcript is made. If you do not wish to attend the public hearing, you may submit written comments on the proposed administrative regulation. Send written notification of intent to attend the public hearing or written comments on the proposed administrative regulation to: William B. Pettus, Assistant Attorney General, Office of Attorney General, Capitol Building, Frankfort, Kentucky 40601, (502) 573-7600.

REGULATORY IMPACT ANALYSIS

Agency Contact: William B. Pettus
(1) Type and number of entities affected: Approximately 1825 embalmers and funeral directors and approximately 498 funeral establishments licensed in Kentucky.
(a) Direct and indirect costs or savings to those affected: There will be no additional direct or indirect costs or savings.
1. First year: There will be no additional direct or indirect costs or savings.
2. Continuing costs or savings: There will be no continuing direct or indirect costs or savings.
3. Additional factors increasing or decreasing costs (note any effects upon competition): There are no additional factors.
(b) Reporting and paperwork requirements: There will be no additional reporting or paperwork requirements.
(2) Effects on the promulgating administrative body:
(a) Direct and indirect costs or savings: There will be no additional direct or indirect costs or savings.
1. First year: There will be no additional direct or indirect costs or savings.
2. Continuing costs or savings: There will be no continuing direct or indirect costs or savings.
3. Additional factors increasing or decreasing costs: There are no additional factors.
(b) Reporting and paperwork requirements: There will be no additional reporting or paperwork requirements.
(3) Assessment of the anticipated effect on state and local revenues: There is no effect anticipated on state and local revenues.
(4) Assessment of alternative methods: reasons why alternatives were rejected: This proposal amends an existing regulation which provides definitions for KRS Chapter 316 and the administrative regulations promulgated thereunder. No other alternatives were deemed appropriate.
(5) Identify any state or federal statute or regulation that may conflict with, overlap, or duplicate the administrative regulation being promulgated: There is no such statute or regulation.
(6) Any additional information or comments: None
TIERING? Was tiering applied? No. Tiering was not applied because all licensees are treated uniformly under the law.

GENERAL GOVERNMENT CABINET
Board of Veterinary Examiners
(Proposed Amendment)

201 KAR 16:020. Approved veterinary colleges.

RELATES TO: KRS 321.193
STATUTORY AUTHORITY: KRS 321.235, 321.240
NECESSITY AND FUNCTION: KRS 321.190 requires all persons engaging in the practice of veterinary medicine in the State of Kentucky to be licensed by the Kentucky Board of Veterinary Examiners. KRS 321.190 sets forth the requirements for licensure as a veterinarian. One (1) of the requirements is the receipt of a degree from a veterinary college approved by the board. This administrative regulation sets forth [~~a listing of~~] the veterinary colleges approved by the board.

Section 1. A degree from a veterinary college approved by the board pursuant to KRS 321.193(1)(c) shall be a veterinary college which had full accreditation, limited accreditation, or approval by the American Veterinary Medical Association (AVMA) Council on Education when the applicant received a degree from the veterinary college. [~~The board recognizes the following veterinary colleges as having those standards and requirements adequate to comply with the provisions of KRS 321.193. All of the following veterinary colleges have been recognized and approved by the Kentucky Board of Veterinary Examiners. Those colleges are as follows:~~

~~(1) College of Veterinary Medicine, Auburn University, Auburn, Alabama.~~

~~(2) University of California, School of Veterinary Medicine, Davis,~~

~~California.~~

~~(3) Colorado State University, Division of Veterinary Medicine, Fort Collins, Colorado.~~

~~(4) Cornell University, New York State Veterinary College, Ithaca, New York.~~

~~(5) University of Utrecht, the Netherlands.~~

~~(6) University of Florida, School of Veterinary Medicine, Gainesville, Florida.~~

~~(7) University of Georgia, School of Veterinary Medicine, Athens, Georgia.~~

~~(8) University of Guelph, Ontario Veterinary College, Guelph Ontario, Canada.~~

~~(9) University of Illinois, School of Veterinary Medicine, Urbana, Illinois.~~

~~(10) Iowa State University, Division of Veterinary Medicine, Ames, Iowa.~~

~~(11) Kansas State University, School of Veterinary Medicine, Manhattan, Kansas.~~

~~(12) Louisiana State University, Baton Rouge, Louisiana.~~

~~(13) Michigan State College, Division of Veterinary Science, East Lansing, Michigan.~~

~~(14) University of Minnesota, School of Veterinary Medicine, St. Paul, Minnesota.~~

~~(15) Mississippi State University, Starksville, Mississippi.~~

~~(16) University of Missouri, School of Veterinary Medicine, Columbia, Missouri.~~

~~(17) Ecole Medicine Veterinaire de ma Province de Quebec, University de Montreal, La Trappe, Quebec, Canada.~~

~~(18) Ohio State University, College of Veterinary Medicine, Columbus, Ohio.~~

~~(19) Oklahoma State University, School of Veterinary Medicine, Stillwater, Oklahoma.~~

~~(20) University of Pennsylvania, School of Veterinary Medicine, Philadelphia, Pennsylvania.~~

~~(21) Purdue University, School of Veterinary Science and Medicine, Lafayette, Indiana.~~

~~(22) University of Saskatchewan, Western College of Veterinary Medicine, Saskatoon, Saskatchewan, Canada.~~

~~(23) University of Tennessee, College of Veterinary Medicine, Knoxville, Tennessee.~~

~~(24) Texas Agricultural and Mechanical University, School of Veterinary Medicine, College Station, Texas.~~

~~(25) Tuskegee Institute, School of Veterinary Medicine, Tuskegee Institute, Alabama.~~

~~(26) Washington State University, College of Veterinary Medicine, Pullman, Washington.~~]

Section 2. If an applicant does not possess a degree from a veterinary college as set forth in Section 1 of this administrative regulation, the candidate shall be able to qualify for licensure pursuant to KRS 321.193(1)(c) by successfully completing the program and receiving certification from the Educational Commission for Foreign Veterinary Graduates (ECFVG) of the American Veterinary Medical Association. [~~All other veterinary colleges shall have academic standards equivalent to the schools listed above in order to be recognized by this board. Evaluation of the academic standards, veterinary courses and practices of these schools shall be made after an application for a license has been received.~~]

JOHN McCLURE, Board Chairman

APPROVED BY AGENCY: March 30, 1994

FILED WITH LRC: April 14, 1994 at 8 a.m.

PUBLIC HEARING: A public hearing on this administrative regulation shall be held on May 24, 1994, at 10 a.m., at the offices of the Division of Occupations and Professions, located at the Berry Hill Annex, 700 Louisville Road, Frankfort, Kentucky 40601. Individuals interested in being heard at this hearing shall notify this agency in writing by May 19, 1994, five days prior to the hearing, of their intent to attend. If no notification of intent to attend the hearing is received by that date, the hearing may be cancelled. This hearing is open to the public. Any person who wishes to be heard will be given an opportunity to comment on this proposed administrative regulation. A transcript of the public hearing will not be made unless a written request for a transcript is made. If you do not wish to be heard at the public hearing, you may submit written comments on the proposed administrative regulation. Send written notification of intent to be heard at the public hearing or written comments on the proposed administrative regulation to: David L. Nicholas, Director, Division of Occupations and Professions, P. O. Box 456, Frankfort, Kentucky 40602, (502) 564-3296.

REGULATORY IMPACT ANALYSIS

Contact Person: David Nicholas

(1) Type and number of entities affected: All candidates for licensure.

(a) Direct and indirect costs or savings to those affected: There are no costs associated with this regulation.

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: Transcripts must be furnished along with certification from AVMA when applicable.

(2) Effects on the promulgating administrative body: This sets the approved schools for licensure and the method of approval for persons from schools which have not been approved.

(a) Direct and indirect costs or savings: There will not be any 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: None

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

(4) Assessment of alternative methods; reasons why alternatives were rejected: The statute requires the promulgation of this regulation.

(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: Is tiering applied? No. All credentialed practitioners and applicants will be subject to this regulation in the same ways.

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

301 KAR 2:171. Deer hunting seasons.

RELATES TO: KRS 150.010, 150.170, 150.175, 150.180, 150.340, 150.360, 150.370, 150.390, 150.395, 150.990

STATUTORY AUTHORITY: KRS 13A.350, 150.170, 150.175

NECESSITY AND FUNCTION: This administrative regulation pertains to deer hunting in specified counties and on wildlife management areas (WMAs). This administrative regulation is necessary to set deer hunting season dates, to specify the counties and management areas open to deer hunting and to prescribe the methods by which deer may be legally taken. The function of this administrative regulation is to provide for the prudent taking of deer within reasonable limits, and to insure a permanent and continuing supply of deer

for present and future residents of the state. This amendment is necessary to change the requirement for landowners to check in their deer.

Section 1. Definitions. As used in this administrative regulation, unless the context otherwise requires:

(1) "Adult" means an individual at least eighteen (18) years of age.

(2) "Antlered deer" means any deer that has one (1) antler at least four (4) inches in length, measured from the skin to the tip of the antler.

(3) "Antlerless deer" means does and any buck that has both antlers less than four (4) inches long, measured from the skin to the tips of the antlers.

(4) "Archery equipment" means long bows, recurve bows and compound bows incapable of holding an arrow at full or partial draw without aid from the archer.

(5) "Barbed broadhead" means a point or portion of a blade projecting backward from a broadhead designed to hold an arrow within an animal.

(6) "Breech-loading" or "modern gun" means any rifle, handgun or shotgun in which the cartridge or shotshell is placed into the gun at the rear of the barrel.

(7) "Center-fire" means a cartridge that fires by the firing pin striking a primer in the center of the end of the cartridge case.

(8) "Crossbow equipment" means any device designed to hold an arrow (or bolt) at full or partial draw without aid from the archer.

(9) "Deer control tags" means those tags issued by the department to landowners for distribution to [~~licensed or license exempt~~] deer hunters during the season and used in the control of deer causing damage to private property or farm crops.

(10) "Firearms" means all breech and muzzle-loading rifles, shotguns and handguns.

(11) "Muzzle-loading gun" means any rifle, shotgun or handgun in which the bullet or projectile, is placed in the gun from the discharging end of the barrel.

(12) "Private inholdings" means any privately-owned properties completely surrounded by wildlife management area lands controlled by the Department [~~of Fish and Wildlife Resources~~].

(13) "Shotshell" means multiple-projectile or pelleted ammunition.

(14) "Slug" means single-projectile ammunition.

(15) "WMA tags" means those permits issued by the department to hunters to tag deer taken during WMA hunts.

Section 2. County Zone Assignments. The following counties are open to deer hunting during the periods specified in Section 4 of this administrative regulation. County zone assignments shall apply to the entire deer hunting season.

(1) Zone No. 1: Jefferson and Oldham. [~~Crittenden, Hancock, Jefferson, Livingston, and Oldham.~~]

(2) Zone No. 2: Boone, Crittenden, Gallatin, Hancock, Hopkins, Livingston, Muhlenburg, Ohio, and Webster. [~~Boone, Gallatin, Hopkins, Muhlenberg, Nelson, Ohio, and Webster.~~]

(3) Zone No. 3: Allen, Bracken, Breckinridge, Bullitt, Caldwell, Campbell, Carroll, Christian, Grayson, Hardin, Kenton, Lyon, Meade, Shelby, Trigg, and Trimble. [~~Allen, Anderson, Ballard, Boyle, Bracken, Breckinridge, Bullitt, Campbell, Carroll, Christian, Fulton, Grant, Graves, Grayson, Hardin, Henderson, Kenton, Logan, Lyon, Marion, Meade, Shelby, Todd, Trigg, Trimble, and Woodford.~~]

(4) Zone No. 4: Adair, Anderson, Ballard, Barren, Boyle, Butler, Calloway, Carlisle, Casey, Cumberland, Daviess, Franklin, Fulton, Grant, Graves, Green, Harrison, Henderson, Henry, Hickman, Larue, Logan, Marion, McLean, McCracken, Mercer, Metcalfe, Monroe, Nelson, Owen, Pendleton, Robertson, Scott, Simpson, Spencer, Taylor, Todd, Union, Warren, Washington, and Woodford. [~~Adair, Barren, Butler, Caldwell, Calloway, Carlisle, Casey, Cumberland, Daviess, Franklin, Green, Harrison, Henry, Hickman, Larue, McCracken, McLean, Mercer, Monroe, Owen, Pendleton, Robertson, Scott, Simpson, Spencer, Taylor, Union, Warren, and Washington.~~]

(5) Zone No. 5: Boyd, Carter, Clinton, Edmonson, Elliott, Greenup, Hart, Lawrence, Marshall, Mason, Nicholas, Russell, and Wayne. [~~Boyd, Carter, Clinton, Edmonson, Elliott, Greenup, Hart, Lawrence, Marshall, Mason, Metcalfe and Nicholas.~~]

(6) Zone No. 6: Bath, Bell, Clark, Fleming, Garrard, Jackson, Laurel, Lewis, Lincoln, Madison, Martin, McCreary, Menifee, Morgan, Pulaski, Rowan, and Whitley. [~~Bath, Clark, Fleming, Garrard, Lewis, Lincoln, Madison, Martin, McCreary, Menifee, Morgan, Pulaski, Rowan, Russell, Wayne, and Whitley.~~]

(7) Zone No. 7: Bourbon, Breathitt, Clay, Estill, Fayette, Floyd, Harlan, Jessamine, Johnson, Knott, Knox, Lee, Leslie, Letcher, Magoffin, Montgomery, Owsley, Perry, Powell, Rockcastle, and Wolfe. [~~Bell, Bourbon, Breathitt, Clay, Estill, Fayette, Floyd, Harlan, Jackson, Jessamine, Johnson, Knott, Knox, Laurel, Lee, Leslie, Letcher, Magoffin, Montgomery, Owsley, Perry, Powell, Rockcastle, and Wolfe.~~]

Section 3. Counties and Areas Closed to Deer Hunting. (1) Counties: Pike.

(2) Wildlife management areas: Daviess County Gun Club in Daviess County, Fishtrap WMA in Pike County, Robinson Forest WMA in Breathitt, Perry, and Knott counties, and Swan Lake WMA in Ballard County.

(3) Deer hunting shall be prohibited within the boundaries of all national parks.

Section 4. Deer Hunting Dates and Tag Restrictions. (1) Archery and crossbow dates and restrictions.

(a) Archery season: October 1 through January 15.

(b) Crossbow season: the second Saturday in November for twenty (20) consecutive days and during periods open to muzzleloading gun.

(c) Except as specified in subsection (d) of this section, in Zones 1-6, the white tag shall be valid for any deer and the yellow tag shall be valid for antlerless deer only. In Zone 7, the white tag shall be valid for antlered deer only and the yellow tag shall be invalid.

[~~(a) Archery equipment shall be used for deer hunting October 1 through January 15, except during modern gun, muzzle-loading gun or crossbow season when archery equipment may be used. Crossbow equipment may be used the fourth Tuesday in November for ten (10) consecutive days, and during periods open to muzzle-loading gun or modern gun use only. Except as specified in paragraph (b) of this subsection, in Zones 1-6, the white tag shall be valid for any deer and the yellow tag shall be valid for antlerless deer only. In Zone 7, the white tag shall be valid for antlered deer only and the yellow tag shall be invalid.~~]

(d) [~~(b)~~] Persons using archery or crossbow equipment during periods when modern guns are also permitted for deer hunting shall abide by the tag restrictions for modern gun season in effect for that period. Likewise, persons using archery or crossbow equipment during periods when muzzle-loading guns are also permitted for deer shall abide by the tag restrictions for muzzle-loading gun seasons in effect for that period.

(2) Muzzle-loading gun dates and restrictions.

(a) Muzzle-loading gun season: [~~s may be used for deer hunting~~] the third Saturday in October for two (2) consecutive days and the second Saturday in December for seven (7) consecutive days.

(b) During these periods, in Zones 1-5 the white tag shall be valid for any deer and the yellow tag shall be valid for antlerless deer only. In Zones 6-7, the white tag shall be valid for antlered deer only and the yellow tag shall be invalid during these periods.

(c) [~~(b)~~] Persons using muzzle-loading guns during the period when modern guns may also be used for deer hunting shall abide by the tag restrictions for modern gun season in effect for that period.

(d) Hunters shall not use modern guns during the muzzleloader

gun seasons.

(3) Modern gun dates and restrictions.

(a) Modern gun season: in zones 1 through 6 [~~s specified in Section 5 of this administrative regulation may be used for deer hunting~~] the second Saturday in November for ten (10) consecutive days.

(b) In Zone 7, the second Saturday in November for five (5) consecutive days. [~~, except in Zone 7 as specified below. This shall be the only period when modern guns shall be permitted for deer, except as permitted during muzzle loader or modern gun quota hunts on wildlife management areas as specified in Section 9 of this administrative regulation.~~]

(c) [~~(b)~~] In Zone 1 the white tag shall be valid for any deer and the yellow tag shall be valid for antlerless deer during the entire ten (10) day period.

(d) [~~(c)~~] In Zone 2, during the first five (5) days the white tag shall be valid for any deer and the yellow tag shall be valid for antlerless deer. During the last five (5) days, the white tag shall be valid for antlered deer only and the yellow tag shall be invalid.

(e) [~~(d)~~] In Zone 3, during the first two (2) days the white tag shall be valid for any deer and the yellow tag shall be valid for antlerless deer. During the last eight (8) days, the white tag shall be valid for antlered deer only and the yellow tag shall be invalid.

(f) [~~(e)~~] In Zone 4, during the first eight (8) days the white tag shall be valid for antlered deer only, and the yellow tag shall be invalid. The last two (2) days the white tag shall be valid for any deer and the yellow tag shall be valid for antlerless deer.

(g) [~~(f)~~] In Zones 5 and 6, the white tag shall be valid for antlered deer only and the yellow tag shall be invalid for the entire ten (10) day period.

(h) [~~(g)~~] In Zone 7, the white tag shall be valid only for the first five (5) days and only for antlered deer. The yellow tag shall be invalid during this period.

(i) [~~(h)~~] During this ten (10) day period, any legal deer hunting equipment may be used, including archery, crossbow, muzzle-loading and modern guns, and all hunters shall abide by the tag and other restrictions for modern gun hunting. Persons using archery or crossbow equipment during the last five (5) days of this ten (10) day period in Zone 7 shall abide by tag restrictions for archery hunting specified in Section 4[~~(1)(a)~~] of this administrative regulation.

Section 5. Equipment Requirements and Restrictions. (1) Only the following gun and archery equipment used as described shall be permitted for taking deer during the periods specified in Section 4 of this administrative regulation:

(a) Breech-loading or modern guns: centerfire rifles and handguns; shotguns up to ten (10) gauge maximum used with slug ammunition only. Muzzle-loading guns: rifles .40 caliber or larger and handguns .44 caliber or larger; shotguns up to ten (10) gauge maximum used with slug ammunition only.

(b) Archery: compound bows, longbows, recurve bows and crossbows may be used. Arrows or crossbow bolts shall not be fitted with barbed broadhead points. Broadhead points shall be at least seven-eights (7/8) inch wide. Crossbows shall have a working safety device.

(2) The following gun and archery equipment and ammunition shall be prohibited for taking deer:

(a) Equipment: any fully automatic firearm, or firearm capable of firing more than one (1) round with one (1) trigger pull; semiautomatic and pump rifles or shotguns with a magazine capacity exceeding ten (10) rounds; longbows, recurve and compound bows fitted with any device capable of holding an arrow at full or partial draw without aid of the hunter; and chemically treated arrows, bolts or broadheads, or any type of chemical attachment.

(b) Ammunition: any caliber or cartridge that does not meet the requirements stated in this section, any fully jacketed ammunition, tracer bullet ammunition or any type of shotshell.

Section 6. License and Permit Requirements[~~, Hunting Method Exemptions~~] and Bag Limit. (1) License requirements:

(a) All resident and nonresident deer hunters except those exempted by KRS 150.170 shall possess a valid annual hunting license and deer permit. A nonresident [~~temporary~~] five (5) day hunting license shall not be used in conjunction with the deer permit. Deer permits shall be signed by the holder before hunting.

(b) Persons age sixteen (16) and above required to possess a hunting license and deer permit shall use only one (1) two (2) tag deer permit per license year. Persons who are in possession of a valid junior hunting license may use a maximum of two (2) individual junior deer hunting permits or one (1) two (2) tag permit. The tag accompanying a junior deer hunting permit shall be used as either the yellow or white tag according to the tag restrictions of the season in the zone where it is used. Persons losing their deer permit may purchase another one after having filed an affidavit with the licensing agent stating the fact of loss. Use of any portion of the deer permit by someone other than the person whose name is signed on the permit shall not be permitted, except as specified in administrative regulation 301 KAR 2:211.

[~~(2) Hunting methods exemptions for handicapped hunters. Persons with physical handicaps that make it impossible for them to hunt by conventional methods may apply by letter to the commissioner of the department for a hunting methods exemption. The application letter shall be accompanied by a physician's statement that the applicant is handicapped to such a degree that the exemption is necessary in order for the applicant to hunt. The commissioner may authorize any reasonable exception that would permit a handicapped person to hunt when he could not otherwise do so because of his handicap. Specific exemptions to be allowed shall be described in the letter of authorization and shall be retained in the possession of the applicant while hunting. Hunting methods exemptions shall expire at the end of the license year.~~]

(2) [~~(3)~~] Season limit: an individual may take a maximum of two (2) deer per license year, only one (1) of which may be antlered, with the following exceptions only:

(a) Hunters who are drawn for a quota hunt and/or issued a WMA tag may take deer in addition to the limit; and

(b) Hunters using deer control tags [~~issued to landowners for taking antlerless deer~~] may take a maximum of two (2) antlerless deer in addition to the statewide limit and only as specified in administrative regulation 301 KAR 2:211.

Section 7. Hunter Requirements, Shooting Hours, and Taking of Other Species. (1) Persons under sixteen (16) shall not hunt deer with a gun unless they are accompanied by an adult who shall be able to take immediate control of the juvenile's gun at all times while the juvenile is hunting.

(2) Hunters may be in the woods or stands before daylight, but shall not take, or attempt to take deer except during daylight hours.

(3) Coyotes [~~and wild hogs~~] may be taken during modern gun and muzzleloader deer season by legal deer hunters only.

(4) Wild hogs may be taken during deer seasons and shall be taken by legal deer hunters only. Wild hogs shall be checked in at an official check station.

(5) [~~(4)~~] Deer shall not be taken with the aid of dogs, or any domestic animal, or from any type of vehicle or boat.

(6) [~~(5)~~] A deer shall not be taken while the deer is swimming.

(7) [~~(6)~~] Any person possessing a deer shall leave the head attached to the body until the deer has been officially checked, as specified in Section 8 of this administrative regulation.

(8) [~~(7)~~] Hunter orange garments shall be worn by all deer hunters while hunting on any location or property where any deer gun season is permitted by administrative regulation. Garments shall be worn as outer coverings on at least the head, chest and back. They shall be of a solid, unbroken pattern. Any mesh weave opening shall not exceed one-fourth (1/4) inch by any measurement. Garments may

display a small section of another color. Camouflage pattern hunter orange garments do not meet these requirements.

(9) [~~(8)~~] On department-controlled wildlife management areas, Westvaco Public Hunting Areas, the Daniel Boone National Forest, Reelfoot National Wildlife Refuge and the Big South Fork National Recreation Area, the use of any nails, spikes, screw-in device, wire or tree climbers shall be prohibited for attaching tree stands or climbing trees. Only portable stands and climbing devices that do not injure trees shall be permitted. Portable stands shall not be placed in trees more than two (2) weeks before opening day of each hunting period and shall be removed within one (1) week following the last day of each hunting period. All portable stands shall be plainly marked with the owner's name and address. Existing permanent tree stands shall not be used.

Section 8. Deer Tagging and Checking Procedures, Transportation and Processing Requirements. [~~All~~] Deer taken in Kentucky shall be tagged and officially checked as specified below:

(1) Tagging.

(a) Before moving the deer carcass, the hunter shall attach a valid, adhesive-backed portion of the deer permit, deer control tag or WMA tag to the carcass. This tag shall be attached so that it cannot be removed without destroying the tag or mutilating the carcass. Tags shall remain attached to the carcass until processed.

(b) Following the same requirements stated above in paragraph (a) of this subsection, hunters, except resident landowners, their dependents, and tenants residing and working on the landowner's property, not required to possess a deer permit shall identify their harvested deer by providing their own cards or tags to attach to the deer carcass. Hunters shall write "White Tag" and "Yellow Tag" on two (2) separate cards along with their name and address. After a deer is taken, the hunter shall fill in on the card(s) the date and location (county) where the deer was taken, and attach the appropriate card to the deer before moving the carcass. These two (2) cards shall be used according to the zone and tag restrictions specified in Section 4 of this administrative regulation, in lieu of the deer tag. Resident landowners, their dependents, and tenants residing and working on the landowner's property, shall not be required to place an identifying tag on deer taken on their property unless the deer is removed from their property and taken to another location.

(c) Deer taken in Kentucky shall not be transported outside state boundaries until officially checked. Proof of legal harvest shall accompany any deer, or parts of deer transported into Kentucky.

(d) Any deer entered in trophy deer listings for Kentucky shall be legally harvested within state boundaries.

(e) Deer hides may be sold to licensed fur buyers and licensed fur processors.

(f) All individuals, lockers and plants that process deer shall keep accurate records that include the hunter's name, address and date received for each deer in their possession. Each deer shall also bear a tag provided by the operator/processor stating the above information until the deer is processed. Processors shall not accept deer carcasses without proper owner identification as described.

(2) Checking deer.

(a) All harvested deer, except those taken by resident landowners, their dependents, and tenants residing and working on the landowner's property, shall be officially checked by 9 a.m. on the day after the deer is taken. The entire, or field-dressed carcass shall be taken to the nearest open check station. Check station operators, state conservation officers, or other authorized employees of the department may officially check deer.

(b) Deer shall be checked in by the person who harvested the deer.

(c) Hunters shall fill out, or provide the information required to check station operators to complete an official game check card for each harvested deer. The completed game check card shall be submitted to the check station operator, officer or authorized employee. The hunter's copy of the game check card shall be kept in the hunter's possession until the deer is processed. Parts of deer separated for mounting shall bear the completed taxidermy portion of the hunter's copy of the game check card or landowner tag.

Section 9. Exceptions to Deer Hunting Administrative Regulations for Wildlife Management Areas. All administrative regulations in effect for deer hunting shall apply to wildlife management areas (WMAs), unless otherwise noted in this section. WMAs listed in this section have specific season dates or other additional requirements for deer hunting. When specific periods or season dates are listed for a WMA, deer hunting shall be permitted only on those dates and hunters shall only use the equipment specified. Periods open for the use of muzzleloading guns for deer shall not be in effect on the WMAs listed in this section, unless otherwise noted. On WMAs where a quota hunt is scheduled, no other gun deer hunting shall be permitted, unless otherwise noted in the individual area listing.

(1) Limits: an individual shall take no more than one (1) deer from each of the areas listed in this section, except that two (2) may be taken, as specified from West Kentucky [~~and Higginson-Henry~~] WMA[~~s~~].

(2) Quota hunt requirements, restrictions and application procedures:

(a) Advance application is required for all quota hunts. Applications shall be made only on Managed Deer Hunt Application form, dated June, 1994 [~~1993~~], which is hereby incorporated by reference. Copies shall be available to the public, including copying and inspection, by contacting the Wildlife Division offices at #1 Game Farm Road, Frankfort, Kentucky 40601, between the hours of 8 a.m. and 4:30 p.m. Monday through Friday, except holidays, or by contacting local conservation officers or hunting license vendors. Only one (1) hunter shall apply per form and a maximum of four (4) hunters may apply as a party. Hunters sixteen (16) years old and older may apply to only one (1) quota hunt. Hunters at least ten (10) years old, but not yet sixteen (16) by the scheduled hunt date may apply for only one (1) quota hunt and one (1) youth hunt in addition to the Ballard WMA youth hunt. Multiple applications to one (1) area or failure to meet any of the application requirements described above shall result in disqualification of the applicant. Completed applications shall be stamped, self-addressed and postmarked no later than August 31 unless another date is announced by the commissioner. The application deadline shall be extended by the commissioner when availability of forms is delayed.

(b) Only quota hunt applicants who are drawn and issued a permit shall hunt on quota hunt dates. Quota hunters shall hunt only on the dates assigned and in the areas assigned.

(c) During all quota hunts, only persons possessing a valid quota hunt permit shall be permitted to enter a WMA, except to use established public roads, or other areas designated open by signs. Owners of private inholdings or their guests may travel within the owner's lands, but shall not enter the WMA except as described above.

(d) During a quota hunt or firearm hunt, any legal deer hunting equipment may be used, unless otherwise noted under the area listing in this section. Hunts listed as archery hunts are restricted to legal archery equipment only. All quota hunters shall check in before and check out at the completion of the hunt.

(e) On the following WMAs, all deer hunters shall check in and check out for all hunts: Clay, Central Kentucky, Dewey Lake, Grayson Lake, Higginson-Henry, Kleber, Paintsville Lake, Pennyrile Forest, Redbird, Tradewater, West Kentucky, Yatesville, and Yellowbank WMAs[~~, and for the Barren River Lake WMA youth hunt~~].

(f) Hunters shall present the signature portion of a valid deer permit, a valid quota hunt permit, show proof of identity and Social Security number when checking in for a quota hunt. No one can substitute for the person whose name appears on the quota hunt permit.

(g) Participants in all quota hunts shall comply with the hunter orange clothing requirements as specified in Section 7[~~(7)~~] of this administrative regulation. When deer hunting on a WMA during periods when only archery equipment is permitted for taking deer on the WMA, the hunter orange clothing requirement shall not apply.

(h) Deer taken during quota hunts shall not count as part of the season limit. Hunters shall use WMA tags, provided by the department, for tagging deer harvested during a quota hunt. WMA tags shall be valid only during the dates and on the WMA for which the tag was issued. Hunters shall take only the type of deer indicated on the WMA tag, if specified.

(i) Owners of private inholdings or their guests may hunt on the owner's lands without following the application procedure specified in Section 9(2)(a), (b) and (c) of this administrative regulation, but shall follow all other quota hunt requirements. Private inholdings shall only be open during the periods listed for the WMA in which they lie, and hunters shall follow all administrative regulations in effect during those periods.

(j) Participants in quota youth hunts [~~shall comply with all hunter education requirements as specified in administrative regulation 301 KAR 2:185 and~~] shall present a valid hunter education course completion card when checking in on the day of the hunt.

(k) Individuals drawn for a quota hunt on Ballard, Dewey Lake, Higginson-Henry, Kleber, Taylorsville Lake and Yellowbank WMAs shall not be eligible to apply to the same area quota hunt for the next three (3) seasons.

(3) Ballard WMA in Ballard County (except that portion south of Terrell Landing Road): quota youth hunt for deer as specified on permit, fourth Saturday in October for two (2) consecutive days, [~~and the~~] fifth Saturday in October for (2) consecutive days and the first Saturday in November for two (2) consecutive days.

(4) Barren River WMA in Allen and Barren counties.

(a) Quota youth hunt: any deer, second Saturday in October for two (2) consecutive days.

(b) Modern gun, archery and muzzle-loading gun hunting shall conform to statewide administrative regulations.

(5) Beaver Creek WMA in McCreary and Pulaski counties, and Mill Creek WMA in Jackson County.

(a) Archery hunt: antlered deer only, October 15 through the Friday preceding the second Saturday in November and the Monday following the quota hunt through December 31.

(b) Quota hunt: antlered deer only, first Saturday in December for two (2) consecutive days.

(6) Birdsville Island WMA in Livingston County.

(a) Quota hunt: any deer, second Saturday in October for two (2) consecutive days and the last Saturday in October for two (2) consecutive days.

(b) Application procedure. Applicants shall be present at 10 a.m. central daylight time on September 17 in downtown Smithland where a public drawing will be held.

(c) Archery hunt: October 1 through October 14.

(7) [~~(6)~~] Cane Creek WMA in Laurel County.

(a) Archery hunt: antlered deer only, October 1 through the Friday preceding the second Saturday in November and the Monday following the first Sunday in December through December 31.

(b) Gun hunt: antlered deer only, second Saturday in November.

(8) [~~(7)~~] Central Kentucky WMA in Madison County.

(a) Archery hunt: any deer, December 18 through January 15.

(b) No gun deer hunting allowed.

(9) [~~(8)~~] Clay WMA in Nicholas County. Archery hunt: antlered deer only, October 15 through the Friday preceding the second Saturday in November.

(10) [~~(9)~~] Dewey Lake WMA in Floyd County.

(a) Archery hunt:

1. Antlered deer only, October 1 through October 14, November 1 through 4 [~~5~~], November 7 [~~8~~] through 11 [~~12~~], November 17 [~~18~~] through December 2 [~~3~~], and December 5 [~~6~~] through 31.

2. Any deer, October 15 through October 31.

[~~(b) Quota hunt: antlered deer only, first Saturday in December for two (2) consecutive days.~~]

(b) [~~(c)~~] Youth quota hunt: antlered or antlerless as specified on permit [~~any deer~~], first Saturday in November for two (2) consecutive days.

(11) [~~(10)~~] Grayson Lake WMA in Carter and Elliott counties.

(a) Youth quota hunt: any deer, first Saturday in November for two (2) consecutive days and the first Saturday in December for two (2) consecutive days. Only on that portion west of Route 1496, and east of the line delineated by the following: Bruin Creek, the Bruin Creek Fork of Grayson Lake, and Grayson Lake north of the Bruin Creek Fork. This is the only firearm deer hunting permitted on the area.

(b) Archery and crossbow hunt: any deer, except on the portion west of Route 1496, and east of the line delineated by the following: Bruin Creek, the Bruin Creek Fork of Grayson Lake, and Grayson Lake north of the Bruin Creek Fork. October 1 through December 31.

(12) Green River WMA in Taylor and Adair Counties.

(a) Quota hunt: any deer, the first Saturday in December for two (2) consecutive days.

(b) Archery hunt: any deer, October 1 through December 31.

(13) [~~(11)~~] Higginson-Henry WMA in Union County.

(a) Quota hunt for deer as specified on permit, first Saturday in December for two (2) consecutive days.

(b) Archery hunt: only antlerless deer may be taken during the period October 1 through 15. Any deer may be taken with the white tag, or an antlerless deer may be taken with the yellow tag during the period October 16 through December 31.

(14) [~~(12)~~] Kleber WMA in Owen and Franklin Counties.

(a) Quota hunt: any deer, first Saturday in December for two (2) consecutive days.

(b) Archery hunt: any deer, third Saturday in October through December 31.

(15) [~~(13)~~] Lapland WMA in Meade County.

(a) Quota hunt: any deer, first Saturday in December for two (2) consecutive days.

(b) Archery hunt: any deer, October 1 through December 31.

(16) Obion Creek WMA in Hickman County.

(a) Quota hunt: any deer, the first Friday in November for three (3) consecutive days.

(b) Archery hunt: any deer, October 1 through December 31.

(17) [~~(14)~~] Paintsville Lake WMA in Morgan and Johnson Counties.

(a) Quota hunt: antlered deer only, first Saturday in December for two (2) consecutive days.

(b) Archery hunt: antlered deer only, October 1 through November 11 [~~12~~], November 22 [~~23~~] through December 2 [~~3~~] and December 5 [~~6~~] through 31.

(18) Peabody WMA in Hopkins, Muhlenburg and Ohio Counties.

(a) Quota hunt: any deer, the second Saturday in November for five (5) consecutive days and the third Thursday in November for five (5) consecutive days.

(b) Archery hunt: any deer, October 1 through January 15.

(19) [~~(15)~~] Pennyrile WMA in Caldwell, Christian, and Hopkins Counties, and Tradewater WMA in Hopkins County.

(a) Quota hunt: antlered deer only, the first Saturday in December for two (2) consecutive days.

(b) Limits: one (1) antlered deer only.

(c) Archery hunting: conforms to statewide administrative regulations except that only antlered deer shall be taken.

(20) [~~(16)~~] Pioneer Weapons WMA in Bath and Menifee Counties.

(a) Legal muzzle-loading gun only; crossbows may be used during the entire archery season.

(b) Muzzle-loading gun hunting shall conform to statewide administrative regulations.

(21) [~~(17)~~] Redbird WMA in Clay and Leslie Counties.

(a) Archery hunt: antlered deer only, October 1 through the Friday preceding the second Saturday in November and the third Thursday in November [~~Monday following the first Sunday in December~~] through December 31.

(b) Gun hunt: antlered deer only, two (2) consecutive days beginning the second Saturday in November.

(22) [~~(18)~~] Taylorsville Lake WMA in Anderson and Spencer Counties.

(a) Archery hunt: any deer, October 1 through December 31.

(b) Quota hunt: any deer, first Saturday in November for two (2) consecutive days.

(23) [~~(19)~~] West Kentucky WMA in McCracken County.

(a) Archery hunts: any deer, October 1 through 27 [~~28~~], October 31 [~~November 1~~] through November 17 [~~18~~], November 21 [~~22~~] through 25, December 5 [~~6~~] through 8 [~~9~~] and December 12 [~~13~~] through January 15 on all tracts except posted zones.

(b) Posted zones: designated posted zones shall be opened to archery hunts on December 12 [~~13~~] through January 15.

(c) Quota hunt 1: any deer, third Saturday in November for two (2) consecutive days.

(d) Quota hunt 2: any deer, second Saturday in December for two (2) consecutive days.

(e) Youth quota hunt: any deer, last Saturday in October for two (2) consecutive days.

(f) All gun hunters are limited to muzzle or breech-loading shotguns only.

(g) No firearms permitted on any posted zone at any time.

(h) Crossbow hunt: beginning November 1 and continuing for fourteen (14) consecutive days.

(i) Limits: two (2) deer, one (1) of which shall be antlerless and tagged with the yellow or white tag, the other deer may be antlered or antlerless and tagged with a WMA tag issued on the area. Only one (1) WMA tag shall be issued to an individual. Only one (1) deer may be taken by gun and it shall be tagged with the WMA tag. [~~A bowhunter who has taken a deer on this WMA with a WMA tag shall not hunt in the quota hunt.~~]

(24) [~~(20)~~] White City WMA in Hopkins County.

(a) Archery hunt: October 1 through December 31.

(b) Quota hunt 1: the second Saturday in November through the following Wednesday.

(c) Quota hunt 2: the Thursday following the second Saturday in November through the following Monday.

(d) Limit: one (1) deer.

(25) [~~(21)~~] Yellowbank WMA in Breckinridge County.

(a) Quota hunt: antlered or antlerless deer as specified on permit, [~~any deer,~~] first Saturday in November for two (2) consecutive days.

(b) Archery hunt: antlered deer only October 1 through 14 and any deer, October 15 through December 31.

Section 10. This administrative regulation shall expire on adjournment of the next regular session of the General Assembly.

C. TOM BENNETT, Commissioner
CRIT LUALLEN, Secretary
DAVID H. GODBY, Chairman

APPROVED BY AGENCY: March 7, 1994

FILED WITH LRC: April 13, 1994 at 2 p.m.

PUBLIC HEARING: A public hearing on this administrative regulation shall be held on May 24, 1994 at 9 a.m. at the Department of Fish and Wildlife Resources in the Commission Room of the Arnold L. Mitchell Building, #1 Game Farm Road, Frankfort, Kentucky. Individuals interested in attending this hearing shall notify this agency in writing by May 19, 1994, five days prior to the hearing, of their intent to attend. If no notification of intent to attend the hearing is received by that date, the hearing may be canceled. This hearing is open to the public. Any person who attends will be given an opportunity to comment on the proposed administrative regulation. A transcript of the public hearing will not be made unless a written request for a transcript is made. If you do not wish to attend the public hearing, you may submit written comments on the proposed administrative regulation. Send written notification of intent to attend the public hearing or written comments on the proposed administrative regulation to: Mr. Arthur R. Boebinger, Acting Director, Wildlife Division, Department of Fish and Wildlife Resources, Arnold L. Mitchell Building, #1 Game Farm Road, Frankfort, Kentucky 40601, (502) 564-4406.

REGULATORY IMPACT ANALYSIS

Agency Contact: C. Tom Bennett

(1) Type and number of entities affected: An estimated 212,000 persons will participate in the white-tailed deer hunting proposed by this administrative regulation.

(a) Direct and indirect costs or savings to those affected: These costs involve the purchase of a state hunting license and a deer permit. Indirect costs are determined by the individual hunter, depending on his level of participation.

1. First year: Persons participating in the hunting proposed for authorization by this administrative regulation would be required to possess a valid hunting license ($12.50 for residents) and a deer permit ($21.50) unless exempt by administrative regulations.

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

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

(b) Reporting and paperwork requirements: Deer hunters will be asked to check their deer at a county deer check station and fill out a game check card denoting specific information about the deer.

(2) Effects on the promulgating administrative body: Requires time and effort in developing, publishing, reporting on, and enforcing the proposed administrative regulation.

(a) Direct and indirect costs and savings: Primary costs are associated with enforcement of the administrative regulation.

1. First year: The estimated cost associated with establishing and carrying out the provisions of this administrative regulation is $1,000,000.

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: Approximately 212,000 deer hunters may 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 alternative to regulated hunting is closure of the season. This alternative was rejected as contrary to the conservation ethic which is based on the wise use of renewable resources and the fact that white-tailed deer populations are at levels which can sustain a regulated harvest by Kentucky sportsmen.

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

(a) Necessity of proposed administrative 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. Special seasons, limits and hunting procedures are recognized for various zones and land holdings based on deer availability and other user considerations.

FISCAL NOTE ON LOCAL GOVERNMENT

1. Does this administrative regulation relate to any aspect of a local government, including any service provided by that local government? Yes

2. State whether this administrative regulation will affect the local government or only a part or division of the local government. Only parts of local government will be affected.

3. State the aspect or service of local government to which this administrative regulation relates. The County Clerks office serves as a distribution system for the hunting licenses required by this administrative regulation. The District Courts are where violators of these administrative regulations are prosecuted.

4. How does this administrative regulation affect the local government or any service it provides? The County Clerk's office personnel are involved in sale of hunting licenses and deer tags. This office receives a $.50/license fee for selling the licenses. The District Courts are utilized for prosecution of cases made against violators of these administrative regulations and recover their costs as the court cost portion of any levied fines.

ECONOMIC DEVELOPMENT CABINET
Department of Agriculture
Division of Weights and Measures
(Proposed Amendment)

302 KAR 16:080. Qualifications and inspection criteria for bungee (bungy) jumping or similar apparatus permit.

RELATES TO: KRS 247.232, 247.234

STATUTORY AUTHORITY: KRS 246.040, 247.232, 247.234, 247.236, 247.990

NECESSITY AND FUNCTION: To establish the criteria for obtaining a permit to operate an amusement ride or attraction in the Commonwealth of Kentucky: designated bungee ("bungy") or similar apparatus.

Section 1. Definitions. The following definitions shall apply to this administrative regulation:

(1) "Air bag" means a device which cradles the body and which uses an air release breather system to dissipate the energy due to a fall, thereby allowing the person to land without an abrupt stop.

(2) "Bungy cord" means the elastic rope to which the jumper is attached.

(3) "Bungy jumping" means a person falling from a height, including either a permanent or mobile jumping facility, where the descent is limited by attachment to the bungy cord.

(4) "Bungy jump site" means the area designated for the bungy jump operation by the owner or operator and approved by the Kentucky Department of Agriculture.

(5) "Carabineer" means a shaped metal device with a gate used to connect sections of the bungy cord, jump rigging, equipment or safety gear. Carabineers used for life supporting activities must be of the locking design.

(6) "Catapulting, launching, negative or reverse jumping" means the practice of stretching the bungy cord while attached to the jumper who is held on the ground then released and propelled into the air.

(7) "Dynamic loading" means the load placed on the bungy cord, rigging, harness, etc. by the weight of the jumper plush and the G forces involved.

(8) "G force" means the unit of force equal to the gravity exerted on a body at rest.

(9) "Harness" means an assembly to be worn by a jumper and to be attached to a bungy cord designed to prevent the wearer from becoming detached from the bungy system.

(10) "Lift" means a device or similar equipment utilized to transport customers, general public or employee to work area or jump launch area.

(11) "Military specification (Mil-Spec) cord" means preloaded or prestretched rubber cords originally developed for military use. These cords are made in conformance with military specifications and are often referred to as "Mil-Spec". These cords are usually cotton or nylon sheathed. There are some nonmilitary sheathed cords in use that may meet the specifications. This type of cord is usually made of three (3) to five (5) sheathed cords contained in one (1) outer sheathing.

(12) "New Zealand cord" means all rubber cords made of synthetic or natural rubber using continuous loops or strands. These types were developed in New Zealand. These type cords do not usually utilize any sheathing, and are configured as one (1) large cord made of several hundred small rubber strands.

(13) "Platform" means the launch area where jumpers will be assembled and depart from.

(14) "Safe working load (SWL)" means the maximum rated load which can be safely handled by equipment or a component of the rigging under specified conditions, expressed in pounds.

(15) "Safety factor" means the ratio obtained by dividing the breaking load of any piece of equipment by its working load.

(16) "Safety harness (safety belt)" means an assembly worn by a jump master, etc. designed to be attached to a safety line to stop the wearer from falling.

(17) "Safety line" means a line used to connect the safety harness or belt to an anchorage point or rail in situations where there is a risk of a fall.

(18) "Sandbagging" means the practice of a jumper holding onto any object (including another person) while jumping, for the purpose of exerting more force on the bungy cord in order to stretch it further, and then releasing the object at the bottom of the jump causing the jumper to rebound with more force than could be created by the jumper's weight alone.

(19) "Stunt jumping" means the combining of any other activity with bungy jumping with disregard for safety clearances as outlined in this criteria.

(20) "Tandem, multiple, or double jumping" means the practice of two (2) or more harnessed together while jumping simultaneously from the same platform.

(21) "Ultimate tensile strength" means the point when the applied load reaches a maximum prior to failure, expressed in pounds.

Section 2. Applicability and Inspection Criteria. (1) Applicability.

(a) This administrative regulation shall apply to bungy jumping sites and operations open to the general public.

(b) This administrative regulation shall not apply to bungy jumping sites and operations the department determines are for demonstration or exhibition purposes only and which are not open to the general public.

(2) Inspection criteria. This administrative regulation provides inspection criteria for:

(a) Site and site approval;
(b) Design;
(c) Equipment testing;
(d) Management operation;
(e) Operation procedures;
(f) Emergency provisions; and
(g) Emergency procedures.

Section 3. Operating Approval. (1) The owner or operator of a bungy jumping site or facility shall be issued a permit from the Kentucky Department of Agriculture pursuant to KRS 247.234 and 302 KAR 16:080 prior to operation in the state of Kentucky.

(2) The owner or operator of a bungy jumping site or facility shall comply with all relevant statutes and administrative regulations throughout the permit period.

(3) The following permit periods and inspection fee shall apply to all bungy jumping sites or facilities operating in the Commonwealth of Kentucky.

(a) For permanent and mobile installations the permit of operation shall be renewed annually.

(b) For mobile operations an inspection fee will be charged at each "set-up".

(4) Site plan and equipment design and construction.

(a) A report shall be submitted to the construction or "set-up" which shall contain site plans, safety zones, drawings, specifications and certification of equipment and structures, and operating manuals.

(b) The department may require a registered engineer's report that the design and construction of the structures, equipment, access ways, operating areas, and intended method of operations meet applicable engineering standards and local codes.

(c) The owner or operator of a bungy jumping site or facility shall provide a certificate of insurance to the department that an insurance policy exists covering any spectator or patron in the amount required by law.

Section 4. Permanent Platform. All bungy jumping sites or facilities shall be equipped with a platform which meets the following criteria:

(1) The safety working load (SWL) shall be determined by the maximum weight on the platform at any one (1) time, with a safety factor of not less than five (5), to include any dynamic loads from the jumping operation.

(2) Where the platform is not an integral part of the structure to which they are attached, shall have a safety factor of at least five (5) over the total design load, to include any dynamic loads from the jumping operation.

(3) Where the platform is not an integral part of the structure, these platforms will have a back-up safety at all times with a safety factor of at least five (5).

(4) On either type of platform, a balance load must be maintained during all operations.

(5) The platform shall have a slip-resistant floor surface. The platform shall be constructed of an open mesh type steel to insure jump master has visual site of jumper at all times during the jump operation from jump until recovery.

(6) The platform shall have anchor points for safety harness belt lanyards, designed and placed to best suit the operator's need.

(7) The platform shall be constructed to have sufficient working space, for the intended number of persons, as specified in the site manual.

(8) There shall be a self-closing gate with an automatic positive lock system across the jump point when a jumper is not present at the jump point.

(9) Access and platform walkways, stairways, ladders, handrails, etc. shall meet minimum OSHA standards and Kentucky Building Code when and where applicable.

(10) All shackles shall be safety-wired.

(11) The system for recovering the jumper shall be operated by either the jump operator or jump master.

(12) There shall be an alternative method of jumper recovery should the main recovery system fail to recover the jumper.

(13) In a human powered retrieval system or in a friction lowering system, an eleven (11) mm or larger rock climbing rope shall be used.

(14) In a human powered retrieval system where a jumper is pulled back up to the jump platform, a locking mechanism (for example, and ascender or jumper) shall be used to stop and hold the jumper in one (1) place once the applied force on the retrieval rope is removed.

(15) In a friction lowering system there shall be a "dead man switch" or locking mechanism that will stop the lowering action of the system should a situation arise where the person in charge of lowering the jumper becomes unconscious or unable to perform the lowering duties safely.

(16) All bungy cords shall be attached to the anchor point at all times the cord is in the connection area.

Section 5. Bungy Cord(s). All bungy cords used at bungy jumping sites or facilities shall meet the following criteria:

(1) The minimum factor of safety (FS) for any configuration bungy cord shall be not less than five (5). The maximum dynamic load possible for a jumper to exert on a bungy cord shall be no greater than one-fifth (1/5) or twenty (20) percent of that cord's minimum breaking strength. Minimum breaking strength shall be no less than that recommended by the manufacturer.

(2) The maximum G force allowable to a jumper using waist and chest harness is four and five-tenths (4.5) Gs. The maximum G force allowable to a jumper using an ankle harness is three and five-tenths (3.5) Gs.

(3) In a multiple cord design (Mil-Spec) the cords shall be entirely enclosed in a protective sheath.

(4) In a single cord system the binding shall hold the cord threads in the designed positions. The binding shall have the same characteristics as the cords itself.

(5) Bungy cord design, manufacturing, and testing shall meet the following specifications:

(a) All bungy cord manufacturers shall perform conclusive ultimate tensile strength testing on a representative amount of all manufactured bungy cords with stress to failure of the bungy samples. The bungy cord sample must have been constructed using the manufacturer's standard methods which shall include bungy cord end connections. All tests shall be performed or supervised by an independent testing laboratory or a certified engineer. Test results shall be readily available, upon request. The ultimate tensile strength is reached when the applied load reaches a maximum before failure.

(b) A load verses elongation curve, resulting from the aforementioned test shall be used to calculate the maximum G force exerted by the cord on a jumper within the proper weight range. Documentation of these calculations shall be readily available upon request.

(c) All bungy cord manufacturers shall provide specifications on maximum allowable usage of bungy cords expressed in number of jumps.

(d) All bungy cord manufacturers shall provide specifications on maximum deterioration or damage to cords allowed. This may include but is not limited to hours of ultraviolet light exposure, percentage of broken threads, evidence of thread wear, etc.

(6) Bungy cords shall be removed from use and destroyed when:

(a) They exhibit deterioration or damage;

(b) They do not react according to specifications;

(c) They have reached the maximum usage expressed in number of jumps as specified by the manufacturer;

(d) They exhibit any abnormalities as specified by the manufacturer.

(7) Bungy cords shall be considered destroyed when they are cut into lengths not greater than five (5) feet.

(8) All operators shall have an audible system for recording the number of jumps on each individual cord in use. This data shall be readily available to the manufacturer, any jumper, and any regulating authority. This recording system shall be documented in the site manual:

(a) Cord manufacturer;

(b) Cord lot;

(c) Cord serial number;

(d) Total allowable jump per manufacturer specifications;

(e) Record name of jumper to include address and phone number;

(f) Jump date and time.

(9) Any material such as "webbing" used in either of the two (2) end attachment points of a bungy cord regardless of whether it is

designed as a single or multiple cord system shall have a strength of at least three (3) times the ultimate tensile of the cord.

(10) All end attachment points subject to wear are to be retired and destroyed when that cord is retired and destroyed.

(11) The unloaded length of the bungy cord plus the rigging system shall be less than one-half (1/2) the designed extended length.

Section 6. Jumper Harness and Hardware. All bungy jumping harnesses and hardware shall meet the following criteria:

(1) All harness, webbing, bindings, ropes, and hardware shall meet or exceed the standards as set by the National Fire Prevention Association (NFPA) 1983 Standard on Fire Service Life Safety Rope, Harness, and Hardware (1990 Edition).

(2) A jumper harness shall be either a full body harness, a sit harness with shoulder straps, or an ankle harness. Harnesses shall be specifically designed and manufactured for mountaineering or bungy jumping.

(3) Harnesses shall be available to fit the range of patron sizes accepted for jumping.

(4) There shall be a redundant connection (back-up) between the harnesses and the cord(s).

(5) All load supporting slings or webbing shall be flat tubular mountaineering webbing or its equivalent. Minimum breaking strength shall be 6,000 pounds. Slings or webbing shall be formed by sewing, or properly tied with a "water knot" with taped ends.

(6) Carabineers shall be the steel crew gate type with a minimum breaking strength of 6,000 pounds. All carabineers shall be designed and constructed using the standards for mountaineering gear.

(7) All ropes, pulleys, and shackles used to raise, lower, or hold the jumper shall have a minimum breaking strength of 6,000 pounds. All pulleys shall be compatible with the rope.

(8) All anchors shall meet or exceed the following:

(a) Where a single anchor is used to attach the bungy cord to the platform, it shall have a factor of safety of twenty (20).

(b) Where two (2) anchors are used to attach the bungy cord to the platform, each shall have a safety factor of five (5).

(c) Where the anchor(s) is made of wire rope, it shall have swagged ends with the thimble eyes.

(d) Where the anchor(s) is made of "webbing" it shall be manufactured by a company that normally supplies these anchors to crane and rigging companies.

(9) Test of all jumper harnesses and hardware have to be available to the inspector.

(10) All items to be serial numbered.

Section 7. Equipment Inspection and Testing. All bungy jumping sites or facilities shall comply with the following equipment inspection and testing criteria:

(1) All bungy cords shall be inspected by the jump master. Frequency of inspection shall be stated in the operations manual. As a minimum the cord(s) shall be inspected prior to opening the site each day, and any other inspections as specified by the bungy cord manufacturer.

(2) All jump rigging lowering system, platform, anchors, and safety gear shall be regularly inspected for damage or wear, by the jump master. Frequency of inspection shall be stated in the operations manual. As a minimum the equipment shall be inspected prior to opening the site each day, and any other inspections as specified by the equipment manufacturers.

(3) All harnesses and harness rigging shall be inspected for damage or wear before use by each jumper.

(4) Hardware subject to abnormal loadings, being impacted against hard surfaces, or having surface damage, shall be replaced.

(5) Ropes, webbing, and slings subject to abnormal shock load shall be replaced.

(6) Any items of equipment, rigging, or safety gear that are found to be substandard shall be replaced immediately. If a replacement is not available, jumping shall cease immediately, until a proper replacement is available.

(7) Each item shall have its own permanent individual identification.

(a) The application of this identification shall not harm the material of the item.

(b) The identification shall be clearly visible to the operators during daily operations.

(c) The identification shall be recorded on the equipment log sheet.

(d) Recovery time between reusage on each bungy cord after each use will be marked on cord and/or entered in log book by serial number.

Section 8. Jump Area or Jump Space. The following criteria regarding the jump space or jump area shall apply to all bungy jumping sites or facilities:

(1) Jump area.

(a) The jump space is defined using dimensions in the lateral (perpendicular), and longitudinal (parallel) directions with respect to the jumper's direction of launch. The following criteria shall be used to design this space:

1. Maximum system length - the maximum stretched length of a bungy cord system including static line length.

2. Average cord length - the average of the unstretched (static) bungy cord system length and the maximum system length.

(b) The jump space is defined in two (2) parts: top jump space and bottom jump space. The top jump is directly above the bottom jump space. The jump space is longitudinally and laterally centered under the jump point.

(c) The bottom jump space is a box-shaped volume extending from ground level upward to an altitude lying below the jump point by a distance equivalent to fifty (50) percent of the maximum system length. The longitudinal dimension of this volume (length) is equivalent to 200 percent of the unstretched, static length of the bungy cord system.

(d) The top jump space is a pyramid-shaped volume. The four (4) base points of this pyramid shape are coincident with the topmost four (4) points of the bottom jump space. The top point of this pyramid shape is coincident with the jump point. (See Annex 1)

(e) The jump space shall be free of obstructions with the exceptions of the water or air bag.

(2) Over land.

(a) The jump area shall be fenced or other barriers provided. The fence or barriers shall be designed to prevent people and animals from entering the jump area.

(b) The jump area shall be free of spectators at all times.

(c) The jump area shall be free of any equipment or staff when a jumper is being prepared on the jump platform and until the jumper is stable after the jump.

(d) If the jumper is lowered for recover, a clean, smooth, nonabrasive surface shall be provided for the jumper and cord(s). This recovery area shall be at least ten (10) feet by ten (10) feet.

(e) A place for the jumper to sit and recover shall be provided close to, but outside the landing area.

(f) An air bag certified for a fall from the platform height shall be in place centered under the jumper.

(g) There shall be adequate clearance between the jumper at full extension and the surface of the air bag.

(h) Adequate storage shall be provided on site to protect equipment from damage. The storage shall be secured against unauthorized entry.

(3) Over water.

(a) The jump space/landing area shall be free of other vessels, floating and submerged objects and the public, and when in open water shall be defined by the deployment of buoys. A sign of

appropriate size which reads "BUNGY JUMPING KEEP CLEAR" shall be fixed to the four (4) sides of the buoy line.

(b) Minimum water depth shall be nine (9) feet.

(c) The recovery vessel shall:

1. Be properly registered and/or certified by appropriate authorities.

2. Be positioned accurately and remain in a constant position for the recovery.

3. Have a landing pad size of at least five (5) feet by five (5) feet, within and lower than the sides of the vessel.

4. Be able to be maneuvered in the range of water conditions expected and will enable staff to pick up a jumper or other person who has fallen into the water.

5. Have a minimum of two (2) operators: one (1) pilot the vessel and at least one (1) other to assist jumper recovery. At least one (1) jumper recovery assistant shall be certified life guard.

(d) Where the landing area is part of a constructed swimming pool complex or is specially constructed for bungy jumping the following shall apply:

1. The pool size shall meet the requirements for the jump area size.

2. The minimum water depth shall be nine (9) feet.

3. Rescue equipment shall be available.

4. The jump space and landing area shall be fenced.

5. Only the operators and participants of the bungy jump shall be within the jump space and landing area.

Section 9. Site Manual. (1) Each site shall have an operating manual, referred to as the site manual, for the safe operation of the site. A copy of the manual and any amendments shall be held at each site, and shall be freely available to the staff. As a minimum, the manual shall include:

(a) A site plan view of the site with all components in place, fencing and the jump zone defined.

(b) Job descriptions/position duties and responsibilities.

(c) Personnel qualifications - required and actual.

(d) Staff training procedures and documentation.

(e) Inspection/maintenance procedures - to include inspection frequency, inspection standards, follow-up actions.

(f) Equipment descriptions/certifications/test documentation.

(g) Disaster/emergency plans procedures.

(h) Accident/incident reporting procedures.

(i) Examples of forms to be used.

(j) Examples of logs to be kept.

(k) Daily preopening inspection/maintenance procedures.

(l) Jumper restrictions - age, weight, medical, physical and mental condition.

(m) No jumper below the age of sixteen (16) [~~eighteen (18)~~].

(n) No signed certificate allowed for permission for under the age of sixteen (16) [~~eighteen (18)~~].

(o) Jumper interview and acceptance procedures.

(p) Jumper preparation procedures.

(q) Jump procedures.

(r) Recovery procedures.

(s) Close-down procedures.

(t) State maximum weather conditions for safe operation.

(2) Any amendments to the site manual shall be approved in writing by the Kentucky Department of Agriculture, Amusement Rides and Attractions Inspection Section before implementation.

Section 10. Operations. (1) There shall be an operating public address system on site.

(2) There shall be a telephone communication link to emergency medical and rescue services within a reasonable distance.

(3) A sign shall be posted listing the medical, weight, and age restrictions for jumpers. The sign shall be clearly visible to intending jumpers. Letters not less than one-half (1/2) inch.

(4) Symbol not less than three and one-half (3 1/2) inches across at any point required for person(s) not able to read the English language.

(5) KRS 247.236, Operation and Construction of Amusement Rides and Attractions, and applicable KARs will be complied with.

(a) Jumper jump area will be secured (enclosed with a mesh type fence constructed of steel, not less than five (5) feet four (4) inches in height with no opening less than two (2) inches except at gate hinge points and at locking catch and these areas only large enough for operation. Landing zone operator must clear the area during jump. Assign position or position will be marked for operator during jump.

(b) Floor will be constructed of steel where no solid material - material of steel to be mesh with no opening less than one (1) inch not greater than two and one-half (2 1/2) inch opening.

(c) The jumpers shall be instructed and prepared in a place separated from the jump point.

(d) Safety type ring to frame to connect to jumper while being prepared for jump at all times.

(e) Approved scales to be used in weighing jumper when fully prepared for jump (Kentucky Department of Agriculture, Division of Weights and Measures inspection of weighing device report must be posted.)

(f) Adjustments for the weight of each jumper shall be made by the jump masters selection of bungy cord(s) and/or adjustment of the length of the rigging.

(g) The jump master shall stop the jumping operations when the weather conditions affect the safe operation of the site.

1. Wind speed and direction indicator with readout will be at jump platform.

2. Ceases operation instruction will be posted at each site indicating limitation due to operation height and wind speeds or other factors due to weather.

(h) The mobile platform for jumping shall be a constant height above the ground or surface.

(i) All staff members shall be easily identifiable from the public or jumpers, by means of uniforms or similar clothing colors, etc.

(j) All operations and passengers on mobile platforms shall wear a safety belt\harness and lanyard attached to the anchor points, at all times the platform is elevated.

(k) The jumper, on a mobile platform shall wear a safety lanyard attached to the anchor points until jump height is reached.

(l) Bungy "catapulting", "negative jumping", "reverse jumping" or "launching" is prohibited.

(m) "Tandem", "double" or "multiple" jumping is prohibited.

(n) "Sandbagging" is prohibited.

Section 11. Unacceptable Operation Activities. The following equipment shall not be used at any bungy jumping site or facility in the Commonwealth of Kentucky:

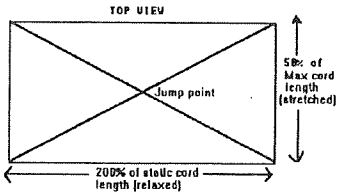
(1) Mobile or fixed type cranes not designed, manufactured, tested nor intended to primarily handle personnel.

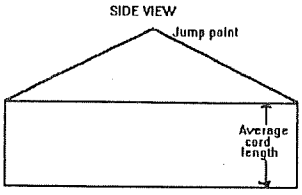
(2) Lighter than air type aircraft or aircraft not regulated by the Federal Aviation Administration such as hot air balloon, blimp, helicopter or other craft not specified that somehow have escaped to be regulated by Federal Aviation Administration.

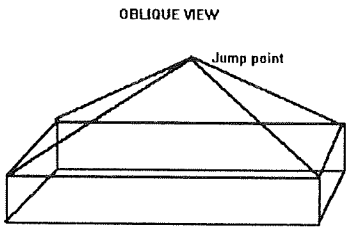
Section 12. Incorporation by Reference. (1) The National Fire Prevention Association (NFPA) 1983 Standard on Fire Service Life Safety Rope, Harness and Hardware (1990 Edition) and the Safety Air Cushion Standards (1992) are incorporated by reference.

(2) The NFPA (1983) Standard on Fire Service Life Safety Rope, Harness and Hardware (1990 Edition) and the Safety Air Cushion Standards (1992) can be inspected and copied, subject to copyright, at the offices of the Division of Weights and Measures, Kentucky Department of Agriculture, Frankfort, Kentucky 40601, between the hours of 8 a.m. and 4:30 p.m. Monday through Friday.

ANNEX 1
JUMP SPACE DIAGRAM







Average cord length =

$$\frac{\text{stretched length} + \text{relaxed length}}{2}$$

Cord length = length of bungy cord + length of any rigging from jumper harness to anchor point.

ED LOGSDON, Commissioner
APPROVED BY AGENCY: April 14, 1994
FILED WITH LRC: April 14, 1994 at noon

PUBLIC HEARING: A public hearing on this administrative regulation shall be held on May 23, 1994, at 1 p.m. at the Department of Agriculture, 7th Floor Conference Room, Capital Plaza Tower, 500 Mero Street, Frankfort, Kentucky 40601. Individuals interested in being heard at this hearing shall notify this agency in writing by May 18, 1994, five days prior to the meeting, of their intent to attend. If no notification of intent to attend the hearing is received by that date, the hearing may be cancelled. This hearing is open to the public. Any person who wishes to be heard will be given the opportunity to comment on the proposed administrative regulation. A transcript of the public hearing will not be made unless a written request for at transcript is made. If you do not wish to be heard at the public hearing, you may submit written comments on the proposed administrative regulation. Send written notification of intent to be attend the public hearing or written comments on the proposed administrative regulation to: Donna Greenwell Dutton, General Counsel, Department of Agriculture, Capital Plaza Tower, 7th Floor, 500 Mero Street, Frankfort, Kentucky 40601, (502) 564-4696.

REGULATORY IMPACT ANALYSIS

Contact person: Donna G. Dutton

(1) Type and number of entities affected: All bungee operators in Kentucky.

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

1. First year: N/A

2. Continuing costs or savings: N/A

3. Additional factors increasing or decreasing costs (note any effects upon competition): N/A

(b) Reporting and paperwork requirements: N/A

(2) Effects on the promulgating administrative body: None

(a) Direct and indirect costs or savings: None

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: No change.

(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: N/A

(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: N/A

TIERING: Is tiering applied? No. This administrative regulation treats all bungee operators in Kentucky the same.

ECONOMIC DEVELOPMENT CABINET
Department of Agriculture
Division of Animal Health
(Proposed Amendment)

302 KAR 20:220. Pseudorabies: eradication and control.

RELATES TO: KRS Chapter 257

STATUTORY AUTHORITY: KRS 257.110, 257.120, 257.030, 257.480

NECESSITY AND FUNCTION: To provide procedures for enabling the Board of Agriculture to approve a pseudorabies herd cleanup plan and to eradicate pseudorabies from a porcine herd or animal upon a determination of infection or exposure to pseudorabies. These procedures are necessary in order to achieve pseudorabies control and eradication.

Section 1. Definitions. (1) "Breeding swine" means male or female porcines which are sexually intact, six (6) months of age or older, which are specifically used or intended to be used for reproduction.

(2) "Circle testing" means serological sampling of swine required by an official pseudorabies epidemiologist in herds that are within one and one-half (1.5) miles of a known infected herd.

(3) "Depopulation" means a procedure where the premises is cleared of all swine at a specified time.

(a) "Mandatory depopulation" means the required removal of all swine from a premises for which no official herd plan was developed or followed or the herd plan used is not effective in the elimination of pseudorabies.

(b) "Official depopulation" means a herd plan for a herd with an infection rate of more than ten (10) percent recommended by an official epidemiologist where the herd owner agrees to clear the

premises of all swine in a manner approved by the state veterinarian and where indemnity is paid on all breeding swine in the herd.

(c) "Voluntary depopulation" means a herd plan for a herd with an infection rate of less than ten (10) percent chosen by the owner where the premises is cleared of all swine and where indemnity is paid only for seropositive breeding swine.

(4) "Exposed swine" means any swine that has been in known contact with an animal infected with pseudorabies. This includes all swine in a known infected herd.

(5) "Herd" shall mean all porcine animals maintained for any purpose on common grounds under common ownership or supervision, including animals which may be geographically segregated and have interchange or movement of animals without regard to health status.

(6) "Indemnity" means monies paid to the owner by the state-federal agencies in addition to the salvage value of the swine.

(7) "Known infected herd" means any herd in which swine have been determined to be infected with pseudorabies by an official pseudorabies epidemiologist or state veterinarian.

(8) "Official herd cleanup plan" means a plan developed by an official pseudorabies epidemiologist in consultation with the herd owner and his or her veterinary practitioner when applicable and approved by the state veterinarian for the purpose of eliminating pseudorabies from the herd. This plan may include test and slaughter, depopulation, offspring segregation with or without vaccination or a combination of any approved procedure.

(9) "Official pseudorabies epidemiologist" means a state or federal employed veterinarian designated by the state veterinarian and the federal veterinarian in charge, to investigate, diagnose, and make recommendations concerning suspected pseudorabies in swine.

(10) "Official pseudorabies test" means any serological test approved by the state veterinarian for the diagnosis of pseudorabies and is licensed or approved by the United States Department of Agriculture.

(11) "Official random sample test" means a group sampling of swine utilizing serological tests which provide a ninety-five (95) percent probability of detecting pseudorabies in a segregated group of swine when at least ten (10) percent of the animals tested are seropositive for pseudorabies.

(12) "Positive animal" means an animal which has given a positive reaction to an official test for the detection of pseudorabies and is so classified by an official epidemiologist or where the pseudorabies virus has been found in the body of an animal or in the body discharge of an animal.

(13) "Pseudorabies" means a communicable, contagious and infectious disease caused by a herpes virus affecting livestock and other animals.

(14) "Pseudorabies monitored feeder pig herd" means a swine breeding herd in which boars and sows have been sampled and tested negative for pseudorabies during the last twelve (12) months according to the requirements of 302 KAR 20:210.

(15) "Pseudorabies vaccine" means a pseudorabies vaccine licensed by the United States Department of Agriculture.

(16) "Qualified pseudorabies negative herd" means a swine herd that is free of pseudorabies and maintains a pseudorabies free status by periodic testing of breeding swine.

(17) "Quarantine feedlot" means a premises where swine of unknown health status are fed for slaughter under procedures approved by the state veterinarian.

(18) "Salvage value" means the carcass worth of an animal.

(19) "Test and slaughter" means a herd plan where positive animals are removed from the herd to slaughter within thirty (30) days of classification and additional tests are performed on the herd.

Section 2. Procedures. (1) The owner of a known infected herd shall apply to the state veterinarian for approval of an official herd cleanup plan within thirty (30) days of notification that his herd is classified as a known infected herd.

(2) The official herd cleanup plan shall provide as follows:

(a) Within ninety (90) days from the date of notification of classification as a known infected herd, the owner shall implement an approved herd cleanup plan.

(b) The owner of the herd shall cooperate with the department in conducting the necessary testing, classification and supervision of the herd.

(c) Animals within the herd shall be removed to slaughter or depopulated under the supervision of the state veterinarian and as provided in the official herd cleanup plan.

(d) Pseudorabies vaccine shall be used only with approval of the state veterinarian.

(3) When official depopulation is the approved herd cleanup plan, the plan shall require the premises to be cleared of breeding swine within two (2) months from the date of approval and cleared of all swine within eight (8) months of the plan approval date.

(4) The official herd cleanup plan shall provide for the completion of all requirements set out in the cleanup plan within twenty-four (24) months from the approval date of the plan. However, the state veterinarian may approve additional time to complete the official cleanup plans not to exceed ninety (90) days for completion of all requirements set out in the plan.

(5) The herd cleanup plan may be changed or amended when approved by the official pseudorabies epidemiologist and the state veterinarian.

(6) When the owner of a pseudorabies infected herd does not develop an official herd cleanup plan or when the state veterinarian determines that the official herd cleanup plan has not or will not effectively eliminate pseudorabies from a swine herd, and that approval or continuation of the official herd cleanup plan is unlikely to effectively eliminate pseudorabies from the herd, the board or its authorized agents shall order depopulation as provided by KRS 257.110. The following procedures shall apply:

(a) Notification to the owner of the order of depopulation shall be delivered to the owner or mailed to the owner's business address by certified mail. This notification shall include test results and other appropriate documents supporting the depopulation order.

(b) The owner shall have fifteen (15) days from receipt of notification of the depopulation order to appeal said order by written request to the state veterinarian that he or she disagrees with said order. If no appeal is received within this time, an order of depopulation shall be issued.

(c) The owner may submit written arguments or may schedule a conference with the state pseudorabies epidemiologist and the state veterinarian within fifteen (15) days of the written request appealing said order.

(d) The owner shall be notified by certified mail within seven (7) days after receipt of written arguments or conference as to the state veterinarian's final ruling on the appeal.

(e) When mandatory depopulation is ordered, all breeding swine shall be removed from premises for slaughter within two (2) months and all swine shall be removed from premises within eight (8) months of owner's receipt of depopulation order.

(f) The premises shall meet quarantine release as required in Section 7 of this regulation.

Section 3. Pseudorabies Program Testing. (1) Within thirty (30) days of a request for testing by the department, the owner of swine shall submit their swine for required testing and provide the department with necessary facilities and assistance required for conducting testing.

(2) Pseudorabies testing shall be in addition to the testing requirements set out in 302 KAR 20:210, Section 2, and may include random sample test or complete herd test as determined by the state veterinarian.

(3) An official random sample test shall include all animals in a

segregated unit or a minimum of thirty (30) animals, whichever is less.

(4) Expenses incurred in collection of blood samples in infected herds, circle testing, slaughter traces and epidemiological tracings may be paid or reimbursed, if funds are available, in amount specified and approved by the state veterinarian.

(5) Expenses incurred in serological testing may be paid by state-federal funds when samples are submitted to a state-federal laboratory designated by the state veterinarian.

(6) Contract for fee basis. The state veterinarian may provide for reimbursement for payment of the expenses authorized in this regulation by a fee basis contract or agreement with a veterinary practitioner accredited and licensed in Kentucky.

Section 4. Movement of Qualified and Monitored Swine. (1) Testing shall be the responsibility of the seller. All breeding swine in Kentucky offered for sale to a Kentucky producer shall be negative to an official test within thirty (30) days of the date of change of ownership, or the swine must originate directly from a qualified pseudorabies negative herd.

(2) Feeder pigs from a qualified pseudorabies negative herd or pseudorabies monitored feeder pig herd may be moved without individual identification from the originating Kentucky farm to another Kentucky farm for purposes of feeding for slaughter providing all feeder pigs on the recipient farm are from the same originating herd when all other requirements of 302 KAR 20:210 are met and with specific approval of the Kentucky State Veterinarian.

(3) Swine originating from a state which qualifies for Stage IV or V under the national program standards may enter Kentucky without a test unless a test prior to entry for exhibition or sale is required by the state veterinarian.

~~[Section 5. Quarantine Swine Feed Lots. (1) Quarantine swine feed lots shall be permitted under the authority and direction of the state veterinarian. Quarantine feed lots shall comply with the following requirements to prevent the spread of disease from the premises.~~

~~(a) Owner shall have a permit which is issued by the state veterinarian and renewed annually.~~

~~(b) All owners are required to have a Kentucky dealer's license.~~

~~(c) Known pseudorabies positive or pseudorabies exposed swine shall not enter feed lot premises.~~

~~(d) Quarantine feed lots shall not be permitted within a two (2) mile radius of a qualified pseudorabies negative herd or pseudorabies monitored feeder pig herd.~~

~~(e) All swine owners within a two (2) mile radius of a quarantine feed lot shall be notified prior to the issuance of a quarantined feed lot permit.~~

~~(f) All swine leaving these premises shall be sold for slaughter.~~

~~(g) A swine breeding operation shall not be maintained on the same premises or on other farms under the same management without all swine being under quarantine.~~

~~(h) Records of sales and purchases shall be kept as directed by the state veterinarian.~~

~~(i) All swine entering quarantine feeding premises shall be identified with an official slaughter eartag.~~

~~(j) All swine must weigh 150 pounds or more to be eligible for entry to a quarantine feeding premises.~~

~~(k) Boars and bred females shall not enter or be maintained in a quarantined swine feed lot.]~~

Section 5. [~~6.~~] Indemnity. (1) State indemnity funds, if available, shall be paid only for the following classes of swine that are sent directly to slaughter in the following amounts:

(a) Twenty-five (25) dollars per head for all seropositive breeding swine when test and slaughter, voluntary depopulation or a herd plan other than official depopulation or mandatory depopulation is the herd cleanup plan.

(b) Fifty (50) dollars per head on all breeding swine where official depopulation is the official herd cleanup plan.

(2) In order to be eligible for indemnity, any swine on which indemnity is requested must have been in Kentucky for six (6) months prior to the time of the first test determining pseudorabies infection within a herd.

(3) In order to be eligible for state indemnity funds pursuant to this regulation, a written depopulation agreement shall be signed by the owner seeking state indemnity. Authorization for depopulation and for the payment of indemnity shall be approved by the state veterinarian and the amount of indemnity is to be stated prior to the signing of the agreement.

(4) The refusal of the state veterinarian to approve payment of state indemnity for any reason set out in KRS 257.120(4) shall not restrict or otherwise limit the state veterinarian's authority to order slaughter or depopulation of infected or exposed porcine animals.

Section 6. [~~7.~~] Quarantine Release. (1) Known infected herds and premises shall be released from quarantine when:

(a) The herd has been depopulated for at least thirty (30) days and the premises cleaned and disinfected. If the premises is repopulated, the herd shall have a negative test thirty (30) to sixty (60) days after repopulation.

(b) When test and slaughter was the official herd cleanup plan, the herd shall have two (2) negative tests. The first test shall be no less than thirty (30) days after the last positive animal has been sold to slaughter. The second test shall be more than sixty (60) days after the last positive animal is sold for slaughter. The second test shall include all breeding swine and other swine on the premises shall be random sampled.

(2) Other quarantined herds shall be released after a negative test as directed by the official pseudorabies epidemiologist and quarantine release approved by the state veterinarian.

ED LOGSDON, Commissioner

APPROVED BY AGENCY: April 14, 1994

FILED WITH LRC: April 14, 1994 at noon

PUBLIC HEARING: A public hearing on this administrative regulation shall be held on May 23, 1994, at 9 a.m. at the Department of Agriculture, 7th Floor Conference Room, Capital Plaza Tower, 500 Mero Street, Frankfort, Kentucky 40601. Individuals interested in being heard at this hearing shall notify this agency in writing by May 18, 1994, five days prior to the meeting, of their intent to attend. If no notification of intent to attend the hearing is received by that date, the hearing may be cancelled. This hearing is open to the public. Any person who wishes to be heard will be given the opportunity to comment on the proposed administrative regulation. A transcript of the public hearing will not be made unless a written request for at transcript is made. If you do not wish to be heard at the public hearing, you may submit written comments on the proposed administrative regulation. Send written notification of intent to be attend the public hearing or written comments on the proposed administrative regulation to: Donna Greenwell Dutton, General Counsel, Department of Agriculture, Capital Plaza Tower, 7th Floor, 500 Mero Street, Frankfort, Kentucky 40601, (502) 564-4696.

REGULATORY IMPACT ANALYSIS

Contact person: D. L. Notter, DVM

(1) Type and number of entities affected: All swine herd owners in Kentucky.

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

1. First year: N/A

2. Continuing costs or savings: N/A

3. Additional factors increasing or decreasing costs (note any effects upon competition): N/A

(b) Reporting and paperwork requirements: N/A

(2) Effects on the promulgating administrative body: Employees no longer required to regulate quarantine swine feed lots.

(a) Direct and indirect costs or savings: No direct savings but employees will no longer be required to regulate quarantine swine feed lots.

1. First year: Same as above.

2. Continuing costs or savings: Same as above.

3. Additional factors increasing or decreasing costs: Same as above.

(b) Reporting and paperwork requirements: Reporting and paperwork involved with regulating no longer necessary.

(3) Assessment of anticipated effect on state and local revenues: No direct effect but department employees will no longer be required to regulate quarantine swine feed lots.

(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: N/A

(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: N/A

TIERING: Is tiering applied? No. This administrative regulation treats all swine herd owners in Kentucky the same.

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

401 KAR 4:060. Stream construction criteria.

RELATES TO: KRS 151.100, 151.110, 151.180, 151.210, 151.250, 151.260, 151.280, 151.310

STATUTORY AUTHORITY: KRS 151.125, 151.230

NECESSITY AND FUNCTION: This administrative regulation provides minimum standards necessary to ensure the wise use of the Commonwealth's flood prone areas while protecting the safety and welfare of the public and preventing both flood damages and increased flood levels. These aims are addressed through provisions which require that all development in the base floodplain is in a manner which precludes flood damages. In addition, there are provisions which ensure that flood levels are not unduly increased. The provisions of this administrative regulation will be implemented through the permitting authority in KRS 151.250.

~~[Section 1. Applicability. The provisions of this regulation apply to all construction across, along, or adjacent to a stream (i.e. the base floodplain) or in the floodway of a stream for which a construction permit is required pursuant to KRS 151.250, except for the construction of dams as defined in KRS 151.100.]~~

Section 1. ~~[2.]~~ Definitions. Terms used in this administrative regulation shall have the meanings given them in KRS 151.100 or this section.

(1) "Backwater effect" means the rise in water surface elevation caused by obstruction of a stream's flow, such as by a narrow bridge opening, buildings or fill material that limits the area through which the stream's flow must pass.

(2) "Base flood" means the flood having a one (1) percent chance of being equaled or exceeded in any given year, also called the 100-year frequency flood.

(3) "Base floodplain" means the area along, adjacent to, and including a stream, which [~~area~~] is inundated by the base flood on that stream.

(4) "Basement" means any area of the building having its floor below ground level on all sides. [~~"Cabinet" means the Natural Resources and Environmental Protection Cabinet.~~]

(5) "Conveyance" means [~~is~~] a measure of the flow-carrying capability of a stream cross section and is equal to the flow rate at a given depth in cubic feet per second divided by the square root of the slope of the energy grade line in feet per foot.

(6) "Cross section" means a graph or plot of ground elevation across a stream valley or portion of it along a line perpendicular to the direction of stream flow.

(7) "Designated floodway" means the stream and that portion of the adjacent base floodplain specified by a local ordinance or indicated on National Flood Insurance Program maps to be kept free of obstructions to the passage of flood flows.

(8) "Energy grade line" means [~~is~~] a representation of the total energy possessed by flowing water. The value at any point on the line can be expressed as an elevation in feet above mean sea level equal to the elevation of the water surface plus the hydraulic head. Hydraulic head is approximately equal to the quotient of the square of the average velocity over the cross section divided by twice the acceleration of gravity ($V^2/2g$).

(9) "Flood crest" means the maximum stage or elevation reached or expected to be reached by waters of a specific flood at a given location.

(10) "Flood frequency" means [~~is~~] a statistical expression of the average time period between floods equaling or exceeding a given magnitude.

(11) "Flood proofing" means structural changes or adjustments to new or existing structures and facilities, their contents, or their sites for the purpose of reducing or eliminating flood damages by protecting against structural failure, keeping water out, or reducing the effect of water entry.

(12) "Flood warning" means the issuance and dissemination of information about an imminent or current flood.

(13) "Historic structure" means any structure that is:

(a) Listed individually in the National Register of Historic Places or preliminarily determined by the Secretary of the Interior as meeting the requirements for listing;

(b) Certified or preliminarily determined as contributing to the historical significance of a registered historic district;

(c) Listed on the state inventory of historic places; or

(d) Listed on a local inventory of historic places in communities with historic preservation programs approved by the state or the Secretary of the Interior. [~~"Floodway" see "designated floodway" and "regulatory floodway."~~]

(14) "Lowest floor" means the lowest floor of the lowest enclosed area, including any basement. An unfinished or flood resistant enclosure usable solely for parking of vehicles, building access, or storage of mobile equipment or of property that is not flood damageable in an area other than a basement is not considered a building's lowest floor.
considered a building's lowest floor.

(15) "Manufactured home" means a structure, transportable in one (1) or more sections, that is built on a permanent chassis and designed for use with or without a permanent foundation when connected to utilities. The term includes park trailers and similar vehicles placed on a site for greater than 180 consecutive days.

(16) [~~(15)~~] "National Flood Insurance Program", or "NFIP", means [~~is~~] a federal program which makes available flood insurance protection to property owners in flood prone areas. To qualify for the sale of this federally-subsidized flood insurance, this program requires a community to adopt and submit to the Federal Emergency Management Agency (FEMA) base floodplain management regulations which satisfy FEMA's minimum requirements designed to reduce or avoid future flood or flood related damages.

(17) [~~(16)~~] "100-year flood" means a flood of a magnitude having a one (1) percent chance of occurring in any given year and which,

over a very long period of time, can be expected to be equaled or exceeded on the average of once every 100 years.

(18) [(17)] "Permit" means a permit for construction across, along, or adjacent to a stream subject to the provisions of KRS 151.250 but does not mean [.-(] permits for the construction of dams. [are not included in this definition.)]

(19) [(18)] "Profile" means a graph or plot elevation of the water surface or channel bottom against distance along the stream.

(20) [(19)] "Regulatory floodway" means the stream channel and that portion of adjacent land area that is required to pass flood flows without raising the base flood crest elevation by more than one (1) foot. In [urban] areas where three (3) or more houses or commercial or industrial buildings may be affected, backwater effect used to determine the regulatory floodway may be limited to less than one (1) foot.

(21) [(20)] "Stream" [shall] means any river, creek or channel, having well-defined banks, in which water flows for substantial periods of the year to drain a given area, or any lake or other body of water in the Commonwealth.

(22) [(21)] "Substantial improvement" means any combination of repairs, reconstruction, alteration, or improvements to a structure, taking place during a five (5) year period, in which the cumulative cost equals or exceeds fifty (50) percent of the market value of the structure. The market value of the structure shall [should] be:

(a) The appraised value of the structure prior to the start of the initial repair or improvement; or

(b) If damage has occurred [In the case of damage], the value of the structure prior to the damage [occurring]. [For the purposes of this definition, "] Substantial improvement["] is considered to occur when the first alteration of any wall, ceiling, floor, or other structural part of the building commences, whether or not that alteration affects the external dimensions of the structure. The term does not, however, include any project for improvement of a structure required to comply with existing health, sanitary, or safety code specifications which are solely necessary to assure safe living conditions.

[(22) "Urban area" for the purpose of this regulation means the following:

(a) The area within the present corporate limits plus the adjoining area that is or could be under the statutory extraterritorial zoning jurisdiction of any city, village, or town;

(b) Any group of three (3) or more seasonal or permanent residential buildings or other buildings that are served by public utilities, such as public water and sanitary facilities; or

(c) Any other area where the developments are urban in nature.

(23) "Watershed" means the total area from which surface run-off is carried away by a stream.]

Section 2. Applicability. This administrative regulation shall apply to all construction across, along, or adjacent to a stream (i.e., the base floodplain) or in the floodway of a stream for which a construction permit is required pursuant to KRS 151.250, except for the construction of dams as defined in KRS 151.100.

Section 3. General Provisions. (1) [The provisions of] This administrative regulation shall constitute minimum criteria for the issuance of permits for stream construction pursuant to KRS 151.250. If the cabinet determines that additional information is pertinent or best engineering practice is required [requires], it may apply more stringent considerations.

(2) The permittee shall provide the cabinet with written notification that construction was completed in accordance with approved plans and specifications not later than ninety (90) days after completion of construction.

(3) Any construction limits specified in the permit shall be plainly staked or otherwise marked on the site.

(4) Public notification.

(a) As part of the stream construction permit issuance procedure, [the cabinet will require] each applicant shall [to] provide notice to all parties who might incur additional flood-related damages as a result of [be affected by] the construction that a permit has been requested, except as provided in subparagraph 3 of this paragraph.

1. For those projects that the cabinet determines may [will] have flooding impacts beyond the local area of the construction, [the cabinet will require] the applicant shall [to] publish a notice in the newspaper [or newspapers] having greatest circulation in the area of the proposed construction. This notice shall provide:

a. The name of the applicant;

b. The location, nature, and extent of the proposed construction; and

c. The address and telephone number of the Division of Water [cabinet agency responsible for issuing the permit] and stating the comments and objections shall [are to] be directed to the division [that agency]. The notice shall be run for period of three (3) consecutive days or printings of the newspaper; however, for weekly newspapers the cabinet may reduce this requirement to two (2) consecutive printings upon written request of the applicant.

2. Where the cabinet determines that flood impacts will be localized, [it may allow] the applicant may [to] obtain and submit affidavits from all parties who reside, own property, or have other legitimate property interests in the affected areas. This affidavit will contain a complete description of the proposed construction, a place for concerned parties to sign indicating that they have read the statement and that they understand that a permit application is being submitted to the cabinet, and the name and address of the cabinet representative to whom statements of concern or request for hearing may be addressed.

3. For construction projects that the cabinet determines will have negligible flood impacts (e.g. placement of electrical utility power poles or transmission towers where no fill is included or minor stream-bank restoration), the cabinet may waive the public notification requirement after receipt of a written request from the applicant to do so.

4. The cabinet will notify all persons filing comments or objections to the issuance of any permit of their right to be heard pursuant to the provisions of KRS 151.182(2).

(b) Proof that the notice was published or the original of the completed affidavit, as applicable, shall [must] be provided to the cabinet before the application will be considered complete; however, technical review of the application by the cabinet may proceed before [such] proof is provided. [In no case shall] Issuance of the permit shall not proceed until sufficient proof of notice is submitted.

(c) The public notice required in paragraph (a)1 of this subsection shall be at least three (3) column inches in size, and [but in all cases] shall be large enough that all of the information required in paragraph (a)1 of this subsection [(1)] is easily readable.

(d) If the cabinet determines any of the conditions of paragraph (a) of this subsection are not met by the initial notice or affidavit, it may require that the applicant place another notice or provide another affidavit which does so. The application will not be considered complete until the applicable public notification provisions of this subsection are satisfied.

Section 4. Uses of Regulatory Floodway. (1) Except as provided below, no fill, deposit, obstruction, excavation, storage of materials, or structure, either alone or in combination with existing or future similar works, which may [could] adversely affect the efficiency or the capacity of the regulatory floodway, existing streams, or drainage facilities shall be [allowed to be] placed in the regulatory floodway. The determination of adverse effects shall be based on the assumption that all allowable encroachment will occur above and below the project site and on both sides of the stream and shall be made in the manner described in Section 5 of this administrative regulation. [Neither shall] Structures that are:

(a) Designed for human habitation;

(b) Associated with high flood damage potential;

(c) Not connected with permitted open space uses; or

(d) Structures consistent with open space uses, but that could themselves obstruct flood flows, shall not be located [~~allowed~~] in the regulatory floodways. No person shall store [~~Other prohibited uses of areas within regulatory floodway limits include storage of~~] materials that are buoyant, flammable, explosive, or injurious to human, animal or plant life within regulatory floodway limits.

(2) The following activities or structures are [~~will be~~] allowed for land within the regulatory floodway limits of a stream if they are not of such nature as to result in increases in flood elevations:

(a) Open space uses having no appreciable flood damage potential such as those associated with agriculture, silviculture, recreation, parking, storage yards, and certain sand and gravel operation;

(b) Certain structures that are related to allowable [~~accessory to permitted~~] open space uses if the structures are designed, constructed and placed on the lot so as to offer the minimum obstruction to flood flows;

(c) Structures necessary for navigation and waterborne freight handling, for transportation or utility crossings, if [~~provided~~] the cabinet determines that every effort has been made to reduce the impact of all such facilities on flooding and if the [~~provided that such~~] facilities considered alone or in conjunction with permissible development above and below it and on the opposite side of the stream do not [~~shall under no circumstances~~] create an increase in flood elevations in excess of that which is appropriate for determination of the floodway boundaries at that site as discussed in Section 5 of this administrative regulation;

(d) Dredging or other removal of material from between the stream banks, if [~~provided~~] disposal of the dredged material is outside of the regulatory floodway; and

(e) Other activities exempted by [~~regulations~~] 401 KAR 4:020 and [~~401 KAR~~] 4:050.

Section 5. Determining Regulatory Floodway Boundaries. (1) The regulatory floodway boundaries shall include the stream channel and that portion of the adjacent land areas required to pass the base flood discharge without increasing the water surface elevation at any point more than one (1) foot. Where the stream flow is supercritical, or where velocity is so high that backwater considerations are not possible or appropriate, the determination of regulatory floodway boundaries shall [~~will~~] be based on a one (1) foot maximum allowable rise in the energy grade line. When making these calculations, the cabinet will use methods which consider equal conveyance losses on opposite sides of the stream.

(2) For stream segments for which a local government has used methods comparable to those specified in this section to define floodway boundaries and has adopted these boundaries by ordinance or for which the Federal Emergency Management Agency (FEMA) has determined and mapped floodway boundaries, the cabinet will consider these designated floodway boundaries to define the regulatory floodway. If both locally-determined floodway boundaries and FEMA maps are available, the more stringent shall [~~will~~] apply for purposes of this administrative regulation.

(3) Notwithstanding any other provisions of this administrative regulation, in [~~urban~~] areas where three (3) or more houses or commercial or industrial buildings may be affected by flooding or at other locations where, on a case-by-case basis, the cabinet determines that the one (1) foot increase in base flood elevation allowable in determining regulatory floodway boundaries would create an undue increase in flood damages, the cabinet [~~it~~] may impose a more stringent limitation on the floodway determination.

(4) Base flood flow information shall be determined by one (1) of the following methods, which are listed in descending order of preference:

(a) The base flood flow frequency curve for gauged sites on unregulated streams shall be obtained from the district office of the U.S. Geological Survey, Water Resources Division or the appropriate U.S. Army Corps of Engineers district office. These data shall be applied so as to provide the best discharge estimates for the site under consideration. Peak discharges for ungauged sites on a gauged stream may consider both the gauged site information and information from an appropriate regional estimate, where available. The transfer technique for establishing discharges at the ungauged location shall be by interpolation or extrapolation methods in keeping with best engineering practices [~~approved by the cabinet~~]. For gauged streams with regulated flows, peak discharges shall [~~will~~] be obtained from the agency responsible for the regulation.

(b) For ungauged streams one (1) of the following shall [~~will~~] be used:

1. Where the watershed area is greater than ten (10) square miles, the source of information shall [~~will~~] be "Techniques for Estimating Magnitude, Frequency, and Duration of Flows in Kentucky," U.S. Army Corps of Engineers, incorporated by reference in 401 KAR 4:200 [~~1984~~];

2. Where the watershed area is greater than three (3) square miles but less than 100 square miles, base flood flow shall [~~may~~] be based on the U.S. Soil Conservation Service's "National Engineering Handbook, Section 4: Hydrology," incorporated by reference in 401 KAR 4:200 [~~latest edition~~]; or

3. Where drainage areas are less than ten (10) square miles, the cabinet may approve the use of other generally accepted methods in keeping with best engineering practices.

(5) In performing the calculations for regulatory floodway boundaries, the cabinet will use standard engineering practices [~~the most recent version of the U.S. Army Corps of Engineers Hydrologic Engineering Center's computer program HEC-2~~].

(a) The applicant shall provide cross sections for determining floodway boundaries at any proposed construction site where FEMA maps are not available. All cross sections shall be referenced to mean sea level and shall have vertical error tolerances of no more than ± five-tenths (0.5) foot. Cross sections elevations shall be taken at those points which represent significant breaks in slope and at points where hydraulic characteristics of the base floodplain change. Each cross section shall extend across the entire base floodplain and shall be in the number and at the locations specified by the cabinet. If [~~Where~~] necessary to ensure that significant flood damage will not occur, the cabinet may require additional cross sections or specific site elevations which extend beyond those needed for making routine regulatory floodway boundary calculations.

(b) Roughness values for use in regulatory floodway computations shall [~~will~~] be calibrated from existing flood information, where possible. If the [~~such~~] information is not available, the cabinet shall [~~will~~] base these values [~~on the U.S. Geologic Survey's "Roughness Characteristics of Natural Channels" and~~] on the professional judgment of the cabinet's staff in keeping with best engineering practices [~~engineers~~]. The cabinet may require the applicant to provide photographs or other information which may be helpful in making this determination.

(c) Slope values used for regulatory floodway boundary calculations shall [~~will~~] be based on flood profiles where available.

(d) Conveyance loss shall be calculated through an [~~the HEC-2~~] equal loss method.

Section 6. Placement of Flood-damageable Property in Floodplain. (1) [~~In order~~] To minimize or prevent the harmful effects of stream flooding, the cabinet shall [~~will~~] not issue permits for the placement or construction of flood-damageable property in the base floodplains of streams, unless the [~~such~~] placement or construction conforms to the requirements of the following subsection.

(2) In issuing construction permits pursuant to KRS 151.250 for the placement of flood-damageable property within the base flood inundation area the cabinet shall require the following [~~, it will be the~~

~~cabinet's policy to~~]:

(a) [~~Require that~~] All new construction and substantial improvements of residential structures within the base floodplain shall have the lowest floor (including basement) elevated to at least the base flood level or to higher level [~~above~~] if the local government has a more stringent requirement, unless granted an exception by the cabinet for the allowance of basements [~~and/~~]or storm cellars which shall be properly flood proofed;

(b) [~~Require that~~] All new construction and substantial improvements of nonresidential structures within the base floodplain shall meet the following conditions:

1. [~~Have~~] The lowest floor (including basement) shall be elevated to the base flood level or above; or

2. Together with attendant utility and sanitary facilities, shall be designed so that below the base flood level the structure is properly flood proofed with walls substantially impermeable to the passage of water and with structural components having the capability of resisting hydrostatic and hydrodynamic loads and effects of buoyancy;

(c) The [~~Require that a~~] floor elevation or the flood proofing certification shall be provided by the permittee after the lowest floor is completed. Upon placement of the lowest floor, or flood proofing by whatever construction means, [~~it shall be the duty of~~] the permit holder or owners shall [~~to~~] submit to the Division of Water a certification of the elevation of the lowest floor or flood proofed elevation, whichever is applicable, as built, in relation to mean sea level. The [~~Said~~] certification shall be prepared by or under the direct supervision of a registered land surveyor or professional engineer and certified by same. If [~~When~~] flood proofing is used for a particular building, the [~~said~~] certification shall be prepared by or under the direct supervision of a professional engineer and certified by same. Any work undertaken prior to submission of the certification shall be at the permit holder's or owner's risk. The Division of Water shall review the floor elevation survey data submitted. Deficiencies detected by the cabinet's [~~such~~] review shall be corrected by the permit holder or owner immediately and prior to further progressive work being performed. Failure to submit the survey or failure to make said corrections required hereby, shall be cause to issue a stop-work order for the project; and

(d) [~~Require that~~] All manufactured homes [~~(mobile homes)~~], except in an existing manufactured home [~~(mobile home)~~] park or subdivision, shall [~~must~~] be elevated to the base flood elevation and properly anchored to resist flotation, collapse, or lateral movement. If placed [~~Placement~~] in an existing manufactured home [~~(mobile home)~~] park or subdivision [~~requires that~~] the home shall be elevated no less than three (3) feet above grade, and properly anchored. Any manufactured home in an existing manufactured home park that has incurred damage equal to or exceeding fifty (50) percent of its predamaged market value as a result of a flood shall be elevated to the base flood elevation and properly anchored. The expansion of an existing manufactured home [~~(mobile home)~~] park or subdivision constitutes new construction and placement in that newly developed area shall conform to both base flood elevation and anchoring requirements.

Section 7. Construction Materials. To avoid secondary adverse impacts from stream construction projects, all materials used in [~~such~~] projects shall be stable and inert, shall be free from pollutants and floatable objects, and shall meet all appropriate engineering standards applicable to the construction project.

Section 8. Variances and Exceptions. (1) Encroachments which cause a backwater effect of more than one (1) foot may be allowed by the cabinet if [~~provided~~] the applicant owns the entire affected property on both sides of the stream, the amount of backwater at the nearest upstream property line is no more than considerations in Section 5 of this administrative regulation would allow, and the cabinet has reasonable assurances that none of the applicant's property within the area of the [~~such~~] excessive backwater will be subdivided and sold. Reasonable assurances shall include zoning considerations that would preclude subdivision of the property or deed restrictions or easements that create such a binding condition. All structures built in these [~~such~~] areas shall have their lowest floor elevation at or above the altered elevation or be flood proofed to that elevation.

(2) The cabinet may allow regulatory floodway boundaries to be shifted by changing allocation of conveyance losses. In doing this, the cabinet may redesignate the regulatory floodway boundary on one (1) side of a stream to be closer to the stream channel if [~~provided that~~] a permanent flooding easement is [~~can be~~] provided for a compensating area on the opposite side. This easement shall include that area extending from the top of the opposite stream bank to whatever distance away from the stream that is required to compensate for the proposed streamward shift of the floodway boundary. The easement shall specify the Commonwealth as owner of the easement rights and shall prohibit the placement of any obstruction on the property. The easement shall be filed of record in the county where the county is located and the grantor shall provide proof to the cabinet that the easement has been recorded. [~~be made part of the deed or deeds for the affected property, shall prohibit placement of any obstruction thereon, and shall specify the Commonwealth as the owner of the easement rights.~~] In addition, the cabinet may impose any other conditions it determines to be necessary to offset potential adverse flooding impacts. If [~~When~~] regulatory floodway boundary changes are approved by the cabinet, the applicant[~~(s)~~] shall be responsible for having changes made to the appropriate FEMA boundary maps.

(3) [~~In some cases, due to printing errors, boundary changes from subsection (2) of this section, or other circumstances,~~] Areas along streams may be incorrectly indicated as being within the designated floodway on FEMA maps. If [~~such~~] an error is suspected, an applicant may request the cabinet to perform an independent analysis of the situation. The applicant shall be responsible for obtaining all site-specific information for the [~~such~~] analysis including, if necessary, the information used for the initial FEMA study. The cabinet will perform the analysis and, if the mapped information is indeed incorrect, it will assist the local community, as resources allow, in getting the maps revised. The cabinet's permit will reflect the boundaries determined by the corrected analysis.

(4) Exceptions to Section 6 of this administrative regulation may be allowed for the reconstruction, rehabilitation, or restoration of historic structures upon the cabinet's determination that the proposed repair, rehabilitation, or restoration will not preclude the structure's continued designation as a historic structure and that the exception is the minimum necessary to preserve historic character and design of the structure.

(5) Exceptions may be allowed for the requirement of a hydraulic or hydrologic study for the replacement or reconstruction of county or city bridges, if it is demonstrated to the satisfaction of the cabinet that:

(a) The existing bridge causes no significant obstruction or flood damage;

(b) The new bridge, as designed, will be capable of passing as much or more flow at the base flood level; and

(c) There are no significant changes in the elevation and grades of the existing approaches and roadway which may be within the base floodplain.

PHILLIP J. SHEPHERD, Secretary
E. DOUGLAS STEPHAN, Commissioner
APPROVED BY AGENCY: April 14, 1994
FILED WITH LRC: April 15, 1994 at 11 a.m.

PUBLIC HEARING: A public hearing to receive comments on this proposed regulation has been scheduled for Wednesday, May 25, 1994 at 1:30 p.m. (ET), in the Auditorium of the State Office Building, Frankfort, Kentucky. Individuals interested in being heard at this hearing shall notify Jack A. Wilson in writing at the address noted

below by May 20, 1994, of their intent to attend the hearing and be heard. If no notification of intent to attend the hearing and be heard is received by that date, the hearing may be canceled. This hearing is open to the public. Any person wishing to be heard will be given an opportunity to comment on the proposed regulation. Persons testifying at the hearing are asked to provide the Cabinet with a written copy of their testimony, if available. A transcript of the hearing may not be made unless a written request for a transcript is made at least five (5) days before the hearing. If you do not wish to be heard at the public hearing, you may submit written comments on the proposed regulation. Written comments must be received by Jack A. Wilson at the address below no later than the close of business, (4:30 p.m. (ET)) May 25, 1994. The Natural Resources and Environmental Protection Cabinet does not discriminate on the basis of race, color, national origin, sex, religion, age, or disability. The meeting facility is accessible to people with disabilities. The Cabinet will provide, upon request, reasonable accommodations including auxiliary aids and services necessary to afford individuals with a disability an equal opportunity to participate in all services, programs, and activities. If an interpreter or other auxiliary aid or service is needed, contact Mr. Wilson at the address below before May 20, 1994 between 8 a.m. and 4:30 p.m. (ET).

CONTACT PERSON: Jack A. Wilson, Director, Division of Water, Department for Environmental Protection, 14 Reilly Road, Frankfort, Kentucky 40601, (502) 564-3410.

REGULATORY IMPACT ANALYSIS

Agency Contact: Jack A. Wilson

(1) Type and number entities affected: The amendments to this regulation apply to all citizens, businesses and local governments which are involved in floodplain activities. One part of the amended regulation is more specifically applicable to local governments.

(a) Direct and indirect costs or savings to those affected: The only part of the amended regulation which may directly impact costs would be for an exception for local governments to design bridge replacement/reconstructions without an engineering analysis for the impact the new design would have on existing flooding conditions. The exception would be valid if certain conditions are met; those conditions are commonly followed by local government for these activities.

1. First year: The savings would depend on the number of bridges replaced or reconstructed. The cost per structure could be in the range of $2,000 - $5,000.

2. Continuing costs or savings: The same savings would continue for local governments, but should increase in the future as engineering costs rise for this type of work. By use of this exception, the review and permitting time saved would help the permitting program to meet mandatory review time limits and decrease the time needed to obtain construction permits.

3. Additional factors increasing or decreasing costs (not only effects upon competition): No other factors will increase or decrease costs.

(b) Reporting and paperwork requirements: Local governments would significantly reduce the required material needed to obtain a permit. No other part of the amendment should change existing requirements to obtain permit approvals.

(2) Effects on the promulgating administrative body: There should be little effect on the administrative body since most of the amendments are to clarify existing requirements. A decrease in permit review time would be realized for some local government bridge projects.

(a) Direct or indirect costs or savings: There are no direct or 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: The reporting and paperwork of the agency will not change significantly. The only change would be in some review time being decreased.

(3) Assessment of anticipated effect on state and local revenues: There should be no impact on state revenues. The local governments, by saving on the costs of preparing an engineering analysis for some bridge construction projects, will realize less expenditures.

(4) Assessment of alternative methods; reasons why alternatives were rejected: The amendments were prompted for two reasons: (1) Clarification of existing requirements which better relate to National Flood Insurance Program language used in local government floodplain ordinances, and (2) Easing of local requirements for those bridge projects which appear to have no significant impact on flooding. No other alternative was considered short of a "do nothing" alternative which would result in continuing confusion over definitions and require local governments to submit material having little impact on obtaining necessary permits.

(5) Identify any statute, administrative regulation or government policy which may be in conflict, overlapping or duplication: The only regulation overlapping provisions with this regulation would be with the state's adoption of the floodplain ordinance requirements in order to participate in the National Flood Insurance Program (200 KAR 6:040. Floodplain management).

(a) Necessity of proposed regulation if in conflict: No conflict exists. Regulation 200 KAR 6:040 addresses state owned properties and construction activities; this regulation addresses general permitting criteria for all floodplain properties regardless of ownership.

(b) If in conflict, was effort made to harmonize the proposed administrative regulation with conflicting provisions: No conflict exists.

(6) Any additional information or comments: None

Tiering: Was tiering applied? No. All floodplain permits are issued under the same general criteria regardless of the size of project or its location. This is the intention of the National Flood Insurance Program as well.

FISCAL NOTE ON LOCAL GOVERNMENT

1. Does this administrative regulation relate to any aspect of a local government, including any service provided by that local government? Yes

2. State what unit, part or division of local government this administrative regulation will affect. This regulation will apply to all local governments whose boundaries contain floodplain areas and/or bridges under their jurisdiction.

3. State the aspect or service of local government to which this administrative regulation related. Local floodplain construction permitting and bridge replacement/reconstruction programs.

4. Estimate the effect of this administrative regulation on the expenditures and revenues of a local government for the first full year the regulation is to be in effect. If specific dollar estimates cannot be determined, provide a brief narrative to explain the fiscal impact of the administrative regulation.

Revenues (+/-): No impact.

Expenditures (+/-): See explanation below.

Other explanation: There is only one change outlined on this regulation that may impact expenditures of local governments. The current regulation does not expressly allow bridge replacements or reconstructions to be permitted without a hydrologic/hydraulic analysis. The proposed change would allow an exception for requiring the engineering analysis if several conditions are met. The cost savings would depend on the number of structures affected; but a per structure cost of the analysis would be in the range of $2,000 - $5,000; this could be reduced by less personnel time being involved for the permitting process.

FEDERAL MANDATE ANALYSIS COMPARISON

1. Federal statute or regulation constituting the federal mandate.

There is no federal mandate on states to implement this program. The federal statutes require that communities, including state governments, who wish to participate in the National Flood Insurance Program, adopt a floodplain management ordinance which must contain certain mandatory elements. This state regulation clarifies and updates existing regulations to better conform with the federal elements. The federal statutes that local governments must comply with for participation are contained within 44 CFR Parts 59, 60, and 64.

2. State compliance standards. Kentucky Revised Statute 151.250 specifies that floodway and floodplain construction be approved and permitted by the department. This regulation details specific criteria for reviewing and approving such activities.

3. Minimum or uniform standards contained in the federal mandate. There is no federal mandate. In order for state and local governments to qualify for participation in the National Flood Insurance Program (to be able to insure state properties in the floodplain), the Commonwealth adopted the minimum federal guidelines for floodplain management. These regulations follow those same guidelines, but further define them for permitting review needs.

4. Will this administrative regulation impose stricter requirements, or additional or different responsibilities or requirements, than those required by the federal mandate. There is no federal mandate. The regulation is different than the voluntary NFIP requirements for state permitting needs. They specify certain engineering techniques used to analyze potential flooding problems and require public notice for citizens' comments.

5. Justification for the imposition of the stricter standard, or additional or different responsibilities or requirements. There is no federal mandate. The federal program provides floodplain maps for much of the state, but not all areas are defined since communities who did not wish to participate did not receive detail mapping. Because this regulation requires permitting statewide, there are criteria defined to analyze those unmapped sites. The public notice process is not required for communities to participate in the NFIP, but is needed for citizen comment and objections, which is typical for most state permitting processes.

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

401 KAR 8:010. Definitions for Title 401 Chapter 8.

RELATES TO: KRS Chapter 223, 224, 40 CFR 141.2

STATUTORY AUTHORITY: KRS Chapter 223, 224.10-100, 224.10-110, 40 CFR 141.2 (1993), [~~as amended at 54 FR 27,526 and 27,562 (1989),~~] 42 USCA 300f, 300g, 300j

NECESSITY AND FUNCTION: KRS 224.10-110 directs the cabinet to enforce statutes [~~rules~~] and administrative regulations adopted by the secretary for the regulation and control of the purification of water for public and semipublic use. The Safe Drinking Water Act, as amended by the Safe Drinking Water Act Amendments of 1986, provides for primary enforcement responsibility by states that have adopted regulations "no less stringent than the national primary drinking water regulations", as well as meeting other criteria stipulated by the Act. The Commonwealth of Kentucky has accepted and is currently exercising such primary enforcement responsibility. The purpose of this administrative regulation is to define terms used by the cabinet in regulation of public and semipublic drinking water supplies pursuant to KRS Chapter 224 and PL 93-523, as amended, as well as to regulate certification of public water system operators pursuant to KRS Chapter 223.

Section 1. The following definitions shall apply to 401 KAR Chapter 8:

(1) "Action level" means the concentration of lead or copper in water specified in 401 KAR 8:300, Section 3, which determines, in some cases, the treatment requirements contained in 401 KAR 8:300 that a water system is required to complete.

(2) "Approved source" means the source of the water whether it be from a spring, well, public water system, or other source that has been sampled and the water analyzed, and found to be of a safe and sanitary quality and quantity in accordance with 401 KAR 8:010 through 401 KAR 8:700, inclusive.

(3) [~~(2)~~] "Auxiliary intake" means a piping connection or other device whereby raw water may be secured for treatment from a location or source other than the intake which is normally used.

(4) [~~(3)~~] "Best available technology" or "BAT" means the best technology, treatment techniques, or other means which the cabinet finds, after examination for efficacy under field conditions, and not solely under laboratory conditions, are available to the public water system (taking cost into consideration). For the purposes of setting maximum contaminant levels for synthetic organic chemicals, BAT shall be at least as effective as granular activated carbon.

(5) [~~(4)~~] "Blood lead level or PbB level" means the concentration of lead in the blood as measured in micrograms of lead per deciliter of blood (mg/d1).

(6) [~~(5)~~] "Board" means the Kentucky Board of Certification of Water Treatment Plant and Water Distribution System Operators.

(7) [~~(6)~~] "Boil water advisory" or "consumer advisory" means a notice to the consuming public through radio, television, direct mail, posting, newspaper or other media to convey to the consuming public in the quickest manner possible information that water provided by a system may cause adverse human health effects if consumed. The advisory shall include information concerning all actions which by the affected public is advised to take.

(8) [~~(7)~~] "Boil water notice" means a notice to the consuming public through radio, television, direct mail, posting, newspaper or other media to convey to the consuming public in the quickest manner possible information that water provided by a system is unfit for human consumption unless first boiled for two (2) minutes at a rolling boil.

(9) [~~(8)~~] "Bottled water" means water that is from an approved bottled water treatment plant and is placed in a sealed container or package and is offered for human consumption or other consumer uses.

(10) [~~(9)~~] "Bottled water system" means a water system which provides bottled drinking water. The term includes, but is not limited to, the sources of water, and treatment, storage, bottling, manufacturing, or distribution facilities. The term excludes a public water system which provides only a source of water supply for a bottled water system and excludes an entity providing only transportation, distribution or sale of bottled water in sealed bottles or other sealed containers. Bottled water systems shall be designated as community public water systems.

(11) [~~(10)~~] "Bottled water treatment plant" means a facility which provides the product water used for bottled water by processing water from an approved source.

(12) [~~(11)~~] "Bypass" means a physical arrangement whereby water may be diverted around any feature of the purification process of a public or semipublic water supply.

(13) [~~(12)~~] "Cabinet" means the Natural Resources and Environmental Protection Cabinet, Department for Environmental Protection, Division of Water, or its successor.

(14) [~~(13)~~] "Certificate" means a certificate of competency issued by the secretary or his designated agent stating that the operator has met all requirements for the specified operator classification as set by these administrative regulations.

(15) [~~(14)~~] "Certified laboratory" means a laboratory where the physical, instrumental, procedural, and personnel capabilities have

been approved by either the U.S. Environmental Protection Agency or the cabinet. A laboratory may be certified for one (1) or more types of the contaminants listed in these administrative regulations or for one (1) or more of the specific constituents or combinations of constituents listed.

(16) [~~(15)~~] "Check samples" means chemical and radiological samples taken subsequent to a routine compliance sample and at the same location to determine if results of the routine sample are valid.

(17) [~~(16)~~] "Coagulation" means a process using coagulant chemicals and mixing by which colloidal and suspended materials are destabilized and agglomerated into flocs.

(18) "Compliance cycle" means the nine (9) year calendar year cycle during which public water systems shall monitor. Each compliance cycle shall consist of three (3) three (3) year compliance periods. The first calendar year cycle begins January 1, 1993 and ends December 31, 2001; the second begins January 1, 2002 and ends December 31, 2010; and the third begins January 1, 2011 and ends December 31, 2019.

(19) "Compliance period" means a three (3) year calendar year period within a compliance cycle. Each compliance cycle has three (3) three (3) year compliance periods. Within the first compliance cycle, the first compliance period runs from January 1, 1993 to December 31, 1995; the second from January 1, 1996 to December 31, 1998; the third from January 1, 1999 to December 31, 2001.

(20) [~~(17)~~] "Confluent growth" means a continuous bacterial growth covering the entire filtration area of a membrane filter, or a portion of the filter, in which bacterial colonies are not discrete.

(21) "Consecutive public water systems" means two (2) or more public water systems with interconnected distribution systems, the effect of which is to distribute water from one (1) system to the next.

(22) [~~(18)~~] "Contaminant" means a physical, chemical, biological, or radiological substance or other matter found in water.

(23) [~~(19)~~] "Contaminant group" means all of the constituent members that collectively comprise the individual bacteriological, inorganic chemical, organic chemical, radiological, volatile organic chemical, synthetic organic chemical, and secondary contaminant groups regulated under these administrative regulations.

(24) [~~(20)~~] "Conventional filtration treatment" means a series of processes including coagulation, flocculation, sedimentation, and filtration resulting in substantial particulate removal.

(25) [~~(21)~~] "Corrosion" means the dissolution or erosion of pipe or other plumbing material by water.

(26) "Corrosion inhibitor" means a substance capable of reducing the corrosivity of water toward metal plumbing materials, especially lead and copper, by forming a protective film on the interior surface of those materials.

(27) [~~(22)~~] "Corrosivity" means the tendency of water to form or dissolve calcium carbonate as a film or scale.

(28) [~~(23)~~] "Cross connection" means a physical connection or arrangement between two (2) otherwise separate systems, one (1) of which contains potable water and the other being either water of unknown or questionable safety, or steam, gas or chemicals, whereby there may be flow from one (1) system to the other, the direction of flow depending on the pressure differential between the two (2) systems.

(29) [~~(24)~~] "CT or CT calc" means the product of "residual disinfectant concentration" (C) in mg/1 determined before or at the first customer and the corresponding "disinfectant contact time" (T) in minutes, i.e., "C" x "T". If a public water system applies disinfectants at more than one (1) point prior to the first customer, it shall determine the CT of each disinfectant sequence before or at the first customer to determine the total percent inactivation or "total inactivation ratio". In determining the total inactivation ratio, the public water system shall determine the residual disinfectant concentration of each disinfection sequence and corresponding contact time before subsequent disinfection application points. "$CT_{99.9}$" means the CT value required for 99.9 percent (3-log) inactivation of Giardia lamblia cysts.

$$\frac{CT\ calc}{CT_{99.9}}$$

is the inactivation ratio. The sum of the inactivation ratios, or total inactivation ratio shown as

$$\sum \frac{(CT\ calc)}{(CT_{99.9})}$$

is calculated by adding together the inactivation ratio for each disinfection sequence. A total inactivation ratio equal to or greater than one and zero-tenths (1.0) is assumed to provide a 3-log inactivation of Giardia lamblia cysts.

(30) [~~(25)~~] "Department" means the Kentucky Department for Environmental Protection.

(31) [~~(26)~~] "Diatomaceous earth filtration" means a process resulting in substantial particulate removal in which a precoat cake of diatomaceous earth filter media is deposited on a support membrane (septum), and while the water is filtered by passing through the cake on the septum, additional filter media known as body feed is continuously added to the feed water to maintain the permeability of the filter cake.

(32) [~~(27)~~] "Direct filtration" means a series of processes including coagulation and filtration but excluding sedimentation resulting in substantial particulate removal.

(33) [~~(28)~~] "Direct responsible charge" means personal, first hand responsibility, control or supervision of the operation of a public water system.

(34) [~~(29)~~] "Disinfectant contact time" ("T" in CT calculations) means the time in minutes that it takes for water to move from the point of disinfectant application or the previous point of disinfectant residual measurement to a point before or at the point where residual disinfectant concentration ("C") is measured. If only one (1) "C" is measured, "T" means the time in minutes that it takes for water to move from the point of disinfectant application to a point before or at where residual disinfectant concentration ("C") is measured. If more than one (1) "C" is measured, "T" means for the first measurement of "C", the time in minutes that it takes for water to move from the first or only point of disinfectant application to a point before or at the point where the first "C" is measured and for subsequent measurements of "C", the time in minutes that it takes for water to move from the previous "C" measurement point to the "C" measurement point for which the particular "T" is being calculated. Disinfectant contact time in pipelines must be calculated based on "plug flow" by dividing the internal volume of the pipe by the maximum hourly flow rate through that pipe. Disinfectant contact time within mixing basins and storage reservoirs shall be determined by tracer studies or an equivalent demonstration.

(35) [~~(30)~~] "Disinfection" means a process which inactivates pathogenic organisms in water by chemical oxidants or equivalent agents.

(36) [~~(31)~~] "Distributed water" means water leaving the water treatment facility and entering the distribution system.

(37) [~~(32)~~] "Division" means the Division of Water.

(38) [~~(33)~~] "Domestic or other nondistribution system plumbing problem" means a coliform contamination problem in a public water system with more than one (1) service connection that is limited to the specific service connection from which the coliform-positive sample was taken.

(39) [~~(34)~~] "Dose equivalent" means the product of the absorbed dose from ionizing radiation and the factors that account for differences in biological effectiveness due to the type of radiation and its distribution in the body as specified by the International Commission on Radiological Units and Measurements (ICRU).

(40) "Effective corrosion inhibitor residual", for the purpose of 401

KAR 8:300 only, means a concentration sufficient to form a passivating film on the interior walls of a pipe.

(41) [~~(35)~~] "Fee" means a monetary charge to be assessed by the cabinet.

(42) [~~(36)~~] "Filtration" means a process for removing particulate matter from water by passage through porous media.

(43) "First draw sample" means a one (1) liter sample of tap water, collected in accordance with 401 KAR 8:300, Section 9(2)(b), that has been standing in plumbing pipes at least six (6) hours and is collected without flushing the tap.

(44) [~~(37)~~] "Flocculation" means a process to enhance agglomeration or collection of smaller floc particles into larger, more easily settleable particles through gentle stirring by hydraulic or mechanical means.

(45) [~~(38)~~] "Free flowing tap or outlet" means a tap or outlet that when turned on is flowing freely. It does not mean a continuously operating tap.

(46) [~~(39)~~] "Gross alpha particle activity" means the total radioactivity due to alpha particle emission as inferred from measurements on a dry sample.

(47) [~~(40)~~] "Groundwater source" means a source of water for a public or semipublic water supply that does not have a free water surface exposed to the atmosphere or a turbidity content which exceeds acceptable levels for potable water as specified in 401 KAR 8:010 through 8:700 inclusive, and is not under the direct influence of surface water.

(48) [~~(41)~~] "Groundwater under the direct influence of surface water" means water beneath the surface of the ground with significant occurrence of insects or other macroorganisms, algae, or large-diameter pathogens such as Giardia lamblia, or significant and relatively rapid shifts in water characteristics such as turbidity, temperature, conductivity, or pH which closely correlate to climatological or surface water conditions. Direct influence shall be determined for individual sources in accordance with criteria established by the cabinet. The cabinet's determination of direct influence may be based on site-specific measurements of water quality as well as documentation of well construction characteristics and geology with field evaluation.

(49) "Initial compliance period" means the first full three (3) year compliance period: January 1993 to December 1995 for systems serving more than 150 service connections and January 1996 to December 1998 for systems having fewer than 150 service connections.

(50) "Large water system", for the purpose of 401 KAR 8:300 only, means a water system that serves more than 50,000 persons.

(51) "Lead service line" means a service line made of lead which connects the water main to the building inlet and any lead pigtail, gooseneck or other fitting which is connected to the lead line.

(52) [~~(42)~~] "Legionella" means a genus of bacteria, some species of which have caused a type of pneumonia called Legionnaires Disease.

(53) [~~(43)~~] "Manmade beta particle and photon emitters" means all radionuclides emitting beta particles and photons listed in "Maximum Permissible Body Burdens and Maximum Permissible Concentration of Radionuclides in Air or Water for Occupational Exposure," NBS Handbook 69, except the daughter products of thorium-232, uranium-235 and uranium-238.

(54) [~~(44)~~] "Maximum contaminant level" (MCL) means the maximum permissible level of a contaminant in water which is delivered to a user of a public water system as measured at points specified in 401 KAR 8:010 through 8:700 inclusive.

(55) [~~(45)~~] "Maximum total trihalomethane potential (MTP)" means the maximum concentration of total trihalomethanes (TTHMs) produced in a given water containing excess free chlorine residuals after seven (7) days retention at a temperature of twenty-five (25) degrees Centigrade (seventy-seven (77) degrees Fahrenheit) or above.

(56) "Medium-size water system", for the purpose of 401 KAR 8:300 only, means a water system that serves greater than 3,300 and less than or equal to 50,000 persons.

(57) [~~(46)~~] "Mineral water" means bottled water that contains no less than 500 parts per million total dissolved solids.

(58) [~~(47)~~] "Near the first service connection" means at one (1) of the twenty (20) percent of service connections in the entire system that are nearest the water supply treatment facility, as measured by water transport time within the distribution system.

(59) [~~(48)~~] "Operator" means a person who has on-site responsibility and authority to conduct the procedures and practices necessary to ensure that the water supply system or a portion thereof is operated in accordance with the laws and administrative regulations of the Commonwealth; or to supervise others in conducting the procedures and practices. Maintenance personnel and others who do not participate directly in the production or distribution of potable water are not included in the term "operator".

(60) "Optimal corrosion control treatment", for the purpose of 401 KAR 8:300 only, means the corrosion control treatment that minimizes the lead and copper concentrations at users' taps while ensuring that the treatment does not cause the water system to violate any national primary drinking water regulations.

(61) [~~(49)~~] "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.

(62) [~~(50)~~] "Picocurie (pCi)" means that quantity of radioactive material producing 2.22 nuclear transformations per minute.

(63) [~~(51)~~] "Point of disinfectant application" means the point where the disinfectant is applied and water downstream of that point is not subject to recontamination by surface water runoff.

(64) [~~(52)~~] "Point-of-entry treatment device" means a treatment device applied to the drinking water entering a house or building for the purpose of reducing contaminants in the drinking water distributed throughout the house or building.

(65) [~~(53)~~] "Point-of-use treatment device" means a treatment device applied to a single tap used for the purpose of reducing contaminants in drinking water at that one tap.

(66) [~~(54)~~] "Potable water" means water which meets the provisions of 401 KAR 8:010 through 401 KAR 8:700, inclusive,, the quality of which is approved by the cabinet for human consumption.

(67) [~~(55)~~] "Private water supply" means a residential water supply located on private property for the use of residents, and not qualifying as a public or semipublic water system.

(68) [~~(56)~~] "Product water" means the water processed by a bottled water treatment plant that is used for bottled drinking water.

(69) [~~(57)~~] "Professional engineer" means an engineer with current registration as a professional engineer in Kentucky.

(70) [~~(58)~~] "Public water system" means a water system [~~owned by a person,~~] for the provision to the public of water for human consumption, if the system has at least fifteen (15) service connections or regularly serves an average of at least twenty- five (25) individuals daily at least sixty (60) days of the year, and includes [~~a~~] collection, treatment, storage and [~~or~~] distribution facilities under control of the operator of the system and [~~facility~~] used primarily in connection with the system and collection and pretreatment storage facilities not under control of the operator of the water system which are used primarily in connection with the water system. For the purposes of 401 KAR 8:020, 401 KAR 8:150, 401 KAR 8:200, "public water system" shall also include a commercial facility which serves food or drink to the public and is not using water purchased from a public water system. However, if a facility serving food to the public uses exclusively bottled water as defined by this section for the preparation of food and the cleaning of food preparation utensils and dishes to serve food, and the facility establishes [~~may establish~~], to the cabinet's satisfaction, that only potable water shall be received by the public, [~~and~~] the facility shall be exempt from this definition. A public water system is [~~either~~] a "community water system" or a

"noncommunity water system" or, for the purposes of 401 KAR 8:020, 8:150 and 8:200, a "public water system", is a commercial facility which serves food or drink to the public regardless of the number served.

(a) "Community water system" means a public water system which serves at least fifteen (15) service connections used by year-round residents or regularly serves at least twenty-five (25) year-round residents.

(b) "Noncommunity water system" means a public water system which serves at least fifteen (15) service connections used by persons for a period less than year-round or which serves an average of at least twenty-five (25) individuals daily at least sixty (60) days of the year but less than year-round. Noncommunity water systems are either transient or nontransient.

1. "Transient noncommunity water system" means a water system which serves a transient group of people and does not meet the definition for nontransient noncommunity water system set forth below.

2. "Nontransient noncommunity water system" means a system which serves at least twenty-five (25) of the same persons over six (6) months of the year.

(71) [~~(59)~~] "Rem" means the unit of dose equivalent from ionizing radiation to the total body or an internal organ or organ system.

(72) "Repeat compliance period" means any subsequent compliance period after the initial compliance period.

(73) [~~(60)~~] "Residual disinfectant concentration" ("C" in CT calculations) means the concentration of disinfectant measured in mg/1 in a representative sample of water.

(74) [~~(61)~~] "Sanitary survey" means an on-site review of the water source, facilities, equipment, operation and maintenance of a public water system for the purpose of evaluating the adequacy of source, facilities, equipment, operation and maintenance for producing and distributing safe drinking water.

(75) [~~(62)~~] "Secondary contaminants" means contaminants which do not, in general, have a direct impact on the health of consumers but whose presence in excessive quantities may discourage the utilization of drinking water and discredit the supplier.

(76) [~~(63)~~] "Secondary standards" means the maximum contaminant levels for secondary contaminants.

(77) [~~(64)~~] "Secretary" means the secretary for the Natural Resources and Environmental Protection Cabinet.

(78) [~~(65)~~] "Sedimentation" means a process for removal of solids before filtration by gravity or separation.

(79) [~~(66)~~] "Semipublic water system" means a water system made available for drinking or domestic use which serves more than three (3) families but does not qualify as a public water system.

(80) "Service line sample" means a one (1) liter sample of water, collected in accordance with 401 KAR 8:300, Section 9(2)(c), that has been standing for at least six (6) hours in a service line.

(81) "Single family structure", for the purpose of 401 KAR 8:300 only, means a building constructed as a single-family residence that is currently used as either a residence or a place of business.

(82) [~~(67)~~] "Slow sand filtration" means a process involving passage of raw water through a bed of sand at low velocity (generally less than four-tenths (0.4) m/h) resulting in substantial particulate removal by physical and biological mechanisms.

(83) "Small water system", for the purpose of 401 KAR 8:300 only, means a water system that serves 3,300 persons or fewer.

(84) [~~(68)~~] "Specific analysis" means a laboratory analysis or procedure acceptable to the cabinet for determining the amount of a specific constituent of a type of contaminant regulated under these regulations.

(85) [~~(69)~~] "Standard Methods" means the 16th Edition of "Standard Methods for the Examination of Water and Wastewater," prepared and jointly published by the American Public Health Association, the American Water Works Association, and the Water Pollution Control Federation.

(86) [~~(70)~~] "Standard sample" means the aliquot of finished drinking water that is examined for the presence of coliform bacteria.

(87) [~~(71)~~] "Supplier of water" means a person who owns or operates a public water system.

(88) [~~(72)~~] "Surface water" means water which is open to the atmosphere and subject to surface runoff, or groundwater under the direct influence of surface water.

(89) [~~(73)~~] "Surface water source" includes, but is not limited to, ponds, reservoirs, streams of all sizes, free-flowing springs, wells with variable turbidity due to the characteristics of the raw water, or a source of water supply for a public water system that has a free water surface exposed to the atmosphere, or groundwater under the influence of surface water.

(90) "System" means a public water system.

(91) [~~(74)~~] "System with a single service connection" means a system which supplies drinking water to consumers via a single service line.

(92) [~~(75)~~] "Total trihalomethanes (TTHMs)" means the arithmetic sum of the concentrations in milligrams per liter of the trihalomethane (THM) compounds (trichloromethane, dibromochloromethane, bromodichloromethane, and tribromomethane) rounded to two (2) significant figures.

(93) [~~(76)~~] "Too numerous to count" means that the total number of bacterial colonies exceeds 200 on a forty-seven millimeter (47-mm) diameter membrane filter used for coliform detection.

(94) [~~(77)~~] "Trihalomethane (THM)" means one (1) family of organic halogen compounds resulting from the displacement of three (3) of the four (4) hydrogen atoms in methane with chlorine, bromine, or iodine atoms in the molecular structure.

(95) [~~(78)~~] "Turbidity" means the presence of suspended particulates, including, but not limited to, sand, silt, clay, finely divided organic or inorganic matter, plankton or other microscopic organisms or elements which optically interfere with the clarity of liquids.

(96) [~~(79)~~] "Virus" means a virus of fecal origin which is infectious to humans by waterborne transmission.

(97) [~~(80)~~] "Waterborne disease outbreak" means the significant occurrence of acute infectious illness, epidemiologically associated with the ingestion of water from a public water system which is deficient in treatment as determined by the cabinet.

(98) [~~(81)~~] "Water distribution system" means the portion of the water supply system in which water is conveyed from the water treatment plant or other supply point to the premises of a consumer or a system of piping and ancillary equipment which is owned and operated by an established water system independent of the water supply system from which potable water is purchased.

(99) [~~(82)~~] "Water supply reservoir" and "lake primarily used for drinking water" means, for the purpose of 401 KAR 8:020, Section 2(18), a lake or reservoir so designated by its developer, a public water system drawing raw water from the lake, a local government, and a property owner having an interest in the lake and the watershed upstream of the dam or downstream outlet of the lake.

(100) [~~(83)~~] "Water supply system" means the source of supply and all structures and appurtenances used for the collection, treatment, storage and distribution of water for a public or semipublic water supply.

(101) [~~(84)~~] "Water treatment plant" or "purification plant" means that portion of the water supply system which is designed to alter either the physical, chemical or bacteriological quality of the water.

E. DOUGLAS STEPHAN, Commissioner
PHILLIP J. SHEPHERD, Secretary
APPROVED BY AGENCY: April 14, 1994
FILED WITH LRC: April 15, 1994 at 11 am.

PUBLIC HEARING: A public hearing to receive comments on this proposed regulation has been scheduled for May 25, 1994, at 1:30 p.m. (ET), in the Auditorium of the State Office Building, Frankfort, Kentucky. Individuals interested in being heard at this hearing shall

notify John T. Smither in writing at the address noted below by May 20, 1994, of their intent to attend the hearing and be heard. If no notification of intent to attend the hearing and be heard is received by that date, the hearing may be canceled. This hearing is open to the public. Any person wishing to be heard will be given an opportunity to comment on the proposed regulation. Persons testifying at the hearing are requested to provide the Cabinet with a written copy of their testimony, if available. A transcript of the hearing may not be made unless a written request for a transcript is made at least five (5) days before the hearing. If you do not wish to be heard at the public hearing, you may submit written comments on the proposed regulation. Written comments must be received by John T. Smither at the address below no later than the close of business, (4:30 p.m. (ET)) May 25, 1994. The Natural Resources and Environmental Protection Cabinet does not discriminate on the basis of race, color, national origin, sex, religion, age, or disability. The meeting facility is accessible to people with disabilities. The Cabinet will provide, upon request, reasonable accommodations including auxiliary aids and services necessary to afford individuals with a disability an equal opportunity to participate in all services, programs, and activities. If an interpreter or other auxiliary aid or service is needed, contact Mr. Smither at the address below before May 20, 1994 between 8 a.m. and 4:30 p.m. (ET).

CONTACT PERSON: John T. Smither, Manager, Drinking Water Branch, Division of Water, Department for Environmental Protection, 14 Reilly Road, Frankfort, Kentucky 40601, (502) 564-3410.

REGULATORY IMPACT ANALYSIS

Agency Contact: John T. Smither

(1) Type and number of entities affected: The amendments to this regulation will affect approximately 918 public and semipublic water systems throughout Kentucky. This number will vary somewhat from month to month.

(a) Direct and indirect costs or savings to those affected: This regulation incorporates several new definitions which apply to 401 KAR Chapter 8. With three exceptions, these new definitions are a result of new federal regulations being incorporated into 401 KAR Chapter 8. The exceptions are changes to clarify the meaning of "public water system", to define "system" and to define "consecutive public water systems". While by themselves these definitions do not have cost impacts, the remainder of Chapter 8 will impose costs on water systems. Some of these costs will vary depending on the classification of the water system. All water systems, both semipublic and public, will be required to, at a minimum, disinfect their water or show why such disinfection is unnecessary. For a semipublic or small public water system, a chlorinator will cost around $300. Chlorine for a system producing about 30,000 gallons of water per month, will run about $20 or $25 per year. For a semipublic system serving food to the public and by virtue of the definition in this regulation, thereby becoming a public system for the purpose of three regulations, additional costs may be imposed. These include the purchase of a test kit to measure residual disinfectant, about $30 with replacement chemicals for the kit costing $10 or $15 per year. Reports must be submitted to the Cabinet monthly at a cost of less than one dollar per month for postal fees. These reports may be made on forms furnished by the Cabinet at no charge. If this system is using surface water as a source, it may need to purchase a turbidometer at anywhere from $500 to $3,000 depending on quality. In most cases, groundwater will be the source for small systems and no turbidometer will be needed. If surface water is the source the system will need to provide some level of filtration, usually costing less than $500 for a small system. Again, in most cases groundwater will be the source and no filtration will be necessary. Groundwater systems may choose to try to demonstrate that disinfection is unnecessary. If so, more bacteriological tests at about $10 each will be required.

1. First year: Costs for filtration and equipment will occur in the first year, from $300 to $3000 depending on what is necessary, for semipublic and small public water systems. Other costs will be discussed at the point in 401 KAR Chapter 8 where appropriate.

2. Continuing costs or savings: Costs for chlorine and chemicals to measure residual disinfection will run $20 to $40 per year for some public and small public water systems, with reports to the Cabinet costing about $12 per year.

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

(b) Reporting and paperwork requirements: This regulation, which contains only definitions, will not affect reporting and paperwork requirements, although the requirements do increase for semipublic water systems which are defined as public because they serve food to the public. This is an existing requirement, however. The definition for "public water system" is merely being clarified.

(2) Effects on the promulgating administrative body: The amendments to this regulation will not affect the promulgating administrative body since only new definitions are incorporated.

(a) Direct and indirect costs or savings: None

1. First year: None

2. Continuing costs or savings: None

3. Additional factors increasing or decreasing costs: None

(b) Reporting and paperwork requirements: None

(3) Assessment of anticipated effect on state and local revenues: This regulation will not affect state or local revenues.

(4) Assessment of alternative methods; reasons why alternatives were rejected: This regulation incorporates new definitions which apply to 401 KAR Chapter 8. Most of these new definitions are a direct result of new federal drinking water regulations. Any alternative definition would make Kentucky's regulations inconsistent with federal requirements. Three changes are made to clarify the existing meanings of "public water systems", "system", and "consecutive public water system".

(5) Identify any statute, administrative regulation or government policy which may be in conflict, overlapping, or duplication: No statute, regulation, or policy conflicts, overlaps, or duplicates this regulation.

(a) Necessity of proposed regulation if in conflict: No conflict exists.

(b) If in conflict, was effort made to harmonize the proposed administrative regulation with conflicting provisions: No conflict exists.

(6) Any additional information or comments: None

TIERING: Was tiering applied? No. This regulation contains only definitions which apply to 401 KAR Chapter 8. While this regulation was not tiered, other regulations in Chapter 8 are tiered.

FISCAL NOTE ON LOCAL GOVERNMENT

1. Does this administrative regulation relate to any aspect of a local government, including any service provided by that local government? Yes

2. State what unit, part or division of local government this administrative regulation will affect. This regulation relates to public water systems. Local governments frequently own or operate public water systems.

3. State the aspect or service of local government to which this administrative regulation relates. This regulation relates to the provision of potable drinking water.

4. Estimate the effect of this administrative regulation on the expenditures and revenues of a local government for the first full year the regulation is to be in effect. If specific dollar estimates cannot be determined, provide a brief narrative to explain the fiscal impact of the administrative regulation.

Revenues (+/-): None

Expenditures (+/-): None

Other Explanation: This regulation contains only definitions relating to 401 KAR Chapter 8. This regulation will have no effect on

revenues or expenditures.

FEDERAL MANDATE ANALYSIS COMPARISON

1. Federal statute or regulation constituting the federal mandate. 40 CFR 141.2 as amended at 56 Federal Register 3578, January 30, 1991, 56 Federal Register 26547 June 7, 1991 and 56 Federal Register 31838 July 17, 1992.

2. State compliance standards. This regulation provides definitions to terms used in 401 KAR Chapter 8 relating to the regulation of public water systems.

3. Minimum or uniform standards contained in the federal mandate. 40 CFR 141.2 provides definitions relating to terms used in the regulation of public water systems.

4. Will this administrative regulation impose stricter requirements, or additional or different responsibilities or requirements, than those required by the federal mandate? No. The amendments to this regulation are identical to the Federal definitions of the same terms. Three housekeeping amendments are included, unrelated to the federal mandate.

5. Justification for the imposition of the stricter standard, or additional or different responsibilities or requirements. The amendments to this regulation incorporate new Federal definitions which are identical.

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

401 KAR 8:020. Public and semipublic water supplies - general provisions.

RELATES TO: KRS Chapters 223, 224, 40 CFR 141.3, 141.74, 141.75, 142.14, 142.15

STATUTORY AUTHORITY: KRS Chapter 223, 224.10-100, 224.10-110, 40 CFR 141.3, 141.74, 141.75, 142.14, 142.15 (1993), [~~as amended at 54 FR 27,530 (1989),~~] 42 USCA 300f, 300g, 300j

NECESSITY AND FUNCTION: KRS 224.10-110 directs the cabinet to enforce statutes and administrative [~~rules and~~] regulations adopted by the secretary for the regulation and control of the purification of water for public and semipublic use. The Safe Drinking Water Act, as amended by the Safe Drinking Water Act Amendments of 1986, provides for primary enforcement responsibility by states that have adopted regulations "no less stringent than the national primary drinking water regulations", as well as meeting other criteria stipulated by the Act. The Commonwealth of Kentucky has accepted and is currently exercising such primary enforcement responsibility. The purpose of this administrative regulation is to stipulate general provisions for public and semipublic water supplies to enable the supplies to comply with KRS 224.10-110 [~~224.032~~], as well as the Safe Drinking Water Act, as amended. [~~The amendments to this regulation are to add certain new recordkeeping and reporting requirements which have become necessary as a result of new federal requirements.~~]

Section 1. Applicability. (1) Inclusions. All public and semipublic water systems are subject to the requirements of 401 KAR 8:010 through 8:700, inclusive except those noted in subsection (2) of this section. A commercial facility which uses water from its own premises to prepare food to be served to the public is subject to the requirements of 401 KAR 8:020, 401 KAR 8:150, and 401 KAR 8:200 unless bottled water is used exclusively for food preparation and dish washing, and the facility has demonstrated to the cabinet's satisfaction that no contaminated water may reach the public.

(2) Exclusions. Except as stated above, this chapter does not apply to water systems in the following two (2) categories:

(a) Water systems which consist only of distribution and storage facilities, which do not have collection or treatment facilities, which obtain all of their water from, but are not owned or operated by, public water systems covered by these administrative regulations, and which do not sell water to any person; or

(b) Water systems which are carriers which convey passengers in interstate commerce.

Section 2. Operation, Maintenance and Safety Requirements. (1) Public and semipublic water systems. No person shall operate or commence operation of a public or semipublic water system except in compliance with the provisions of 401 KAR 8:010 through 8:700, inclusive. Water supply systems constructed prior to November 11, 1990 [~~the effective date of these regulations~~] may be continued in use, if the operation, maintenance, bacteriological, chemical, physical, and radiological standards comply with 401 KAR 8:010 through 401 KAR 8:700 inclusive, or the system obtains a variance or exemption as set forth in 401 KAR 8:060 from those standards with which they do not comply.

(2) Cross-connections prohibited. All cross-connections are prohibited. The use of automatic devices, such as reduced pressure zone back flow preventers and vacuum breakers, may be approved by the cabinet in lieu of proper air gap separation. A combination of air gap separation and automatic devices shall be required if determined by the cabinet to be necessary due to the degree of hazard to public health. [~~It shall be the responsibility of~~] Every public water system shall [~~to~~] determine if [~~whether~~] or where cross-connections exist and shall [~~to~~] immediately eliminate them.

(3) Bypasses. No bypass shall be created or maintained without the prior written approval of the cabinet stating the approved circumstances for establishment of a bypass, its design, and the exact conditions which shall [~~must~~] exist for its use.

(4) Auxiliary intakes. No auxiliary intake shall be used in direct connection with a public or semipublic water system except with prior written approval from the cabinet stating the emergency conditions which necessitate the intake.

(5) Water and sewer connections. The sewer system serving the purification plant and auxiliary facilities, including all plumbing fixtures, toilets, showers, drinking fountains, and floor drains, shall discharge to the sewer system where available. If no such sewer is available, the connection shall be made to an approved sewage disposal facility. There shall be no connections between the sewer system and a filter backwash, filter-to-waste drains or clearwell overflow lines, unless an approved air gap is provided between such drains and overflow lines and the approved sanitary, storm sewer, or natural drainage system, so as to preclude the possibility of back-up of sewage or waste into the drain or overflow lines.

(6) Proper operation and maintenance. The owner or operator of a public water system shall [~~at all times~~] properly operate and maintain all facilities and systems of treatment, intake and distribution to achieve compliance with the provisions of 401 KAR 8:010 through 8:700 inclusive. Proper operation and maintenance includes effective performance, preventive maintenance, adequate operator staffing and training, adequate representative sample points, and adequate process controls for testing, including appropriate quality assurance procedures.

(7) Reports to the cabinet.

(a) Monthly operating reports. The supplier of water shall file complete monthly operating reports with the cabinet. The reports shall be provided in a manner [~~on forms provided or~~] approved by the cabinet and shall be received at the Division of Water, Frankfort Office Park, 14 [~~18~~] Reilly Road, Frankfort, Kentucky 40601, no later than ten (10) days after the end of the month for which the report is filed. Completed reports shall include volume of water treated, type and amount of chemicals added, and test results appropriate to be

reported by the plant. Completed reports shall also include the dated original signature of the owner or authorized agent. [~~Beginning with the month of July 1992 for subparagraph 1 of this paragraph, and January 1993 for subparagraph 2 of this paragraph,~~] The supplier of water shall submit the following reports to the cabinet no later than ten (10) days after the end of each month the public water system serves water to the public:

1. Turbidity measurements with maximum contaminant levels [~~as required by 401 KAR 8:200, Section 4(4) and (5)~~] and monitoring in accordance with [~~that section and~~] 401 KAR 8:150[~~, Section 3(2)(a) until June 29, 1993. After June 29, 1993, turbidity monitoring shall be in accordance with 401 KAR 8:150, Section 3(2)(a), with measurements in accordance with 401 KAR 8:150, Section 3(1)(d) and (2)(a), and maximum contaminant levels in accordance with 401 KAR 8:150, Section 2~~]. The supplier of water shall include the following turbidity information in the monthly operating report:

a. The total number of filtered water turbidity measurements taken during the month.

b. The number and percentage of filtered water turbidity measurements taken during the month which are less than or equal to the turbidity limits specified in 401 KAR 8:150, Section 2, for the filtration technology being used.

c. The date and value of any turbidity measurements taken during the month which exceed five (5) NTU.

2. Disinfection information specified in 401 KAR 8:150, Section 3(2)(b). The supplier of water shall include the following disinfection information in the monthly operating report:

a. For each day, the lowest measurement of residual disinfectant concentration in mg/1 in water entering the distribution system.

b. The date and duration of each period when the residual disinfectant concentration in water entering the distribution system fell below the residual requirements as specified in 401 KAR 8:150, Section 1(1), and when the cabinet was notified as of the occurrence.

c. The following information on the samples taken in the distribution system in conjunction with total coliform monitoring pursuant to 401 KAR 8:150, Sections 1 and 3(2)(c):

(i) Number of instances where the residual disinfectant concentration is measured.

(ii) Number of instances where the residual disinfectant concentration is not measured but heterotrophic bacteria plate count (HPC) is measured.

(iii) Number of instances where the residual disinfectant concentration is measured but does not measure at least two-tenths (0.2) milligrams per liter or ppm or the equivalent [~~not detected~~] and no HPC is measured.

(iv) Number of instances where [~~no~~] residual disinfectant concentration is less than two-tenths (0.2) milligrams per liter [~~detected~~] and where HPC is greater than 500/ml.

(v) Number of instances where the residual disinfectant concentration is not measured and HPC is greater than 500/ml.

(vi) For the current and previous month the system serves water to the public the value of "V" in the following formula:

$$V = \frac{c+d+e}{a+b} \times 100$$

where

a = the value in subclause (i) of this clause
b = the value in subclause (ii) of this clause
c = the value in subclause (iii) of this clause
d = the value in subclause (iv) of this clause
e = the value in subclause (v) of this clause

(vii) If the cabinet determines, based on site-specific considerations, that a system has no means for having a sample transported and analyzed for HPC by a certified laboratory within the requisite time and temperature conditions specified by 401 KAR 8:150, Section 3(1)(c), and that the system is providing adequate disinfection in the distribution system, the requirements of paragraph (a)2c(i) through (vi) of this subsection do not apply.

d. A system need not report the data [~~date~~] listed in clause a. of this subparagraph if all data listed in clauses a. through c. of this subparagraph remain on file at the system and the cabinet determines that the system has submitted all the information required by clauses a. through c. of this subparagraph for at least twelve (12) months.

3. Each system, upon discovering that a waterborne disease outbreak potentially attributable to that water system has occurred, shall report that occurrence to the cabinet in accordance with paragraph (c) of this subsection. If the turbidity exceeds five (5) NTU, the system shall inform the cabinet as soon as possible in accordance with paragraph (c) of this subsection. If the residual falls below the requirements specified in 401 KAR 8:150, Section 1(1), in the water entering the distribution system, the system shall notify the cabinet as soon as possible in accordance with paragraph (c) of this subsection. The system also shall notify the cabinet by the end of the next business day whether or not the residual was restored to the residual required by 401 KAR 8:150, Section 1(1), within four (4) hours.

(b) Reports of failure to comply. Public water systems shall report to the cabinet, within forty-eight (48) hours, by phone or in writing, the failure to comply with any provision of 401 KAR 8:010 through 8:700, inclusive, including the failure to comply with monitoring requirements.

(c) Emergency reports. When a public water system experiences a line break as described in 401 KAR 8:150, Section 4(3), loss of pressure, loss of disinfection, or other event which may result in contamination of the water, the public water system shall immediately report to the cabinet by calling the drinking water branch of the division of water in Frankfort at (502) 564-3410 or the appropriate regional field office of the division of water. If a report required by paragraph (c) of this subsection is made at a time other than normal business hours, it shall be made through the twenty-four (24) hour environmental emergency telephone number, (502) 564-2380.

(8) Records to be maintained. All owners or operators of public water and semipublic water systems shall keep on or near the premises the records set forth in this subsection.

(a) Data summaries. Either actual laboratory reports shall be kept or data shall be transferred to tabular summaries. The following information shall be included:

1. The date, place and time of sampling, and the name of the person who collected the sample;

2. Whether the sample was a routine distribution system sample, check sample, raw or processed water sample or other special purpose sample;

3. The date of analysis;

4. The laboratory and person responsible for performing analysis;

5. The analytical technique or method used; and

6. The results of the analysis.

(b) Bacteriological analysis records shall be kept at least five (5) years.

(c) Chemical analysis records shall be kept at least [~~for a period of~~] ten (10) years.

(d) Turbidity analysis records shall be kept [~~for a period of~~] at least one (1) year.

(e) Records of violations and the actions taken by the system to correct violation of primary drinking water regulations shall be kept no less than ten (10) years after the last action taken with respect to the particular violation involved.

(f) Records of sanitary surveys, copies of written reports, summaries of communications relating to sanitary surveys of the system, conducted by the system, a private consultant, or a local, state or federal agency, shall be kept no less than ten (10) years after completion of the sanitary survey involved, at which time they may be transferred to the cabinet.

(g) Records concerning a variance or exemption granted to the

system shall be kept no less then five (5) years following the expiration of the variance or exemption.

(9) Boil water notices and consumer advisories.

(a) Boil water notices and advisories. Public water systems and semipublic water systems may issue boil water notices or boil water advisories if the system believes [~~feels~~] a notice or advisory is warranted. The cabinet may direct that a boil water notice be issued when positive bacteriological sample results have been confirmed by an analysis or analyses made in a certified laboratory. The cabinet may direct that a boil water advisory be issued when conditions within a public water system indicate a possible adverse health effect from microbiological contamination may result from consumption of the water distributed by a system. The cabinet may, when it determines circumstances warrant, issue a boil water notice or boil water advisory directly, rather than rely on a public or semipublic water system to issue the notice. All boil water notices or advisories shall remain in effect until the cabinet determines or approves the notice or advisory may be lifted.

(b) Consumer advisory. The cabinet may issue a consumer advisory if conditions within a public water system or semipublic water system indicate a possible adverse health effect from consumption of the water distributed by the system or when other information of interest to the consumer exists. The advisory will notify affected persons of a required or recommended action that should be taken.

(10) How to issue notice or advisory. Boil water notices, boil water advisories, and consumer advisories shall be issued through newspapers, radio, television, or other media having an immediate public impact. As a health and safety measure, the water system shall repeat the notification during the period of imminent danger at intervals which maintain public awareness. The notice or advisory shall be readily understandable and shall include instructions for the public, as well as an explanation of the steps being taken to correct the problem. Boiling instructions shall caution to only boil drinking water for short range use by boiling water for at least three (3) [~~two (2)~~] minutes at a rolling boil.

(11) Other notices. Other public notifications shall be issued by public water systems as required by 401 KAR 8:010 through 8:700 inclusive.

(12) Maps. Within twelve (12) months of November 15, 1990, public and semipublic water systems shall have on the premises, or conveniently located to the premises, an up-to-date map of the distribution system. The map shall, at a minimum, show line size, cutoff valves, fire hydrants, flush hydrants, tanks, booster pumps, chlorination stations, connection to emergency or alternative sources, and wholesale customer master meters. The type of piping material in the distribution system and its location shall also be provided. If a public water system, due to age, improper documentation, lost documentation or other valid reason cannot comply with this requirement, the system may petition the cabinet to modify this requirement to the extent that compliance is not feasible. The petition for modification shall state specifically what portion of this requirement is not practical and why.

(13) Operation and maintenance manual. Each public water system shall develop and keep on the premises, for operators and employees of the system, an operation and maintenance manual that includes a detailed design of the plant, daily operating procedures, a schedule of testing requirements designating who is responsible for the tests, and safety procedures for operation of the facility, including storage and inventory requirements for materials and supplies used by the facility. The operation and maintenance manual shall be updated as necessary and no less than annually and shall be available by November 16, 1991. Public water systems serving fewer than 100 people or thirty (30) service connections may request that the cabinet waive this requirement. The request shall be in writing and any waiver granted by the cabinet shall be in writing and be retained by the public water system for examination by cabinet personnel.

(14) Flushing recommended. It is recommended that all distribution systems be thoroughly flushed at least twice a year, usually in the spring and fall. The purpose of systematic flushing is to reduce turbidity created from the scouring of accumulated sediment within the water lines. Flushing should start at the hydrants nearest the source of supply and proceed in an outward direction to the end of each main. Flushing should continue at each hydrant until all traces of turbidity and color are gone. Hydrants should be opened and shut slowly to prevent damage from water hammer. In addition to the regularly scheduled flushing, the following conditions indicate a need to flush the entire system: turbidity within the distribution system greater than five (5) nephelometric turbidity units (NTU); an inability to maintain an adequate residual of a disinfection agent in any part of the system or a heterotrophic plate count (HPC) in excess of 500. Other indicators that flushing may be called for are taste and odor complaints, color of water, contaminated water samples, or line repairs.

(15) No person shall introduce a substance which may have a deleterious physiological effect, or for which physiological effects may not be known, to the water supply system.

(16) Certified lab analysis required. For the purpose of determining compliance with the sampling requirements of 401 KAR 8:010 through 8:700 inclusive, samples shall be analyzed by a laboratory certified by the cabinet as prescribed in 401 KAR 8:040, except that measurements for turbidity and disinfectant residuals may be performed by a person approved by the cabinet.

(17) Right of entry. The cabinet may enter[~~, during normal business hours,~~] an establishment, facility or other property of public and semipublic water supplies in order to determine whether the supplies have acted or are acting in compliance with applicable laws or regulations which the cabinet has the authority to enforce. Entry may include collection of water samples for laboratory analyses, inspection of records, files, papers, processes, controls and facilities required to be kept, installed or used under the provisions of 401 KAR 8:010 through 8:700, inclusive. The cabinet or its authorized agent may cause to be tested a feature of a public water system, including its raw water source, to determine compliance with applicable legal requirements.

(18) Recommended practices for water supply reservoirs to be used for drinking water. The following practices are recommended to be employed by water systems which have a lake primarily used as a source of raw drinking water:

(a) Prohibition of swimming, water skiing and other contact sports.

(b) Prohibition of large motor-driven craft or any craft with toilets.

(c) An area at least 100 feet wide from the upper pool elevation shall be kept clear of all sources of potential contamination such as septic tanks, drain fields, livestock, barns, etc.

(d) No effluent from sewage treatment plants shall be discharged into the lake.

(e) Picnicking may be permitted around the lake if plans for the development of any picnic area meet regulatory requirements of the cabinet.

(f) A nonpoint source pollution control plan shall be implemented.

(19) Water treatment chemicals and system components. Chemical additives and protective materials (such as paints and linings) used by a water system shall be acceptable to the cabinet for use in contact with potable water.

(20) Disposal of chlorinated water. Chlorinated water resulting from disinfection of treatment facilities and new, repaired or extended distribution systems shall be disposed in a manner which will not violate 401 KAR 5:031.

(21) Water loading stations. Public water systems which provide water loading stations for the purpose of providing water to water hauling trucks or other bulk water devices shall construct such stations to conform to the standards in the Great Lakes Upper Mississippi River Board of State Public Health & Environmental Managers' "Recommended Standards for Water Works," incorporated

by reference in Section 4(1) of this administrative regulation.

Section 3. Records and Reports Maintained by the Cabinet. The cabinet shall maintain and report records and reports as governed by 40 CFR 142.14 and 142.15, as amended at 54 Federal Register 27,557, 27,567, and 27,579 (1989), 56 Federal Register 3595 (1991) and 56 Federal Register 26562 (1991); hereby adopted without change.

Section 4. Incorporation by Reference. The following materials are hereby incorporated by reference and are available for public inspection and copying, subject to copyright laws, between 8 a.m. and 4:30 p.m., Monday through Friday, excluding state holidays, at the Division of Water, Frankfort Office Park, 14 [~~18~~] Reilly Road, Frankfort, Ky. 40601:

(1) Great Lakes Upper Mississippi River Board of State Public Health & Environmental Managers' "Recommended Standards for Water Works," 1992 [~~1987~~], published by the Health Research Inc., Health Education Services Division, P.O. Box 7126, Albany, New York 12224.

(2) "General Design Criteria for Surface and Ground Water Supplies", 1984, published by the Kentucky Division of Water, Frankfort Office Park, 14 [~~18~~] Reilly Road, Frankfort, Kentucky 40601.

(3) "Guidelines for Conducting Stream Studies for Wastewater Discharges Proposed Within Five Miles Upstream from Public Water Supply Sources or From the Location of Public Water Supply Intakes Within Five Miles Downstream from Wastewater Discharges" 1983, published by the Kentucky Division of Water, Frankfort Office Park, 14 [~~18~~] Reilly Road, Frankfort, Kentucky 40601.

E. DOUGLAS STEPHAN, Commissioner
PHILLIP J. SHEPHERD, Secretary

APPROVED BY AGENCY: April 14, 1994

FILED WITH LRC: April 15, 1994 at 11 a.m.

PUBLIC HEARING: A public hearing to receive comments on this proposed regulation has been scheduled for Wednesday, May 25, 1994 at 1:30 p.m. (ET), in the Auditorium of the State Office Building, Frankfort, Kentucky. Individuals interested in being heard at this hearing shall notify John T. Smither in writing at the address noted below by May 20, 1994, of their intent to attend the hearing and be heard. If no notification of intent to attend the hearing and be heard is received by that date, the hearing may be canceled. This hearing is open to the public. Any person wishing to be heard will be given an opportunity to comment on the proposed regulation. Persons testifying at the hearing are requested to provide the Cabinet with a written copy of their testimony, if available. A transcript of the hearing may not be made unless a written request for a transcript is made at least five (5) days before the hearing. If you do not wish to be heard at the public hearing, you may submit written comments on the proposed regulation. Written comments must be received by John T. Smither at the address below no later than the close of business, (4:30 p.m. (ET)) May 25, 1994. The Natural Resources and Environmental Protection Cabinet does not discriminate on the basis of race, color, national origin, sex, religion, age, or disability. The meeting facility is accessible to people with disabilities. The Cabinet will provide, upon request, reasonable accommodations including auxiliary aids and services necessary to afford individuals with a disability an equal opportunity to participate in all services, programs, and activities. If an interpreter or other auxiliary aid or service is needed, contact Mr. Smither at the address below before May 20, 1994 between 8 a.m. and 4:30 p.m. (ET).

CONTACT PERSON: John T. Smither, Manager, Drinking Water Branch, Division of Water, Department for Environmental Protection, 14 Reilly Road, Frankfort, Kentucky 40601, (502) 564-3410.

REGULATORY IMPACT ANALYSIS

Agency Contact: John T. Smither

(1) Type and number of entities affected: The amendments to this regulation will affect approximately 918 public and semipublic water systems.

(a) Direct and indirect costs or savings to those affected: The amendments to this regulation will clarify disinfection requirements in public water system distribution systems, take out implementation language for turbidity requirements since those requirements will have been fully implemented by the time this regulation takes effect, and incorporate additional reporting requirements for the Cabinet as a result of Federal Regulations. The amendments will also require public water systems to notify the Cabinet when boil water notices or advisories are issued at the systems initiative and will require Cabinet permission to lift such notice. The amendment after hearing to this regulation will advise that water be boiled three minutes instead of two.

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: The amendments to this regulation will require the Cabinet to submit additional reports to the Environmental Protection Agency, specifically, data related to Phase II and Phase V chemical tests from Public Water Systems and lead and copper data generated by public water systems. They will also require public water systems to notify the Cabinet when a boil water notice or advisory is issued.

(2) Effects on the promulgating administrative body: The amendments to this regulation will require the Cabinet to maintain and submit to EPA data relating to Phase II and Phase V chemical testing and lead and copper testing.

(a) Direct and indirect costs or savings: Additional time to handle additional data will be required. It is expected that this additional data management can be handled by current staff.

1. First year: Additional data will need to be maintained and submitted to EPA.

2. Continuing costs or savings: These reports will be on-going from year-to-year. However, not all public water systems will submit data in the same year.

3. Additional factors increasing or decreasing costs: No other factors will increase or decrease costs.

(b) Reporting and paperwork requirements: The data management will be done through computer generated reports which are already maintained and submitted to EPA through the Federal Reporting and Data System (FRDS). Additional data will be added to this system.

(3) Assessment of anticipated effect on state and local revenues: This amendment is not expected to impact state or local revenues.

(4) Assessment of alternative methods; reasons why alternatives were rejected: These reports are required by Federal Regulation; other methods of reporting would be unacceptable to EPA. Other amendments to this regulation are simply cleanups of existing language.

(5) Identify any statute, administrative regulation or government policy which may be in conflict, overlapping, or duplication: No statute, regulation, or policy conflicts, overlaps, or duplicates this regulation.

(a) Necessity of proposed regulation if in conflict: No regulation conflicts.

(b) If in conflict, was effort made to harmonize the proposed administrative regulation with conflicting provisions: No conflict exists.

(6) Any additional information or comments:

TIERING: Was tiering applied? Yes. Although the amendments to this regulation are not tiered, this regulation is tiered to take into consideration different sizes and types of public water systems.

FISCAL NOTE ON LOCAL GOVERNMENT

1. Does this administrative regulation relate to any aspect of a local government, including any service provided by that local government? Yes

2. State what unit, part or division of local government this administrative regulation will affect. This regulation relates to public water systems. Local governments frequently own or operate public water systems.

3. State the aspect or service of local government to which this administrative regulation relates. This regulation relates to the provision of potable drinking water.

4. Estimate the effect of this administrative regulation on the expenditures and revenues of a local government for the first full year the regulation is to be in effect. If specific dollar estimates cannot be determined, provide a brief narrative to explain the fiscal impact of the administrative regulation.

Revenues (+/-): None

Expenditures (+/-): None

Other Explanation: This regulation contains only housekeeping amendments and incorporates certain federal requirements for the Cabinet's recordkeeping and reporting. Provisions of this regulation require certain reports be submitted to the Cabinet by public water systems, which are often owned by local governments. However, these reports are unlikely to affect state or local revenues since costs are usually offset by fees for water service paid by the consumer. A local government could, however, choose to absorb these costs.

FEDERAL MANDATE ANALYSIS COMPARISON

1. Federal statute or regulation constituting the federal mandate. 40 CFR 142.14 and 40 CFR 142.15 as amended at 56 Federal Register 3595 January 30, 1991 and 56 Federal Register 26562, June 7, 1991 establish certain minimum requirements for implementation of the federal Safe Drinking Water Act (SDWA). The SDWA does not require states to adopt the federal program, so there is no federal mandate. It does authorize states to apply for program delegation. This eliminates the need for dual federal and state programs.

2, State compliance standards. This regulation incorporates without change certain federal requirements for recordkeeping and reporting. Other amendments in this regulation are for clarification or housekeeping purposes unrelated to federal requirements.

3. Minimum or uniform standards contained in the federal mandate. 40 CFR 142.14 and 40 CFR 142.15 provide reporting and recordkeeping requirements for primacy agencies enforcing the Safe Drinking Water Act.

4. Will this administrative regulation impose stricter requirements, or additional or different responsibilities or requirements, than those required by the federal mandate? There is no federal mandate to implement the federal SDWA. The Cabinet has implemented its state statutory authority in adopting this regulation.

5. Justification for the imposition of the stricter standard, or additional or different responsibilities or requirements. The standards are incorporated without change.

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

401 KAR 8:040. Laboratory certification.

RELATES TO: KRS Chapter 224, 40 CFR 141.28

STATUTORY AUTHORITY: KRS 224.10-100, 224.10-110, PL 93-523, The Safe Drinking Water Act, as amended in 1986 and by the Lead Contamination and Control Act of 1988, PL 100-572, 42 USCA 300f, 300g, 300j

NECESSITY AND FUNCTION: KRS Chapter 224.10-110 directs the cabinet to enforce the statutes and administrative [~~rules and~~] regulations adopted by the secretary for the regulation and control of the purification of water for public and semipublic use. The Safe Drinking Water Act, as amended by the Safe Drinking Water Act Amendments of 1986, provides for primary enforcement responsibility by states that have adopted regulations "no less stringent than the national primary drinking water regulations", as well as meeting other criteria stipulated by the Act. The Commonwealth of Kentucky has accepted and is currently exercising such primary enforcement responsibility. This administrative regulation provides procedures whereby commercial or water system laboratories may be certified to test for various contaminant groups or constituents within a contaminant group.

Section 1. Laboratory Certification. [~~Certification of laboratories will be performed by~~] The U.S. Environmental Protection Agency or the cabinet may certify [~~for~~] all public water systems or commercial laboratories performing analyses for public water systems. Certification may be for one (1) or more contaminant groups or for a single constituent within a contaminant group. Each contaminant group requires a different certification, but different certifications may be accomplished during one (1) inspection.

Section 2. Application. Laboratories which desire certification shall submit a written request for the [~~such~~] certification to the cabinet. The cabinet may [~~will provide application forms and~~] request other information necessary to furnish the cabinet with the data needed to determine suitability for certification.

Section 3. Standards. Laboratories shall be certified in accordance with the "Manual for the Certification of Laboratories Analyzing Drinking Water," incorporated in Section 11 [~~14~~] of this administrative regulation, and other stipulations contained in this administrative regulation.

Section 4. Performance Evaluations. [~~Performance evaluation (PE) samples may be required by the cabinet for certification or for maintenance of certification.~~] For laboratories certified, or for those laboratories seeking certification to conduct chemical or bacteriological analyses, performance evaluations shall be performed.

Section 5. Certification of laboratories are performed by the cabinet for all public water system laboratories or commercial laboratories performing analyses for public water systems. Certifications will be performed on an annual basis with fees payable as set forth in 401 KAR 8:050.

Section 6. Public Water System Laboratories. Public water systems may establish their own laboratories. These laboratories shall be properly certified and shall maintain annual certification. Failure to achieve or maintain annual certification shall not relieve the public water system of the responsibility for reporting results of the required analyses from a certified laboratory.

Section 7. Requirements. Maintenance of certification shall be dependent on the following factors:

(1) Submittal of routine results. Except as provided in subsection (4) of this section, results of analyses performed in certified laboratories by and for public water systems shall be submitted to the cabinet by the tenth of the month following the specified testing period for which the samples were taken and shall be submitted to the public water system as soon as possible. The public water system is responsible for this reporting requirement.

(2) Performance evaluation. Performance evaluation (PE)

samples shall be analyzed and the results submitted to the cabinet at the cabinet's request, not to exceed twice a year, unless the cabinet has reason to believe that quality assurance at a lab may be questionable.

(3) Deviations. Any deviation from accepted practice, listed on a report resulting from an on-site inspection, shall be corrected. A written explanation of the [~~such~~] deviation and steps taken to correct it shall be submitted to the cabinet within thirty (30) days of the issuance of the inspection report.

(4) Violations. The laboratory shall report any violation of maximum contaminant levels or other violation of tier one violations, as explained in 401 KAR 8:070, to the public water system and the cabinet within twenty-four (24) hours of sample analysis. The public water system shall begin check sampling within twenty-four (24) hours of notification of the violation.

(5) Twenty-four (24) hour call. Laboratories shall make provision for a twenty-four (24) hour emergency testing service.

(6) Minimum microbiological requirements. Laboratories certified to perform microbiological testing shall run a minimum of twenty (20) microbiological samples per month. New laboratories shall meet this standard within six (6) months of certification. Any significant deviation from this standard may result in decertification.

Section 8. Right of Entry. The certified lab shall permit the cabinet to conduct on-site surveys during normal business hours, without prior notification.

Section 9. Revocation of certification and downgrading of certification shall be in accordance with the procedures set forth in the "Manual for the Certification of Laboratories Analyzing Drinking Water" incorporated in Section 11 of this administrative regulation. Laboratories which have been notified of a change of certification shall, within seventy-two (72) hours, notify public water systems which the laboratory serves, of the change in certification status and any impact that change could have on the public water system. Laboratories may, with permission of the cabinet, and after notice to the public water system, fulfill their obligations to public water systems to provide monitoring reports by contracting with a certified laboratory.

Section 10. Recognition of Out-of-state Laboratories. The cabinet may recognize laboratories outside of Kentucky upon submission of proof of Environmental Protection Agency certification, certification by a state having primary enforcement responsibility for the provisions of the Safe Drinking Water Act, or such other proof as the cabinet may require. Any Kentucky water system may enter into a contract with a certified out-of-state laboratory, if reporting time intervals and capabilities are maintained. If on-site inspection is necessary for certification of out-of-state laboratories, the laboratories shall bear the cost.

Section 11. All analyses required by 401 KAR 8:010 through 8:700, inclusive, shall be performed in a certified laboratory and shall be in accordance with methods approved for drinking water by the United States Environmental Protection Agency (US EPA) or by the cabinet. The following documents are incorporated by reference, and are available for inspection and copying subject to copyright laws, between 8 a.m. and 4:30 p.m., Monday through Friday, excluding state holidays, at the Division of Water, 14 [~~18~~] Reilly Road, Frankfort Office Park, Frankfort, Kentucky 40601:

(1) Standard Methods for the Examination of Water and Wastewater, 16th Edition, 1985, prepared and jointly published by the American Public Health Association, the American Water Works Association, and the Water Pollution Control Federation. This publication is printed, distributed and may be obtained by contacting the Publication Office, American Public Health Association, 1015 15th Street NW, Washington, D.C. 20005.

(2) "Manual for the Certification of Laboratories Analyzing Drinking Water," EPA 814B-92-002, September 1992 [~~570/9-90/008, April 1990~~], U.S. EPA, Office of Drinking Water, Washington, D.C. This publication may be obtained through the division.

[~~Section 12. Severability. If any provision of this regulation is set aside by a court of competent jurisdiction, the remainder of this regulation remains in effect.~~]

E. DOUGLAS STEPHAN, Commissioner
PHILLIP J. SHEPHERD, Secretary
APPROVED BY AGENCY: April 14, 1994
FILED WITH LRC: April 15, 1994 at 11 a.m.

PUBLIC HEARING: A public hearing to receive comments on this proposed regulation has been scheduled for Wednesday, May 25, 1994 at 1:30 p.m. (ET), in the Auditorium of the State Office Building, Frankfort, Kentucky. Individuals interested in being heard at this hearing shall notify John T. Smither in writing at the address noted below by May 20, 1994, of their intent to attend the hearing and be heard. If no notification of intent to attend the hearing and be heard is received by that date, the hearing may be canceled. This hearing is open to the public. Any person wishing to be heard will be given an opportunity to comment on the proposed regulation. Persons testifying at the hearing are requested to provide the cabinet with a written copy of their testimony, if available. A transcript of the hearing may not be made unless a written request for a transcript is made at least five (5) days before the hearing. If you do not wish to be heard at the public hearing, you may submit written comments on the proposed regulation. Written comments must be received by John T. Smither at the address below no later than the close of business, (4:30 p.m. (ET)) May 25, 1994. The Natural Resources and Environmental Protection Cabinet does not discriminate on the basis of race, color, national origin, sex, religion, age, or disability. The meeting facility is accessible to people with disabilities. The cabinet will provide, upon request, reasonable accommodations including auxiliary aids and services necessary to afford individuals with a disability an equal opportunity to participate in all services, programs, and activities. If an interpreter or other auxiliary aid or service is needed, contact Mr. Smither at the address below before May 20, 1994 between 8 a.m. and 4:30 p.m. (ET).

CONTACT PERSON: John T. Smither, Manager, Drinking Water Branch, Division of Water, Department for Environmental Protection, 14 Reilly Road, Frankfort, Kentucky 40601, (502) 564-3410.

REGULATORY IMPACT ANALYSIS

Agency Contact: John T. Smither

(1) Type and number of entities affected: This regulation affects approximately 91 certified laboratories as well as an unknown number of laboratories which may in the future wish to be certified to provide services to public water systems in Kentucky.

(a) Direct and indirect costs or savings to those affected: The amendment to this regulation simply incorporates EPA's latest laboratory certification manual and clarifies that certification for microbiological labs outside Kentucky requires an on-site visit at the laboratories' expense. No direct costs to labs or the cabinet are anticipated as a result of this amendment. Some additional expendables may have to be purchased with costs passed to customers. Performance evaluations will now be required for bacteriological certification, although the cabinet has previously had authority to require such evaluations.

1. First year: No costs or savings are anticipated.

2. Continuing costs or savings: No costs or savings are anticipated.

3. Additional factors increasing or decreasing costs (note any effects upon competition): No other factors will increase or decrease costs, and this amendment will have no effect on competition.

(b) Reporting and paperwork requirements: No additional

reporting or paperwork requirements are anticipated.

(2) Effects on the promulgating administrative body: This amendment will have no effect on the promulgating administrative body.

(a) Direct and indirect costs or savings: No direct or indirect cost or savings are expected.

1. First year: No costs or savings are expected.

2. Continuing costs or savings: No costs or savings are expected.

3. Additional factors increasing or decreasing costs: No other factors will increase or decrease costs.

(b) Reporting and paperwork requirements: This amendment will not change reporting or paperwork requirements.

(3) Assessment of anticipated effect on state and local revenues: This amendment is not expected to affect state or local revenues.

(4) Assessment of alternative methods; reasons why alternatives were rejected: The amendments to this regulation incorporate the latest EPA manual for certification of laboratories which run tests for public water systems and clarify requirements for laboratories outside Kentucky seeking microbiological certification. Laboratories which do testing for public water systems shall be certified in accordance with EPA requirements. No other laboratory certification manual for this purpose is available, and on-site visits are necessary for microbiological certification.

(5) Identify any statute, administrative regulation or government policy which may be in conflict, overlapping, or duplication: No statute, regulation, or policy conflicts, overlaps, or duplicates with this regulation.

(a) Necessity of proposed regulation if in conflict: No conflict exists.

(b) If in conflict, was effort made to harmonize the proposed administrative regulation with conflicting provisions: No conflict exists.

(6) Any additional information or comments:

TIERING: Was tiering applied? Yes. Laboratories may be certified for testing some contaminants and not others; i.e. a laboratory may run bacteriological tests but not chemical.

FEDERAL MANDATE ANALYSIS COMPARISON

1. Federal statute or regulation constituting the federal mandate. 40 CFR Part 141 provides that laboratories conducting analysis for compliance with the provisions of that regulation be certified either by the Environmental Protection Agency or by a central laboratory certified in the state by EPA for such purpose; thereby establishing certain minimum requirements for implementation of the federal Safe Drinking Water Act (SDWA). The SDWA does not require states to adopt the federal program, so there is no federal mandate. It does authorize states to apply for program delegation. This eliminated the need for dual federal and state programs.

2. State compliance standards. The cabinet requires laboratories conducting analysis for compliance with 401 KAR Chapter 8 to be certified by the cabinet or EPA.

3. Minimum or uniform standards contained in the federal mandate. The Environmental Protection Agency publishes a manual of laboratory practices for certification of laboratories.

4. Will this administrative regulation impose stricter requirements, or additional or different responsibilities or requirements, than those required by the federal mandate? There is no federal mandate to implement the federal SDWA. The cabinet has implemented its state statutory authority in adopting this regulation.

5. Justification for the imposition of the stricter standard, or additional or different responsibilities or requirements. There is no stricter standard.

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

401 KAR 8:060. Variances and exemptions.

RELATES TO: KRS Chapter 224, 21 CFR 102.35, 110, 129 (1993), 40 CFR Part 142 (1993)

STATUTORY AUTHORITY: KRS 224.10-100, 224.10-110, PL 93-523, The Safe Drinking Water Act, as amended in 1986, and by the Lead Contamination and Control Act of 1988, 42 USCA 300f, 300g, 300j, 21 CFR 103.35, 110, 129 (1993)

NECESSITY AND FUNCTION: KRS 224.10-110 directs the cabinet to enforce administrative [~~rules and~~] regulations adopted by the secretary for the regulation and control of the purification of water for public and semipublic use. The Safe Drinking Water Act, as amended by the Safe Drinking Water Act Amendments of 1986, provides for primary enforcement responsibility by states that have adopted regulations "no less stringent than the national primary drinking water regulations", as well as meeting other criteria stipulated by the Act. The Commonwealth of Kentucky has accepted and is currently exercising the [~~such~~] primary enforcement responsibility. This administrative regulation provides for variances and exemptions from drinking water regulations which may be granted by the cabinet. It lists the requirements for applications for variances and exemptions and the conditions for approval or denial.

Section 1. Variances. (1) When granted. The cabinet may grant variances to the maximum contaminant levels in 401 KAR 8:010 through 8:700, inclusive, upon its finding that:

(a) Because of characteristics of the raw water sources which are reasonably available to the system, the system cannot meet the applicable maximum contaminant levels after application of the best available technology, treatment techniques, or other means, as prescribed by 401 KAR 8:010 through 8:700, inclusive; and

(b) The granting of a variance will not result in an unreasonable risk to the health of any person. A variance may also be granted from the requirements as to treatment techniques contained in 401 KAR 8:010 through 8:700, inclusive, if the public water system applying for the variance has demonstrated that because of the nature of the raw water source of the [~~such~~] system, the [~~such~~] treatment techniques are not necessary to protect the health of persons. A variance granted under this paragraph shall be conditioned upon monitoring or other requirements prescribed by the cabinet.

(2) Variance request. A supplier of water may request a variance by submitting a written request to the cabinet. The request shall contain all the information and data required by the cabinet, concerning the biological and chemical makeup of the raw water, the treatment techniques which are in place, and a complete analysis of the finished water, design criteria of the plant and any other information pertinent to the variance. The request shall include a proposed compliance schedule and a statement that the system shall perform monitoring and other requirements prescribed by the cabinet as a condition to the variance. An approved compliance schedule (including increments of progress), an approved monitoring plan, and any other requirements of the cabinet shall be in place before a variance is granted. The proposed compliance schedule shall include the date by which arrangement for alternative raw water source or improvement of existing raw water source will be completed, the date of initiation of the connection of the alternative raw water source or improvement of existing raw water source, and the date by which final compliance is to be achieved.

(3) Factors considered. The cabinet may consider such factors as the availability and effectiveness of treatment techniques, costs, and other economic considerations, such as the cost of implementing

other treatment techniques, improving source water quality, or using an alternate source. In considering a variance request to a required treatment technique, the cabinet may consider such factors as the quality of the water source and any source protection measures provided by the water system.

(4) Public hearing.

(a) Before a variance and compliance schedule will be granted, the applicant will notify the public of the opportunity for a public hearing on the variance and compliance schedule. The notice shall be published by the applicant at the time the variance request and compliance schedule are filed with the cabinet. Publication shall be in a manner which conforms to 401 KAR 8:070, Section 1(1)(a), (b) or (e), [~~or~~] (2), or (3), whichever is applicable to the public water system. Repeat notices are not necessary. A copy of the notice shall be submitted to the cabinet within one (1) week of publication. The notice shall grant a period of at least thirty (30) days during which any person may request that a public hearing be held, and shall contain a summary of the proposed variance and schedule of compliance.

(b) Requests for public hearing may be submitted to the cabinet and shall include the name, address, and telephone number of the individual or organization requesting the hearing, along with the signature of the person or responsible official of the organization requesting the hearing.

(c) A hearing convened pursuant to this subsection will be conducted before persons designated by the cabinet.

(d) If a hearing is requested or if the cabinet determines a hearing is desirable, the cabinet will notify the public water system of the time and place of the hearing. The public water system shall notify the public of the time and place of the hearing, at least fifteen (15) days prior to the hearing, in a manner consistent with paragraph (a) of this subsection.

(e) The variance and compliance schedule will become effective when the cabinet confirms or revises the variance and compliance schedule, or will not become effective if the cabinet denies the variance and compliance schedule. The cabinet's decision will be based upon the hearing recommendations, if any, and other relevant information.

(5) Time limitations. No variance and compliance schedule shall be for a period exceeding one (1) year, but may be renewed in one (1) year increments with opportunity for public hearing on the renewals, in accordance with subsection (4) of this section.

Section 2. Exemptions. (1) When granted. The cabinet may exempt a public water system from any requirement respecting a maximum contaminant level or any treatment technique requirement, or both, of 401 KAR 8:010 through 8:700, inclusive, upon a determination by the cabinet that, due to compelling factors, which may include economic factors:

(a) The public water system is unable to comply with the [~~such~~] contaminant level or treatment technique requirement;

(b) The public water system was in operation on the effective date of the [~~such~~] contaminant level or treatment technique requirement, or, if the system was not in operation by that date, no reasonable alternative source of drinking water is available to the [~~such~~] new public water systems; and

(c) The exemption does not result in an unreasonable risk to health.

(2) Exemption request. A supplier of water may request an exemption from any requirement of 401 KAR 8:010 through 8:700, inclusive, respecting a maximum contaminant level or treatment technique requirement, or both, by submitting a written request for exemption to the cabinet. The request shall specify the nature and duration of exemption requested; relevant analytical results of water quality sampling of the system, including samples of raw and finished water and samples required by 401 KAR 8:010 through 8:700, inclusive; an explanation of the compelling factors, such as time or economic factors which prevent the system from achieving compliance; and other information pertinent to the application, including a proposed compliance schedule.

(3) Consideration of an exemption request. In its consideration of an exemption request, the cabinet may consider [~~such~~] factors such as the construction, installation or modification of treatment equipment or systems; the time needed to put into operation a new treatment facility to replace an existing system which is not in compliance; and the economic feasibility of compliance.

(4) Compliance schedule. An exemption shall not be granted if the request does not include a compliance schedule, including increments of progress, for each contaminant level or treatment technique for which the exemption is granted. The compliance schedule may include control measures or other requirements of the cabinet to maintain the validity of the exemption.

(5) Public hearing. No exemption and compliance schedule (including an extension of any existing exemption and compliance schedule) shall become effective without the opportunity for a public hearing. Procedures for requesting and conducting a public hearing for an exemption shall be the same as those for variances as set forth in Section 1(4) of this administrative regulation.

(6) Time limitations. Exemptions shall not exceed twelve (12) months. The cabinet may extend an exemption for up to three (3) years, if it finds that the public water system must install capital improvements to comply and cannot complete such improvements without an extension; or that the water system has entered into an enforceable agreement to become part of another public water system; and if it finds that the water system is taking all practicable steps to comply with the administrative regulations. Systems serving fewer than 500 service connections may receive further renewals in increments of two (2) years, if the system needs financial assistance to comply and is taking all practical steps to meet the requirements of 401 KAR 8:010 through 8:700, inclusive.

Section 3. Disposition of a Variance or Exemption Request. The cabinet will act on any variance or exemption request submitted to it, within (90) days of receipt of the request.

(1) Variance or exemption denied. If the cabinet makes a preliminary determination to deny the application for a variance or exemption, it will notify the applicant of its intention to issue a denial. The notice will include a statement of reasons for the proposed denial and will offer the applicant an opportunity to present, within thirty (30) days of receipt of the notice, additional information or argument to the cabinet. The cabinet will make a final determination to grant or deny the request within thirty (30) days after receiving any [~~such~~] additional information or argument. If no additional information or argument is submitted by the applicant, the application shall be denied.

(2) Variance or exemption granted:

(a) If the cabinet proposes to grant a variance or exemption, it will notify the applicant of its preliminary determination. The notice shall [~~will~~] identify the variance or exemption, the facility covered, and the conditions under which the variance or exemption may be terminated; and will specify the proposed termination date of the variance or exemption, unless otherwise terminated.

(b) No variance or exemption shall be effective until the opportunity is provided for a public hearing on the proposed variance or exemption.

Section 4. Termination of a Variance or Exemption. Any variance or exemption granted by the cabinet pursuant to this administrative regulation shall terminate at the earliest of the following dates:

(1) The termination date specified at the time the variance or exemption is issued;

(2) The date the system comes into compliance with 401 KAR 8:010 through 8:700, inclusive;

(3) The date the cabinet determines that the system has failed to comply with the finalized schedule;

(4) The date the cabinet determines that the raw water source

requires a specified treatment technique to protect the health of persons served (applicable to a variance only); and

(5) The date the cabinet finds that the water system has failed to comply with monitoring and other requirements prescribed by the cabinet as a condition to the granting of the variance (applicable to a variance only).

Section 5. Best Available Technology for Variances and Exemptions from the Maximum Contaminant Levels for Organic and Inorganic Chemicals. (1) The following are the best available technologies for achieving compliance with the maximum contaminant levels for organic and volatile organic chemicals listed in 401 KAR 8:400 and 8:420:

	BEST AVAILABLE TECHNOLOGIES		
CONTAMINANT	PTA[1]	GAC[2]	OX[3]
(a) Benzene	X	X	
(b) Carbon tetrachloride	X	X	
(c) 1,2-Dichloroethane	X	X	
(d) Trichloroethylene	X	X	
(e) para-Dichlorobenzene	X	X	
(f) 1,1-Dichloroethylene	X	X	
(g) 1,1,1-Trichloroethane	X	X	
(h) Vinyl chloride	X		
(i) cis-1,2-Dichloroethylene	X	X	
(j) 1,2-Dichloropropane	X	X	
(k) Ethylbenzene	X	X	
(l) Monochlorobenzene	X	X	
(m) o-Dichlorobenzene	X	X	
(n) Styrene	X	X	
(o) Tetrachloroethylene	X	X	
(p) Toluene	X	X	
(q) trans-1,2-Dichloroethylene	X	X	
(r) Xylenes (total)	X	X	
(s) Alachlor	X	X	
(t) Aldicarb	X		
(u) Aldicarb sulfoxide		X	
(v) Aldicarb sulfone		X	
(w) Atrazine	X		
(x) Carbofuran		X	
(y) Chlordane		X	
(z) Dibromochloropropane	X	X	
(aa) 2,4-D		X	
(bb) Ethylene dibromide	X	X	
(cc) Heptachlor		X	
(dd) Heptachlor epoxide		X	
(ee) Lindane	X		
(ff) Methoxychlor		X	
(gg) PCBs		X	
(hh) Pentachlorophenol		X	
(ii) Toxaphene		X	
(jj) 2,4,5-TP	X		
(kk) Benzo(a)pyrene		X	
(ll) Dalapon	X		
(mm) Dichloromethane	X		
(nn) Di(2-ethylhexyl)adipate	X	X	
(oo) Di(2-ethylhexyl)phthalate		X	
(pp) Dinoseb	X		
(qq) Diquat		X	
(rr) Endothall		X	
(ss) Endrin	X		
(tt) Glyphosate			X
(uu) Hexachlorobenzene			X
(vv) Hexachlorocyclopentadiene	X	X	
(ww) Oxamyl (Vydate)		X	
(xx) Picloram	X		
(yy) Simazine	X		
(zz) 1,2,4-Trichlorobenzene	X	X	
(aaa) 1,1,2-Trichloroethane	X	X	
(bbb) 2,3,7,8-TCDD (Dioxin)		X	

[1] Packed Tower Aeration
[2] Granular Activated Carbon
[3] Oxidation (Chlorination or Ozonation)

(2) The following are hereby identified as the best technology, treatment techniques, or other means available for achieving compliance with the maximum contaminant levels for the inorganic chemicals listed in 401 KAR 8:250:

CHEMICAL NAME	BAT
Antimony	2,7
Asbestos	2,3,8
Barium	5,6,7,9
Beryllium	1,2,5,6,7
Cadmium	2,5,6,7
Chromium	2,5,6[2],7
Cyanide	5,7,10
Mercury	2[1],4,6[1],7[1]
Nickel	5,6,7
Nitrate	5,7,9
Nitrite	5,7
Selenium	1,2[3],6,7,9
Thallium	1,5

[1] BAT only if influent Hg concentrations less than or equal to ten (10) microgram/1iter.
[2] BAT for Chromium III only.
[3] BAT for Selenium IV only.

Key to BATS in Table

1 = Activated Alumina
2 = Coagulation or Filtration, except for systems with less than 500 service connections
3 = Direct and Diatomite Filtration
4 = Granular Activated Carbon
5 = Ion Exchange
6 = Lime Softening, except for systems with less than 500 service connections
7 = Reverse Osmosis
8 = Corrosion Control
9 = Electrodialysis
10 = Chlorine
11 = Ultraviolet

(3) Community water systems and nontransient noncommunity water systems shall install and use any treatment method identified in subsection (1) and (2) of this section as a condition for granting a variance except as provided in subsection (4) of this section. If, after the system's installation of the treatment method, the system cannot meet the MCL, that system shall be eligible for a variance.

(4) If a system can demonstrate through comprehensive engineering assessments, which may include pilot plant studies, that the treatment methods identified in subsections (1) and (2) of this section would only achieve a de minimis reduction in contaminants, the cabinet may issue a schedule of compliance that requires the system being granted the variance to examine other treatment methods as a condition of obtaining the variance.

(5) If the cabinet determines that a treatment method identified in subsection (4) of this section is technically feasible, the cabinet may require the system to install and use that treatment method in connection with a compliance schedule issued under the provisions of this administrative regulation. The cabinet's determination shall be based upon studies by the system and other relevant information.

(6) The cabinet may require a public water system to use bottled water, point-of-use devices, point-of-entry devices or other means as a condition of granting a variance or an exemption from the requirements of 401 KAR 8:250, 8:400, and 8:420, to avoid an unreasonable risk to health. A public water system may be required to use bottled water and point-of-use devices or other means, but not point-of-entry devices, as a condition for granting an exemption from corrosion control treatment requirements for lead and copper in 401 KAR 8:300 to avoid an unreasonable risk to health. A public water system may be required to use point-of-entry devices as a condition for granting an exemption from the source water treatment and lead service line replacement requirements for lead and copper under 401 KAR 8:300 to avoid an unreasonable risk to health.

(7) Public water systems that use bottled water as a condition for receiving a variance or an exemption from the requirements of 401 KAR 8:250, 8:400, and 8:420, or an exemption from the requirements of 401 KAR 8:300 shall meet the requirements specified in either paragraph (a) or (b) of this subsection and paragraph (c) of this subsection:

(a) The public water system shall develop and put in place a monitoring program that has been approved by the cabinet and that provides reasonable assurances that the bottled water meets all maximum contaminant levels. The public water system shall monitor a representative sample of the bottled water for all contaminants regulated under 401 KAR 8:250, 8:400, and 8:420 during the first three (3) month period that it supplies the bottled water to the public, and annually thereafter. The public water system shall submit results of the monitoring program to the cabinet annually.

(b) The public water system shall obtain a certification from the bottled water company that the bottled water supplied has been taken from an "approved source", as defined in 21 CFR 129.3(a); the bottled water company has conducted monitoring in accordance with 21 CFR 129.80 (g)(1) through (3); and the bottled water does not exceed any maximum contaminant levels or quality limits as set out in 21 CFR 103.35, 110, and 129 (1993) all hereby incorporated without change. The public water system shall provide the certification to the cabinet the first quarter after it supplies bottled water and annually thereafter.

(c) The public water system is fully responsible for the provision of sufficient quantities of bottled water to every person supplied by the public water system via door-to-door bottled water delivery.

(8) Public water systems that use point-of-use or point-of-entry devices as a condition for obtaining a variance or an exemption from National Primary Drinking Water Regulations shall meet the following requirements:

(a) The public water system shall operate and maintain the point-of-use or point-of-entry treatment system.

(b) Before point-of-use or point-of-entry devices are installed, the public water system shall obtain cabinet approval of a monitoring plan which ensures that the devices provide health protection equivalent to that provided by central water treatment.

(c) The public water system shall apply effective technology under a cabinet-approved plan and maintain the microbiological safety of the water.

(d) The public water system shall obtain adequate certification of performance, field testing, and, if not included in the certification process, a rigorous engineering design review of the point-of-use and point-of-entry devices.

(e) The public water system shall consider in the design and application of the point-of-use or point-of-entry device, the potential for increasing concentrations of heterotrophic bacteria in water treated with activated carbon. The cabinet may require the public water system to utilize frequent backwashing, postcontractor disinfection, and heterotrophic plate count monitoring to ensure that the microbiological safety of the water is not compromised.

(f) The public water system shall assure the cabinet that buildings connected to the system have sufficient point-of-use or point-of-entry devices that are properly installed, maintained, and monitored such that all consumers will be protected.

(g) If the use of a point-of-entry device is a condition for granting an exemption from the treatment requirements for lead and copper under 401 KAR 8:300, the public water system shall assure the cabinet that use of the device will not cause increased corrosion of lead and copper bearing materials located between the device and the tap that could increase contaminant levels at the tap. [~~Severability. If any provision of this regulation is set aside by a court of competent jurisdiction, the remainder of this regulation remains in effect.~~]

E. DOUGLAS STEPHAN, Commissioner
PHILLIP J. SHEPHERD, Secretary
APPROVED BY AGENCY: April 14, 1994
FILED WITH LRC: April 15, 1994 at 11 a.m.

PUBLIC HEARING: A public hearing to receive comments on this proposed regulation has been scheduled for Wednesday, May 25, 1994 at 1:30 p.m. (ET), in the Auditorium of the State Office Building, Frankfort, Kentucky. Individuals interested in being heard at this hearing shall notify John T. Smither in writing at the address noted below by May 20, 1994, of their intent to attend the hearing and be heard. If no notification of intent to attend the hearing and be heard is received by that date, the hearing may be canceled. This hearing is open to the public. Any person wishing to be heard will be given an opportunity to comment on the proposed regulation. Persons testifying at the hearing are requested to provide the cabinet with a written copy of their testimony, if available. A transcript of the hearing may not be made unless a written request for a transcript is made at least five (5) days before the hearing. If you do not wish to be heard at the public hearing, you may submit written comments on the proposed regulation. Written comments must be received by John T. Smither at the address below no later than the close of business, (4:30 p.m. (ET)) May 25, 1994. The Natural Resources and Environmental Protection Cabinet does not discriminate on the basis of race, color, national origin, sex, religion, age, or disability. The meeting facility is accessible to people with disabilities. The cabinet will provide, upon request, reasonable accommodations including auxiliary aids and services necessary to afford individuals with a disability an equal opportunity to participate in all services, programs, and activities. If an interpreter or other auxiliary aid or service is needed, contact Mr. Smither at the address below before May 20, 1994 between 8 a.m. and 4:30 p.m. (ET).

CONTACT PERSON: John T. Smither, Manager, Drinking Water Branch, Division of Water, Department for Environmental Protection, 14 Reilly Road, Frankfort, Kentucky 40601, (502) 564-3410.

REGULATORY IMPACT ANALYSIS

Agency Contact: John T. Smither

(1) Type and number of entities affected: This regulation affects approximately 809 public water systems. This number may vary from month to month.

(a) Direct and indirect costs or savings to those affected: The amendments to this regulation incorporate special requirements for granting a variance or exemption to public water systems for certain organic or inorganic chemical maximum contaminant levels. No variance or exemption has ever been granted or requested. Therefore, no costs or savings are anticipated.

1. First year: No costs or savings are anticipated.

2. Continuing costs or savings: No costs or savings are anticipated.

3. Additional factors increasing or decreasing costs (note any effects upon competition): No costs or savings are anticipated. However, if a public water system were to make a variance or exemption request from a chemical maximum contaminant level, a thorough engineering study of the public water system would be

required. While many factors could affect the cost of such a study, $20,000 to $50,000 would not be an unreasonable estimate. Also, additional costs could be generated by the study (additional treatment applications, for instance) before a variance or exemption would or could be granted.

(b) Reporting and paperwork requirements: If a public water system were to request and receive a variance or exemption, reporting or paperwork requirements could be significant as a condition of receiving the variance or exemption. For instance, additional monitoring could be required with reports submitted to the cabinet on a regular basis. However, no variance or exemption request has ever been made and none is expected.

(2) Effects on the promulgating administrative body: The amendments to this regulation are not expected to have any affect on the promulgating administrative body since no variance or exemption has been requested or granted. Although the current amendments to this regulation would require the cabinet to evaluate a substantial amount of engineering studies if a request were received, much of this information would be required under existing regulatory requirements and is being consolidated in this regulation through these amendments. No request for a variance or exemption is expected.

(a) Direct and indirect costs or savings: No direct or indirect costs or savings are anticipated since no variance or exemption request is anticipated.

1. First year: No costs or savings are anticipated. If a request for a variance or exemption is received, it would likely be an isolated event with any costs in staff time being absorbed by shifting current staff and priorities to absorb them.

2. Continuing costs or savings: No costs or savings are anticipated.

3. Additional factors increasing or decreasing costs: No other factors would increase or decrease costs.

(b) Reporting and paperwork requirements: Should a public water system apply for a variance or exemption, cabinet personnel would have to review engineering studies to determine whether or not a variance or exemption is appropriate. This will require a good deal of reporting and paperwork by both the cabinet and the public water system. No variance or exemption has been requested and none is anticipated.

(3) Assessment of anticipated effect on state and local revenues: No effect on state or local revenue is anticipated.

(4) Assessment of alternative methods; reasons why alternatives were rejected: The amendments to this regulation are a result of changing federal requirements. Alternative methods would not as effectively reflect federal requirements.

(5) Identify any statute, administrative regulation or government policy which may be in conflict, overlapping, or duplication: No statute, regulation, or policy conflicts, or duplicates this regulation. 401 KAR 8:200 & 8:150 contain some additional requirements for a variance or exemption from bacteriological requirements and filtration requirements respectively, but they do not conflict.

(a) Necessity of proposed regulation if in conflict: No conflict exists.

(b) If in conflict, was effort made to harmonize the proposed administrative regulation with conflicting provisions: No conflict exists.

(6) Any additional information or comments: None

TIERING: Was tiering applied? Yes. Public water systems may request variances or exemptions from some or all requirements of this chapter with requirements varying from system to system.

FISCAL NOTE ON LOCAL GOVERNMENT

1. Does this administrative regulation relate to any aspect of a local government, including any service provided by that local government? Yes

2. State what unit, part or division of local government this administrative regulation will affect. This regulation relates to public water systems. Local governments frequently own or operate public water systems.

3. State the aspect or service of local government to which this administrative regulation relates. This regulation relates to the provision of potable drinking water.

4. Estimate the effect of this administrative regulation on the expenditures and revenues of a local government for the first full year the regulation is to be in effect. If specific dollar estimates cannot be determined, provide a brief narrative to explain the fiscal impact of the administrative regulation.

Revenues (+/-): None

Expenditures (+/-): None

Other Explanation: This regulation relates to variances and exemptions from maximum contaminant levels for public water systems. While this regulation could cause public water systems to expend funds to obtain a variance or exemption, any such expenditure would likely be passed through to the consumer of water. However, a public water system owned by a local government could use general revenues to cover costs of operating the public water system, including costs associated with this regulation. No variance or exemption has ever been requested by a public water system or been granted by the cabinet.

FEDERAL MANDATE ANALYSIS COMPARISON

1. Federal statute or regulation constituting the federal mandate. 40 CFR 142.62 as amended at 56 Federal Register 3596 January 30, 1991 and 57 Federal Register 31848 July 17, 1992 establish certain minimum requirements for implementation of the federal Safe Drinking Water Act (SDWA). The SDWA does not require states to adopt the federal program, so there is no federal mandate. It does authorize states to apply for program delegation. This eliminates the need for dual federal and state programs.

2. State compliance standards. The cabinet sets out certain stipulations for granting a variance or exemption from maximum contaminant levels for public water systems.

3. Minimum or uniform standards contained in the federal mandate. 40 CFR 142.62 sets out certain stipulations for granting a variance or exemption from maximum contaminant levels for public water systems.

4. Will this administrative regulation impose stricter requirements, or additional or different responsibilities or requirements, than those required by the federal mandate? There is no federal mandate to implement the federal SDWA. The cabinet has implemented its state statutory authority in adopting this regulation.

5. Justification for the imposition of the stricter standard, or additional or different responsibilities or requirements. The standards are the same.

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

401 KAR 8:070. Public notification.

RELATES TO: KRS Chapter 224, 40 CFR Parts 141, 142, 143.5

STATUTORY AUTHORITY: KRS 224.10-100, 224.10-110, 40 CFR Part 141.32 (1993), [~~as amended by Federal Register 27,556 (1989) and 54 Federal Register 27,527 (1989),~~] 42 USCA 300f, 300g, 300j

NECESSITY AND FUNCTION: KRS 224.10-110 directs the cabinet to enforce administrative [~~rules and~~] regulations adopted by the secretary for the regulation and control of the purification of water for public and semipublic use. The Safe Drinking Water Act, as

amended by the Safe Drinking Water Act Amendments of 1986, provides for primary enforcement responsibility by states that have adopted regulations "no less stringent than the national primary drinking water regulations", as well as meeting other criteria stipulated by the Act. The Commonwealth of Kentucky has accepted and is currently exercising the [~~such~~] primary enforcement responsibility. This administrative regulation relates to notification of the public when these administrative regulations have been violated by a public or semipublic water system. Several new sections of mandatory language have been added to reflect the expanded list of contaminants being regulated. [~~It has been substantially revised to reflect amendments to the Safe Drinking Water Act.~~]

Section 1. Notification for Tier One Violations. The owner or operator of a public or semipublic water system which fails to comply with an applicable maximum contaminant level or treatment technique established by 401 KAR 8:010 through 401 KAR 8:700, inclusive, or which fails to comply with the requirements of a schedule prescribed pursuant to a variance or exemption, shall notify the public in accordance with the requirements of this section. These violations are Tier One violations and may be designated by the cabinet as ordinary or acute, with acute violations representing a class of violation which may represent an immediate threat to the public health, requiring consumers to take special precautions.

(1) Community public water systems. The owner or operator of a community public water system shall provide notice of a Tier One violation in the following manner:

(a) Newspaper. By publication in a daily newspaper of general circulation in the area served by the system as soon as possible, but in no case later than fourteen (14) days after the violation or failure has occurred. If the area served by a public water system is not served by a daily newspaper of general circulation, notice shall instead be given by publication in a weekly newspaper of general circulation serving the area; and

(b) Mail. By mail delivery (by direct mail or with the water bill), or by hand delivery, no later than forty-five (45) days after the violation or failure. The cabinet may waive mail or hand delivery if it determines that the owner or operator of the public water system in violation has corrected the violation or failure within the forty-five (45) day period. The cabinet, if it chooses to issue a waiver, will issue the waiver in writing and within the forty-five (45) day period; and

(c) Acute violation. In addition to the other requirements of this section, for violations of acute Tier One standards the owner or operator of the public water system shall furnish copies of the public notification to radio and television stations serving the area served by the public water system as soon as possible, but in no case later than seventy-two (72) hours after notice of the violation is received by the public water system from the laboratory. The following violations are acute violations:

1. Violations of the maximum contaminant level for total coliforms, if fecal coliforms or E. coli are present in the water distribution system, as provided in 401 KAR 8:200;

2. Violation of the maximum contaminant level for nitrate or nitrite, as provided in 401 KAR 8:250; and

3. Other violations that the cabinet or public water system determines call for special care by the consumer.

(d) Repeat notice. For as long as the violation continues, the owner or operator of the public water system shall give notice at least once every three (3) months by mail delivery (by direct mail or with the water bill) or by hand delivery.

(e) Newspaper not available. Community water systems in an area not served by a daily or weekly newspaper of general circulation may satisfy the requirements of this subsection by giving notice, within fourteen (14) days of the violation or failure, by hand delivery or by continuous posting in conspicuous places within the area served by the system. Posting shall continue for as long as the violation or failure exists. Notice by hand delivery shall be repeated at least once every three (3) months for as long as the violation or failure exists.

(2) Noncommunity public water systems. The owner or operator of noncommunity water systems may comply with the notice requirements of this section by giving notice within seventy-two (72) hours for acute violations or within fourteen (14) days after other violations or failure by hand delivery or by continuous posting in conspicuous places within the area served by the system. Posting shall continue for as long as the violation or failure exists. Notice by hand delivery shall be repeated at least once every three (3) months for as long as the violation or failure exists.

(3) Semipublic. The cabinet may require the owner or operator of semipublic water systems [~~may be required~~] to give notice equivalent to the requirements of noncommunity systems [~~at the discretion of the cabinet~~].

Section 2. Notification for Tier Two Violations. The owner or operator of a public or semipublic water system which fails to perform the monitoring required by 401 KAR 8:010 through 8:700, inclusive, fails to make a report required by 401 KAR 8:010 through 8:700, inclusive, fails to comply with a testing procedure established by 401 KAR 8:010 through 8:700, inclusive, is subject to a variance to 401 KAR 8:010 through 8:700, inclusive, granted by the cabinet, or is subject to an exemption from 401 KAR 8:010 through 8:700, inclusive, granted by the cabinet, shall notify persons served by the system as prescribed in this section. The violation or receipt of a variance or exemption shall be considered a Tier Two category violation.

(1) Community systems. The owner or operator of community public water systems shall give notice of Tier Two violations in the following manner:

(a) Newspaper. Notice of Tier Two violations shall be made by the owner or operator of a community public water system, within three (3) months of the violation or granting of a variance or exemption, by publication in a daily newspaper of general circulation in the area served by the system. If the area served by a public water system is not served by a daily newspaper of general circulation, notice shall instead be given by publication in a weekly newspaper of general circulation serving the area.

(b) Repeat notice. Following the initial notice given under this section, the owner or operator of the public water system shall give notice at least once every three (3) months by mail delivery (by direct mail or with the water bill) or by hand delivery, for as long as the violation exists. Repeat notice of the existence of a variance or exemption shall be given for as long as the variance or exemption remains in effect.

(c) Notice when newspaper not available. The owner or operator of community water systems not being served by a daily or weekly newspaper of general circulation may meet the requirements of paragraphs (a) and (b) of this subsection by giving notice, within three (3) months of the violation or granting of the variance or exemption, by hand delivery or by continuous posting in conspicuous places within the area served by the system. Posting shall continue for as long as the violation exists or a variance or exemption remains in effect. Notice by hand delivery shall be repeated at least once every three (3) months for as long as the violation exists or a variance or exemption remains in effect.

(2) Noncommunity public water systems. The owner or operator of a noncommunity water system may comply with the notice provisions of this section by giving notice, within three (3) months of the violation or the granting of the variance or exemption, by hand delivery or by continuous posting in conspicuous places within the area served by the system. Posting shall continue for as long as the violation exists or the variance or exemption remains in effect. Notice by hand delivery shall be repeated at least once every three (3) months for as long as the violation exists or a variance or exemption remains in effect.

(3) Semipublic. The owner or operator of semipublic water

systems may be compelled to give the notice required of noncommunity systems when public health considerations require it.

(4) Reduction in notification frequency. The cabinet may reduce notification frequency for minor violations when criteria for the reduction have been approved as a program revision, as stipulated by the U.S. Environmental Protection Agency.

Section 3. New Billing Units. The owner or operator of a community water system shall give a copy of the most recent public notice for any outstanding Tier One violation to all new billing units or new hookups prior to, or when service begins.

Section 4. General Content of Public Notices. Each notice required by this administrative regulation shall provide a clear and readily understandable explanation of the violation, potential adverse health effects, the population at risk, the steps that the public water system is taking to correct the violation, the necessity for seeking alternative water supplies, if any, and any preventive measures the consumer should take until the violation is corrected. Each notice shall be conspicuous; shall not contain unduly technical language, unduly small print, or other problems that frustrate the purpose of the notice; and, where appropriate, the notice shall be multilingual. Each notice shall include the name and telephone number of the owner, operator or designee of the public water system as a source of additional information concerning the notice.

Section 5. Proof of Notice. (1) How to submit. Public notices required by this administrative regulation shall be submitted to the cabinet. For newspaper advertisements, a copy of the complete page of the newspaper or newspapers in which the advertisement appeared and the date of its appearance, shall be submitted by the water system. For notices to radio and television media for acute violations, a copy of all material submitted to the radio and television media shall be submitted to the cabinet by the water system, along with an affidavit, signed by the operator or owner of the public water system, stating when and to which radio and television media the notice was given. A copy of notices that are hand delivered, delivered to radio or television media for acute violations, or mailed, shall be mailed to the cabinet by the water system, along with an affidavit signed by the operator or owner of the water system stating that all consumers were notified. Mailing to the cabinet shall take place the same day as hand delivery, delivery to radio or television media, or mailing to the public. If the notice is posted, the owner or operator of the water system shall submit a copy of the notice and an affidavit stating where the notices were placed. All notices to the cabinet shall be addressed to the Division of Water, Drinking Water Branch, Frankfort Office Park, 14 [~~18~~] Reilly Road, Frankfort, Kentucky 40601.

(2) Public notification by the cabinet. The cabinet may give the notice to the public required by this section on behalf of the owner or operator of the public water system. However, the owner or operator of the public water system remains legally responsible for ensuring that the requirements are met.

(3) Failure to submit proof of notice. The cabinet may construe failure to submit proof of notice as evidence that the public water system has failed to notify the public. When the public water system fails to submit proof of notice within thirty (30) days of any requirement for notice, the cabinet may submit the notice to be published, with the cost of publication to be billed to the public water system by the publishing entity. Costs incurred by the cabinet to notify the public, resulting from the failure of the public water system to do so, may be recovered by the cabinet.

Section 6. Mandatory Language for Tier One Violations. Public notice for those contaminants listed in this section shall contain language in addition to the information on potential adverse health effects required by Section 4 of this administrative regulation. The owner or operator of a public water system shall include the language specified below for each contaminant listed in those notices. The following mandatory-health- effects language shall be published intact and may not include inserted material not prescribed by this administrative regulation:

(1) Trichloroethylene. The U.S. Environmental Protection Agency (EPA) sets drinking water standards and has determined that trichloroethylene is a health concern at certain levels of exposure. This chemical is a common metal cleaning and dry cleaning fluid. It generally gets into drinking water by improper waste disposal. This chemical has been shown to cause cancer in laboratory animals such as rats and mice when the animals are exposed at high levels over their lifetimes. Chemicals that cause cancer in laboratory animals also may increase the risk of cancer in humans who are exposed at lower levels over long periods of time. EPA has set forth the enforceable drinking water standard for trichloroethylene at 0.005 parts per million (ppm) to reduce the risk of cancer or other adverse health effects which have been observed in laboratory animals. Drinking water which meets this standard is associated with little to none of this risk and should be considered safe.

(2) Carbon tetrachloride. The U.S. Environmental Protection Agency (EPA) sets drinking water standards and has determined that carbon tetrachloride is a health concern at certain levels of exposure. This chemical was once a popular household cleaning fluid. It generally gets into drinking water by improper waste disposal. This chemical has been shown to cause cancer in laboratory animals such as rats and mice when the animals are exposed at high levels over their lifetimes. Chemicals that cause cancer in laboratory animals also may increase the risk of cancer in humans who are exposed at lower levels over long periods of time. EPA has set the enforceable drinking water standard for carbon tetrachloride at 0.005 parts per million (ppm) to reduce the risk of cancer or other adverse health effects which have been observed in laboratory animals. Drinking water which meets this standard is associated with little to none of this risk and should be considered safe.

(3) 1,2-Dichloroethane. The U.S. Environmental Protection Agency (EPA) sets drinking water standards and has determined that 1,2-dichloroethane is a health concern at certain levels of exposure. This chemical is used as a cleaning fluid for fats, oils, waxes, and resins. It generally gets into drinking water from improper waste disposal. This chemical has been shown to cause cancer in laboratory animals such as rats and mice when the animals are exposed at high levels over their lifetimes. Chemicals that cause cancer in laboratory animals also may increase the risk of cancer in humans who are exposed at lower levels over long periods of time. EPA has set the enforceable drinking water standard for 1,2-dichloroethane at 0.005 parts per million (ppm) to reduce the risk of cancer or other adverse health effects which have been observed in laboratory animals. Drinking water which meets this standard is associated with little to none of this risk and should be considered safe.

(4) Vinyl chloride. The U.S. Environmental Protection Agency (EPA) sets drinking water standards and has determined that vinyl chloride is a health concern at certain levels of exposure. This chemical is used in industry and is found in drinking water as a result of the breakdown of related solvents. The solvents are used as cleaners and degreasers of metals and generally get into drinking water by improper waste disposal. This chemical has been associated with significantly increased risks of cancer among certain industrial workers who were exposed to relatively large amounts of this chemical during their working careers. This chemical has also been shown to cause cancer in laboratory animals when the animals are exposed at high levels over their lifetimes. Chemicals that cause increased risk of cancer among exposed industrial workers and in laboratory animals also may increase the risk of cancer in humans who are exposed at lower levels over long periods of time. EPA has set the enforceable drinking water standard for vinyl chloride at 0.002 parts per million (ppm) to reduce the risk of cancer or other adverse health effects which have been observed in humans and laboratory

animals. Drinking water which meets this standard is associated with little to none of this risk and should be considered safe.

(5) Benzene. The U.S. Environmental Protection Agency (EPA) sets drinking water standards and has determined that benzene is a health concern at certain levels of exposure. This chemical is used as a solvent and degreaser of metals. It is also a major component of gasoline. Drinking water contamination generally results from leaking underground gasoline and petroleum tanks or improper waste disposal. This chemical has been associated with significantly increased risks of leukemia among certain industrial workers who were exposed to relatively large amounts of this chemical during their working careers. This chemical has also been shown to cause cancer in laboratory animals when the animals are exposed at high levels over their lifetimes. Chemicals that cause increased risk of cancer among exposed industrial workers and in laboratory animals also may increase the risk of cancer in humans who are exposed at lower levels over long periods of time. EPA has set the enforceable drinking water standard for benzene at 0.005 parts per million (ppm) to reduce the risk of cancer or other adverse health effects which have been observed in humans and laboratory animals. Drinking water which meets this standard is associated with little to none of this risk and should be considered safe.

(6) 1,1-Dichloroethylene. The U.S. Environmental Protection Agency (EPA) sets drinking water standards and has determined that 1,1-dichloroethylene is a health concern at certain levels of exposure. This chemical is used in industry and is found in drinking water as a result of the breakdown of related solvents. The solvents are used as cleaners and degreasers of metals and generally get into drinking water by improper waste disposal. This chemical has been shown to cause liver and kidney damage in laboratory animals such as rats and mice when the animals are exposed at high levels over their lifetimes. Chemicals which cause adverse effects in laboratory animals also may cause adverse health effects in humans who are exposed at lower levels over long periods of time. EPA has set the enforceable drinking water standard for 1,1-dichloroethylene at 0.007 parts per million (ppm) to reduce the risk of these adverse health effects which have been observed in laboratory animals. Drinking water which meets this standard is associated with little to none of this risk and should be considered safe.

(7) Para-dichlorobenzene. The U.S. Environmental Protection Agency (EPA) sets drinking water standards and has determined that para-dichlorobenzene is a health concern at certain levels of exposure. This chemical is a component of deodorizers, moth balls, and pesticides. It generally gets into drinking water by improper waste disposal. This chemical has been shown to cause liver and kidney damage in laboratory animals such as rats and mice when the animals are exposed to high levels over their lifetimes. Chemicals which cause adverse effects in laboratory animals also may cause adverse health effects in humans who are exposed at lower levels over long periods of time. EPA has set the enforceable drinking water standard for para-dichlorobenzene at 0.075 parts per million (ppm) to reduce the risk of these adverse health effects which have been observed in laboratory animals. Drinking water which meets this standard is associated with little to none of this risk and should be considered safe.

(8) 1,1,1-Trichloroethane. The U.S. Environmental Protection Agency (EPA) sets drinking water standards and has determined that 1,1,1-trichloroethane is a health concern at certain levels of exposure. This chemical is used as a cleaner and degreaser of metals. It generally gets into drinking water by improper waste disposal. This chemical has been shown to damage the liver, nervous system, and circulatory system of laboratory animals such as rats and mice when the animals are exposed at high levels over their lifetimes. Some industrial workers who were exposed to relatively large amounts of this chemical during their working careers also suffered damage to the liver, nervous system, and circulatory system. Chemicals which cause adverse effects among exposed industrial workers and in laboratory animals also may cause adverse health effects in humans who are exposed at lower levels over long periods of time. EPA has set the enforceable drinking water standard for 1,1,1-trichloroethane at 0.2 parts per million (ppm) to protect against the risk of these adverse health effects which have been observed in humans and laboratory animals. Drinking water which meets this standard is associated with little to none of this risk and should be considered safe.

(9) Fluoride. The U.S. Environmental Protection Agency (EPA) requires that we send you this notice on the level of fluoride in your drinking water. The drinking water in your community has a fluoride concentration of _____ (Public Water Supply shall insert the compliance result which triggered public notice) milligrams per liter (mg/l).

Federal regulations require that fluoride, which occurs naturally in your water supply, not exceed a concentration of 4.0 mg/l in drinking water. This is an enforceable standard called a Maximum Contaminant Level (MCL), and it has been established to protect the public health. Exposure to drinking water levels above 4.0 mg/l for many years may result in some cases of crippling skeletal fluorosis, which is a serious bone disorder.

Federal law also requires that we notify you when monitoring indicates that the fluoride in your drinking water exceeds 2.0 mg/l. This is intended to alert families about dental problems that might affect children under nine (9) years of age. The fluoride concentration of your water exceeds this federal guideline.

Fluoride in children's drinking water at levels of approximately 1.0 mg/l reduces the number of dental cavities. However, some children exposed to levels of fluoride greater than about 2.0 mg/l may develop dental fluorosis. Dental fluorosis, in its moderate and severe forms, is a brown staining and/or pitting of the permanent teeth.

Because dental fluorosis occurs only when developing teeth (before they erupt from the gums) are exposed to elevated fluoride levels, households without children are not expected to be affected by this level of fluoride. Families with children under the age of nine (9) are encouraged to seek other sources of drinking water for their children to avoid the possibility of staining and pitting. Your water supplier can lower the concentration of fluoride in your water so that you will still receive the benefits of cavity prevention while the possibility of stained and pitted teeth is minimized. Removal of fluoride may increase your water costs. Treatment systems are also commercially available for home use. Information on such systems is available at the address given below. Low fluoride bottled drinking water that would meet all standards is also commercially available. For further information contact _____ (Public Water Supply shall insert the name, address and telephone number of a contact person) at your water system.

(10) Total coliforms (to be used when there is a violation of 401 KAR 8:200, Section 2(1), and not a violation of 401 KAR 8:200, Section 2(2)). The United States Environmental Protection Agency (EPA) sets drinking water standards and has determined that the presence of total coliforms is a possible health concern. Total coliforms are common in the environment and are generally not harmful themselves. The presence of these bacteria in drinking water, however, generally is a result of a problem with water treatment of the pipes which distribute the water, and indicates that the water may be contaminated with organisms that can cause disease. Disease symptoms may include diarrhea, cramps, nausea, and possibly jaundice, and any associated headaches and fatigue. These symptoms, however, are not just associated with disease-causing organisms in drinking water, but also may be caused by a number of factors other than your drinking water. EPA has set an enforceable drinking water standard for total coliforms to reduce the risk of these adverse health effects. Under this standard, no more than five (5.0) percent of the samples collected during a month can contain these bacteria, except that systems collecting fewer than forty (40) samples/month that have one (1) total coliform-positive sample per month

are not violating the standard. Drinking water which meets this standard is usually not associated with a health risk from disease-causing bacteria and should be considered safe.

(11) Fecal Coliforms-E. coli (to be used when there is a violation of 401 KAR 8:200, Section 2(2)). The United States Environmental Protection Agency (EPA) sets drinking water standards and has determined that the presence of fecal coliforms of E. coli is a serious health concern. Fecal coliforms and E. coli are generally not harmful themselves, but their presence in drinking water is serious because they usually are associated with sewage or animal wastes. The presence of these bacteria in drinking water is generally a result to a problem with water treatment or the pipes which distribute the water, and indicates that the water may be contaminated with organisms that can cause disease. Disease symptoms may include diarrhea, cramps, nausea, and possibly jaundice, and associated headaches and fatigue. These symptoms, however, are not just associated with disease-causing organisms in drinking water, but also may be caused by a number of factors other than your drinking water. EPA has set an enforceable drinking water standard for fecal coliforms and E. coli to reduce the risk of these adverse health effects. Under this standard all drinking water samples must be free of these bacteria. Drinking water which meets this standard is associated with little or none of this risk and should be considered safe. State and local health authorities recommend that consumers take the following precautions: (to be inserted by the public water system according to instructions from state or local authorities).

(12) Microbiological contaminants (for use when there is a violation of the treatment technique requirements for filtration and disinfection in 401 KAR 8:150). The United States Environmental Protection Agency (EPA) sets drinking water standards and has determined that the presence of microbiological contaminants are a health concern at certain levels of exposure. If water is inadequately treated, microbiological contaminants in that water may cause disease. Disease symptoms may include diarrhea, cramps, nausea, and possibly jaundice, and any associated headaches and fatigue. These symptoms, however, are not just associated with disease-causing organisms in drinking water, but also may be caused by a number of factors other than your drinking water. EPA has set enforceable requirements for treating drinking water to reduce the risk of these adverse health effects. Treatment such as filtering and disinfecting the water removes or destroys microbiological contaminants. Drinking water which is treated to meet EPA requirements is associated with little to none of this risk and should be considered safe.

(13) Asbestos. The United States Environmental Protection Agency (EPA) sets drinking water standards and has determined that asbestos fibers greater than ten (10) micrometers in length are a health concern at certain levels of exposure. Asbestos is a naturally occurring mineral. Most asbestos fibers in drinking water are less than ten (10) micrometers in length and occur in drinking water from natural sources and from corroded asbestos-cement pipes in the distribution system. The major uses of asbestos were in the production of cements, floor tiles, paper products, paint, and caulking; in transportation-related applications; and in the production of textiles and plastics. Asbestos was once a popular insulating and fire retardant material. Inhalation studies have shown that various forms of asbestos have produced lung tumors in laboratory animals. The available information on the risk of developing gastrointestinal tract cancer associated with the ingestion of asbestos from drinking water is limited. Ingestion of intermediate-range chrysotile asbestos fibers greater than ten (10) micrometers in length is associated with causing benign tumors in male rats. Chemicals that cause cancer in laboratory animals also may increase the risk of cancer in humans who are exposed over long periods of time. EPA has set the drinking water standard for asbestos at seven (7) million long fibers per liter to reduce the potential risk of cancer or other adverse health effects which have been observed in laboratory animals. Drinking water which meets the EPA standard is associated with little to none of this risk and should be considered safe with respect to asbestos.

(14) Barium. The United States Environmental Protection Agency (EPA) sets drinking water standards and has determined that barium is a health concern at certain levels of exposure. This inorganic chemical occurs naturally in some aquifers that serve as sources of ground water. It is also used in oil and gas drilling muds, automotive paints, bricks, tiles and jet fuels. It generally gets into drinking water after dissolving from naturally occurring minerals in the ground. This chemical may damage the heart and cardiovascular system, and is associated with high blood pressure in laboratory animals such as rats exposed to high levels during their lifetimes. In humans, EPA believes that effects from barium on blood pressure should not occur below two (2) parts per million (ppm) in drinking water. EPA has set the drinking water standard for barium at two (2) parts per million (ppm) to protect against the risk of these adverse health effects. Drinking water that meets the EPA standard is associated with little to none of this risk and is considered safe with respect to barium.

(15) Cadmium. The United States Environmental Protection Agency (EPA) sets drinking water standards and has determined that cadmium is a health concern at certain levels of exposure. Food and the smoking of tobacco are common sources of general exposure. This inorganic metal is a contaminant in the metals used to galvanize pipe. It generally gets into water by corrosion of galvanized pipes or by improper waste disposal. This chemical has been shown to damage the kidney in animals such as rats and mice when the animals are exposed at high levels over their lifetimes. Some industrial workers who were exposed to relatively large amounts of this chemical during working careers also suffered damage to the kidney. EPA has set the drinking water standard for cadmium at 0.005 parts per million (ppm) to protect against the risk of these adverse health effects. Drinking water that meets the EPA standard is associated with little to none of this risk and is considered safe with respect to cadmium.

(16) Chromium. The United States Environmental Protection Agency (EPA) sets drinking water standards and has determined that chromium is a health concern at certain levels of exposure. This inorganic metal occurs naturally in the ground and is often used in the electroplating of metals. It generally gets into water from runoff from old mining operations and improper waste disposal from plating operations. This chemical has been shown to damage the kidney, nervous system, and the circulatory system of laboratory animals such as rats and mice when the animals are exposed at high levels. Some humans who were exposed to high levels of this chemical suffered liver and kidney damage, dermatitis and respiratory problems. EPA has set the drinking water standard for chromium at one-tenth (0.1) parts per million (ppm) to protect against the risk of these adverse health effects. Drinking water that meets the EPA standard is associated with little to none of this risk and is considered safe with respect to chromium.

(17) Mercury. The United States Environmental Protection Agency (EPA) sets drinking water standards and has determined that mercury is a health concern at certain levels of exposure. This inorganic metal is used in electrical equipment and some water pumps. It usually gets into water as a result of improper waste disposal. This chemical has been shown to damage the kidney of laboratory animals such as rats when the animals are exposed at high levels over their lifetimes. EPA has set the drinking water standard for mercury at 0.002 parts per million (ppm) to protect against the risk of these adverse health effects. Drinking water that meets the EPA standard is associated with little to none of this risk and is considered safe with respect to mercury.

(18) Nitrate. The United States Environmental Protection Agency (EPA) sets drinking water standards and has determined that nitrate poses an acute health concern at certain levels of exposure. Nitrate is used in fertilizer and is found in sewage and wastes from human and/or farm animals and generally gets into drinking water from those activities. Excessive levels of nitrate in drinking water have caused

serious illness and sometimes death in infants under six months of age. The serious illness in infants is caused because nitrate is converted to nitrite in the body. Nitrite interferes with the oxygen carrying capacity of the child's blood. This is an acute disease in that symptoms can develop rapidly in infants. In most cases, health deteriorates over a period of days. Symptoms include shortness of breath and blueness of the skin. Clearly, expert medical advice should be sought immediately if these symptoms occur. The purpose of this notice is to encourage parents and other responsible parties to provide infants with an alternate source of drinking water. Local and state health authorities are the best source for information concerning alternate sources of drinking water for infants. EPA has set the drinking water standard at ten (10) parts per million (ppm) for nitrate to protect against the risk of these adverse effects. EPA has also set a drinking water standard for nitrite at one (1) ppm. To allow for the fact that the toxicity of nitrate and nitrite are additive, EPA has also established a standard for the sum of nitrate and nitrite at ten (10) ppm. Drinking water that meets the EPA standard is associated with little to none of this risk and is considered safe with respect to nitrate.

(19) Nitrite. The United States Environmental Protection Agency (EPA) sets drinking water standards and has determined that nitrite poses an acute health concern at certain levels of exposure. This inorganic chemical is used in fertilizers and is found in sewage and wastes from humans and/or farm animals and generally gets into drinking water as a result of those activities. While excessive levels of nitrite in drinking water have not been observed, other sources of nitrite have caused serious illness and sometimes death in infants under six months of age. The serious illness in infants is caused because nitrite interferes with the oxygen carrying capacity of the child's blood. This is an acute disease in that symptoms can develop rapidly. However, in most cases, health deteriorates over a period of days. Symptoms include shortness of breath and blueness of the skin. Clearly, expert medical advice should be sought immediately if these symptoms occur. The purpose of this notice is to encourage parents and other responsible parties to provide infants with an alternate source of drinking water. Local and state health authorities are the best source for information concerning alternate sources of drinking water for infants. EPA has set the drinking water standard at 1 part per million (ppm) for nitrite to protect against the risk of these adverse effects. EPA has also set a drinking water standard for nitrate (converted to nitrite in humans) at ten (10) ppm and for the sum of nitrate and nitrite at 10 ppm. Drinking water that meets the EPA standard is associated with little to none of this risk and is considered safe with respect to nitrite.

(20) Selenium. The United States Environmental Protection Agency (EPA) sets drinking water standards and has determined that selenium is a health concern at certain high levels of exposure. Selenium is also an essential nutrient at low levels of exposure. This inorganic chemical is found naturally in food and soils and is used in electronics, photocopy operations, the manufacture of glass, chemicals, drugs, and as a fungicide and a feed additive. In humans, exposure to high levels of selenium over a long period of time has resulted in a number of adverse health effects, including a loss of feeling and control in the arms and legs. EPA has set the drinking water standard for selenium at 0.05 parts per million (ppm) to protect against the risk of these adverse health effects. Drinking water that meets the EPA standard is associated with little to none of this risk and is considered safe with respect to selenium.

(21) Acrylamide. The United States Environmental Protection Agency (EPA) sets drinking water standards and has determined that acrylamide is a health concern at certain levels of exposure. Polymers made from acrylamide are sometimes used to treat water supplies to remove particulate contaminants. Acrylamide has been shown to cause cancer in laboratory animals such as rats and mice when the animals are exposed at high levels over their lifetimes. Chemicals that cause cancer in laboratory animals also may increase the risk of cancer in humans who are exposed over long periods of time. Sufficiently large doses of acrylamide are known to cause neurological injury. EPA has set the drinking water standard for acrylamide using a treatment technique to reduce the risk of cancer or other adverse health effects which have been observed in laboratory animals. This treatment technique limits the amount of acrylamide in the polymer and the amount of the polymer which may be added to drinking water to remove particulates. Drinking water systems which comply with this treatment technique have little to no risk and are considered safe with respect to acrylamide.

(22) Alachlor. The United States Environmental Protection Agency (EPA) sets drinking water standards and has determined that alachlor is a health concern at certain levels of exposure. This organic chemical is a widely used pesticide. When soil and climatic conditions are favorable, alachlor may get into drinking water by runoff into surface water or by leaching into ground water. This chemical has been shown to cause cancer in laboratory animals such as rats and mice when the animals are exposed at high levels over their lifetimes. Chemicals that cause cancer in laboratory animals also may increase the risk of cancer in humans who are exposed over long periods of time. EPA has set the drinking water standard for alachlor at 0.002 parts per million (ppm) to reduce the risk of cancer or other adverse health effects which have been observed in laboratory animals. Drinking water that meets this standard is associated with little to none of this risk and is considered safe with respect to alachlor.

(23) Aldicarb. The United States Environmental Protection Agency (EPA) sets drinking water standards and has determined that aldicarb is a health concern at certain levels of exposure. Aldicarb is a widely used pesticide. Under certain soil and climatic conditions (e.g., sandy soil and high rainfall), aldicarb may leach into ground water after normal agricultural applications to crops such as potatoes or peanuts or may enter drinking water supplies as a result of surface runoff. This chemical has been shown to damage the nervous system in laboratory animals such as rats and dogs exposed to high levels. EPA has set the drinking water standard for aldicarb at 0.003 parts per million (ppm) to protect against the risk of adverse health effects. Drinking water that meets the EPA standard is associated with little to none of this risk and is considered safe with respect to aldicarb.

(24) Aldicarb sulfoxide. The United States Environmental Protection Agency (EPA) sets drinking water standards and has determined that aldicarb sulfoxide is a health concern at certain levels of exposure. Aldicarb is a widely used pesticide. Aldicarb sulfoxide in ground water is primarily a breakdown product of aldicarb. Under certain soil and climatic conditions (e.g., sandy soil and high rainfall), aldicarb sulfoxide may leach into ground water after normal agricultural applications to crops such as potatoes or peanuts or may enter drinking water supplies as a result of surface runoff. This chemical has been shown to damage the nervous system in laboratory animals such as rats and dogs exposed to high levels. EPA has set the drinking water standard for aldicarb sulfoxide at 0.004 parts per million (ppm) to protect against the risk of adverse health effects. Drinking water that meets the EPA standard is associated with little to none of this risk and is considered safe with respect to aldicarb sulfoxide.

(25) Aldicarb sulfone. The United States Environmental Protection Agency (EPA) sets drinking water standards and has determined that aldicarb sulfone is a health concern at certain levels of exposure. Aldicarb is a widely used pesticide. Aldicarb sulfone is formed from the breakdown of aldicarb and is considered for registration as a pesticide under the name aldoxycarb. Under certain soil and climatic conditions (e.g., sandy soil and high rainfall), aldicarb sulfone may leach into ground water after normal agricultural applications to crops such as potatoes or peanuts or may enter drinking water supplies as a result of surface runoff. This chemical has been shown to damage the nervous system in laboratory animals such as rats and dogs exposed to high levels. EPA has set the drinking water standard for aldicarb sulfone at 0.002 parts per million (ppm) to protect against the

risk of adverse health effects. Drinking water that meets the EPA standard is associated with little to none of this risk and is considered safe with respect to aldicarb sulfone.

(26) Atrazine. The United States Environmental Protection Agency (EPA) sets drinking water standards and has determined that atrazine is a health concern at certain levels of exposure. This organic chemical is a herbicide. When soil and climatic conditions are favorable, atrazine may get into drinking water by runoff into surface water or by leaching into ground water. This chemical has been shown to affect offspring of rats and the heart of dogs. EPA has set the drinking water standard for atrazine at 0.003 parts per million (ppm) to protect against the risk of these adverse health effects. Drinking water that meets the EPA standard is associated with little to none of this risk and is considered safe with respect to atrazine.

(27) Carbofuran. The United States Environmental Protection Agency (EPA) sets drinking water standards and has determined that carbofuran is a health concern at certain levels of exposure. This organic chemical is a pesticide. When soil and climatic conditions are favorable, carbofuran may get into drinking water by runoff into surface water or by leaching into ground water. This chemical has been shown to damage the nervous and reproductive systems of laboratory animals such as rats and mice exposed at high levels over their lifetimes. Some humans who were exposed to relatively large amounts of this chemical during their working careers also suffered damage to the nervous system. Effects on the nervous system are generally rapidly reversible. EPA has set the drinking water standard for carbofuran at 0.04 parts per million (ppm) to protect against the risk of these adverse health effects. Drinking water that meets the EPA standard is associated with little to none of this risk and is considered safe with respect to carbofuran.

(28) Chlordane. The United States Environmental Protection Agency (EPA) sets drinking water standards and has determined that chlordane is a health concern at certain levels of exposure. This organic chemical is a pesticide used to control termites. Chlordane is not very mobile in soils. It usually gets into drinking water after application near water supply intakes or wells. This chemical has been shown to cause to cancer in laboratory animals such as rats and mice when the animals are exposed at high levels over their lifetimes. Chemicals that cause cancer in laboratory animals also may increase the risk of cancer in humans who are exposed over long periods of time. EPA has set the drinking water standard for chlordane at 0.002 parts per million (ppm) to reduce the risk of cancer or other adverse health effects which have been observed in laboratory animals. Drinking water that meets the EPA standard is associated with little to none of this risk and is considered safe with respect to chlordane.

(29) Dibromochloropropane (DBCP). The United States Environmental Protection Agency (EPA) sets drinking water standards and has determined that DBCP is a health concern at certain levels of exposure. This organic chemical was once a popular pesticide. When soil and climatic conditions are favorable, dibromochloropropane may get into drinking water by runoff into surface water or by leaching into ground water. This chemical has been shown to cause cancer in laboratory animals such as rats and mice when the animals are exposed at high levels over their lifetimes. Chemicals that cause cancer in laboratory animals also may increase the risk of cancer in humans who are exposed over long periods of time. EPA has set the drinking water standard for DBCP at 0.0002 parts per million (ppm) to reduce the risk of cancer or other adverse health effects which have been observed in laboratory animals. Drinking water that meets the EPA standard is associated with little to none of this risk and is considered safe with respect to DBCP.

(30) o-Dichlorobenzene. The United States Environmental Protection Agency (EPA) sets drinking water standards and has determined that o-dichlorobenzene is a health concern at certain levels of exposure. This organic chemical is used as a solvent in the production of pesticides and dyes. It generally gets into water by improper waste disposal. This chemical has been shown to damage the liver, kidney and the blood cells of laboratory animals such as rats and mice exposed to high levels during their lifetimes. Some industrial workers who were exposed to relatively large amounts of this chemical during working careers also suffered damage to the liver, nervous system, and circulatory system. EPA has set the drinking water standard for o-dichlorobenzene at six-tenths (0.6) parts per million (ppm) to protect against the risk of these adverse health effects. Drinking water that meets the EPA standard is associated with little to none of this risk and is considered safe with respect to o-dichlorobenzene.

(31) cis-1,2-Dichloroethylene. The United States Environmental Protection Agency (EPA) establishes drinking water standards and has determined that cis-1,2-dichloroethylene is a health concern at certain levels of exposure. This organic chemical is used as a solvent and intermediate in chemical production. It generally gets into water by improper waste disposal. This chemical has been shown to damage the liver, nervous system, and circulatory system of laboratory animals such as rats and mice when exposed at high levels over their lifetimes. Some humans who were exposed to relatively large amounts of this chemical also suffered damage to the nervous system. EPA has set the drinking water standard for cis-1,2-dichloroethylene at 0.07 parts per million (ppm) to protect against the risk of these adverse health effects. Drinking water that meets the EPA standard is associated with little to none of this risk and is considered safe with respect to cis-1,2-dichloroethylene.

(32) trans-1,2-Dichloroethylene. The United States Environmental Protection Agency (EPA) establishes drinking water standards and has determined that trans-1,2-dichloroethylene is a health concern at certain levels of exposure. This organic chemical is used as a solvent and intermediate in chemical production. It generally gets into water by improper waste disposal. This chemical has been shown to damage the liver, nervous system, and the circulatory system of laboratory animals such as rats and mice when exposed at high levels over their lifetimes. Some humans who were exposed to relatively large amounts of this chemical also suffered damage to the nervous system. EPA has set the drinking water standard for trans-1,2-dichloroethylene at 0.1 parts per million (ppm) to protect against the risk of these adverse health effects. Drinking water that meets the EPA standard is associated with little to none of this risk and is considered safe with respect to trans-1,2-dichloroethylene.

(33) 1,2-Dichloropropane. The United States Environmental Protection Agency (EPA) sets drinking water standards and has determined that 1,2-dichloropropane is a health concern at certain levels of exposure. This organic chemical is used as a solvent and pesticide. When soil and climatic conditions are favorable, 1,2-dichloropropane may get into drinking water by runoff into surface water or by leaching into ground water. It may also get into drinking water through improper waste disposal. This chemical has been shown to cause cancer in laboratory animals such as rats and mice when the animals are exposed at high levels over their lifetimes. Chemicals that cause cancer in laboratory animals also may increase the risk of cancer in humans who are exposed over long periods of time. EPA has set the drinking water standard for 1,2-dichloropropane at 0.005 parts per million (ppm) to reduce the risk of cancer or other adverse health effects which have been observed in laboratory animals. Drinking water that meets the EPA standard is associated with little to none of this risk and is considered safe with respect to 1,2-dichloropropane.

(34) 2,4-D. The United States Environmental Protection Agency (EPA) sets drinking water standards and has determined that 2,4-D is a health concern at certain levels of exposure. This organic chemical is used as a herbicide and to control algae in reservoirs. When soil and climatic conditions are favorable, 2,4-D may get into drinking water by runoff into surface water or by leaching into ground water. This chemical has been shown to damage the liver and kidney of laboratory animals such as rats exposed at high levels during their

lifetimes. Some humans who were exposed to relatively large amounts of this chemical also suffered damage to the nervous system. EPA has set the drinking water standard for 2,4-D at 0.07 parts per million (ppm) to protect against the risk of these adverse health effects. Drinking water that meets the EPA standard is associated with little to none of this risk and is considered safe with respect to 2,4-D.

(35) Epichlorohydrin. The United States Environmental Protection Agency (EPA) sets drinking water standards and has determined that epichlorohydrin is a health concern at certain levels of exposure. Polymers made from epichlorohydrin are sometimes used in the treatment of water supplies as a flocculent to remove particulates. Epichlorohydrin generally gets into drinking water by improper use of these polymers. This chemical has been shown to cause cancer in laboratory animals such as rats and mice when the animals are exposed at high levels over their lifetimes. Chemicals that cause cancer in laboratory animals also may increase the risk of cancer in humans who are exposed over long periods of time. EPA has set the drinking water standard for epichlorohydrin using a treatment technique to reduce the risk of cancer or other adverse health effects which have been observed in laboratory animals. This treatment technique limits the amount of epichlorohydrin in the polymer and the amount of the polymer which may be added to drinking water as a flocculent to remove particulates. Drinking water systems which comply with this treatment technique have little to no risk and are considered safe with respect to epichlorohydrin.

(36) Ethylbenzene. The United States Environmental Protection Agency (EPA) sets drinking water standards and has determined ethylbenzene is a health concern at certain levels of exposure. This organic chemical is a major component of gasoline. It generally gets into water by improper waste disposal or leaking gasoline tanks. This chemical has been shown to damage the kidney, liver, and nervous system of laboratory animals such as rats exposed to high levels during their lifetimes. EPA has set the drinking water standard for ethylbenzene at seven-tenths (0.7) parts per million (ppm) to protect against the risk of these adverse health effects. Drinking water that meets the EPA standard is associated with little to none of this risk and is considered safe with respect to ethylbenzene.

(37) Ethylene dibromide (EDB). The United States Environmental Protection Agency (EPA) sets drinking water standards and has determined that EDB is a health concern at certain levels of exposure. This organic chemical was once a popular pesticide. When soil and climatic conditions are favorable, EDB may get into drinking water by runoff into surface water or by leaching into ground water. This chemical has been shown to cause cancer in laboratory animals such as rats and mice when the animals are exposed at high levels over their lifetimes. Chemicals that cause cancer in laboratory animals also may increase the risk of cancer in humans who are exposed over long periods of time. EPA has set the drinking water standard for EDB at 0.00005 parts per million (ppm) to reduce the risk of cancer or other adverse health effects which have been observed in laboratory animals. Drinking water that meets this standard is associated with little to none of this risk and is considered safe with respect to EDB.

(38) Heptachlor. The United States Environmental Protection Agency (EPA) sets drinking water standards and has determined that heptachlor is a health concern at certain levels of exposure. This organic chemical was once a popular pesticide. When soil and climatic conditions are favorable, heptachlor may get into drinking water by runoff into surface water or by leaching into ground water. This chemical has been shown to cause cancer in laboratory animals such as rats and mice when the animals are exposed at high levels over their lifetimes. Chemicals that cause cancer in laboratory animals also may increase the risk of cancer in humans who are exposed over long periods of time. EPA has set the drinking water standards for heptachlor at 0.0004 parts per million (ppm) to reduce the risk of cancer or other adverse health effects which have been observed in laboratory animals. Drinking water that meets this standard is associated with little to none of this risk and is considered safe with respect to heptachlor.

(39) Heptachlor epoxide. The United States Environmental Protection Agency (EPA) sets drinking water standards and has determined that heptachlor epoxide is a health concern at certain levels of exposure. This organic chemical was once a popular pesticide. When soil and climatic conditions are favorable, heptachlor epoxide may get into drinking water by runoff into surface water or by leaching into ground water. This chemical has been shown to cause cancer in laboratory animals such as rats and mice when the animals are exposed at high levels over their lifetimes. Chemicals that cause cancer in laboratory animals also may increase the risk of cancer in humans who are exposed over long periods of time. EPA has set the drinking water standards for heptachlor epoxide at 0.0002 parts per million (ppm) to reduce the risk of cancer or other adverse health effects which have been observed in laboratory animals. Drinking water that meets this standard is associated with little to none of this risk and is considered safe with respect to heptachlor epoxide.

(40) Lindane. The United States Environmental Protection Agency (EPA) sets drinking water standards and has determined that lindane is a health concern at certain levels of exposure. This organic chemical is used as a pesticide. When soil and climatic conditions are favorable, lindane may get into drinking water by runoff into surface water or by leaching into ground water. This chemical has been shown to damage the liver, kidney, nervous system, and immune system of laboratory animals such as rats, mice and dogs exposed at high levels during their lifetimes. Some humans who were exposed to relatively large amounts of this chemical also suffered damage to the nervous system and circulatory system. EPA has established the drinking water standard for lindane at 0.0002 parts per million (ppm) to protect against the risk of these adverse health effects. Drinking water that meets the EPA standard is associated with little to none of this risk and is considered safe with respect to lindane.

(41) Methoxychlor. The United States Environmental Protection Agency (EPA) sets drinking water standards and has determined that methoxychlor is a health concern at certain levels of exposure. This organic chemical is used as a pesticide. When soil and climatic conditions are favorable, methoxychlor may get into drinking water by runoff into surface water or by leaching into ground water. This chemical has been shown to damage the liver, kidney, nervous system, and reproductive system of laboratory animals such as rats exposed at high levels during their lifetimes. It has also been shown to produce growth retardation in rats. EPA has set the drinking water standard for methoxychlor at 0.04 parts per million (ppm) to protect against the risk of these adverse health effects. Drinking water that meets the EPA standard is associated with little to none of this risk and is considered safe with respect to methoxychlor.

(42) Monochlorobenzene. The United States Environmental Protection Agency (EPA) sets drinking water standards and has determined that monochlorobenzene is a health concern at certain levels of exposure. This organic chemical is used as a solvent. It generally gets into water by improper waste disposal. This chemical has been shown to damage the liver, kidney and nervous system of laboratory animals such as rats and mice exposed to high levels during their lifetimes. EPA has set the drinking water standard for monochlorobenzene at one-tenth (0.1) parts per million (ppm) to protect against the risk of these adverse health effects. Drinking water that meets the EPA standard is associated with little to none of this risk and is considered safe with respect to monochlorobenzene.

(43) Polychlorinated biphenyls (PCBs). The United States Environmental Protection Agency (EPA) sets drinking water standards and has determined that polychlorinated biphenyls (PCBs) are a health concern at certain levels of exposure. These organic chemicals were once widely used in electrical transformers and other industrial equipment. They generally get into drinking water by improper waste disposal or leaking electrical industrial equipment. This chemical has

been shown to cause cancer in laboratory animals such as rats and mice when the animals are exposed at high levels over their lifetimes. Chemicals that cause cancer in laboratory animals also may increase the risk of cancer in humans who are exposed over long periods of time. EPA has set the drinking water standard for PCBs at 0.0005 parts per million (ppm) to reduce the risk of cancer or other adverse health effects which have been observed in laboratory animals. Drinking water that meets this standard is associated with little to none of this risk and is considered safe with respect to PCBs.

(44) Pentachlorophenol. The United States Environmental Protection Agency (EPA) sets drinking water standards and has determined that pentachlorophenol is a health concern at certain levels of exposure. This organic chemical is used as a wood preservative, herbicide, disinfectant, and defoliant. It generally gets into drinking water by runoff into surface water or leaching into ground water. This chemical has been shown to produce adverse reproductive effects and to damage the liver and kidneys of laboratory animals such as rats exposed to high levels during their lifetimes. Some humans who were exposed to relatively large amounts of this chemical also suffered damage to the liver and kidneys. This chemical has been shown to cause cancer in laboratory animals such as rats and mice when the animals are exposed at high levels over their lifetimes. Chemicals that cause cancer in laboratory animals also may increase the risk of cancer in humans who are exposed over long periods of time. EPA has set the drinking water standard for pentachlorophenol at 0.001 parts per million (ppm) to protect against the risk of cancer or other adverse health effects. Drinking water that meets the EPA standard is associated with little to none of this risk and is considered safe with respect to pentachlorophenol.

(45) Styrene. The United States Environmental Protection Agency (EPA) sets drinking water standards and has determined that styrene is a health concern at certain levels of exposure. This organic chemical is commonly used to make plastics and is sometimes a component of resins used for drinking water treatment. Styrene may get into drinking water from improper waste disposal. This chemical has been shown to damage the liver and nervous system in laboratory animals when exposed at high levels during their lifetimes. EPA has set the drinking water standard for styrene at one-tenth (0.1) parts per million (ppm) to protect against the risk of these adverse health effects. Drinking water that meets the EPA standard is associated with little to none of this risk and is considered safe with respect to styrene.

(46) Tetrachloroethylene. The United States Environmental Protection Agency (EPA) sets drinking water standards and has determined that tetrachloroethylene is a health concern at certain levels of exposure. This organic chemical has been a popular solvent, particularly for dry cleaning. It generally gets into drinking water by improper waste disposal. This chemical has been shown to cause cancer in laboratory animals such as rats and mice when the animals are exposed at high levels over their lifetimes. Chemicals that cause cancer in laboratory animals also may increase the risk of cancer in humans who are exposed over long periods of time. EPA has set the drinking water standard for tetrachloroethylene at 0.005 parts per million (ppm) to reduce the risk of cancer or other adverse health effects which have been observed in laboratory animals. Drinking water that meets this standard is associated with little to none of this risk and is considered safe with respect to tetrachloroethylene.

(47) Toluene. The United States Environmental Protection Agency (EPA) sets drinking water standards and has determined that toluene is a health concern at certain levels of exposure. This organic chemical is used as a solvent and in the manufacture of gasoline for airplanes. It generally gets into water by improper waste disposal or leaking underground storage tanks. This chemical has been shown to damage the kidney, nervous system, and circulatory system of laboratory animals such as rats and mice exposed to high levels during their lifetimes. Some industrial workers who were exposed to relatively large amounts of this chemical during working careers also suffered damage to the liver, kidney and nervous system. EPA has set the drinking water standard for toluene at 1 part per million (ppm) to protect against the risk of these adverse health effects. Drinking water that meets the EPA standard is associated with little to none of this risk and is considered safe with respect to toluene.

(48) Toxaphene. The United States Environmental Protection Agency (EPA) sets drinking water standards and has determined that toxaphene is a health concern at certain levels of exposure. This organic chemical was once a pesticide widely used on cotton, corn, soybeans, pineapples and other crops. When soil and climatic conditions are favorable, toxaphene may get into drinking water by runoff into surface water or by leaching into ground water. This chemical has been shown to cause cancer in laboratory animals such as rats and mice when the animals are exposed at high levels over their lifetimes. Chemicals that cause cancer in laboratory animals also may increase the risk of cancer in humans who are exposed over long periods of time. EPA has set the drinking water standard for toxaphene at 0.003 parts per million (ppm) to reduce the risk of cancer or other adverse health effects which have been observed in laboratory animals. Drinking water that meets this standard is associated with little to none of this risk and is considered safe with respect to toxaphene.

(49) 2,4,5-TP. The United States Environmental Protection Agency (EPA) sets drinking water standards and has determined that 2,4,5-TP is a health concern at certain levels of exposure. This organic chemical is used as a herbicide. When soil and climatic conditions are favorable, 2,4,5-TP may get into drinking water by runoff into surface water or by leaching into ground water. This chemical has been shown to damage the liver and kidney of laboratory animals such as rats and dogs exposed to high levels during their lifetimes. Some industrial workers who were exposed to relatively large amounts of this chemical during working careers also suffered damage to the nervous system. EPA has set the drinking water standard for 2,4,5-TP at 0.05 parts per million (ppm) to protect against the risk of these adverse health effects. Drinking water that meets the EPA standard is associated with little to none of this risk and is considered safe with respect to 2,4,5-TP.

(50) Xylenes. The United States Environmental Protection Agency (EPA) sets drinking water standards and has determined that xylene is a health concern at certain levels of exposure. This organic chemical is used in the manufacture of gasoline for airplanes and as a solvent for pesticides, and as a cleaner and degreaser of metals. It usually gets into water by improper waste disposal. This chemical has been shown to damage the liver, kidney and nervous system of laboratory animals such as rats and dogs exposed to high levels during their lifetimes. Some humans who were exposed to relatively large amounts of this chemical also suffered damage to the nervous system. EPA has set the drinking water standard for xylene at ten (10) parts per million (ppm) to protect against the risk of these adverse health effects. Drinking water that meets the EPA standard is associated with little to none of this risk and is considered safe with respect to xylene.

(51) Antimony. The United States Environmental Protection Agency (EPA) sets drinking water standards and has determined that antimony is a health concern at certain levels of exposure. This inorganic chemical occurs naturally in soils, ground water and surface waters and is often used in the flame retardant industry. It is also used in ceramics, glass, batteries, fireworks and explosives. It may get into drinking water through natural weathering of rock, industrial production, municipal waste disposal or manufacturing processes. This chemical has been shown to decrease longevity, and altered blood levels of cholesterol and glucose in laboratory animals such as rats exposed to high levels during their lifetimes. EPA has set the drinking water standard for antimony at 0.006 parts per million (ppm) to protect against the risk of these adverse health effects. Drinking water which meets the EPA standard is associated with little to none of this risk and should be considered safe with respect to antimony.

(52) Beryllium. The United States Environmental Protection Agency (EPA) sets drinking water standards and has determined that beryllium is a health concern at certain levels of exposure. This inorganic metal occurs naturally in soils, ground water and surface waters and is often used in electrical equipment and electrical components. It generally gets into water from runoff from mining operations, discharge from processing plants and improper waste disposal. Beryllium compounds have been associated with damage to the bones and lungs and induction of cancer in laboratory animals such as rats and mice when the animals are exposed at high levels over their lifetimes. There is limited evidence to suggest that beryllium may pose a cancer risk via drinking water exposure. Therefore, EPA based the health assessment on noncancer effects with an extra uncertainty factor to account for possible carcinogenicity. Chemicals that cause cancer in laboratory animals also may increase the risk of cancer in humans who are exposed over long periods of time. EPA has set the drinking water standard for beryllium at 0.004 part per million (ppm) to protect against the risk of these adverse health effects. Drinking water which meets the EPA standard is associated with little to none of this risk and should be considered safe with respect to beryllium.

(53) Cyanide. The United States Environmental Protection Agency (EPA) sets drinking water standards and has determined that cyanide is a health concern at certain levels of exposure. This inorganic chemical is used in electroplating, steel processing, plastics, synthetic fabrics and fertilizer products. It usually gets into water as a result of improper waste disposal. This chemical has been shown to damage the spleen, brain and liver of humans fatally poisoned with cyanide. EPA has set the drinking water standard for cyanide at two-tenths (0.2) parts per million (ppm) to protect against the risk of these adverse health effects. Drinking water which meets the EPA standard is associated with little to none of this risk and should be considered safe with respect to cyanide.

(54) Nickel. The United States Environmental Protection Agency (EPA) sets drinking water standards and has determined that nickel poses a health concern at certain levels of exposure. This inorganic metal occurs naturally in soils, ground water and surface waters and is often used in electroplating, stainless steel and alloy products. It generally gets into water from mining and refining operations. This chemical has been shown to damage the heart and liver in laboratory animals when the animals are exposed to high levels over their lifetimes. EPA has set the drinking water standard at one-tenth (0.1) parts per million (ppm) for nickel to protect against the risk of these adverse effects. Drinking water which meets the EPA standard is associated with little to none of this risk and should be considered safe with respect to nickel.

(55) Thallium. The United States Environmental Protection Agency (EPA) sets drinking water standards and has determined that thallium is a health concern at certain high levels of exposure. This inorganic metal is found naturally in soils and is used in electronics, pharmaceuticals, and the manufacture of glass and alloys. This chemical has been shown to damage the kidney, liver, brain and intestines of laboratory animals when the animals are exposed at high levels over their lifetimes. EPA has set the drinking water standard for thallium at 0.002 parts per million (ppm) to protect against the risk of these adverse health effects. Drinking water which meets the EPA standard is associated with little to none of this risk and should be considered safe with respect to thallium.

(56) Benzo(a)pyrene. The United States Environmental Protection Agency (EPA) sets drinking water standards and has determined benzo(a)pyrene is a health concern at certain levels of exposure. Cigarette smoke and charbroiled meats are common sources of general exposure. The major source of benzo(a)pyrene in drinking water is the leaching from coal tar lining and sealants in water storage tanks. This chemical has been shown to cause cancer in animals such as rats and mice when the animals are exposed at high levels. EPA has set the drinking water standard for benzo(a)pyrene at 0.0002 parts per million (ppm) to protect against the risk of cancer. Drinking water which meets the EPA standard is associated with little to none of this risk and should be considered safe with respect to benzo(a)pyrene.

(57) Dalapon. The United States Environmental Protection Agency (EPA) sets drinking water standards and has determined that dalapon is a health concern at certain levels of exposure. This organic chemical is a widely used herbicide. It may get into drinking water after application to control grasses in crops, drainage ditches and along railroads. This chemical has been shown to cause damage to the kidney and liver in laboratory animals when the animals are exposed to high levels over their lifetimes. EPA has set the drinking water standard for dalapon at two-tenths (0.2) parts per million (ppm) to protect against the risk of these adverse health effects. Drinking water which meets the EPA standard is associated with little to none of this risk and should be considered safe with respect to dalapon.

(58) Dichloromethane. The United States Environmental Protection Agency (EPA) sets drinking water standards and has determined that dichloromethane (methylene chloride) is a health concern at certain levels of exposure. This organic chemical is a widely used solvent. It is used in the manufacture of paint remover, as a metal degreaser and as an aerosol propellant. It generally gets into drinking water after improper discharge of waste disposal. This chemical has been shown to cause cancer in laboratory animals such as rats and mice when the animals are exposed at high levels over their lifetimes. Chemicals that cause cancer in laboratory animals also may increase the risk of cancer in humans who are exposed over long periods of time. EPA has set the drinking water standard for dichloromethane at 0.005 parts per million (ppm) to reduce the risk of cancer or other adverse health effects which have been observed in laboratory animals. Drinking water which meets this standard is associated with little to none of this risk and should be considered safe with respect to dichloromethane.

(59) Di(2-ethylhexyl)adipate. The United States Environmental Protection Agency (EPA) sets drinking water standards and has determined that di(2-ethylhexyl)adipate is a health concern at certain levels of exposure. Di(2-ethylhexyl)adipate is a widely used plasticizer in a variety of products, including synthetic rubber, food packaging materials and cosmetics. It may get into drinking water after improper waste disposal. This chemical has been shown to damage liver and testes in laboratory animals such as rats and mice exposed to high levels. EPA has set the drinking water standard for di(2-ethylhexyl)-adipate at 0.4 parts per million (ppm) to protect against the risk of adverse health effects. Drinking water which meets the EPA standard is associated with little to none of this risk and should be considered safe with respect to di(2-ethylhexyl)adipate.

(60) Di(2-ethylhexyl)phthalate. The United States Environmental Protection Agency (EPA) sets drinking water standards and has determined that di(2-ethylhexyl)phthalate is a health concern at certain levels of exposure. Di(2-ethylhexyl)phthalate is a widely used plasticizer, which is primarily used in the production of polyvinyl chloride (PVC) resins. It may get into drinking water after improper waste disposal. This chemical has been shown to cause cancer in laboratory animals such as rats and mice exposed to high levels over their lifetimes. EPA has set the drinking water standard for di(2-ethylhexyl)phthalate at 0.004 parts per million (ppm) to reduce the risk of cancer or other adverse health effects which have been observed in laboratory animals. Drinking water which meets the EPA standard is associated with little to none of this risk and should be considered safe with respect to di(2-ethylhexyl)phthalate.

(61) Dinoseb. The United States Environmental Protection Agency (EPA) sets drinking water standards and has determined that dinoseb is a health concern at certain levels of exposure. Dinoseb is a widely used pesticide and generally gets into drinking water after application on orchards, vineyards and other crops. This chemical has been shown to damage the thyroid and reproductive organs in laboratory animals such as rats exposed to high levels. EPA has set the drinking

water standard for dinoseb at 0.007 parts per million (ppm) to protect against the risk of adverse health effects. Drinking water which meets the EPA standard is associated with little to none of this risk and should be considered safe with respect to dinoseb.

(62) Diquat. The United States Environmental Protection Agency (EPA) sets drinking water standards and has determined that diquat is a health concern at certain levels of exposure. This organic chemical is a herbicide used to control terrestrial and aquatic weeds. It may get into drinking water by runoff into surface water. This chemical has been shown to damage the liver, kidney and gastrointestinal tract and causes cataract formation in laboratory animals such as dogs and rats exposed at high levels over their lifetimes. EPA has set the drinking water standard for diquat at 0.02 parts per million (ppm) to protect against the risk of these adverse health effects. Drinking water which meets the EPA standard is associated with little to none of this risk and should be considered safe with respect to diquat.

(63) Endothall. The United States Environmental Protection Agency (EPA) sets drinking water standards and has determined that endothall is a health concern at certain levels of exposure. This organic chemical is a herbicide used to control terrestrial and aquatic weeds. It may get into water by runoff into surface water. This chemical has been shown to damage the liver, kidney, gastrointestinal tract and reproductive system of laboratory animals such as rats and mice exposed at high levels over their lifetimes. EPA has set the drinking water standard for endothall at 0.1 parts per million (ppm) to protect against the risk of these adverse health effects. Drinking water which meets the EPA standard is associated with little to none of this risk and should be considered safe with respect to endothall.

(64) Endrin. The United States Environmental Protection Agency (EPA) sets drinking water standards and has determined that endrin is a health concern at certain levels of exposure. This organic chemical is a pesticide no longer registered for use in the United States. However, this chemical is persistent in treated soils and accumulates in sediments and aquatic and terrestrial biota. This chemical has been shown to cause damage to the liver, kidney and heart in laboratory animals such as rats and mice when the animals are exposed at high levels over their lifetimes. EPA has set the drinking water standard for endrin at 0.002 parts per million (ppm) to protect against the risk of these adverse health effects which have been observed in laboratory animals. Drinking water that meets the EPA standard is associated with little to none of this risk and should be considered safe with respect to endrin.

(65) Glyphosate. The United States Environmental Protection Agency (EPA) sets drinking water standards and has determined that glyphosate is a health concern at certain levels of exposure. This organic chemical is a herbicide used to control grasses and weeds. It may get into drinking water by runoff into surface water. This chemical has been shown to cause damage to the liver and kidneys in laboratory animals such as rats and mice when the animals are exposed at high levels over their lifetimes. EPA has set the drinking water standard for glyphosate at seven-tenths (0.7) parts per million (ppm) to protect against the risk of these adverse health effects. Drinking water which meets the EPA standard is associated with little to none of this risk and should be considered safe with respect to glyphosate.

(66) Hexachlorobenzene. The United States Environmental Protection Agency (EPA) sets drinking water standards and has determined that hexachlorobenzene is a health concern at certain levels of exposure. This organic chemical is produced as an impurity in the manufacture of certain solvents and pesticides. This chemical has been shown to cause cancer in laboratory animals such as rats and mice when the animals are exposed to high levels during their lifetimes. Chemicals that cause cancer in laboratory animals also may increase the risk of cancer in humans who are exposed over long periods of time. EPA has set the drinking water standard for hexachlorobenzene at 0.001 parts per million (ppm) to protect against the risk of cancer and other adverse health effects. Drinking water which meets the EPA standard is associated with little to none of this risk and should be considered safe with respect to hexachlorobenzene.

(67) Hexachlorocyclopentadiene. The United States Environmental Protection Agency (EPA) establishes drinking water standards and has determined that hexachlorocyclopentadiene is a health concern at certain levels of exposure. This organic chemical is used as an intermediate in the manufacture of pesticides and flame retardants. It may get into water by discharge from production facilities. This chemical has been shown to damage the kidney and the stomach of laboratory animals when exposed at high levels over their lifetimes. EPA has set the drinking water standard for hexachlorocyclopentadiene at 0.05 parts per million (ppm) to protect against the risk of these adverse health effects. Drinking water which meets the EPA standard is associated with little to none of this risk and should be considered safe with respect to hexachlorocyclopentadiene.

(68) Oxamyl. The United States Environmental Protection Agency (EPA) sets drinking water standards and has determined that oxamyl is a health concern at certain levels of exposure. This organic chemical is used as a pesticide for the control of insects and other pests. It may get into drinking water by runoff into surface water or leaching into ground water. This chemical has been shown to damage the kidneys of laboratory animals such as rats when exposed at high levels over their lifetimes. EPA has set the drinking water standard for oxamyl at 0.2 parts per million (ppm) to protect against the risk of these adverse health effects. Drinking water which meets the EPA standard is associated with little to none of this risk and should be considered safe with respect to oxamyl.

(69) Picloram. The United States Environmental Protection Agency (EPA) sets drinking water standards and has determined that picloram is a health concern at certain levels of exposure. This organic chemical is used as a pesticide for broadleaf weed control. It may get into drinking water by runoff into surface water or leaching into groundwater has a result of pesticide application and improper waste disposal. This chemical has been shown to cause damage to the kidneys and liver in laboratory animals such as rats when the animals are exposed at high levels over their lifetimes. EPA has set the drinking water standard for picloram at 0.5 parts per million (ppm) to protect against the risk of these adverse health effects. Drinking water which meets the EPA standard is associated with little to none of this risk and should be considered safe with respect to picloram.

(70) Simazine. The United States Environmental Protection Agency (EPA) sets drinking water standards and has determined that simazine is a health concern at certain levels of exposure. This organic chemical is a herbicide used to control annual grasses and broadleaf weeds. It may leach into ground water or run off into surface water after application. This chemical may cause cancer in laboratory animals such as rats and mice exposed at high levels during their lifetimes. Chemicals that cause cancer in laboratory animals also may increase the risk of cancer in humans who are exposed over long periods of time. EPA has set the drinking water standard for simazine at 0.004 parts per million (ppm) to reduce the risk of cancer or other adverse health effects. Drinking water which meets the EPA standard is associated with little to none of this risk and should be considered safe with respect to simazine.

(71) 1,2,4-Trichlorobenzene. The United States Environmental Protection Agency (EPA) sets drinking water standards and has determined that 1,2,4-trichlorobenzene is a health concern at certain levels of exposure. This organic chemical is used as a dye carrier and as a precursor in herbicide manufacture. It generally gets into drinking water by discharges from industrial activities. This chemical has been shown to cause damage to several organs, including the adrenal glands. EPA has set the drinking water standard for 1,2,4-trichlorobenzene at 0.07 parts per million (ppm) to protect against the risk of these adverse health effects. Drinking water which meets the EPA standard is associated with little to none of this risk and should be considered safe with respect to 1,2,4-trichlorobenzene.

(72) 1,1,2-Trichloroethane. The United States Environmental Protection Agency (EPA) sets drinking water standards and has determined that 1,1,2-trichloroethane is a health concern at certain levels of exposure. This organic chemical is an intermediate in the production of 1,1-dichloroethylene. It generally gets into water by industrial discharge of wastes. This chemical has been shown to damage the kidney and liver of laboratory animals such as rats exposed to high levels during their lifetimes. EPA has set the drinking water standard for 1,1,2-trichloroethane at 0.005 parts per million (ppm) to protect against the risk of these adverse health effects. Drinking water which meets the EPA standard is associated with little to none of this risk and should be considered safe with respect to 1,1,2-trichloroethane.

(73) 2,3,7,8-RCDD (Dioxin). The United States Environmental Protection Agency (EPA) sets drinking water standards and has determined that dioxin is a health concern at certain levels of exposure. This organic chemical is an impurity in the production of some pesticides. It may get into drinking water by industrial discharge of wastes. This chemical has been shown to cause cancer in laboratory animals such as rats and mice when the animals are exposed at high levels over their lifetimes. Chemicals that cause cancer in laboratory animals also may increase the risk of cancer in humans who are exposed over long periods of time. EPA has set the drinking water standard for dioxin at 0.00000003 parts per million (ppm) to reduce the risk of cancer or other adverse health effects which have been observed in laboratory animals. Drinking water which meets this standard is associated with little to none of this risk and should be considered safe with respect to dioxin.

(74) Lead. The United States Environmental Protection Agency (EPA) sets drinking water standards and has determined that lead is a health concern at certain exposure levels. Materials that contain lead have frequently been used in the construction of water supply distribution systems, and plumbing systems in private homes and other buildings. The most commonly found materials include service lines, pipes, brass and bronze fixtures, and solders and fluxes. Lead in these materials can contaminate drinking water as a result of the corrosion that takes place when water comes into contact with those materials. Lead can cause a variety of adverse health effects in humans. At relatively low levels of exposure, these effects may include interference with red blood cell chemistry, delays in normal physical and mental development in babies and young children, slight deficits in the attention span, hearing, and learning abilities of children, and slight increases in the blood pressure of some adults. EPA's national primary drinking water regulation requires all public water systems to optimize corrosion control to minimize lead contamination resulting from the corrosion of plumbing materials. Public water systems serving 50,000 people or fewer that have lead concentrations below 15 parts per billion (ppb) in more than ninety (90) percent of tap water samples (the EPA "action level") have optimized their corrosion control treatment. Any water system that exceeds the action level must also monitor their source water to determine whether treatment to remove lead in source water is needed. Any water system that continues to exceed the action level after installation of corrosion control and/or source water treatment must eventually replace all lead service lines contributing in excess of fifteen (15) ppb of lead to drinking water. Any water system that exceeds the action level must also undertake a public education program to inform consumers of ways they can reduce their exposure to potentially high levels of lead in drinking water.

(75) Copper. The United States Environmental Protection Agency (EPA) sets drinking water standards and has determined that copper is a health concern at certain exposure levels. Copper, a reddish-brown metal, is often used to plumb residential and commercial structures that are connected to water distribution systems. Copper contaminating drinking water as a corrosion by-product occurs as the result of the corrosion of copper pipes that remain in contact with water for a prolonged period of time. Copper is an essential nutrient, but at high doses it has been shown to cause stomach and intestinal distress, liver and kidney damage, and anemia. Persons with Wilson's disease may be at a higher risk of health effects due to copper than the general public. EPA's national primary drinking water regulation requires all public water systems to install optimal corrosion control to minimize copper contamination resulting from the corrosion of plumbing materials. Public water systems serving 50,000 people or fewer that have copper concentrations below one and three-tenths (1.3) parts per million (ppm) in more than ninety (90) percent of tap water samples (the EPA "action level") are not required to install or improve their treatment. Any water system that exceeds the action level must also monitor their source water to determine whether treatment to remove copper in source water is needed.

E. DOUGLAS STEPHAN, Commissioner
PHILLIP J. SHEPHERD, Secretary
APPROVED BY AGENCY: April 14, 1994
FILED WITH LRC: April 15, 1994 at 11 a.m.

PUBLIC HEARING: A public hearing to receive comments on this proposed regulation has been scheduled for Wednesday, May 25, 1994 at 1:30 p.m. (ET), in the Auditorium of the State Office Building, Frankfort, Kentucky. Individuals interested in being heard at this hearing shall notify John T. Smither in writing at the address noted below by May 20, 1994, of their intent to attend the hearing and be heard. If no notification of intent to attend the hearing and be heard is received by that date, the hearing may be canceled. This hearing is open to the public. Any person wishing to be heard will be given an opportunity to comment on the proposed regulation. Persons testifying at the hearing are requested to provide the cabinet with a written copy of their testimony, if available. A transcript of the hearing may not be made unless a written request for a transcript is made at least five (5) days before the hearing. If you do not wish to be heard at the public hearing, you may submit written comments on the proposed regulation. Written comments must be received by John T. Smither at the address below no later than the close of business, (4:30 p.m. (ET)) May 25, 1994. The Natural Resources and Environmental Protection Cabinet does not discriminate on the basis of race, color, national origin, sex, religion, age, or disability. The meeting facility is accessible to people with disabilities. The cabinet will provide, upon request, reasonable accommodations including auxiliary aids and services necessary to afford individuals with a disability an equal opportunity to participate in all services, programs, and activities. If an interpreter or other auxiliary aid or service is needed, contact Mr. Smither at the address below before May 20, 1994 between 8 a.m. and 4:30 p.m. (ET).

CONTACT PERSON: John T. Smither, Manager, Drinking Water Branch, Division of Water, Department for Environmental Protection, 14 Reilly Road, Frankfort, Kentucky 40601, (502) 564-3410.

REGULATORY IMPACT ANALYSIS

Agency Contact: John T. Smither

(1) Type and number of entities affected: This regulation affects approximately 809 public water systems. This number may vary from month to month.

(a) Direct and indirect costs or savings to those affected: The amendments to this regulation incorporate mandatory language for public notification in case of violations of maximum contaminant levels for an additional 63 contaminants. In addition, nitrite has been added as an acute tier one violation. This amendment will not increase or decrease costs if no violation occurs. However, the field of contaminants which may trigger a violation is substantially expanded. If a violation occurs, public water systems would be required to notify the public and would incur the costs of doing so through newspaper advertisements or publishing fliers or posters for notifying the public. These costs could vary depending on the size of the public water system, the size of the newspaper in which the advertising is

purchased, and the number of customers a public water system may need to notify.

1. First year: Notification requirements will be on-going. No costs will be incurred if no violation occurs.

2. Continuing costs or savings: Costs will be incurred if a violation occurs and will continue to occur for as long as the violation exists.

3. Additional factors increasing or decreasing costs (note any effects upon competition): No other factors will increase or decrease costs.

(b) Reporting and paperwork requirements: Public water systems are required to submit copies of public notification to the Cabinet. The amendment to this regulation does not change that but does expand the field of possible contaminants.

(2) Effects on the promulgating administrative body: The amendments to this regulation will have no effect on the promulgating administrative body except to expand the field of contaminants which public water systems will be required to notify the public about and submit such notification to the Cabinet.

(a) Direct and indirect costs or savings: The amendments to this regulation are unlikely to have any measurable direct or indirect costs or savings to the promulgating administrative body. The Cabinet considers it unlikely that most of the expanded list of contaminants will be found above the maximum contaminant level in more than a few systems, if any.

1. First year: No measurable cost or savings.

2. Continuing costs or savings: No continuing cost or savings.

3. Additional factors increasing or decreasing costs: No other factors will increase or decrease costs.

(b) Reporting and paperwork requirements: The reporting and paperwork requirements of this regulation are unchanged by the amendments.

(3) Assessment of anticipated effect on state and local revenues: State and local revenues are not expected to be affected by this regulation, although a public water system owned by a local government which has to notify the public, could be indirectly affected by this regulation.

(4) Assessment of alternative methods; reasons why alternatives were rejected: This regulation stipulates language developed by the Environmental Protection Agency as mandatory language for Public Notification. No other method would comply with this Federal requirement.

(5) Identify any statute, administrative regulation or government policy which may be in conflict, overlapping, or duplication: No statute, administrative regulation, or other policy, conflicts with, or duplicates this regulation, although 401 KAR 8:020 provides for "boil water advisories" and "consumer advisories" which may overlap this regulation. These advisories can be initiated at any time by the public water system or the Cabinet when information needs to be conveyed to consumers. These advisories may or may not fulfill the requirements of this regulation.

(a) Necessity of proposed regulation if in conflict: No conflict exists.

(b) If in conflict, was effort made to harmonize the proposed administrative regulation with conflicting provisions: No conflict exists.

(6) Any additional information or comments:

TIERING: Was tiering applied? Yes. The provisions of this regulation have been tiered to take into consideration the severity of the violation and the circumstances of the Public Water System.

FISCAL NOTE ON LOCAL GOVERNMENT

1. Does this administrative regulation relate to any aspect of a local government, including any service provided by that local government? Yes

2. State what unit, part or division of local government this administrative regulation will affect. This regulation relates to public water systems. Local governments frequently own or operate public water systems.

3. State the aspect or service of local government to which this administrative regulation relates. This regulation relates to the provision of potable drinking water.

4. Estimate the effect of this administrative regulation on the expenditures and revenues of a local government for the first full year the regulation is to be in effect. If specific dollar estimates cannot be determined, provide a brief narrative to explain the fiscal impact of the administrative regulation.

Revenues (+/-): None

Expenditures (+/-): None

Other Explanation: This regulation requires public notification when public water systems fail to comply with 401 KAR Chapter 8. No costs would be incurred if the water system stays in compliance. However, if public notification is necessary, costs could be incurred. These costs would ordinarily be passed on to consumers of the water, but a local government which owns a public water system could choose to absorb these costs. Public Notification costs can vary depending on the type notice, the size of the public water system, and the number of customers the water system has.

FEDERAL MANDATE ANALYSIS COMPARISON

1. Federal statute or regulation constituting the federal mandate. 40 CFR 141.32 as amended at 56 Federal Register 3587(1991), 56 Federal Register 26548(1991), 56 Federal Register 30279(1991) and 57 Federal Register 31843(1992) establish certain minimum requirements for implementation of the federal Safe Drinking Water Act (SDWA). The SDWA does not require states to adopt the federal program, so there is no federal mandate. It does authorize states to apply for program delegation. This eliminates the need for dual federal and state programs.

2. State compliance standards. 401 KAR 8:070 Section 6 prescribes the mandatory language for use in public notifications which are required elsewhere in this regulation.

3. Minimum or uniform standards contained in the federal mandate. 40 CFR 141.32 prescribes mandatory language for use with public notification required by the regulation.

4. Will this administrative regulation impose stricter requirements, or additional or different responsibilities or requirements, than those required by the federal mandate? There is no federal mandate to implement the federal SDWA. The cabinet has implemented its state statutory authority in adopting this regulation.

5. Justification for the imposition of the stricter standard, or additional or different responsibilities or requirements. The standards are the same.

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

401 KAR 8:100. Design, construction and approval of [~~new or modified~~] facilities.

RELATES TO: KRS Chapter 224; 40 CFR Part 141 (1993)

STATUTORY AUTHORITY: KRS 224.10-100, 224.10-110, PL 93-523, The Safe Drinking Water Act, as amended in 1986 and by the Lead Contamination and Control Act of 1988, PL 100-572, 42 USCA 300f, 300g, 300j

NECESSITY AND FUNCTION: KRS 224.10-110 directs the cabinet to enforce administrative [~~rules and~~] regulations adopted by the secretary for the regulation and control of the purification of water for public and semipublic use. The Safe Drinking Water Act, as amended by the Safe Drinking Water Act Amendments of 1986,

provides for primary enforcement responsibility by states that have adopted regulations "no less stringent than the national primary drinking water regulations", as well as meeting other criteria stipulated by the Act. The Commonwealth of Kentucky has accepted and is currently exercising this [~~such~~] primary enforcement responsibility. This administrative regulation sets out design plan requirements for the construction of new and expanded facilities that deliver pure water for public or semipublic use, as well as stipulating certain reporting requirements and requiring modifications to existing facilities for certain line replacements, and feeding granular activated carbon.

Section 1. Plans and Specifications. (1) Plans to be submitted. Before a supplier or potential supplier of water may enter into a financial commitment for or initiate construction of a new public water system, or increase the capacity of an existing public water system, he shall submit the preliminary plans to the cabinet. An applicant shall demonstrate to the cabinet evidence of efforts to avoid locating part or all of the new or expanded facility at a site which is subject to a significant risk from earthquakes, floods, fires or other disasters which could cause a breakdown of the public water system or a portion thereof. Except for the intake structure, the facility shall be out of the 100-year flood plain.

(2) Preliminary information. The following information shall be submitted to the cabinet by a professional engineer on behalf of the applicant along with the fee required by 401 KAR 8:050, Section 1(1):

(a) The names of the applicant and the owner of the plant;

(b) A United States Geological Survey quadrangle map which shows the location of the proposed facility;

(c) The proposed source of water and quantity available, with the location of the intake or wellhead identified by latitude and longitude in degrees, minutes and seconds;

(d) An analysis of the water from the proposed source, which covers all regulated parameters, performed by a laboratory certified by the cabinet or its authorized agent;

(e) A description of the proposed facility, including size, flow rate through filters, settling basin size, and other general criteria; and

(f) An operation plan, including anticipated load, hours of operation, area served and the name of the plant operator.

(3) Preliminary plans approval. Upon receipt and review of the preliminary plans, as set forth in subsection (1) of this section, the cabinet shall either approve the preliminary plans or return them to the supplier of water for revision. Approval of the preliminary plans signifies approval only of the concept described in the preliminary plans and does not alter in any way the responsibility of the supplier of water to submit complete plans and specifications to the cabinet for final approval. The facility shall comply with the approved preliminary plans. Any change in the final design from the concept set forth in the preliminary plans shall be approved prior to its incorporation in the final plans and specifications.

(4) Preliminary plans for semipublic treatment facilities or distribution systems. Preliminary plans are not required by the cabinet for semipublic treatment facilities or for distribution system construction, extensions or improvements.

(5) Final plans and specifications for water treatment plants and distribution facilities.

(a) Plans for the construction or modification of public water systems shall be submitted by the water system or shall be accompanied by a letter from the water system confirming that it has reviewed the plans, accepts the design and can and will provide water service to the project. Public water systems which purchase water from another public water system, shall also submit a letter from the seller of water for all construction or modification projects if: such project will result in exceeding eighty-five (85) percent of the purchasers current purchase contract; or such project could result in a pressure reduction below thirty-five (35) pounds per square inch in either the purchaser's or the seller's system; or, such project will result in a demand for water by the purchaser in excess of a 10,000 gallon per day increase. This requirement may be waived by the cabinet if the purchaser shows that a reasonable attempt to obtain the letter has been made and the seller of water fails to provide the required letter. In no event will this provision be the sole justification for rejection of the proposed project. The intent is to alert the seller and the purchaser that they are approaching their water purchase contract limitations and the state standards on minimum water pressure.

(b) Plans and specifications for all public water systems shall be prepared and submitted to the cabinet by a professional engineer registered in Kentucky, and shall bear the engineer's [~~his~~] seal. The seal of a professional engineer is not required on plans and specifications for semipublic water supplies, or for public water supply projects in which the expenditure for the completed project shall not exceed $2,000. The construction or installation of any new facilities or works or the alteration or reconstruction of any existing facilities or works, in any public or semipublic water system, shall not begin until four (4) copies of the plans and specifications, or any changes thereto, together with design data as may be required for proper review of the plans, have been submitted to the cabinet and have been approved by the cabinet in writing. A complete package, including plans, specifications, necessary fees, letters and other information, shall be submitted in such form and content as may be specified by the cabinet, and shall be submitted at least thirty (30) days prior to the date on which action is requested of the cabinet. The front page of the plans shall contain the name of the water supply, its ownership, location by city and county, and the name of the person preparing the plans.

(c) The cabinet's review of plans shall be limited to sanitary features of design and other features of public health significance and shall not include an examination of structural, mechanical or electrical design or economic factors.

(d) The plans shall be drawn to scale and accompanied by proper specifications, so as to permit a comprehensive engineering review, and shall include, but not be limited to, the following:

1. If treatment facilities are involved, chemical analyses of the proposed raw water source or sources shall be performed and evaluated before final approval is granted;

2. A plan and sectional view with all necessary dimensions of the water treatment facilities;

3. A piping diagram showing all appurtenances, including treatment facilities, in sufficient detail, as well as pertinent elevation data, to permit a hydraulic analysis of the system; and

4. Specifications containing details on all treatment equipment, including catalog identification of pumps, chlorinators, chemical feeders and related equipment.

5. A capacity to feed activated carbon shall be a part of the design for a new community or nontransient noncommunity surface water system.

6. A plan for a water line that would propose a section of line be laid within a 200 foot radius of an underground storage tank as defined in KRS 224.60-100 or a petroleum storage tank as defined in KRS 224.60-115, shall provide that all water lines within the 200 foot radius shall be ductile iron pipe or other metal pipe approved by the cabinet. Any future replacement of an existing water line within a 200 foot radius of a storage tank, whether or not plans are submitted to the cabinet, shall also meet this requirement.

(6) Approval of final plans. If approved, one (1) set of plans and specifications stamped "approved" will be returned to the engineer or person who prepared them and one set will be returned to the water supply.

(7) Construction.

(a) During construction, a set of approved plans and specifications shall be available at the job site at all times. All work shall be performed in accordance with the approved plans and specifications.

(b) If the cabinet's representative observes work being performed in a manner which does not conform to the approved plans and specifications, the cabinet shall notify the owner in writing.

(8) Final approval of facility. Upon completion of construction, the person who presented the plans shall certify in writing that the project has been completed in accordance with the "approved" plans and specifications. The public water supply shall operate the facility consistent with the approved plans and specifications. Any proposed change to the approved plan shall be submitted to the cabinet for approval. The public water supply shall not implement any change to the approved plan without the prior written approval of the cabinet.

(9) Expiration of approval. Unless construction is begun within one (1) year from date of approval, the approval shall expire. Extension of approval may be granted upon written request to the cabinet.

(10) Modifications and extension of service. The cabinet may refuse to approve modifications of a public water system or an extension of service to one (1) or more customers where such modification or extension of service may result in the water system's inability to supply consistent water service in compliance with 401 KAR 8:010 through 8:060 inclusive.

(11) [~~(10)~~] All plans and specifications submitted pursuant to this regulation shall be consistent with "Recommended Standards for Water Works", "General Design Criteria for Surface and Groundwater Supplies", and "Water Policy Memorandum Number 84-02, General Guidelines for Conducting Stream Studies for Wastewater Discharges Proposed Within Five Miles Upstream from Public Water Supply Sources, or for the Location of Public Water Supply Intakes Within Five Miles Downstream from Wastewater Discharges", which are incorporated by reference in Section 4 [2] of this regulation.

Section 2. Treatment Techniques for New and Existing Systems. (1) General requirements. The requirements of this section constitute primary drinking water regulations. These administrative regulations establish treatment techniques in lieu of maximum contaminant levels for specified contaminants.

(2) Treatment techniques for acrylamide and epichlorohydrin. Each public water system shall certify annually in writing to the cabinet, using third party or manufacturer's certification, that when acrylamide and epichlorohydrin are used in drinking water systems, the combination or product of dose and monomer level does not exceed the levels specified as follows:

Acrylamide = 0.05% dosed at one (1) ppm (or equivalent);

Epichlorohydrin = 0.01% dosed at twenty (20) ppm (or equivalent).

Certifications may rely on manufacturers or third parties, as approved by the cabinet.

Section 3. All existing community and nontransient noncommunity water systems using surface water as a source shall, by January 1, 1995, submit to the cabinet for approval plans to establish the capacity to feed activated carbon to the treatment system. Within twelve (12) months of the approval of the plans, the water system shall certify in writing to the cabinet that the approved plan has been implemented.

Section 4. [~~2.~~] The following documents are hereby incorporated by reference and are available for public inspection and copying, subject to copyright laws, between 8 a.m. and 4:30 p.m., Monday through Friday, except for state holidays, at the Division of Water, 14 [~~18~~] Reilly Road, Frankfort Office Park, Frankfort, Kentucky 40601:

(1) Great Lakes Upper Mississippi River Board of State Public Health & Environmental Managers "Recommended Standards for Water Works," 1992 [~~1987~~], published by and available from Health Research Inc., Health Education Services Division, P.O. Box 7126, Albany, New York 12224.

(2) "General Design Criteria for Surface and Ground Water Supplies", July 1990, which is published by and may be obtained from the Division of Water; and

(3) "Water Policy Memorandum number 84-02, General Guidelines for Conducting Stream Studies for Wastewater Discharges Proposed within Five Miles Upstream from Public Water Supply Sources, or for the Location of Public Water Supply Intakes within Five Miles Downstream from Wastewater Discharges", 1984, which is published by and may be obtained from the Division of Water.

[~~Section 3. Severability. If any provision of this regulation is set aside by a court of competent jurisdiction, the remainder of this regulation remains in effect.~~]

E. DOUGLAS STEPHAN, Commissioner
PHILLIP J. SHEPHERD, Secretary

APPROVED BY AGENCY: April 14, 1994

FILED WITH LRC: April 15, 1994 at 11 a.m.

PUBLIC HEARING: A public hearing to receive comments on this proposed regulation has been scheduled for Wednesday, May 25, 1994 at 1:30 p.m. (ET), in the Auditorium of the State Office Building, Frankfort, Kentucky. Individuals interested in being heard at this hearing shall notify John T. Smither in writing at the address noted below by May 20, 1994, of their intent to attend the hearing and be heard. If no notification of intent to attend the hearing and be heard is received by that date, the hearing may be canceled. This hearing is open to the public. Any person wishing to be heard will be given an opportunity to comment on the proposed regulation. Persons testifying at the hearing are requested to provide the cabinet with a written copy of their testimony, if available. A transcript of the hearing may not be made unless a written request for a transcript is made at least five (5) days before the hearing. If you do not wish to be heard at the public hearing, you may submit written comments on the proposed regulation. Written comments must be received by John T. Smither at the address below no later than the close of business, (4:30 p.m. (ET)) May 25, 1994. The Natural Resources and Environmental Protection Cabinet does not discriminate on the basis of race, color, national origin, sex, religion, age, or disability. The meeting facility is accessible to people with disabilities. The cabinet will provide, upon request, reasonable accommodations including auxiliary aids and services necessary to afford individuals with a disability an equal opportunity to participate in all services, programs, and activities. If an interpreter or other auxiliary aid or service is needed, contact Mr. Smither at the address below before May 20, 1994 between 8 a.m. and 4:30 p.m. (ET).

CONTACT PERSON: John T. Smither, Manager, Drinking Water Branch, Division of Water, Department for Environmental Protection, 14 Reilly Road, Frankfort, Kentucky 40601, (502) 564-3410.

REGULATORY IMPACT ANALYSIS

Agency Contact: John T. Smither

(1) Type and number of entities affected: This regulation will affect approximately 918 public and semipublic water systems. This number can vary from month to month.

(a) Direct and indirect costs or savings to those affected: The amendments to this regulation will require public water systems, when submitting plans for new facilities, to allow for the need to provide activated carbon as a treatment technique, for existing facilities to submit plans and implement a means of using activated carbon as a treatment technique, to certify to the Cabinet if certain chemical treatments are used to treat water, and to use ductile iron pipe for water lines within 200 feet of underground storage tanks. Proposed changes to approved plans must be submitted for approval. An implicit right to deny modifications to existing systems is made explicit. Costs for using activated carbon as a filtration media are estimated to be $2,000 per year it is in use.

1. First year: Submission of plans for approval is a one time activity unless plans are changed. Submission of proposed changes is required by this regulation but always has been if the change would modify operation of the water system. Costs can vary with the size

and complexity of the project. Plans for the introduction of activated carbon will create some small cost. The amendments to this regulation are not expected to increase costs significantly. However, the use of ductile iron pipe will double the cost of pipe material over PVC pipe for the length of pipe needed.

2. Continuing costs or savings: If a public water system uses acrylamide or epichlorohydrin in its treatment process, it must certify to the Cabinet that certain criteria are met. These certifications may be based on manufacturer's specifications and standards.

3. Additional factors increasing or decreasing costs (note any effects upon competition): No other factors increase or decrease costs.

(b) Reporting and paperwork requirements: The Cabinet will have to maintain the annual certifications made by public water systems using acrylamide or epichlorohydrin in their treatment process. The Cabinet will also need to approve plans for the introduction of activated carbon.

(2) Effects on the promulgating administrative body: The amendments to this regulation will require the Cabinet to maintain the annual certifications for acrylamide and epichlorohydrin. The ability to feed activated carbon is one additional element to be included in new water system plans, and additional plans will have to be reviewed for existing water treatment plants as they develop this ability.

(a) Direct and indirect costs or savings: Some minor record maintenance costs are possible. However, the Cabinet does not know how to gauge these since it is unknown how many water systems may choose to use acrylamide or epichlorohydrin in their treatment process. Also, Cabinet personnel will need to review plans to introduce activated carbon in existing systems.

1. First year: No other direct or indirect costs or savings.

2. Continuing costs or savings: No other continuing costs or savings.

3. Additional factors increasing or decreasing costs: No other factors affecting costs.

(b) Reporting and paperwork requirements: The Cabinet will be required to maintain new certifications relating to two additives and to retain plans for the introduction of activated carbon. It is expected that the new language for submitting proposed changes to approved plans will increase the number of these plan changes which are submitted. No other new paperwork or recordkeeping will be required.

(3) Assessment of anticipated effect on state and local revenues: This regulation will have no effect on state or local revenue.

(4) Assessment of alternative methods; reasons why alternatives were rejected: The Cabinet has given consideration to moving to a more formal permit procedure. However, at this time the plans approval process is well established and understood. This unit seems to be the best place to allow water systems to certify their additives.

(5) Identify any statute, administrative regulation or government policy which may be in conflict, overlapping, or duplication: No statute, regulation, or policy conflicts with, overlaps, or duplicates this regulation.

(a) Necessity of proposed regulation if in conflict: No conflict exists.

(b) If in conflict, was effort made to harmonize the proposed administrative regulation with conflicting provisions: No conflict exists.

(6) Any additional information or comments: None

TIERING: Was tiering applied? Yes. This regulation has been tiered to reflect the types and sizes of public water systems as well as the types of projects involved.

FISCAL NOTE ON LOCAL GOVERNMENT

1. Does this administrative regulation relate to any aspect of a local government, including any service provided by that local government? Yes

2. State what unit, part or division of local government this administrative regulation will affect. This regulation relates to public water systems. Local governments frequently own or operate public water systems.

3. State the aspect or service of local government to which this administrative regulation relates. This regulation relates to the provision of potable drinking water.

4. Estimate the effect of this administrative regulation on the expenditures and revenues of a local government for the first full year the regulation is to be in effect. If specific dollar estimates cannot be determined, provide a brief narrative to explain the fiscal impact of the administrative regulation.

Revenues (+/-):

Expenditures (+/-):

Other Explanation: This regulation will require reports to the Cabinet if certain chemicals are used in the treatment process. It also will require public water systems to provide a means of using activated carbon in the treatment process and use ductile iron pipe for lines within 200 yards of an underground storage tank. While public water systems usually would pass costs for these activities through to the consumer, a local government which owns and operates a public water system could elect to absorb some or all of these costs.

FEDERAL MANDATE ANALYSIS COMPARISON

1. Federal statute or regulation constituting the federal mandate. 40 CFR 141.110 and 40 CFR 141.111 created at 56 Federal Register 3594 January 30, 1991 establish certain minimum requirements for implementation of the federal Safe Drinking Water Act (SDWA). The SDWA does not require states to adopt the federal program, so there is no federal mandate. It does authorize states to apply for program delegation. This eliminates the need for dual federal and state programs.

2. State compliance standards. This regulation sets forth certain reporting requirements for public water systems using certain treatment techniques for water. In addition, this regulation will make the ability to use activated carbon as a treatment technique an element in the design of certain public water systems as well as require all public water systems using surface water to submit plans for feeding activated carbon and to implement those plans within one year. This regulation will also require water lines within 200 yds. of an underground storage tank to be constructed of ductile iron or other metal approved by the cabinet. Also, public water systems must submit proposed changes to approved plans for approval.

3. Minimum or uniform standards contained in the federal mandate. The federal regulations set forth certain reporting requirements for public water systems using certain treatment techniques for water.

4 .Will this administrative regulation impose stricter requirements, or additional or different responsibilities or requirements, than those required by the federal mandate? There is no federal mandate to implement the federal SDWA. The cabinet has implemented its state statutory authority in adopting this regulation.

5. Justification for the imposition of the stricter standard, or additional or different responsibilities or requirements. The cabinet believes that, because of the heightened awareness of possible chemical contamination, water systems should be designed in a way to allow for easy treatment of most chemical contaminants. In addition, there have been numerous cases of PVC pipe being permeated by contaminants from leaking underground storage tanks. Therefore, the cabinet believes that requiring metal pipes within 200 yards of such tanks to be prudent. The requirement to submit proposed changes to approved plans for approval is a housekeeping change to clarify an existing requirement.

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

401 KAR 8:150. Disinfection and filtration.

RELATES TO: KRS Chapter 224, 40 CFR Parts 141, 142 (1993)
STATUTORY AUTHORITY: KRS 224.10-100, 224.10-110, 40 CFR Parts 141 and 142 (1993), [~~as amended at 54 Federal Register 27,526 (1989),~~] 42 USCA 300f, 300g, 300j
NECESSITY AND FUNCTION: KRS 224.10-110 directs the cabinet to enforce administrative [~~rules and~~] regulations adopted by the secretary for the regulation and control of the purification of water for public and semipublic use. The Safe Drinking Water Act, as amended by the Safe Drinking Water Act Amendments of 1986, provides for primary enforcement responsibility by states that have adopted regulations "no less stringent than the national primary drinking water regulations", as well as meeting other criteria stipulated by the Act. The Commonwealth of Kentucky has accepted and is currently exercising this [~~such~~] primary enforcement responsibility. This administrative regulation sets out requirements for the disinfection and filtration of drinking water in public water systems using surface water or groundwater under the direct influence of surface water. These requirements shall serve as treatment techniques in lieu of maximum contaminant levels for the following contaminants: Giardia lamblia, viruses, heterotrophic plate count bacteria, Legionella, as well as an MCL for turbidity.

Section 1. Disinfection. All public and semipublic water systems shall provide disinfection, except as provided in this section. Semipublic water systems and water systems which are public water systems only for the purposes of this administrative regulation, 401 KAR 8:020 and 8:200 because they are a commercial facility and serve food or drink to the public, may satisfy this requirement either by complying with the requirements of this section for public water systems or by meeting the requirements of Section 2(5) of this administrative regulation.

(1) Public water systems using groundwater or surface water as a source. Supplies which use chlorine shall use continuous automatic disinfection by chlorination and shall provide a minimum free chlorine residual of two-tenths (0.2) milligrams per liter (or ppm) [~~at all points~~] throughout the distribution system measured as described in subsection (2) of this section. A contact period of at least thirty (30) minutes shall be provided between the chlorine and the water to allow adequate time for disinfection. For those supplies using chlorine, free chlorine residuals shall be checked daily at representative points throughout the system and shall be reported monthly pursuant to 401 KAR 8:020, Section 2(7)(a). Disinfecting agents other than chlorine, such as chloramines and chlorine dioxide, may be acceptable to the cabinet but shall be specifically approved by the cabinet on a case-by-case basis. If chloramination is used, a minimum combined residual of five-tenths (0.5) milligrams per liter (or ppm) shall be provided throughout the distribution system. If chlorine dioxide is used, the concentration of combined oxidants (chlorine dioxide, chlorate and chlorite) shall not exceed one and zero-tenths (1.0) milligrams per liter (or ppm) in the water delivered to the distribution system.

(2) All public water systems using surface water as a source, or groundwater under the direct influence of surface water, shall provide disinfection treatment as follows:

(a) The disinfection treatment shall be sufficient to ensure that the total treatment processes of that system achieve at least ninety-nine and nine-tenths (99.9) percent (3-log) inactivation or removal of Giardia lamblia cysts and at least 99.99 percent (4-log) inactivation or removal of viruses as determined by the cabinet, consistent with the "Guidance Manual for Compliance with the Filtration and Disinfection Requirements for Public Water Systems using Surface Water Sources" incorporated by reference in Section 5 of this administrative regulation.

(b) The residual disinfectant concentration in the water entering the distribution system measured as specified in Section 3(1)(e) of this administrative regulation shall not be less than required by subsection (1) of this section for more than four (4) hours.

(c) The residual disinfectant concentration in the distribution system measured as free chlorine, total chlorine, combined chlorine, or chlorine dioxide as specified in Section 3(1)(e) of this administrative regulation, shall not be less than two-tenths (0.2) milligrams per liter (or ppm) in more than five (5) percent of the samples each month, for two (2) consecutive months that the system serves water to the public. Water in the distribution system with a heterotrophic bacteria concentration less than or equal to 500/ml, measured as heterotrophic plate count (HPC), as specified in Section 3(1)(c) of this regulation, is deemed to have an adequate disinfectant residual for purposes of determining compliance with this requirement. Thus the value "V" in the following formula shall not exceed five (5) percent in one (1) month for two (2) consecutive months.

$$V = \frac{c+d+e}{a+b} \times 100$$

where:
a = number of instances that the residual disinfectant concentration is measured;
b = number of instances that the residual disinfectant concentration is not measured but heterotrophic bacteria plate count (HPC) is measured;
c = number of instances that the residual disinfectant concentration is measured but does not measure at least two-tenths (0.2) milligrams per liter or ppm or the equivalent [~~not detected~~] and no HPC is measured;
d = number of instances that [~~no~~] residual disinfectant concentration is below two-tenths (0.2) milligrams per liter [~~detected~~] and where the HPC is greater than 500/ml; and
e = number of instances that the residual disinfectant concentration is not measured and HPC is greater than 500/ml.

(d) If the cabinet determines, based on site-specific considerations, that a system has no means for having a sample transported and analyzed for HPC by a certified laboratory under the requisite time and temperature conditions specified in Section 3(1)(c) of this administrative regulation and that the system is providing adequate disinfection in the distribution system, the requirements of paragraph (c) of this subsection shall not apply.

(e) The cabinet may, through its own or independent testing, determine that residual disinfection is not present throughout the distribution system, take action necessary to correct the problem and, if necessary, notify the public in accordance with 401 KAR 8:020, Section 2(9).

(3) Variances or exemptions shall not be granted for subsection (2) of this section.

Section 2. Filtration. All public water systems using a surface water source and all ground water systems under the direct influence of surface water shall establish filtration systems. The design for such systems shall be submitted to the cabinet in accordance with 401 KAR 8:100, and shall comply with the following [~~by June 29, 1993~~]:

(1) Conventional filtration treatment or direct filtration:

(a) If a public water system uses conventional filtration or direct filtration, the turbidity level of representative samples of the system's filtered water shall be less than or equal to five-tenths (0.5) NTU in at least ninety-five (95) percent of the measurements taken each month, measured as specified in Section 3(1)(d) of this administrative regulation, except that if the cabinet determines that the system is

capable of achieving at least ninety-nine and nine-tenths (99.9) percent removal or inactivation of Giardia lamblia cysts at some turbidity level higher than five-tenths (0.5) NTU in at least ninety-five (95) percent of the measurements taken each month, the cabinet may substitute this higher turbidity limit for that system. However, the cabinet shall not approve a turbidity limit that allows more than one (1) NTU in more than five (5) percent of the samples taken each month measured as specified in Section 3(1)(d) of this administrative regulation.

(b) The turbidity level of representative samples of a system's filtered water shall not exceed five (5) NTU, measured as specified in Section 3(1)(d) of this administrative regulation.

(2) Slow sand filtration.

(a) If a public water system uses slow sand filtration, the turbidity level of representative samples of the system's filtered water shall be less than or equal to one (1) NTU in at least ninety-five (95) percent of the measurements taken each month, measured as specified in Section 3(1)(d) of this administrative regulation, except that if the cabinet determines there is no significant interference with disinfection at a higher turbidity level, the cabinet may substitute this higher turbidity limit for that system.

(b) The turbidity level of representative samples of a system's filtered water shall not exceed five (5) NTU, measured as specified in Section 3(1)(d) of this administrative regulation.

(3) Diatomaceous earth filtration.

(a) If a public water system uses diatomaceous earth filtration, the turbidity level of representative samples of the system's filtered water shall be less than or equal to one (1) NTU in at least ninety-five (95) percent of the measurements taken each month, measured as specified in Section 3(1)(d) of this administrative regulation.

(b) The turbidity level of representative samples of a system's filtered water shall not exceed five (5) NTU measured as specified in Section 3(1)(d) of this administrative regulation.

(4) Other filtration technologies. A public water system may use a filtration technology not listed in subsections (1) through (3) of this section if it demonstrates to the cabinet, using pilot plant studies or other means, that the alternative filtration technology, in combination with disinfection treatment that meets the requirements of this administrative regulation, consistently achieves ninety-nine and nine-tenths (99.9) percent removal or inactivation of Giardia lamblia cysts and 99.99 percent removal or inactivation of viruses. If a system makes this demonstration, the requirements of subsection (2) of this section shall apply.

(5) Semipublic water systems and water systems which are public water systems only for the purposes of this administrative regulation, 401 KAR 8:020 and 8:200 because they are a commercial facility and serve food or drink to the public, may enter into a protocol with the cabinet whereby the filtration and disinfection requirements of this administrative regulation are achieved using filtration technology, disinfection technology, or a combination of both, if the technology will achieve a ninety-nine and nine-tenths (99.9) percent removal or inactivation of Giardia lamblia cysts and 99.99 percent removal or inactivation of viruses. The protocol shall contain a schedule for maintenance and testing of the filtration and disinfection equipment to assure that the requirements of this subsection are met. Intensive bacteriological testing may be included in the protocol. If surface water is a source of water, filtration shall be an element of the protocol. If groundwater is the only source of water, the semipublic and public water systems eligible under this subsection may enter into a protocol with the cabinet to demonstrate through a regular schedule of bacteriological testing, that filtration or disinfection is not needed. The protocol shall stipulate that any positive bacteriological test shall require disinfection of the water, unless the cabinet has reason to believe that the positive result was due to error.

(6) Variances or exemptions shall not be granted for this section.

Section 3. Analytical and Monitoring Requirements. (1) Analytical requirements. The analytical methods specified in this subsection, or otherwise approved by the cabinet, shall be used to demonstrate compliance with this administrative regulation. Measurements for pH, temperature, turbidity, and residual disinfectant concentrations shall be conducted by a party approved by the cabinet. Measurements for total coliforms, fecal coliforms, and HPC shall be conducted by a laboratory certified by the cabinet or EPA to do the analyses. Until laboratory certification criteria are developed for the analysis of HPC and fecal coliforms, a laboratory certified for total coliform analysis by EPA or the cabinet shall be deemed certified for HPC and fecal coliform analysis. The following procedures shall be performed in accordance with the respective methods set forth below:

(a) Fecal coliform concentration - Method 908C (Fecal Coliform MPN Procedures), pp. 878-880, Method 908D (Estimation of Bacterial Density), pp. 880-882, or Method 909C (Fecal Coliform Membrane Filter Procedure), pp. 896-898, as set forth in Standard Methods for the Examination of Water and Wastewater, 1985, American Public Health Association et al, 16th edition.

(b) Total coliform concentration - Method 908A (Standard Total Coliform Multiple - Tube (MPN) Tests), pp. 872-876, Method 908B (Application of Tests to Routine Examinations), pp. 876-878, Method 908D (Estimation of Bacterial Density), pp. 880-882, Method 909A (Standard Total Coliform Membrane Filter Procedure), pp. 887-894, or Method 909B (Delayed - Incubation Total Coliform Procedure), pp. 894-896, as set forth in Standard Methods for the Examination of Water and Wastewater, 1985, American Public Health Association et al, 16th edition; Minimal Medium ONPG-MUG Test, as set forth in the article "National Field Evaluation of a Defined Substrate Method for the Simultaneous Enumeration of Total Coliforms and Escherichia coli from Drinking Water; Comparison with the Standard Multiple Tube Fermentation Method" (Edberg et al). Applied and Environmental Microbiology, Volume 54, pp. 1595-1601, June 1988 (as amended under Erratum, Volume 54, p. 3197, December 1988). (Note: the Minimal Medium ONPG- MUG Test is sometimes referred to as the Autoanalysis Colilert System). Systems may use a five (5) tube test or a ten (10) tube test.

(c) Heterotrophic Plate Count - Method 907A (Pour Plate Method), pp. 864-866, as set forth in Standard Methods for the Examination of Water and Wastewater, 1985, American Public Health Association et al, 16th edition.

(d) Turbidity - Method 214A (Nephelometric Method - Nephelometric Turbidity Units), pp. 134-136, as set forth in Standard Methods for the Examination of Water and Wastewater, 1985 American Public Health Association et al, 16th edition.

(e) Residual disinfectant concentration - residual disinfectant concentrations for free chlorine and combined chlorine (chloramines) shall be measured by Method 408C (Amperometric Titration Method), pp. 303-306, Method 408D (DPD Ferrous Titrimetric Method), pp. 306-309, Method 408E (DPD Colorimetric Method), pp. 309-310, or Method 408F (Leuco Crystal Violet Method), pp. 310-313, as set forth in Standard Methods for the Examination of Water and Wastewater, 1985, American Public Health Association et al, 16th edition. Residual disinfectant concentrations for free chlorine and combined chlorine may also be measured by DPD colorimetric test kits if approved by the cabinet. Residual disinfectant concentrations for ozone shall be measured by the Indigo Method published in the 17th edition of Standard Methods for the Examination of Water and Wastewater, American Public Health Association et al; the Iodometric Method in the 16th edition shall not be used. Other automated methods which are calibrated in reference to the results obtained by the Indigo method on a regular basis may be approved by the cabinet. Residual disinfectant concentrations for chlorine dioxide shall be measured by Method 410B (Amperometric Method) or Method 410C (DPD Method), pp. 322-324, as set forth in Standard Methods for the Examination of Water and Wastewater, 1985, American Public Health Association et al, 16th edition.

(f) Temperature - Method 212 (Temperature) pp. 126-127, as set

forth in Standard Methods for the Examination of Water and Wastewater, 1985, American Public Health Association et al, 16th edition.

(g) pH - Method 423 (pH Value), pp. 429-437, as set forth in Standard Methods for the Examination of Water and Wastewater, 1985, American Public Health Association, 16th edition.

(2) Monitoring requirements. A public water system that uses a surface water source or a groundwater source under the influence of surface water shall monitor in accordance with paragraph (a) of this subsection beginning July 1, 1992, and with paragraph (b) of this subsection beginning January 1, 1993, or when filtration is installed, whichever is later.

(a) Turbidity measurements shall be performed by public water systems on representative samples of the system's filtered water at least every four (4) hours that the system serves water to the public. A public water system may substitute continuous turbidity monitoring for grab sample monitoring if it validates the continuous measurement for accuracy on a regular basis using a protocol approved by the cabinet. In addition, a system using continuous monitoring shall submit to the cabinet a schedule of times when the monitoring will be recorded. The schedule shall reflect monitoring at least every four (4) hours the system serves water to the public. If a system uses slow sand filtration or filtration treatment other than conventional treatment, direct filtration, or diatomaceous earth filtration, the cabinet may reduce the sampling frequency to once per day if it determines in writing, that less frequent monitoring is sufficient to indicate effective filtration performance. If a system serves 500 or fewer persons, the cabinet may reduce the turbidity sampling frequency to once per day, regardless of the type of filtration treatment used, if the cabinet determines, in writing, that less frequent monitoring is sufficient to indicate effective filtration performance.

(b) The residual disinfectant concentration of the water entering the distribution system shall be monitored by public water systems continuously, and the lowest value shall be recorded each day, except that if there is a failure in the continuous monitoring equipment, grab sampling every four (4) hours may be conducted in lieu of continuous monitoring, but for no more than five (5) working days following the failure of the equipment, and systems serving 3,300 or fewer persons may take grab samples in lieu of providing continuous monitoring on an ongoing basis at the frequencies each day prescribed below:

System Size by Population	Samples/Day
less than 500	1
501 to 1,000	2
1,001 to 2,500	3
2,501 to 3,300	4

The day's samples shall not be taken at the same time. The sampling intervals shall be subject to cabinet review and approval. If the residual disinfectant concentration falls below the requirements of Section 1(1) of this regulation in a system using grab sampling in lieu of continuous monitoring, the system shall take a grab sample every four (4) hours until the residual disinfectant concentration meets the requirements of Section 1(1) of this administrative regulation.

(c) The residual disinfectant concentration shall be measured at least at the same points in the distribution system and at the same time as total coliforms are sampled, as specified in 401 KAR 8:200, except that the cabinet may allow a public water system which uses both a surface water source, or a groundwater source under direct influence of surface water, and a groundwater source to take disinfectant residual samples at points other than the total coliform sampling points if the cabinet determines in writing that such points are more representative of treated (disinfected) water quality within the distribution system. Heterotrophic bacteria, measured as heterotrophic plate count (HPC) as specified in subsection (1)(c) of this section, may be measured in lieu of residual disinfectant concentration.

(d) If the cabinet determines in writing, based on site-specific considerations, that a system has no means for having a sample transported and analyzed for HPC by a certified laboratory under the requisite time and temperature conditions specified by subsection (1)(c) of this section and that the system is providing adequate disinfection in the distribution system, the requirements of paragraph (c) of this subsection shall not apply to that system.

Section 4. Disinfection of New and Repaired Water Lines. (1) Disinfection of water lines. A water distribution system, including storage distribution tanks, repaired portions of existing systems or all extensions to existing systems, shall be thoroughly disinfected before being placed in service. A water distribution system shall disinfect with chlorine or chlorine compounds, in amounts as to produce a concentration of at least fifty (50) ppm and a residual of at least twenty-five (25) ppm at the end of twenty-four (24) hours, and the disinfection shall be followed by a thorough flushing. New water distribution lines shall not be placed into service until bacteriological samples taken at the points specified in subsection (2) of this section are examined and are shown to be negative following disinfection. Other methods of disinfection may be used with the written permission of the cabinet.

(2) Water distribution systems shall submit to the cabinet results of bacteriological samples for each new construction project, routine repair (which includes restoration of pressure to lines where pressure is lost), replacement, or extension to existing systems, after the disinfection and flushing. A core zone, which includes up to the first one-half (1/2) mile, shall be established. Two (2) samples shall be taken from the core zone. Additionally, one (1) sample taken from each mile of new distribution line shall be submitted to the cabinet. A new or routine replacement line shall not be placed in service until negative laboratory results are obtained on the bacteriological analyses. Sample bottles shall be clearly identified as "special" construction tests. Notification of analytical results shall be given to the cabinet by the most expedient method. Other disinfection methods and testing procedures may be used if the cabinet grants prior written approval.

(3) If emergency repairs due to breaks or ruptures in distribution system lines are required, public water systems may suspend bacteriological sampling, if appropriate and thorough flushing safeguards, with a chlorine residual present, are taken. If a public water system suspends bacteriological sampling, it shall maintain records of flushing and chlorine residuals for one (1) year, and conduct bacteriological tests immediately after normal disinfectant residuals are detected after returning the line to service. Records of results shall be submitted to the cabinet and shall be maintained for one (1) year. In cases of loss of pressure below twenty (20) pounds per square inch or breaks or ruptures requiring more than eight (8) hours to repair, the public water system shall notify the cabinet immediately pursuant to 401 KAR 8:020, Section 2(7)(c). These emergency reports are not required for a loss of pressure, break or rupture occurring in service lines serving only one (1) single family residence. Community and nontransient noncommunity public water systems shall maintain [~~provide~~] a log of all breaks or ruptures which includes the date and location of the break or rupture, the time it was discovered, the population affected, the length of time required to repair the break or rupture, the date and time disinfectant residuals are detected and the date and time bacteriological samples are taken. The log shall be available for inspection by [~~submitted to~~] the cabinet [~~monthly with the monthly operating report required by 401 KAR 8:020, Section 2(7)(a)~~].

Section 5. Incorporation by Reference. The following items are incorporated by reference and are available for public inspection and copying, subject to copyright law, between the hours of 8 a.m. and 4:30 p.m. eastern standard time, Monday through Friday, at the

Division of Water, 14 [18] Reilly Road, Frankfort Office Park, Frankfort, Kentucky 40601:

(1) Standard Methods for the Examination of Water and Wastewater, 16th edition 1985, and for the purposes of 401 KAR 8:150, Section 3(1)(e), the 17th edition, 1989, prepared and jointly published by the American Public Health Association, the American Water Works Association, and the Water Pollution Control Federation. This publication may be obtained by contacting the Publication Office, American Public Health Association, 1015 15th Street NW, Washington, D.C. 20005.

(2) "National Field Evaluation of a Defined Substrate Method for the Simultaneous Enumeration of Total Coliforms and Escherichia Coli from Drinking Water: Comparison with the Standard Multiple Tube Fermentation Method" (Minimal Medium ONPG-MUG Method) (Edgerg et al), Applied and Environmental Microbiology, Volume 54, pp. 1595-1601, June 1988 (as amended under Erratum, Applied and Environmental Microbiology, Volume 54, p. 3197, December, 1988), which may be obtained from the American Water Works Association Research Foundation, 6666 West Quincy Avenue, Denver, Colorado 80235.

(3) "Guidance Manual for Compliance with the Filtration and Disinfection Requirements for Public Water Systems using Surface Water Sources" October, 1989, as published by the United States Environmental Protection Agency, Science and Technology Branch, Criteria and Standards Division, Office of Drinking Water, Washington, D.C., and available from the American Water Works Association, Management Services, 6666 West Quincy Avenue, Denver, Colorado 80235, (303) 794-7711.

E. DOUGLAS STEPHAN, Commissioner
PHILLIP J. SHEPHERD, Secretary

APPROVED BY AGENCY: April 14, 1994

FILED WITH LRC: April 15, 1994 at 11 a.m.

PUBLIC HEARING: A public hearing to receive comments on this proposed regulation has been scheduled for Wednesday, May 25, 1994 at 1:30 p.m. (ET), in the Auditorium of the State Office Building, Frankfort, Kentucky. Individuals interested in being heard at this hearing shall notify John T. Smither in writing at the address noted below by May 20, 1994, of their intent to attend the hearing and be heard. If no notification of intent to attend the hearing and be heard is received by that date, the hearing may be canceled. This hearing is open to the public. Any person wishing to be heard will be given an opportunity to comment on the proposed regulation. Persons testifying at the hearing are requested to provide the cabinet with a written copy of their testimony, if available. A transcript of the hearing may not be made unless a written request for a transcript is made at least five (5) days before the hearing. If you do not wish to be heard at the public hearing, you may submit written comments on the proposed regulation. Written comments must be received by John T. Smither at the address below no later than the close of business, (4:30 p.m. (ET)) May 25, 1994. The Natural Resources and Environmental Protection Cabinet does not discriminate on the basis of race, color, national origin, sex, religion, age, or disability. The meeting facility is accessible to people with disabilities. The cabinet will provide, upon request, reasonable accommodations including auxiliary aids and services necessary to afford individuals with a disability an equal opportunity to participate in all services, programs, and activities. If an interpreter or other auxiliary aid or service is needed, contact Mr. Smither at the address below before May 20, 1994 between 8 a.m. and 4:30 p.m. (ET).

CONTACT PERSON: John T. Smither, Manager, Drinking Water Branch, Division of Water, Department for Environmental Protection, 14 Reilly Road, Frankfort, Kentucky 40601, (502) 564-3410.

REGULATORY IMPACT ANALYSIS

Agency Contact: John T. Smither

(1) Type and number of entities affected: This regulation affects approximately 918 public and semipublic water systems. This number may vary from month to month.

(a) Direct and indirect costs or savings to those affected: Two of the amendments to this regulation clarify that the disinfection requirement throughout the distribution system is 0.2 milligrams per liter in 90% of the samples, and change the requirement that a log of line breaks must be submitted to the cabinet to a requirement that the log be maintained for inspection. The first change clarifies what has been required and the second adopts what has in fact been the practice. Therefore, there should be no cost or savings associated with these changes. A third amendment provides a method for cabinet personnel to take appropriate action when disinfectant residuals are not present in the distribution system. This will not result in a cost or savings to the system since a residual disinfectant is already required. A final change will allow semipublic and public water systems serving fewer than 25 persons to use filtration and disinfectant technology not currently accepted by the cabinet if the system enters into a protocol with the cabinet which approves the technology and stipulates requirements for its use. At this time, the technology which might be approved under these protocols are likely to be more expensive than traditional chlorination.

1. First year: No cost or savings is anticipated.

2. Continuing costs or savings: No continuing cost or savings is anticipated.

3. Additional factors increasing or decreasing costs (note any effects upon competition): No other factors increase or decrease costs.

(b) Reporting and paperwork requirements: Reporting requirements are reduced since the log of line breaks may now simply be maintained rather than submitted to the cabinet. In fact, this has been the practice anyway for most public water systems.

(2) Effects on the promulgating administrative body: The amendment to this regulation will relieve the cabinet of having to place logs of line breaks in facility files. In fact, few of these logs have been received.

(a) Direct and indirect costs or savings: No direct or indirect costs or savings are expected.

1. First year: No costs or savings are expected.

2. Continuing costs or savings: No costs or savings are expected.

3. Additional factors increasing or decreasing costs: No other factors will increase or decrease costs.

(b) Reporting and paperwork requirements: The cabinet will be relieved of filing logs of line breaks in the facility file.

(3) Assessment of anticipated effect on state and local revenues: The amendments to this regulation will not affect state or local revenue.

(4) Assessment of alternative methods; reasons why alternatives were rejected: The alternative to the amendment to this regulation is to not amend it. This alternative was rejected because it would result in confusion over the requirement for disinfection in the distribution systems, and would have maintained a requirement in the regulation to submit logs of line breaks monthly, a requirement that is not being followed and which the Cabinet believes is unnecessary at this time. Cabinet field staff believe the final amendment is necessary to clarify their options when a residual disinfectant is not found during normal inspections.

(5) Identify any statute, administrative regulation or government policy which may be in conflict, overlapping, or duplication: No statute, regulation, or policy conflicts with, overlaps, or duplicates this regulation.

(a) Necessity of proposed regulation if in conflict: No conflict exists.

(b) If in conflict, was effort made to harmonize the proposed

administrative regulation with conflicting provisions: No conflict exists.

(6) Any additional information or comments:

TIERING: Was tiering applied? Yes. This regulation takes into consideration the type of water source used by a system as well as the filtration technique.

FISCAL NOTE ON LOCAL GOVERNMENT

1. Does this administrative regulation relate to any aspect of a local government, including any service provided by that local government? Yes

2. State what unit, part or division of local government this administrative regulation will affect. This regulation relates to public water systems. Local governments frequently own or operate public water systems.

3. State the aspect or service of local government to which this administrative regulation relates. This regulation relates to the provision of potable drinking water.

4. Estimate the effect of this administrative regulation on the expenditures and revenues of a local government for the first full year the regulation is to be in effect. If specific dollar estimates cannot be determined, provide a brief narrative to explain the fiscal impact of the administrative regulation.

Revenues (+/-):

Expenditures (+/-):

Other Explanation: The amendments to this regulation are basically housekeeping in nature. A paper savings may be achieved by the amendment which changes the requirement to submit a log of line breaks to the Cabinet, to a requirement to maintain the log. However, since few of these logs are being submitted, this is unlikely. Any costs or savings from this regulation would likely be passed to the consumer of water, although a local government which owns a public water system could elect to absorb any costs or savings.

FEDERAL MANDATE ANALYSIS COMPARISON

1. Federal statute or regulation constituting the federal mandate. None

2.State compliance standards. The amendments to this regulation are housekeeping only and relate to state requirements.

3. Minimum or uniform standards contained in the federal mandate. None

4. Will this administrative regulation impose stricter requirements, or additional or different responsibilities or requirements, than those required by the federal mandate? There is no Federal mandate.

5. Justification for the imposition of the stricter standard, or additional or different responsibilities or requirements. There is no federal mandate.

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

401 KAR 8:200. Microbiological [~~and turbidity~~] monitoring.

RELATES TO: KRS Chapter 224, 40 CFR Part 141 (1993)

STATUTORY AUTHORITY: KRS 224.10-100, 224.10-110, 40 CFR Part 141 (1993), [~~as amended at 54 FR 27,562 (1989), 56 FR 642 (1991),~~] 56 FR 1557 (1991), 42 USCA 300f, 300g, 300h, 300j

NECESSITY AND FUNCTION: KRS 224.10-110 directs the cabinet to enforce administrative [~~the rules and~~] regulations adopted by the secretary for the regulation and control of the purification of water for public and semipublic use. This administrative regulation sets out a schedule and method for sampling drinking water to test for bacteriological contaminants and establishes maximum contaminant levels for bacteria. This administrative regulation also specifies requirements if tests show maximum contaminant levels have been exceeded[~~, as well as requirements for monitoring turbidity~~].

Section 1. All suppliers of water operating a public or semipublic water system, including suppliers operating those systems which provide water purchased from another system, shall meet the requirements of this administrative regulation.

(1) Routine monitoring for total coliform bacteria. A public water system shall collect total coliform samples at sites which are representative of water throughout the distribution system according to a written sample siting plan. A public water system shall submit the written sample siting plan to the cabinet in a manner prescribed by the cabinet and obtain the cabinet's approval of the plan. The plan shall contain the following elements:

(a) A complete name, address, city and zip code for each sample site. If a post office box number or rural route number is used, the highway number, rural route number or other information adequate to locate the sampling site shall be included.

(b) The site shall be identified as residential, commercial, industrial, educational, or some other specific type of sampling location.

(c) A map shall be submitted with the siting plan showing the public water system's distribution system and the location of all proposed sites. A duplicate map shall be maintained by the public water system. These maps shall be prepared on Kentucky county maps, scale: 1:62,500 (1 inch = 1 mile) or on city maps. These maps may be obtained from the Kentucky Transportation Cabinet, Map Sales, 419 Ann Street, Frankfort, Kentucky 40622. The cabinet may waive this requirement in writing for systems with less than five (5) service connections or which serve a population of less than 500 people.

(2) The monitoring frequency for total coliforms for public water systems shall be based on the population served by the system as follows:

TABLE 1
TOTAL COLIFORM SAMPLING REQUIREMENTS
BASED ON POPULATION SERVED

Population Served	Minimum Number Monthly Samples	Population Served	Minimum Number Monthly Samples
25 - 2,500	2	59,001- 70,000	70
2,501 - 3,300	3	70,001 - 83,000	80
3,301 - 4,100	4	83,001 - 96,000	90
4,101 - 4,900	5	96,001 - 130,000	100
4,901 - 5,800	6	130,001 - 220,000	120
5,801 - 6,700	7	220,001 - 320,000	150
6,701 - 7,600	8	320,001 - 450,000	180
7,601 - 8,500	9	450,001 - 600,000	210
8,501 - 12,900	10	600,001 - 780,000	240
12,901 - 17,200	15	780,001 - 970,000	270
17,201 - 21,500	20	970,001 - 1,230,000	300
21,501 - 25,000	25	1,230,001 - 1,520,000	330
25,001 - 33,000	30	1,520,001 - 1,850,000	360
33,001 - 41,000	40	1,850,001 - 2,270,000	390
41,001 - 50,000	50	2,270,001 - 3,020,000	420
50,001 - 59,000	60	3,020,001 - 3,960,000	450
		3,960,001 or more	480

(3) Population-served calculation. For purposes of determining the population served, the applicable method below shall be used:

(a) When the supplier of water serves an area defined by an

official census count or a population projection, the most recent census count or official population projection shall be used; or

(b) When no official figures on population are available on the area served by a supplier of water, the population served shall be considered to be a factor of not less than three and three-tenths (3.3) times the number of residential connections or a factor of not less than three (3) times the total number of all connections, whichever is greater.

(4) Semipublic systems and systems serving fewer than twenty-five (25) people or fifteen (15) service connections. [~~Suppliers of water for~~] Semipublic water systems and systems serving fewer than twenty-five (25) people or fifteen (15) service connections, shall cause samples to be tested, for the purpose of determining the presence or absence coliforms, at least twice per month, or in accordance with a protocol agreed to pursuant to 401 KAR 8:150, Section 2(5). If coliforms are present, appropriate repeat samples shall be taken.

(5) Sampling schedule. Each public and semipublic water system shall take routine samples to determine the presence or absence of coliforms. No more than half of the samples shall be taken in one (1) week. Results of the analyses of the samples shall be submitted to the cabinet no later than ten (10) days after the end of the month for which the samples were taken. If the tenth day falls on a Saturday, Sunday or holiday the results shall be submitted on the following working day. A noncommunity water system shall sample for total coliform bacteria per 100 milliliters twice each month of operation. Seasonally operated facilities shall notify the cabinet in writing in advance as to the opening and closing dates covered by the sampling requirements. This frequency may be changed by the cabinet on the basis of subsequent surveys and conditions.

(6) Forwarding samples. The cabinet shall, upon request, notify a water supplier as to those commercial or state laboratories, certified in accordance with 401 KAR 8:040, to which samples may be sent for determining the presence or absence of coliforms. The samples shall be forwarded to a certified laboratory by the most expeditious or speedy method available to the water supply.

(7) Sample collection. Samples taken by or on behalf of public water systems shall be collected in bottles prepared and sterilized in accordance with "Standard Methods". When the sample is collected, the disinfectant residual shall be determined and recorded on the form provided by the laboratory with the sample container. Bacteriological sampling forms shall be fully and accurately completed or the sample shall be invalid. The disinfecting agent shall be removed from the sample at the time of its collection. [~~A distributer of water collecting bacteriological samples for analysis in its own certified laboratory may use containers other than bottles, if this practice is approved in writing by the cabinet.~~]

(8) Special purpose samples, such as those taken to determine whether disinfection practices are sufficient following pipe placement, replacement, or repair, shall not be used to determine compliance with the MCL for total coliforms set forth in Section 2 of this administrative regulation. Repeat samples taken pursuant to subsection (9)(a) of this section are not special purpose samples, and shall be used to determine compliance with the MCL for total coliforms set forth in Section 2 of this administrative regulation.

(9) Repeat monitoring.

(a) If a routine sample is total coliform- positive, the public water system shall collect a set of repeat samples within twenty-four (24) hours of being notified of the positive result. The system shall collect at least three (3) repeat samples for each total coliform-positive sample found. The cabinet may extend the twenty-four (24) hour limit on a case-by-case basis if the system demonstrates that it has a logistical problem in collecting the repeat samples within twenty-four (24) hours that is beyond its control. If an extension is granted, the cabinet shall specify how much time the system has to collect the repeat samples.

(b) The public water system shall collect at least one (1) repeat sample from the sampling tap where the original total coliform-positive sample was taken, and at least one (1) repeat sample at a tap within five (5) service connections upstream and at least one (1) repeat sample at a tap within five (5) service connections downstream of the original sampling site. If a total coliform-positive sample is at the end of the distribution system, or one (1) away from the end of the distribution system, the cabinet may waive the requirement to collect a repeat sample upstream or downstream of the original sampling site, but a total of three (3) repeat samples shall be collected.

(c) The public water system shall collect all repeat samples on the same day.

(d) If one (1) or more repeat samples in the set is total coliform-positive, the public water system shall collect an additional set of repeat samples in a manner specified in paragraphs (a), (b), and (c) of this subsection. The public water system shall collect the additional samples within twenty-four (24) hours of being notified of the positive result, unless the cabinet extends the limit as provided in paragraph (a) of this subsection. The public water system shall repeat this process until either total coliforms are not detected in one (1) complete set of repeat samples or the system determines that the MCL for total coliforms set forth in Section 2 of this administrative regulation has been exceeded and notifies the cabinet, and the public, pursuant to 401 KAR 8:070. The cabinet may require further testing until all samples are total coliform-negative.

(10) If a system collecting fewer than five (5) routine samples per month has one (1) or more total coliform-positive samples and the cabinet does not invalidate the sample pursuant to subsection (13) of this section, the public water system shall collect at least five (5) routine samples during the next month the system provides water to the public.

(11) After a system collects a routine sample and before it learns the results of the analysis of that sample, if it collects another routine sample from within five (5) adjacent service connections of the initial sample, and the initial sample, after analysis, is found to contain total coliforms, then the system may count the subsequent sample as a repeat sample instead of a routine sample.

(12) Results of routine and repeat samples not invalidated by the cabinet shall be included in determining compliance with the MCL for total coliforms set forth in Section 2 of this administrative regulation.

(13) Invalidation of total coliform samples. A total coliform-positive sample invalidated under this subsection shall not count towards meeting the minimum monitoring requirements of this section.

(a) The cabinet may invalidate a total coliform-positive sample only if the conditions of clause 1, 2, or 3 of this subparagraph are met.

1. The laboratory establishes to the satisfaction of the cabinet that improper sample analysis caused the total coliform- positive result.

2. The cabinet, on the basis of the results of repeat samples collected as required by subsection (9) of this section, determines in writing that the total coliform-positive sample resulted from a domestic or other nondistribution system plumbing problem. The cabinet shall not invalidate a sample on the basis of repeat sample results unless every repeat sample collected at the same tap as the original total coliform-positive sample is total coliform-positive and every repeat sample collected within five (5) service connections of the original tap is total coliform- negative. The cabinet shall not invalidate a total coliform-positive sample on the basis of repeat samples if every repeat sample is total coliform-negative, or if the public water system has only one (1) service connection.

3. The cabinet has substantial grounds to believe that a total coliform-positive result is due to a circumstance or condition which does not reflect water quality in the distribution system. A decision made by the cabinet to this effect shall be in writing and signed by the Director of the Division of Water upon the written recommendation of the Manager of the Drinking Water Branch. The written decision shall be submitted to the U.S. Environmental Protection Agency and shall be available to the public. The written decision shall state the specific cause of the total coliform-positive sample and shall state

what action the public water system has taken, or will take, to correct the problem. The public water system shall, regardless of the cabinet action taken under this clause, take the repeat samples required under subsection (9) of this section. The cabinet shall not invalidate a total coliform-positive sample solely on the grounds that each repeat sample is total coliform- negative.

(b) A laboratory shall invalidate a total coliform sample (unless total coliforms are detected) if the sample produces a turbid culture in the absence of gas production using an analytical method where gas formation is examined (e.g., the Multiple-Tube Fermentation Technique), produces a turbid culture in the absence of an acid reaction in the Presence- Absence (P-A) Coliform Test, or exhibits confluent growth or produces colonies too numerous to count with an analytical method using a membrane filter (e.g., Membrane Filter Technique). If a laboratory invalidates a sample because of the interference, the public water system shall collect another sample from the same location as the original sample, within twenty-four (24) hours of being notified of the interference problem, and have it analyzed for the presence of total coliforms. The system shall continue to resample within twenty-four (24) hours and have the samples analyzed until it obtains a valid result. The cabinet may waive the twenty-four (24) hour time limit on a case-by-case basis.

(14) Sanitary surveys.

(a) A public water system which does not collect five (5) or more routine samples per month shall undergo an initial sanitary survey by June 29, 1994, if it is a community public water system, and June 29, 1999, if it is a noncommunity water system. Thereafter, the system shall undergo a sanitary survey at least once every five (5) years except that a noncommunity water system using only disinfected groundwater not under the influence of surface water, shall undergo a sanitary survey at least once every ten (10) years. The cabinet shall review the results of each sanitary survey to determine whether the existing monitoring frequency is adequate and what additional measures, if any, the system needs to undertake to improve drinking water quality.

(b) Information relating to a source of contamination within a delineated wellhead protection area, which is collected in the course of developing and implementing a U.S. Environmental Protection Agency approved wellhead protection program, may be considered in conducting a sanitary survey of a public water system using groundwater if the information was collected since the last time the public water system was subject to a sanitary survey.

(c) Sanitary surveys shall be performed by the cabinet or an agent approved by the cabinet. Public water systems are responsible for ensuring that required sanitary surveys take place.

(15) Fecal-coliforms - Escherichia coli (E. coli) testing.

(a) If a routine or repeat sample is total coliform-positive, the public water system shall analyze that total coliform-positive culture medium to determine if fecal coliforms are present, except that the public water system may test for E. coli in lieu of fecal coliforms. If fecal coliforms or E. coli are present, the system shall notify the cabinet by the end of the day the system is notified of the test result pursuant to 401 KAR 8:020, Section 2(7)(c).

(b) The cabinet may allow a public water system, on a case-by-case basis, to forego fecal coliform or E. coli testing on a total coliform-positive sample if that system assumes that the total coliform-positive sample is fecal coliform-positive or E. coli-positive and notifies the cabinet as specified in paragraph (a) of this subsection and the provisions of Section 2(2) of this administrative regulation apply.

(16) Analytical methodology. The analysis for the presence or absence of total coliforms shall commence within thirty (30) hours of the sample being collected, unless the cabinet waives this requirement in writing.

(a) The standard sample volume required for total coliform analysis, regardless of analytical method used, is 100 ml.

(b) Public water systems shall determine the presence or absence of total coliforms; a determination of total coliform density is not required.

(c) Public water systems shall conduct total coliform analyses in accordance with one (1) of the following analytical methods:

1. Multiple-Tube Fermentation (MTF) Technique, as set forth in Standard Methods for the Examination of Water and Waste water, 1985, American Public Health Association et al, 16th edition, Method 908, 908A, and 908B-pp. 870-887, except that ten (10) fermentation tubes shall be used; or Microbiological Methods for Monitoring the Environment, Water and Wastes, U.S. EPA, Environmental Monitoring and Support Laboratory, Cincinnati, Ohio 45268 (EPA-600/8-78-017, December 1978, available from ORD Publications, CERI U.S. EPA, Cincinnati, Ohio 45268), Part III, Section B.4.1-4.6.4, pp. 114-118 (Most Probable Number Method), except that ten (10) fermentation tubes shall be used; [~~or~~]

2. Membrane Filter (MF) Technique, as set forth in Standard Methods for the Examination of Water and Wastewater, 1985, American Public Health Association et al, 16th edition, Method 909, 909A and 909B-pp. 886-896; or Microbiological Methods for Monitoring the Environment, Water and Wastes, U.S. EPA, Environmental Monitoring and Support Laboratory, Cincinnati, Ohio 45268 (EPA-600/8-78-017, December 1978, available from ORD Publications, CERI, U.S. EPA, Cincinnati, Ohio 45268), Part III, Section B.2.1-2.6, pp. 108-112; [~~or~~]

3. Presence-Absence (P-A) Coliform Test, as set forth in Standard Methods for the Examination of Water and Waste water, 1985, American Public Health Association et al, 16th edition, Method 908E-pp. 882-886; or

4. Minimal Medium ONPG-MUG (MMO-MUG) Test, as set forth in the article "National Field Evaluation of a Defined Substrate Method for the Simultaneous Detection of Total Coliforms and Escherichia coli from Drinking Water: Comparison with Presence-Absence Techniques" (Edberg et al), Applied and Environmental Microbiology, Volume 55, pp. 1003-1008, April 1989. (The MMO-MUG Test is sometimes referred to as the Autoanalysis Colilert System.) The MMO-MUG Test with hepes buffer in lieu of phosphate buffer is an acceptable minor revision.

(d) In lieu of the ten (10) tube MTF Technique specified in paragraph (c)1 of this subsection, a public water system may use the MTF Technique using either five (5) tubes (twenty (20) ml sample portions) or a single culture bottle containing the culture medium for the MTF Technique, I.E., lauryl tryptose broth (formulated as described in Standard Methods for the Examination of Water and Wastewater, 1985, American Public Health Association et al, 16th edition, Method 908A-pp. 872), as long as a 100 ml water sample is used in the analysis;

(e) A public water system shall conduct fecal coliform analysis in accordance with the following procedure: If the MTF Technique or Presence-Absence (P-A) Coliform Test is used to test for total coliforms, shake the lactose-positive presumptive tube or P-A bottle vigorously and transfer the growth with a sterile three (3) millimeter loop or sterile applicator stick into brilliant green lactose bile broth and EC medium to determine the presence of total and fecal coliforms, respectively. For EPA approved analytical methods which use a membrane filter, transfer the total coliform-positive culture by one (1) of the following methods: remove the membrane containing the total coliform colonies from the substrate with a sterile forceps and carefully curl and insert the membrane into a tube of EC medium (the laboratory may first remove a small portion of selected colonies for verification), swab the entire membrane filter surface with a sterile cotton swab and transfer the inoculum to EC medium (do not leave the cotton swab in the EC medium), or inoculate individual total coliform-positive colonies into EC medium. Gently shake the inoculated tubes of EC medium to insure adequate mixing and incubate in a waterbath at forty-four and five-tenths (44.5) plus or minus two-tenths (0.2) degrees Celsius for twenty-four (24) plus or minus two (2) hours. The production of gas in the inner fermentation tube of the EC

medium indicates positive fecal coliform test. The preparation of EC medium is described in Standard Methods for the Examination of Water and Wastewater, 1985, American Public Health Association, 16th edition. Method 908C-p. 879, paragraph 1a. Public water systems shall determine the presence or absence of fecal coliforms; a determination of fecal coliform density is not required.

(f) A public water system shall conduct analysis of Escherichia coli in accordance with one (1) of the following analytical methods:

1. EC medium supplemented with fifty (50) micrograms/ml of 4-methylumbelliferyl-beta-D- glucuronide (MUG) final concentration). EC medium is described in Standard Methods for the Examination of Water and Wastewater, 1985, American Public Health Association et al, 16th edition, p. 879. MUG may be added to EC medium before autoclaving. EC medium supplemented with fifty (50) micrograms/ml of MUG is commercially available. At least ten (10) ml of EC medium supplemented with MUG shall be used. The inner inverted fermentation tube may be omitted. The procedure for transferring a total coliform- positive culture to EC medium supplemented with MUG shall be as specified in paragraph (e) of this subsection for transferring a total coliform-positive culture to EC medium. Observe fluorescence with an ultraviolet light (366nm) in the dark after incubating tube at forty-four and five-tenths (44.5) plus or minus two-tenths (0.2) degrees Celsius for twenty-four (24) plus or minus two (2) hours; or

2. Nutrient agar supplemented with 100 micrograms/ml 4-methyl-umbelliferyl-beta-D- glucuronide (MUG) (final concentration). Nutrient agar is described in Standard Methods for the Examination of Water and Wastewater, 1985, American Public Health Association et al, 16th edition, p. 874. This test is used to determine if a total coliform-positive sample, as determined by the Membrane Filter Technique or any other method in which a membrane filter is used, contains E. coli. Transfer the membrane filter containing one (1) or more total coliform colonies to nutrient agar supplemented with 100 micrograms per milliliter (final concentration) of MUG. After incubating the agar plate at thirty-five (35) degrees Celsius for four (4) hours, observe the colonies under ultraviolet light (366 nm) in the dark for fluorescence. If fluorescence is visible, E. coli are present.

3. Minimal Medium ONPG-MUG (MMO-MUG) Test, as set forth in the article "National Field Evaluation of a Defined Substrate Method for the Simultaneous Detection of Total Coliforms and Escherichia coli from Drinking Water: Comparison with Presence-Absence Techniques" (Edberg et al.), Applied and Environmental Microbiology, Volume 55, pp. 1003-1008, April 1989. (The Autoanalysis Colilert System is an MMO-MUG test). If the MMO-MUG test is total coliform-positive after a twenty-four (24) hour incubation, test the medium for fluorescence with a 366-nm ultraviolet light (preferably with a six (6) watt lamp) in the dark. If fluorescence is observed, the sample is E. coli-positive. If fluorescence is questionable (cannot be definitively read) after twenty-four (24) hours incubation, incubate the culture for an additional four (4) hours (but not to exceed twenty-eight (28) hours total), and again test the medium for fluorescence. The MMO-MUG Test with hepes buffer in lieu of phosphate buffer is the only approved formulation for the detection of E. coli.

4. As an option to subparagraph 3 of this paragraph, a system with a total coliform-positive, MUG-negative, MMO-MUG test may further analyze the culture for the presence of E. coli by transferring a one-tenth (0.1) ml, twenty-eight (28) hour MMO-MUG culture to EC Medium + MUG with a pipet. The formulation and incubation conditions of EC Medium + MUG, and observation of the results are described in subparagraph 1 of this paragraph.

(17) Response to violation.

(a) If a public water system exceeds the MCL for total coliforms set forth in Section 2 of this administrative regulation, it shall report the violation to the cabinet no later than the end of the next business day after it learns of the violation, and notify the public in accordance with 401 KAR 8:070.

(b) If a public water system fails to comply with a coliform monitoring requirement, including the sanitary survey requirement, it shall report the monitoring violation to the cabinet within ten (10) days after the system discovers the violation, and notify the public in accordance with 401 KAR 8:070.

Section 2. Maximum Contaminant Levels (MCLs) for Microbiological Contaminants. (1) The MCL is based on the presence or absence of total coliforms in a sample.

(a) If a public water system collects at least forty (40) samples per month and no more than five and zero-tenths (5.0) percent of the samples collected during a month are total coliform-positive, the system is in compliance with the MCL for total coliforms.

(b) If a public water system collects fewer than forty (40) samples per month, and no more than one (1) sample collected during a month is total coliform-positive, the system is in compliance with the MCL for total coliforms.

(2) A fecal coliform-positive repeat sample or E. coli-positive repeat sample, or a total coliform-positive repeat sample following a fecal coliform-positive or E. coli-positive routine sample constitutes a violation of the MCL for total coliforms. For purposes of the public notification requirements in 401 KAR 8:070, this violation may pose an acute risk to health.

(3) A public water system shall determine compliance with the maximum contaminant level for total coliforms set forth in subsections (1) and (2) of this section for each month in which it is required to monitor for total coliforms.

(4) The following technologies are the best technology, treatment techniques, or other means available for achieving compliance with the maximum contaminant level for total coliforms set forth in subsections (1) and (2) of this section:

(a) Protection of wells from contamination by coliforms by appropriate placement and construction;

(b) Maintenance of a disinfectant residual throughout the distribution system;

(c) Proper maintenance of the distribution system including appropriate pipe replacement and repair procedures, main flushing programs, proper operation and maintenance of storage tanks and reservoirs, and continual maintenance of positive water pressure in all parts of the distribution system;

(d) Filtration or disinfection of surface water, as described in 401 KAR 8:150, or disinfection of groundwater using strong oxidants such as chlorine, chlorine dioxide, or ozone; or

(e) The development and implementation of an EPA -approved State Wellhead Protection Program under 42 USCA 300h-7, state programs to establish wellhead protection areas.

Section 3. Variances and Exemptions. Variances or exemptions from the maximum contaminant level for total coliform set forth in Section 2 of this administrative regulation shall not be permitted unless the public water system demonstrates to the cabinet's satisfaction that the violation of the total coliform maximum contaminant level is due to a persistent growth of total coliforms in the distribution system rather than fecal or pathogenic contamination, a treatment lapse or deficiency, or a problem in the operation or maintenance of the distribution system. In making the demonstration, the public water system shall meet all the requirements of 401 KAR 8:060, including submission of a compliance schedule acceptable to the cabinet. In addition, the public water system shall demonstrate to the cabinet's satisfaction that the following criteria have been met before the cabinet may consider a variance:

(1) Over the past thirty (30) days, water entering the distribution system:

(a) Is free from fecal coliform or E. coli occurrence based on at least daily sampling;

(b) Contains less than one (1) total coliform per 100 milliliters of influent water in at least ninety-five (95) percent of all samples based on at least daily sampling;

(c) Complies with the total turbidity requirements of 401 KAR

8:150, Section 2; and

(d) Contains a continuous disinfection residual consistent with 401 KAR 8:150, Section 1;

(2) The public water system has had no waterborne disease outbreak while being operated in its present configuration;

(3) The public water system maintains biweekly contact with the cabinet and local health departments to assess illness possibly attributable to microbial occurrence in the public drinking water system;

(4) The public water system has evaluated, on a monthly basis, at least the number of samples specified in Section 1(2) of this administrative regulation and has not had an E. coli-positive compliance sample within the last six (6) months, unless the system demonstrates to the cabinet that the occurrence is not due to contamination entering the distribution system;

(5) The public water system has undergone a sanitary survey conducted by a party approved by the cabinet within the past twelve (12) months;

(6) The public water system has a cross connection control program acceptable to the cabinet and performs an audit of the effectiveness of the program;

(7) The public water system agrees to submit a biofilm control plan to the cabinet within twelve (12) months of the granting of the first request for a variance;

(8) The public water system monitors general distribution system bacterial quality by conducting heterotrophic bacteria plate counts on at least a weekly basis at a minimum of ten (10) percent of the number of total coliform sites specified for that system's size in Section 1(2) of this administrative regulation preferably using the R2A medium in Method 907A, 907B, or 907C, as set forth in the 16th edition of Standard Methods for the Examination of Water and Wastewater, 1985, American Public Health Association, et al; and

(9) The public water system conducts daily monitoring at distribution system sites approved by the cabinet and maintains a detectable disinfectant residual (measured as specified in 401 KAR 8:150, Section 3(1)(e)) at a minimum of ninety-five (95) percent of those points and a heterotrophic plate count of less than 500 colonies per ml (measured as specified in 401 KAR 8:150, Section 3(1)(c)) at sites without a disinfectant residual.

~~[Section 4. Turbidity Sampling, Analytical Techniques and Maximum Contaminant Levels. Beginning on July 1, 1992, public water systems shall monitor in accordance with 401 KAR 8:150, Section 3(2)(a), and report in accordance with 401 KAR 8:020, Section 2(7)(a)1, although maximum turbidity limits and measurement techniques contained in subsections (4) and (5) of this section shall remain in effect until June 29, 1993, when the requirements of 401 KAR 8:150, Sections 2 and 3 shall be met.~~

~~(1) Who shall sample. Producers of water for public water systems who use surface water sources, in whole or in part, and those groundwater sources which demonstrate a variable turbidity, shall comply with this section. Semipublic systems and systems that purchase water from other systems or obtain their water from turbidity free groundwater sources are not subject to this section.~~

~~(2) Sampling frequency. At least one (1) sample per day for the determination of turbidity shall be taken at the producing facility. Turbidity level determinations shall be made within one (1) hour after sample collection.~~

~~(3) Sampling point. Samples for the determination of turbidity shall be taken at a representative entry point to the distribution system. Where water is produced by more than one (1) treatment plant for a single system, each plant shall be considered a separate sampling point.~~

~~(4) Maximum turbidity limit. The maximum contaminant level for turbidity is one (1) turbidity unit (TU), as determined by a monthly average of daily samples, and no more than five (5) turbidity units, based on an average for two (2) consecutive days.~~

~~(5) Measurement technique. The measurement for turbidity shall be by the Nephelometric Method, as set forth in "Standard Methods," or by an alternate method approved in writing by the cabinet.~~

~~(6) Excessive turbidity. If the result of a turbidity analysis indicates that the maximum allowable limit has been exceeded, the sampling and measurement shall be confirmed by resampling as soon as practicable and no later than one (1) hour thereafter. If the repeat sample exceeds the maximum allowable limit, the supplier shall report the excess to the cabinet within twenty four (24) hours. The repeat sample shall be the sample used for the purpose of calculating the monthly average. If the monthly average of the daily samples exceeds the maximum allowable limit, or if the average of two (2) samples taken on consecutive days exceeds five (5) TU, the supplier of water shall report the excess to the cabinet within twenty four (24) hours and notify the public pursuant to 401 KAR 8:070.~~

~~(7) Exceptions. Up to five (5) turbidity units may be allowed, if the supplier of water demonstrates to the cabinet that the higher turbidity does not:~~

~~(a) Interfere with disinfection;~~

~~(b) Prevent the maintenance of an effective disinfectant agent throughout the distribution system; or~~

~~(c) Interfere with microbiological determinations.]~~

Section 4. ~~[5.]~~ Analysis for microbiological contamination and turbidity shall be in accordance with methods approved for drinking water by the U.S. Environmental Protection Agency or by the cabinet. The following documents are hereby incorporated by reference and are available for public inspection and copying subject to copyright laws, between 8 a.m. and 4:30 p.m., Monday through Friday, except state holidays, at the Division of Water, 14 ~~[18]~~ Reilly Road, Frankfort Office Park, Frankfort, Kentucky 40601:

(1) Standard Methods for the Examination of Water and Wastewater, 16th edition, 1985, prepared and jointly published by the American Public Health Association, the American Water Works Association, and the Water Pollution Control Federation. This publication is printed, distributed and may be obtained by contacting the Publication Office, American Public Health Association, 1015 15th Street NW, Washington, D.C. 20005.

(2) "Manual for the Certification of Laboratories Analyzing Drinking Water," EPA 814B-92-002, September 1992, ~~[570/9-90/008, April 1990,]~~ may be obtained by contacting U.S. EPA, Office of Drinking Water, Washington, D.C., 20460.

(3) Microbiological Methods for Monitoring the Environment, Water and Wastes may be obtained from ORD Publications, December 1978, U.S. EPA, 26 W. Martin Luther King Drive, Cincinnati, Ohio 45268.

(4) Copies of the MMO-MUG Test as set forth in the article "National Field Evaluation of a Defined Substrate Method for the Simultaneous Enumeration of Total Coliforms and Escherichia coli from Drinking Water: Comparison with the Standard Multiple-Tube Fermentation Method: (Edberg, et al), June 1988 may be obtained from the American Water Works Association Research Foundation, 6666 West Quincy Avenue, Denver, CO 80235.

E. DOUGLAS STEPHAN, Commissioner
PHILLIP J. SHEPHERD, Secretary

APPROVED BY AGENCY: April 14, 1994

FILED WITH LRC: April 15, 1994 at 11 a.m.

PUBLIC HEARING: A public hearing to receive comments on this proposed regulation has been scheduled for Wednesday, May 25, 1994 at 1:30 p.m. (ET), in the Auditorium of the State Office Building, Frankfort, Kentucky. Individuals interested in being heard at this hearing shall notify John T. Smither in writing at the address noted below by May 20, 1994, of their intent to attend the hearing and be heard. If no notification of intent to attend the hearing and be heard is received by that date, the hearing may be canceled. This hearing is open to the public. Any person wishing to be heard will be given an

opportunity to comment on the proposed regulation. Persons testifying at the hearing are requested to provide the cabinet with a written copy of their testimony, if available. A transcript of the hearing may not be made unless a written request for a transcript is made at least five (5) days before the hearing. If you do not wish to be heard at the public hearing, you may submit written comments on the proposed regulation. Written comments must be received by John T. Smither at the address below no later than the close of business, (4:30 p.m. (ET)) May 25, 1994. The Natural Resources and Environmental Protection Cabinet does not discriminate on the basis of race, color, national origin, sex, religion, age, or disability. The meeting facility is accessible to people with disabilities. The cabinet will provide, upon request, reasonable accommodations including auxiliary aids and services necessary to afford individuals with a disability an equal opportunity to participate in all services, programs, and activities. If an interpreter or other auxiliary aid or service is needed, contact Mr. Smither at the address below before May 20, 1994 between 8 a.m. and 4:30 p.m. (ET).

CONTACT PERSON: John T. Smither, Manager, Drinking Water Branch, Division of Water, Department for Environmental Protection, 14 Reilly Road, Frankfort, Kentucky 40601, (502) 564-3410.

REGULATORY IMPACT ANALYSIS

Agency Contact: John T. Smither

(1) Type and number of entities affected: This regulation will affect approximately 918 public and semipublic water systems as well as laboratories certified to run bacteriological tests. These numbers may vary from month to month.

(a) Direct and indirect costs or savings to those affected: The amendment to this regulation allows another analytical procedure to be used to conduct bacteriological tests. Former analytical procedures are still acceptable. The new procedure, (commonly referred to as colilert) has short term and long term financial benefits and drawbacks. Whether public water systems and certified laboratories choose to use it is basically a business decision. Turbidity requirements are being removed from this regulation as they have been superseded by other regulations.

1. First year: No costs or savings are necessary. If a laboratory chooses to use the new analytical procedure, equipment will need to be purchased.

2. Continuing costs or savings: No costs or savings are necessary. A laboratory may realize some reduction in time needed to process bacteriological tests with the colilert system.

3. Additional factors increasing or decreasing costs (note any effects upon competition): No other factors will increase or decrease costs.

(b) Reporting and paperwork requirements: Reporting and paperwork requirements are unchanged by this amendment.

(2) Effects on the promulgating administrative body: This amendment will have no effect on the promulgating administrative body.

(a) Direct and indirect costs or savings: No cost or savings will be realized.

1. First year: No cost or savings will be realized.

2. Continuing costs or savings: No costs or savings will be realized.

3. Additional factors increasing or decreasing costs: No other factors will increase or decrease costs.

(b) Reporting and paperwork requirements: Reporting and paperwork requirements are unchanged under this amendment.

(3) Assessment of anticipated effect on state and local revenues: This amendment will have no affect on state or local revenues.

(4) Assessment of alternative methods; reasons why alternatives were rejected: This amendment adds a new analytical method for testing for bacteriological contamination in drinking water. Alternative methods are still allowed.

(5) Identify any statute, administrative regulation or government policy which may be in conflict, overlapping, or duplication: No statute, regulation, or policy conflicts with, overlaps, or duplicates this regulation.

(a) Necessity of proposed regulation if in conflict: No conflict exists.

(b) If in conflict, was effort made to harmonize the proposed administrative regulation with conflicting provisions: No conflict exists.

(6) Any additional information or comments:

TIERING: Was tiering applied? Yes. This regulation is tiered to reflect different sizes and types of public water systems.

FISCAL NOTE ON LOCAL GOVERNMENT

1. Does this administrative regulation relate to any aspect of a local government, including any service provided by that local government? Yes

2. State what unit, part or division of local government this administrative regulation will affect. This regulation relates to public water systems. Local governments frequently own or operate public water systems.

3. State the aspect or service of local government to which this administrative regulation relates. This regulation relates to the provision of potable drinking water.

4. Estimate the effect of this administrative regulation on the expenditures and revenues of a local government for the first full year the regulation is to be in effect. If specific dollar estimates cannot be determined, provide a brief narrative to explain the fiscal impact of the administrative regulation.

Revenues (+/-):

Expenditures (+/-):

Other Explanation: This regulation adopts an additional analytical method for bacteriological testing and removes a section that is no longer relevant as a housekeeping measure. The additional analytical method may, in the long run, reduce costs somewhat. Any such reduction could be passed through to the consumer, absorbed by a commercial lab as additional profit, or be absorbed by a local government which owns the public water system. Some expenditures for new equipment would be necessary to use the new method. These costs could also be passed to the consumer or absorbed by the lab or local government.

FEDERAL MANDATE ANALYSIS COMPARISON

1. Federal statute or regulation constituting the federal mandate. 40 CFR 141.21 as amended at 57 Federal Register 1852(1992) and 57 Federal Register 24747(1992).

2. State compliance standards. The amendment to this regulation allows the colilert system to be used for bacteriological testing.

3. Minimum or uniform standards contained in the federal mandate. Federal regulations allow the colilert system to be used for bacteriological testing.

4. Will this administrative regulation impose stricter requirements, or additional or different responsibilities or requirements, than those required by the federal mandate? No

5. Justification for the imposition of the stricter standard, or additional or different responsibilities or requirements. There is no stricter standard.

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

401 KAR 8:250. Inorganic chemical sampling, analytical techniques and maximum contaminant levels.

RELATES TO: KRS Chapter 224, 40 CFR Part 141 (1993)
STATUTORY AUTHORITY: KRS 224.10-100, 224.10-110, [~~PL 93-523, The Safe Drinking Water Act, as amended in 1986, and by the Lead Contamination and Control Act of 1988,~~] 42 USCA f, 300g, 300j, 40 CFR 141.23[~~(f)~~], 141.41[~~(d)~~]
NECESSITY AND FUNCTION: KRS 224.10-110 directs the cabinet to enforce administrative [~~rules and~~] regulations adopted by the secretary for the regulation and control of the purification of water for public and semipublic use. The Safe Drinking Water Act, as amended by the Safe Drinking Water Act Amendments of 1986, provides for primary enforcement responsibility by states that have adopted regulations "no less stringent than the national primary drinking water regulations", as well as meeting other criteria stipulated by the Act. The Commonwealth of Kentucky has accepted and is currently exercising this [~~such~~] primary enforcement responsibility. This administrative regulation lists sampling and analytical requirements for certain inorganic chemicals and sets maximum contaminant levels for those chemicals which, if exceeded, could affect public health.

Section 1. Community water systems and nontransient, noncommunity water systems shall conduct monitoring to determine compliance with the maximum contaminant levels specified in Section 12 of this administrative regulation in accordance with this section. Transient, noncommunity water systems shall conduct monitoring to determine compliance with the nitrate and nitrite maximum contaminant levels in Section 12 of this administrative regulation. Monitoring shall be conducted as follows:

(1) Groundwater systems shall take a minimum of one (1) sample at every entry point to the distribution system which is representative of each well after treatment (hereafter called a sampling point) beginning in the compliance period starting January 1, 1993. The system shall take each sample at the same sampling point unless conditions make another sampling point more representative of each source or treatment plant.

(2) Surface water systems, including systems using a combination of surface and groundwater, shall take a minimum of one (1) sample at every entry point to the distribution system after any application of treatment or in the distribution system at a point which is representative of each source after treatment (hereafter called a sampling point) beginning in the compliance period beginning January 1, 1993. The system shall take each sample at the same sampling point unless conditions make another sampling point more representative of each source or treatment plant.

(3) If a system draws water from more than one (1) source and the sources are combined before distribution, the system may sample at an entry point to the distribution system during periods of normal operating conditions (i.e., when water is representative of all sources being used).

(4) The cabinet may reduce the total number of samples which must be analyzed by allowing the use of compositing. Composite samples from a maximum of five (5) sampling points are allowed, if the detection limit of the method used for analysis is less than one fifth (1/5) of the MCL. Compositing of samples shall be done in the laboratory.

(a) If the concentration in the composite sample is greater than or equal to one-fifth (1/5) of the MCL of any inorganic chemical, then a follow-up sample shall be taken within fourteen (14) days at each sampling point included in the composite. These samples shall be analyzed for the contaminants which exceeded one-fifth (1/5) of the MCL in the composite sample. Detection limits for each analytical method and MCLs for each inorganic contaminant are the following:

DETECTION LIMITS FOR INORGANIC CONTAMINANTS

Contaminant	MCL (mg/l)	Methodology	Detection Limit (mg/l)
Antimony	0.006	Atomic Absorption; Furnace	0.003
			0.0008[6]
		ICP-Mass Spectrometry	0.0004
		Hydride-Atomic Absorption	0.001
Asbestos	7 MFL[2]	Transmission Electron Microscopy	0.01 MFL
Barium	2	Atomic Absorption; furnace technique	0.002
		Atomic Absorption; direct aspiration	0.1
		Inductively Coupled Plasma	0.002(0.001)[1]
Beryllium	0.004	Atomic Absorption; Furnace	0.0002
			0.00002[6]
		Inductively Coupled Plasma[3]	0.0003
		ICP-Mass Spectrometry	0.0003
Cadmium	0.005	Atomic Absorption; furnace technique	0.0001
		Inductively Coupled Plasma	0.001[1]
Chromium	0.1	Atomic Absorption; furnace technique	0.001
		Inductively Coupled Plasma	0.007(0.001)[1]
Cyanide	0.2	Distillation, Spectrophotometric[4]	0.02
		Distillation, Automated, Spectrophotometric[4]	0.005
		Distillation, Selective Electrode[4]	0.05
		Distillation, Amenable, Spectrophotometric[5]	0.02
Mercury	0.002	Manual Cold Vapor Technique	0.0002
		Automated Cold Vapor Technique	0.0002
Nickel	0.1	Atomic Absorption; Furnace	0.001

		Inductively Coupled Plasma[3]	0.0006[6]
		ICP-Mass Spectrometry	0.005
Nitrate	10 (as N)	Manual Cadmium Reduction	0.0005
		Automated Hydrazine Reduction	0.01
		Automated Cadmium Reduction	0.01
		Ion Selective Electrode	0.05
		Ion Chromatography	1
Nitrite	1 (as N)	Spectrophotometric	0.01
		Automated Cadmium Reduction	0.01
		Manual Cadmium Reduction	0.05
		Ion Chromatography	0.01
Selenium	0.05	Atomic Absorption; furnace	0.004
		Atomic Absorption; gaseous hydride	0.002
Thallium	0.002	Atomic Absorption; Furnace	0.002
			0.001
		ICP-Mass Spectrometry	0.0007[6]
			0.0003

[1]Using concentration technique in Appendix A to EPA Method 200.7.
[2]MFL = million fibers per liter greater than ten (10) µm.
[3]Using a 2X preconcentration step as noted in Method 200.7. Lower MDLs may be achieved when using a 4X preconcentration.
[4]Screening method for total cyanides.
[5]Measures "free" cyanides.
[6]Lower MDLs are reported using stabilized temperature graphite furnace atomic absorption.

(b) If the population served by the system is greater than 3,300 persons, then compositing may only be permitted at sampling points within a single system. In systems serving less than 3,300 persons, the cabinet may permit compositing among different systems if the five (5) sample limit is maintained.

(c) If duplicates of the original sample taken from each sampling point used in the composite are available, the system may use these instead of resampling. The duplicates shall be analyzed by certified laboratories and the results reported to the cabinet within fourteen (14) days of collection.

(5) The frequency of monitoring for asbestos shall be in accordance with Section 2 of this administrative regulation; the frequency of monitoring for barium, cadmium, chromium, fluoride, mercury, and selenium shall be in accordance with Section 3 of this administrative regulation; the frequency of monitoring for nitrate shall be in accordance with Section 4 of this administrative regulation; and the frequency of monitoring for nitrite shall be in accordance with Section 5 of this administrative regulation.

Section 2. The frequency of monitoring to determine compliance with the maximum contaminant level for asbestos specified in Section 1 of this administrative regulation shall be as follows:

(1) Each community and nontransient, noncommunity water system is required to monitor for asbestos during the first three (3) year compliance period of each nine (9) year compliance cycle beginning in the compliance period starting January 1, 1993.

(2) If the system believes it is not vulnerable to either asbestos contamination in its source water or due to corrosion of asbestos-cement pipe, or both, it may apply to the cabinet for a waiver of the monitoring requirement in subsection (1) of this section. If the cabinet grants the waiver, the system is not required to monitor for asbestos pursuant to subsection (1) of this section.

(3) The cabinet may grant a waiver of the monitoring requirement in subsection (1) of this section based on a consideration of the following factors:

(a) Potential asbestos contamination of the water source; and

(b) The use of asbestos-cement pipe for finished water distribution and the corrosive nature of the water.

(4) A waiver remains in effect until the completion of the three (3) year compliance period. Systems not receiving a waiver shall monitor in accordance with the provisions of subsection (1) of this section.

(5) A system vulnerable to asbestos contamination due solely to corrosion of asbestos-cement pipe shall take one (1) sample at a tap served by asbestos-cement pipe and under conditions where asbestos contamination is most likely to occur.

(6) A system vulnerable to asbestos contamination due solely to source water shall monitor in accordance with the provision of Section 1 of this administrative regulation.

(7) A system vulnerable to asbestos contamination due both to its source water supply and corrosion of asbestos-cement pipe shall take one (1) sample at a tap served by asbestos-cement pipe and under conditions where asbestos contamination is most likely to occur.

(8) A system which exceeds the maximum contaminant levels as determined in Section 9 of this administrative regulation shall monitor quarterly beginning in the next quarter after the violation occurred.

(9) The cabinet may decrease the quarterly monitoring requirement to the frequency specified in subsection (1) of this section if the cabinet has determined that the system is reliably and consistently below the maximum contaminant level. This determination by the cabinet shall not be made unless a groundwater system takes a minimum of two (2) quarterly samples and a surface (or combined surface and ground) water system takes a minimum of four (4) quarterly samples.

(10) If monitoring data collected after January 1, 1990 are generally consistent with the requirements of this section, then the cabinet may allow systems to use that data to satisfy the monitoring requirement for the initial compliance period beginning January 1, 1993.

Section 3. The frequency of monitoring conducted to determine compliance with the maximum contaminant levels in Section 1 of this administrative regulation for antimony, barium, beryllium, cadmium, chromium, cyanide, fluoride, mercury, nickel, selenium, and thallium shall be as follows: Groundwater systems shall take one (1) sample at each sampling point once every three (3) years. Surface water systems (or combined surface and ground) shall take one (1) sample annually at each sampling point.

(1) Groundwater systems shall take one (1) sample at each sampling point during each compliance period beginning in the compliance period starting January 1, 1993. Surface water systems, or combined surface and groundwater systems, shall take one (1) sample annually at each sampling point beginning January 1, 1993.

(2) The system may apply to the cabinet for a waiver from the monitoring frequencies specified in subsection (1) of this section.

(3) Public water systems shall take a minimum of one (1) sample while a waiver is effective. A waiver shall not be effective for more than one (1) compliance cycle (i.e., nine (9) years).

(4) A waiver may be granted if surface water systems have monitored annually for at least three (3) years and groundwater

systems have conducted a minimum of three (3) rounds of monitoring. At least one (1) sample shall have been taken since January 1, 1990. Both surface and groundwater systems shall demonstrate that all previous analytical results were less than the maximum contaminant level. Systems that use a new water source are not eligible for a waiver until three (3) rounds of monitoring from the new source have been completed.

(5) In determining the appropriate reduced monitoring frequency, the cabinet shall consider:

(a) Reported concentrations from all previous monitoring;

(b) The degree of variation in reported concentrations; and

(c) Other factors which may affect contaminant concentrations such as changes in groundwater pumping rates, changes in the system's configuration, changes in the system's operating procedures, or changes in stream flows or characteristics.

(6) A decision by the cabinet to grant a waiver shall be made in writing and shall set forth the basis for the determination. The determination may be initiated upon an application by the public water system. The public water system shall specify the basis for its request. The cabinet shall review and, where appropriate, revise its determination of the appropriate monitoring frequency when the system submits new monitoring data or when other data relevant to the system's appropriate monitoring frequency become available.

(7) Systems which exceed the maximum contaminant levels as calculated in Section 9 of this administrative regulation shall monitor quarterly beginning in the next quarter after the violation occurred.

(8) The cabinet may decrease the quarterly monitoring requirement to the frequencies specified in subsections (1) and (2) of this section if it has determined that the system is reliably and consistently below the maximum contaminant level. This determination may only be made when a groundwater system takes a minimum of two (2) quarterly samples and a surface water system takes a minimum of four (4) quarterly samples.

Section 4. All public water systems (community; nontransient, noncommunity; and transient, noncommunity systems) shall monitor to determine compliance with the maximum contaminant level for nitrate in Section 12 of this administrative regulation.

(1) Community and nontransient, noncommunity water systems served by groundwater systems shall monitor annually beginning January 1, 1993; systems served by surface water shall monitor quarterly beginning January 1, 1993.

(2) For community and nontransient, noncommunity water systems, the repeat monitoring frequency for groundwater systems shall be quarterly for at least one (1) year following any one (1) sample in which the concentration is greater than or equal to fifty (50) percent of the maximum contaminant level. The cabinet may allow a groundwater system to reduce the sampling frequency to annually after four (4) consecutive quarterly samples are reliably and consistently less than the maximum contaminant level.

(3) For community and nontransient, noncommunity water systems, the cabinet may allow a surface water system to reduce the sampling frequency to annually if all analytical results from four (4) consecutive quarters are less than fifty (50) percent of the maximum contaminant level. A surface water system shall return to quarterly monitoring if any one (1) sample is greater than or equal to fifty (50) percent of the maximum contaminant level (MCL).

(4) Each transient noncommunity water system shall monitor annually beginning January 1, 1993.

(5) After the initial round of quarterly sampling is completed, each community and nontransient, noncommunity system which is monitoring annually shall take subsequent samples during the quarters which previously resulted in the highest analytical result.

Section 5. All public water systems (community; nontransient, noncommunity; and transient, noncommunity systems) shall monitor to determine compliance with the maximum contaminant level for nitrite in Section 12 of this administrative regulation.

(1) All public water systems shall take one (1) sample at each sampling point in the compliance period beginning January 1, 1993 and ending December 31, 1995.

(2) After the initial sample, systems where an analytical result for nitrite is less than fifty (50) percent of the MCL shall monitor at the frequency specified by the cabinet.

(3) For community, nontransient, noncommunity, and transient noncommunity water systems, the repeat monitoring frequency for a water system shall be quarterly for at least one (1) year following any one (1) sample in which the concentration is greater than or equal to fifty (50) percent of the maximum contaminant level. The cabinet may allow a system to reduce the sampling frequency to annually after determining the system is reliably and consistently less than the maximum contaminant level.

(4) Systems which are monitoring annually shall take each subsequent sample during the quarters which previously resulted in the highest analytical result.

Section 6. Confirmation Sampling. (1) If the results of sampling for asbestos, barium, cadmium, chromium, fluoride, mercury, or selenium indicate an exceedance of the maximum contaminant level, the cabinet may require that one (1) additional sample be collected within two (2) weeks after the initial sample was taken at the same sampling point.

(2) If nitrate or nitrite sampling results indicate an exceedance of the maximum contaminant level, the system shall take a confirmation sample within twenty-four (24) hours of the system's receipt of notification of the analytical results of the first sample. Public water systems unable to comply with the twenty-four (24) hour sampling requirement shall immediately notify the consumers served by the area served by the public water system in accordance with 401 KAR 8:070. Systems exercising this option shall take and analyze a confirmation sample within two (2) weeks of notification of the analytical results of the first sample.

(3) If a confirmation sample is taken for any contaminant, then the results of the initial and confirmation sample shall be averaged. The resulting average shall be used to determine the system's compliance in accordance with Section 9 of this administrative regulation. The cabinet may delete results of obvious sampling errors.

Section 7. The cabinet may require more frequent monitoring than specified in Sections 2 to 5 of this administrative regulation or may require confirmation samples for positive and negative results.

Section 8. Public water systems may apply to the cabinet to conduct more frequent monitoring than the minimum monitoring frequencies specified in this administrative regulation.

Section 9. Compliance with Section 1 of this administrative regulation shall be determined based on the analytical result obtained at each sampling point.

(1) For systems which are conducting monitoring at a frequency greater than annual, compliance with the maximum contaminant levels for antimony, asbestos, barium, beryllium, cadmium, chromium, cyanide, fluoride, mercury, nickel, selenium and thallium shall be determined by a running annual average at any sampling point. If the average at any sampling point is greater than the maximum contaminant level, then the system shall be deemed to be out of compliance. If any one (1) sample would cause the annual average to be exceeded, then the system shall be deemed to be out of compliance immediately. Any sample below the method detection limit shall be calculated at zero for the purpose of determining the annual average.

(2) For systems which are monitoring annually, or less frequently, the system shall be deemed to be out of compliance with the maximum contaminant levels for asbestos, barium, cadmium, chromium, fluoride, mercury and selenium if the level of a contami-

nant at any sampling point is greater than the maximum contaminant level. If a confirmation sample is required by the cabinet, the determination of compliance will be based on the average of the two (2) samples.

(3) Compliance with the maximum contaminant levels for nitrate and nitrite is determined based on one (1) sample if the levels of these contaminants is below the maximum contaminant levels. If the levels of nitrate or nitrite exceed the maximum contaminant levels in the initial sample, a confirmation sample is required in accordance with Section 6(2) of this administrative regulation, and compliance shall be determined based on the average of the initial and confirmation samples.

(4) If a public water system has a distribution system separable from other parts of the distribution system with no inter- connections, the cabinet may allow the system to give public notice to only the area served by that portion of the system which is out of compliance.

Section 10. Each public water system shall monitor at the time designated by the cabinet during each compliance period, as specified in writing to the public water system.

Section 11. Inorganic Analysis. (1) Analytical methods for inorganic chemicals. Analyses for asbestos, barium, cadmium, chromium, mercury, nitrate, nitrite, and selenium shall be conducted in accordance with 40 CFR 141.23(k)(1) 1993, hereby adopted without change.

(2) Analytical methods for arsenic: Analyses for arsenic shall be conducted in accordance with 40 CFR 141.23(k)(2)1993, hereby adopted without change.

(3) Analytical methods for fluoride: Analyses for fluoride shall be conducted in accordance with 40 CFR 141.23(k)(3)1993, hereby adopted without change.

(4) Analysis and sample collection methods for the inorganic contaminants listed at 40 CFR 141.23(k)(4), and (5), 1993 shall be conducted in accordance with the methods described by those sections of federal regulation which are hereby adopted without change.

(5) Analysis under this administrative regulation shall only be conducted by laboratories that have been certified by EPA or the cabinet. Laboratories may conduct sample analysis under provisional certification until January 1, 1996. To receive certification to conduct analyses of antimony, asbestos, barium, beryllium, cadmium, chromium, cyanide, fluoride, mercury, nickel, nitrate, nitrite, selenium, and thallium, the laboratory shall:

(a) Analyze Performance Evaluation samples which include those substances provided by the Environmental Protection Agency's Environmental Monitoring Systems Laboratory or equivalent samples provided by the cabinet.

(b) Achieve quantitative results on the analyses that are within the following acceptance limits:

Contaminant	Acceptance Limit
Antimony	plus or minus 30% at greater than or equal to 0.006 mg/l
Asbestos	2 standard deviations based on study statistics
Barium	plus or minus 15% at greater than or equal to 0.15 mg/l
Beryllium	plus or minus 15% at greater than or equal to 0.001 mg/l
Cadmium	plus or minus 20% at greater than or equal to 0.002 mg/l
Chromium	plus or minus 15% at greater than or equal to 0.01 mg/l
Cyanide	plus or minus 25% at greater than or equal to 0.1 mg/l
Fluoride	plus or minus 10% at greater than or equal to 1 to 10 mg/l
Mercury	plus or minus 30% at greater than or equal to 0.0005 mg/l
Nickel	plus or minus 15% at greater than or equal to 0.01 mg/l
Nitrate	plus or minus 10% at greater than or equal to 0.4 mg/l
Nitrite	plus or minus 15% at greater than or equal to 0.4 mg/l
Selenium	plus or minus 20% at greater than or equal to 0.01 mg/l
Thallium	plus or minus 30% at greater than 0.002 mg/l

Section 12. The maximum contaminant levels for inorganic contaminants specified in subsections (2) to (6), (10), and (11) to (15) of this section shall apply to community water systems and nontransient, noncommunity water systems. The maximum contaminant level specified in subsection (1) of this section shall apply only to community water systems. The maximum contaminant levels specified in subsections (7), (8), and (9) of this section shall apply to community water systems; nontransient, noncommunity water systems; and transient noncommunity water systems.

CONTAMINANT	MAXIMUM CONTAMINANT LEVEL (mg/l)
(1) Fluoride	4.0
(2) Asbestos	7 Million Fibers/liter (longer than 10 micrometers)
(3) Barium	2
(4) Cadmium	0.005
(5) Chromium	0.1
(6) Mercury	0.002
(7) Nitrate	10 (as Nitrogen)
(8) Nitrite	1 (as Nitrogen)
(9) Total Nitrate and Nitrite	10 (as Nitrogen)
(10) Selenium	0.05
(11) Antimony	0.006
(12) Beryllium	0.004
(13) Cyanide (as free Cyanide)	0.2
(14) Nickel	0.1
(15) Thallium	0.002
(16) Arsenic	0.05

Section 13. The following are hereby identified as the best technology, treatment technique, or other means available for achieving compliance with the maximum contaminant levels for inorganic contaminants identified in Section 12 of this administrative regulation, except fluoride:

BAT FOR INORGANIC COMPOUNDS

CHEMICAL NAME	BAT
Antimony	2,7
Asbestos	2,3,8
Barium	5,6,7,9
Beryllium	1,2,5,6,7
Cadmium	2,5,6,7
Chromium	2,5,6[2],7
Cyanide	5,7,10
Mercury	2[1],4,6[1],7[1]
Nickel	5,6,7
Nitrate	5,7,9
Selenium	1,2[3],6,7,9
Thallium	1,5

[1]BAT only if influent Hg concentrations are greater than or equal to 10 µg/l.
[2]BAT for Chromium III only.
[3]BAT for Selenium IV only.

KEY TO BATS IN TABLE

1 = Activated Alumina	6 = Lime Softening
2 = Coagulation and Filtration	7 = Reverse Osmosis
3 = Direct and Diatomite Filtration	8 = Corrosion Control
4 = Granular Activated Carbon	9 = Electrodialysis
5 = Ion Exchange	10 = Chlorine
	11 = Ultraviolet

~~[Section 1. All producers of water for public water systems shall sample for the presence of inorganic chemicals as listed in Section 4 of this regulation. Semipublic systems and systems that purchase all of their water from another public water system are not required to sample for inorganic chemicals.~~

~~Section 2. Sampling Frequency. (1) Community systems using surface water. All community water systems utilizing surface water sources shall sample for the presence of inorganic chemicals once per year.~~

~~(2) Community systems using groundwater. All community water systems utilizing groundwater sources shall sample for the presence of inorganic chemicals once every three (3) years.~~

~~(3) Noncommunity systems. All noncommunity water systems shall sample for the presence of nitrates once every three (3) years.~~

~~Section 3. Sampling Point. The sampling point for identifying the presence of inorganic chemicals shall be at any free flowing outlet of the distribution system.~~

~~Section 4. Maximum Inorganic Chemical Limits. (1) Maximum contaminant levels. The following are the maximum contaminant levels for inorganic chemicals:~~

~~Contaminant~~	~~Level, milligrams per liter~~
~~Arsenic~~	~~0.05~~
~~Barium~~	~~1.00~~
~~Cadmium~~	~~0.010~~
~~Chromium~~	~~0.05~~
~~Fluoride~~	~~4.00~~
~~Lead~~	~~0.05~~
~~Mercury~~	~~0.002~~
~~Nitrate (as N)~~	~~10.00~~
~~Selenium~~	~~0.01~~
~~Silver~~	~~0.05~~

~~(2) Nitrate. The maximum contaminant level for nitrate is applicable to all public water systems. The levels for the other inorganic chemicals apply only to community water systems.~~

~~(3) Fluoride. The maximum limit for fluoride is applicable to community water systems only. Supplemental fluoridation of public water supplies is covered by 401 KAR 8:650.~~

~~Section 5. Analytical Method. Analyses for inorganic chemicals shall be in accordance with methods approved for drinking water by the U.S. Environmental Protection Agency in accordance with 40 CFR 141.23(f).~~

~~Section 6. Inorganic Chemical Limit Exceeded (Except Nitrate). (1) Reporting. If the level of any contaminant listed in Section 4 (except nitrate) exceeds the maximum contaminant level, the supplier of water shall report to the cabinet within seven (7) days and initiate three (3) additional analyses at the same sampling point within one (1) month.~~

~~(2) Public notification required. When the average of the routine sample that exceeds the maximum limit together with the three (3) additional samples, as set forth above, rounded to the same number of significant figures as the maximum contaminant level for the substance in question, exceeds the maximum contaminant level, the supplier of water shall notify the cabinet and give notice to the public in accordance with 401 KAR 8:070. Monitoring by the supplier after public notification shall be at a frequency designated by the cabinet and shall continue until the maximum contaminant level has not been exceeded in two (2) successive samples or until a monitoring schedule, as a condition to a variance, exemption or enforcement action, becomes effective.~~

~~Section 7. Nitrate Limit Exceeded. The maximum contaminant level for nitrate shall be determined on the basis of the mean of two (2) analyses. When a level exceeding the maximum contaminant level for nitrate is found, a second analysis shall be initiated within twenty four (24) hours, and if the mean average of the two (2) analyses exceeds the maximum contaminant level, the supplier of water shall report this to the cabinet and shall notify the public in accordance with 401 KAR 8:070.~~

~~(1) When MCL for nitrate may be exceeded. Nitrate levels not exceeding twenty (20) mg/l may be allowed in a noncommunity water system if:~~

~~(a) No water from the system is or will be available to children under six (6) months of age; and~~

~~(b) There will be continuous posting of the fact that nitrate levels exceed ten (10) mg/l and the notice lists the potential health effects of exposure;~~

~~(c) Local and state public health authorities are notified annually of nitrate levels that exceed ten (10) mg/l; and~~

~~(d) No adverse health effects result.~~

~~(2) Public notification required. Where the cabinet allows levels of nitrate up to twenty (20) mg/l, public notification shall be required when the MCL exceeds twenty (20) mg/l.]~~

Section 14. ~~[8.]~~ Special Monitoring for Sodium. (1) Those required to sample. Suppliers of water for community public water systems shall collect and analyze one (1) sample per plant at the entry point of the distribution system for the determination of sodium concentration levels.

(2) Sampling frequency.

(a) Community water systems, surface source. Systems utilizing surface water sources in whole or in part shall collect and analyze samples semiannually. Samples shall be collected one (1) time during the wet season and one (1) time during the dry season per calendar year.

(b) Community water systems, groundwater sources. Systems utilizing only groundwater sources shall collect and analyze samples annually.

(c) Samples required. The minimum number of samples required to be taken by the system shall be based upon the number of treatment plants used by the system, except the cabinet may consider multiple wells drawing raw water from a single aquifer to be one (1) treatment plant for the purpose of determining the minimum number of samples. The supplier of water may be required to collect and analyze water samples for sodium more frequently in locations where the sodium content is variable.

(d) Analyses for sodium shall be in accordance with methods approved for drinking water by the U.S. Environmental Protection Agency in 40 CFR 141.41(d) (1993), hereby adopted without change. ~~[or by the cabinet.]~~

(3) Reporting. The supplier of water shall report to the cabinet the results of the analyses for sodium within ten (10) days of the end of the month in which the sample results were received or within ten (10) days following the end of the required monitoring period, as determined by the cabinet, whichever of these is first. If more than annual sampling is required the supplier shall report the average

sodium concentration within ten (10) days of the end of the month in which the analytical results of the last sample used for the annual average was received.

(4) Acceptable sodium limits. A level of twenty (20) mg/l of sodium shall be considered an optimum concentration for drinking water. The supplier of water shall notify appropriate local and state public health officials of the sodium levels, by written notice by direct mail, within three (3) months of testing. A copy of each notice required to be provided by this subsection [paragraph] shall be sent to EPA and the cabinet within ten (10) days of its issuance. The supplier of water shall not be required to notify appropriate local and state public health officials of the sodium levels where the state provides such notices in lieu of the supplier.

(5) Public notification. The provisions of 401 KAR 8:070 do not apply to sodium levels unless the water supplier opts to notify the public.

Section 15. [9.] Variance and Exemptions for Fluoride. In addition to the requirements for requesting a variance or exemption provided in 401 KAR 8:060, the following provisions are applicable when a variance or exemption from the maximum contaminant level for fluoride is requested:

(1) Best available technology. The following are the best available technology, treatment techniques or other means generally available for achieving compliance with the maximum contaminant level for fluoride:

(a) Activated alumina absorption, centrally applied; and

(b) Reverse osmosis, centrally applied.

(2) Public water systems shall apply the best available technology, treatment techniques, or other means generally available to the water system and specified in subsection (1)(a) or (b) of this section, prior to the cabinet's consideration of a variance request for fluoride, unless:

(a) Pursuant to 401 KAR 8:060, the public water system submits to the cabinet information, based upon studies of the public water system and other relevant information, that demonstrates that the technology, treatment technique or other available means [method] identified in subsection (1) of this section is not available and effective for the public water system; and

(b) The cabinet determines, based upon the information submitted that the best available technology, treatment technique or other means [method] generally available is not available and effective for the system.

(3) [; (c)] Prior to granting a variance, the cabinet shall issue a compliance schedule which requires the public water system to examine the following treatment techniques to determine the probability that any of these methods will significantly reduce the level of fluoride for that system, and, if so, to determine if those methods are technically feasible and economically reasonable; and to determine if the fluoride reductions obtained are commensurate with the costs incurred with the installation and use of such treatment methods for that system:

(a) [1.] Modification of lime softening;

(b) [2.] Alum coagulation;

(c) [3.] Electrodialysis;

(d) [4.] Anion exchange resins;

(e) [5.] Well field management;

(f) [6.] Alternate source; and

(g) [7.] Regionalization.

(4) [(d)] If the cabinet determines that a treatment technique identified in subsection (3) of this section [paragraph (c) of this subsection] is technically feasible, economically reasonable and will achieve fluoride reductions commensurate with costs incurred with the installation and use of the [such] treatment technique for the public water system, the cabinet shall require the system to install and use that treatment method in connection with a compliance schedule issued pursuant to 401 KAR 8:060.

[Section 10. Severability. If any provision of this regulation is set aside by a court of competent jurisdiction, the remainder of this regulation remains in effect.]

E. DOUGLAS STEPHAN, Commissioner
PHILLIP J. SHEPHERD, Secretary
APPROVED BY AGENCY: April 14, 1994
FILED WITH LRC: April 15, 1994 at 11 a.m.

PUBLIC HEARING: A public hearing to receive comments on this proposed regulation has been scheduled for Wednesday, May 25, 1994 at 1:30 p.m. (ET), in the Auditorium of the State Office Building, Frankfort, Kentucky. Individuals interested in being heard at this hearing shall notify John T. Smither in writing at the address noted below by May 20, 1994, of their intent to attend the hearing and be heard. If no notification of intent to attend the hearing and be heard is received by that date, the hearing may be canceled. This hearing is open to the public. Any person wishing to be heard will be given an opportunity to comment on the proposed regulation. Persons testifying at the hearing are requested to provide the cabinet with a written copy of their testimony, if available. A transcript of the hearing may not be made unless a written request for a transcript is made at least five (5) days before the hearing. If you do not wish to be heard at the public hearing, you may submit written comments on the proposed regulation. Written comments must be received by John T. Smither at the address below no later than the close of business, (4:30 p.m. (ET)) May 25, 1994. The Natural Resources and Environmental Protection Cabinet does not discriminate on the basis of race, color, national origin, sex, religion, age, or disability. The meeting facility is accessible to people with disabilities. The cabinet will provide, upon request, reasonable accommodations including auxiliary aids and services necessary to afford individuals with a disability an equal opportunity to participate in all services, programs, and activities. If an interpreter or other auxiliary aid or service is needed, contact Mr. Smither at the address below before May 20, 1994 between 8 a.m. and 4:30 p.m. (ET).

CONTACT PERSON: John T. Smither, Manager, Drinking Water Branch, Division of Water, Department for Environmental Protection, 14 Reilly Road, Frankfort, Kentucky 40601, (502) 564-3410.

REGULATORY IMPACT ANALYSIS

Agency Contact: John T. Smither

(1) Type and number of entities affected: This regulation applies to approximately 825 public water systems, and 79 laboratories certified to test for inorganic contaminants in drinking water.

(a) Direct and indirect costs or savings to those affected: This regulation incorporates testing requirements for inorganic chemicals in drinking water as promulgated by the Environmental Protection Agency on January 30, 1991 and July 17, 1992, usually referred to as Phase II and Phase V chemical regulations.

1. First year: Public water systems will be required to monitor for most inorganic chemicals either annually for surface water systems or every three years for groundwater systems. Asbestos monitoring is every three years, or less if the Cabinet grants a waiver. Nitrate monitoring shall be quarterly for surface systems and annually for groundwater systems. Nitrite monitoring shall be once during the first three years of a compliance period and will vary subsequently depending on results. All monitoring will increase if violations occur. The Cabinet is in the process of conducting the monitoring for the first three year cycle of Phase II and Phase V chemical contaminants for most Public Water Systems serving less than 10,000 persons at no cost to the Public Water System. For commercial, industrial, and federal facilities and public water systems serving over 10,000 persons, this monitoring is the responsibility of the system. The annual cost for all Phase II and Phase V contaminants is about $12,000. Subsequent monitoring (Beginning in January 1996) will be the responsibility of the public water system.

2. Continuing costs or savings: Most public water systems serving less than 10,000 persons will have no continuing cost or savings until 1996 unless a violation of the maximum contaminant level occurs and best available technology is applied. Best available technology varies with the chemical found and costs vary from technology to technology as well as with the intensity of treatment required to remove the contaminant. These costs may range from $2,000 for granular activated carbon to $65,000 for packed tower aeration. Public water systems may be required to pay for check samples. Industrial, commercial, federal and facilities serving over 10,000 persons will continue to incur monitoring cost.

3. Additional factors increasing or decreasing costs (note any effects upon competition): The cost for monitoring for all Phase II and Phase V contaminants (inorganic, organic, and unregulated) is estimated by EPA to be approximately $12,000 for four quarters of annual testing. Most public water systems serving less than 10,000 persons will not be faced with this cost until 1996. The Cabinet is postponing testings for asbestos and dioxin pending development of laboratory facilities.

(b) Reporting and paperwork requirements: Results of monitoring for inorganic contaminants will be submitted to the Cabinet. For the first three years most of these reports will come from the Cabinet's laboratory. After that, public water systems will be responsible for these reports although as a practical matter most reports will come from certified commercial laboratories.

(2) Effects on the promulgating administrative body: This regulation will have significant impacts on the promulgating administrative body.

(a) Direct and indirect costs or savings: The Cabinet intends to absorb the cost of first time monitoring for most public water systems serving less than 10,000 persons. About $600,000 per year will be spent on this effort. In addition, the Cabinet must maintain the data resulting from this monitoring as well as submit this data to EPA. These functions will be accomplished with the current staff.

1. First year: Both monitoring and recordkeeping tasks will be incurred in the first year.

2. Continuing costs or savings: For three years both monitoring and recordkeeping costs will be on-going.

3. Additional factors increasing or decreasing costs: Recordkeeping costs will be on-going from the fourth year out.

(b) Reporting and paperwork requirements: The Cabinet must maintain data resulting from inorganic chemical monitoring and submit the data to EPA.

(3) Assessment of anticipated effect on state and local revenues: This regulation will not affect State revenues. Public water systems owned by local governments will need to pick up monitoring costs in the fourth year of this regulation. However, this will be an indirect cost, probably offset by higher water bills.

(4) Assessment of alternative methods; reasons why alternatives were rejected: Alternatives to this regulation were not considered because any alternative would be inconsistent with federal requirements.

(5) Identify any statute, administrative regulation or government policy which may be in conflict, overlapping, or duplication: No statute, regulation, or policy conflicts with, overlaps or duplicates this regulation.

(a) Necessity of proposed regulation if in conflict: No conflict exists.

(b) If in conflict, was effort made to harmonize the proposed administrative regulation with conflicting provisions: No conflict exists.

(6) Any additional information or comments: None

TIERING: Was tiering applied? Yes. This regulation is tiered to reflect differences in public water systems and the type chemical being monitored.

FISCAL NOTE ON LOCAL GOVERNMENT

1. Does this administrative regulation relate to any aspect of a local government, including any service provided by that local government? Yes.

2. State what unit, part or division of local government this administrative regulation will affect. This regulation relates to public water systems. Local governments frequently own or operate public water systems.

3. State the aspect or service of local government to which this administrative regulation relates. This regulation relates to the provision of potable drinking water.

4. Estimate the effect of this administrative regulation on the expenditures and revenues of a local government for the first full year the regulation is to be in effect. If specific dollar estimates cannot be determined, provide a brief narrative to explain the fiscal impact of the administrative regulation.

Revenues (+/-):

Expenditures (+/-):

Other Explanation: This regulation requires monitoring for certain inorganic contaminants. The cost of this monitoring should be passed through to the consumer. However, a public water system owned by a local government could have these costs absorbed by the local government.

FEDERAL MANDATE ANALYSIS COMPARISON

1. Federal statute or regulation constituting the federal mandate. 40 CFR 141.23 and 40 CFR 141.62 as amended by 56 Federal Register 3579(1991), 56 Federal Register 30274(1991), and 57 Federal Register 31838(1992) establish certain minimum requirements for implementation of the federal Safe Drinking Water Act (SDWA). The SDWA does not require states to adopt the federal program, so there is no federal mandate. It does authorize states to apply for program delegation. This eliminates the need for dual federal and state programs.

2. State compliance standards. The amendments to this regulation set out monitoring and testing requirements, maximum contaminant levels and best available technology for certain inorganic chemicals in drinking water.

3. Minimum or uniform standards contained in the federal mandate. Federal regulations set out monitoring and testing requirements, maximum contaminant levels and best available technology for certain inorganic chemicals.

4. Will this administrative regulation impose stricter requirements, or additional or different responsibilities or requirements, than those required by the federal mandate? There is no federal mandate to implement the federal SDWA. The cabinet has implemented its state statutory authority in adopting this regulation.

5. Justification for the imposition of the stricter standard, or additional or different responsibilities or requirements. The standards are the same.

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

401 KAR 8:300. Lead and copper.

RELATES TO: KRS Chapter 224, 40 CFR Part 141 (1993)

STATUTORY AUTHORITY: KRS 224.10-100, 224.10-110, 40 CFR 141 (1993), [~~PL 93-523 The Safe Drinking Water Act as amended in 1986 and by the Lead Contamination and Control Act of 1988, PL 100-572,~~] 42 USCA 300f, 300g, 300j

NECESSITY AND FUNCTION: KRS 224.10-110 directs the cabinet to enforce administrative [~~rules and~~] regulations adopted by the secretary for the regulation and control of the purification of water for public and semipublic use. The Safe Drinking Water Act, as amended by the Safe Drinking Water Act Amendments of 1986, provides for primary enforcement responsibility by states that have adopted regulations "no less stringent than the national primary drinking water regulations", as well as meeting other criteria stipulated by the Act. The Commonwealth of Kentucky has accepted and is currently exercising this [~~such~~] primary enforcement responsibility. This administrative regulation bans lead in drinking water facilities and provides standards for lead and copper in drinking water. [~~It is anticipated that this regulation will be expanded substantially when the Environmental Protection Agency proposes the final lead rule.~~]

Section 1. Prohibition of Use of Lead Pipes, Solder and Flux. Any pipe, solder, or flux used in the installation or repair of any public water system, or any plumbing in a residential or nonresidential facility providing water for human consumption which is connected to a public water system, shall be lead-free within the meaning of subsections (1) and (2) of this section. This prohibition does not apply to leaded joints necessary for the repair of cast iron pipes.

(1) The term "lead-free," when used with respect to solder and flux, refers to solders and flux containing not more than two-tenths (0.2) percent lead, and

(2) The term "lead-free," when used with respect to pipes and fittings, refers to pipes and pipe fittings containing not more than eight and zero-tenths (8.0) percent lead.

Section 2. Special Notice for Lead. (1) When notice served. On or before June 19, 1988, the owner or operator of each community water system and each nontransient noncommunity water system shall have issued [~~issue~~] notice to persons served by that system that may be affected by lead contamination of their drinking water. The cabinet may require subsequent notices. [~~Notice under this section is required even if no violation of the maximum contaminant level for lead in 401 KAR 8:250 exists.~~]

(2) When notice is not required. Notice under subsection (1) of this section is not required if the system demonstrates that the water system, including the residential and nonresidential portions connected to the water system, is lead-free.

(3) Manner of notice. Notice shall have been [~~be~~] given to persons served by the system either by three (3) newspaper notices, one (1) for each of three (3) consecutive months and the first no later than June 19, 1988; or once by mailed notice with the water bill or in a separate mailing, no later than June 19, 1988; or once by hand delivery no later than June 19, 1988. For nontransient noncommunity water systems, notice may have been [~~be~~] given by continuous posting. If posting is used, the notice shall have been [~~be~~] posted in a conspicuous place in the area served by the system, shall have begun [~~begin~~] no later than June 19, 1988, and shall have continued [~~continue~~] for three (3) months.

(a) General content of notice. Notices issued under this section shall provide a clear and readily understandable explanation of the potential sources of lead in drinking water, potential adverse health effects, reasonably available methods of mitigating known or potential lead content in drinking water, any steps the water system is taking to mitigate lead content in drinking water, and the necessity for seeking alternative water supplies, if any. Use of the mandatory language in subsection (4) of this section shall be sufficient to explain potential adverse health effects.

(b) Each notice shall also include specific advice on how to determine if materials containing lead have been used in homes or the water distribution system and how to minimize exposure to water likely to contain high levels of lead. Each notice shall be conspicuous and shall not contain unduly technical language, unduly small print, or similar problems that frustrate the purpose of the notice. Each notice shall contain the telephone number of the owner, operator, or designee of the public water system as a source of additional information regarding the notice. Where appropriate, the notice shall be multilingual.

(4) Mandatory health effects information. When providing the public notice of the potential adverse health effects of lead in drinking water required in this section, the owner or operator of the water system shall include the [~~following~~] specific language in 401 KAR 8:070, Section 6(74). [~~the notice:~~

~~"The United States Environmental Protection Agency (EPA) sets drinking water standards and has determined that lead is a health concern at certain levels of exposure. There is currently a standard of 0.050 parts per million (ppm). Based on new health information, EPA is likely to lower this standard significantly.~~

~~"Part of the purpose of this notice is to inform you of the potential adverse health effects of lead. This is being done even though your water may not be in violation of the current standard.~~

~~"EPA and others are concerned about lead in drinking water. Too much lead in the human body can causes serious damage to the brain, kidneys, nervous system, and red blood cells. The greatest risk, even with short term exposure, is to young children and pregnant women.~~

~~"Lead levels in your drinking water are likely to be highest:~~
~~- if your home or water system has lead pipes, or~~
~~- if your home has copper pipes with lead solder, and~~
~~- if the home is less than five years old, or~~
~~- if you have soft or acidic water, or~~
~~- if water sits in the pipes for several hours."~~]

(5) Cabinet notice. The cabinet may give the notice to the public required by this section on behalf of the owner or operator. However, the owner or operator remains legally responsible for ensuring that the requirements of this section are met.

[~~Section 2. Severability. If any provision of this regulation is set aside by a court of competent jurisdiction, the remainder of this regulation remains in effect.~~]

Section 3. General Requirements. (1) The requirements of this administrative regulation constitute the primary drinking water regulations for lead and copper. Unless otherwise indicated, each of the provisions of this administrative regulation applies to community water systems and nontransient, noncommunity water systems (hereinafter referred to as "water systems" or "systems").

(2) The requirements set forth in this administrative regulation shall take effect upon adoption.

(3) This administrative regulation establishes a treatment technique that includes requirements for corrosion control treatment, source water treatment, lead service line replacement, and public education. These requirements are triggered, in some cases, by lead and copper action levels measured in samples collected at consumers' taps.

(4) Lead and copper action levels.

(a) The lead action level is exceeded if the concentration of lead in more than ten (10) percent of tap water samples collected during any monitoring period conducted in accordance with Section 9 of this administrative regulation is greater than 0.015 mg/l (i.e., if the ninetieth (90th) percentile lead level is greater than 0.015 mg/l).

(b) The copper action level is exceeded if the concentration of copper in more than ten (10) percent of tap water samples collected during any monitoring period conducted in accordance with Section 9 of this administrative regulation is greater than one and three-tenths (1.3) mg/l (i.e., if the ninetieth (90th) percentile copper level is greater than one and three-tenths (1.3) mg/L).

(c) The ninetieth (90th) percentile lead and copper levels shall be computed as follows:

1. The results of all lead or copper samples taken during a monitoring period shall be placed in ascending order from the sample

with the lowest concentration to the sample with the highest concentration. Each sampling result shall be assigned a number, ascending by single integers beginning with the number one (1) for the sample with the lowest contaminant level. The number assigned to the sample with the highest contaminant level shall be equal to the total number of samples taken.

2. The number of samples taken during the monitoring period shall be multiplied by nine-tenths (0.9).

3. The contaminant concentration in the numbered sample yielded by the calculation in subparagraph 2 of this paragraph is the 90th percentile contaminant level.

4. For water systems serving fewer than 100 people that collect five (5) samples per monitoring period, the ninetieth (90th) percentile is computed by taking the average of the highest and second highest concentrations.

(5) Corrosion control treatment requirements.

(a) All water systems shall install and operate optimal corrosion control treatment as defined in 401 KAR 8:010.

(b) Any water system that complies with the applicable corrosion control treatment requirements approved by the cabinet under Sections 4 and 5 of this administrative regulation shall be deemed in compliance with the treatment requirement contained in paragraph (a) of this subsection.

(6) Source water treatment requirements. Any system exceeding the lead or copper action level shall implement all applicable source water treatment requirements specified by the cabinet under Section 6 of this administrative regulation.

(7) Lead service line replacement requirements. Any system exceeding the lead action level after implementation of applicable corrosion control and source water treatment requirements shall complete the lead service line replacement requirements contained in Section 7 of this administrative regulation.

(8) Public education requirements. Any system exceeding the lead action level shall implement the public education requirements contained in Section 8 of this administrative regulation.

(9) Monitoring and analytical requirements. Tap water monitoring for lead and copper, monitoring for water quality parameters, source water monitoring for lead and copper, and analyses of the monitoring results under this administrative regulation shall be completed in compliance with Sections 9 to 12 of this administrative regulation.

(10) Reporting requirements. Systems shall report to the cabinet any information required by this administrative regulation.

(11) Recordkeeping requirements. Systems shall maintain records in accordance with Section 14 of this administrative regulation.

(12) Violation of national primary drinking water regulations. Failure to comply with the applicable requirements of Sections 3 to 14 of this administrative regulation, shall constitute a violation of the primary drinking water regulations for lead and copper and the system shall notify the public pursuant to 401 KAR 8:070 and shall issue the notices required by this administrative regulation.

Section 4. Corrosion Control Treatment Applicability. The following corrosion control treatment steps shall apply to small, medium-size, and large water systems.

(1) Systems shall complete applicable corrosion control treatment requirements described in Section 5 of this administrative regulation, by the deadlines established in this section.

(a) A large system (serving more than 50,000 persons) shall complete the corrosion control treatment steps specified in subsection (4) of this section, unless it is deemed to have optimized corrosion control under subsection (2)(b) or (c) of this section.

(b) A small system (serving less than or equal to 3,300 persons) and a medium-size system (serving more than 3,300 and less than or equal to 50,000 persons) shall complete the corrosion control treatment steps specified in subsection (5) of this section, unless it is deemed to have optimized corrosion control under subsection (2)(a), (b), or (c) of this section.

(2) A system is deemed to have optimized corrosion control and is not required to complete the applicable corrosion control treatment steps identified in this section if the system satisfies one (1) of the following criteria:

(a) A small or medium-size water system is deemed to have optimized corrosion control if the system meets the lead and copper action levels during each of two (2) consecutive six (6) month monitoring periods conducted in accordance with Section 9 of this administrative regulation.

(b) A water system may be deemed by the cabinet to have optimized corrosion control treatment if the system demonstrates to the satisfaction of the cabinet that it has conducted activities equivalent to the corrosion control steps applicable to the system under this section. If the cabinet makes this determination, it shall provide the system with written notice explaining the basis for its decision and shall specify the water quality control parameters representing optimal corrosion control in accordance with Section 5(6) of this administrative regulation. A system shall provide the cabinet with the following information in order to support a determination under this paragraph:

1. The results of all test samples collected for each of the water quality parameters in Section 5(3)(c) of this administrative regulation;

2. A report explaining the test methods used by the water system to evaluate the corrosion control treatments listed in Section 5(3)(a) of this administrative regulation, the results of all tests conducted, and the basis for the system's selection of optimal corrosion control treatment;

3. A report explaining how corrosion control has been installed and how it is being maintained to ensure minimal lead and copper concentrations at consumers' taps; and

4. The results of tap water samples collected in accordance with Section 9 of this administrative regulation at least once every six (6) months for one (1) year after corrosion control has been installed.

(c) Any water system is deemed to have optimized corrosion control if it submits results of tap water monitoring conducted in accordance with Section 9 of this administrative regulation and source water monitoring conducted in accordance with Section 11 of this administrative regulation that demonstrates for two (2) consecutive six (6) month monitoring periods that the difference between the ninetieth (90th) percentile tap water lead level computed under Section 3(4)(c) of this administrative regulation, and the highest source water lead concentration, is less than the practical quantitation level for lead specified in Section 12 of this administrative regulation and 40 CFR 141.89 (a)(1)(ii) (1993), hereby adopted without change.

(3) Any small or medium-size water system that is required to complete the corrosion control steps due to its exceedance of the lead or copper action level may cease completing the treatment steps if the system meets both action levels during each of two (2) consecutive monitoring periods conducted pursuant to Section 9 of this administrative regulation and submits the results to the cabinet. If any such water system thereafter exceeds the lead or copper action level during any monitoring period, the system shall recommence completion of the applicable treatment steps, beginning with the first treatment step which was not previously completed in its entirety. The cabinet may require a system to repeat treatment steps previously completed by the system if the cabinet determines it necessary to implement properly the treatment requirements of this section. The cabinet shall notify the system in writing of such a determination and explain the basis for its decision.

(4) Treatment steps and deadlines for large systems. Except as provided in subsection (2)(b) and (c) of this section, large systems shall complete the following corrosion control treatment steps, described in the referenced portions of Sections 5, 9, and 10 of this administrative regulation, by the indicated dates.

(a) Step 1: The system shall have conducted the initial monitoring required by Sections 9(4)(a) and 10(2) of this administrative regulation during two (2) consecutive six (6) month monitoring periods by

January 1, 1993.

(b) Step 2: The system shall complete the corrosion control studies required by Section 5(3) of this administrative regulation by July 1, 1994.

(c) Step 3: The cabinet shall approve or designate an optimal corrosion control treatment pursuant to Section 5(4) of this administrative regulation by January 1, 1995.

(d) Step 4: The system shall install the optimal corrosion control treatment required by Section 5(5) of this administrative regulation by January 1, 1997.

(e) Step 5: The system shall complete the follow-up sampling required by Sections 9(4)(b) and 10(3) of this administrative regulation by January 1, 1998.

(f) Step 6: The cabinet shall review installation of treatment and approve or designate optimal water quality control parameters pursuant to Section 5(6) of this administrative regulation, by July 1, 1998.

(g) Step 7: The system shall operate in compliance with the optimal water quality control parameters approved or designated by the cabinet, pursuant to Section 5(7) of this administrative regulation, and continue to conduct tap sampling as required by Sections 9(4)(c) and 10(4) of this administrative regulation.

(5) Treatment steps and deadlines for small and medium-size systems. Except as provided in subsection (2) of this section, small and medium-size systems shall complete the following corrosion control treatment steps described in the referenced portions of Sections 5, 9, and 10 of this administrative regulation by the indicated time periods.

(a) Step 1: The system shall conduct the initial tap sampling required by Sections 9(4)(a) and 10(2) of this administrative regulation until the system either exceeds the lead or copper action level or becomes eligible for reduced monitoring under Section 9(4)(d) of this administrative regulation. A system exceeding the lead or copper action level shall recommend to the cabinet the optimal corrosion control treatment required by Section 5(1) of this administrative regulation within six (6) months after it exceeds one (1) the action levels.

(b) Step 2: Within twelve (12) months after a system exceeds the lead or copper action level, the cabinet may require the system to perform the corrosion control studies required by Section 5(2) of this administrative regulation. If the cabinet does not require the system to perform corrosion control studies, the cabinet shall specify optimal corrosion control treatment pursuant to Section 5(4) of this administrative regulation within the following time frames:

1. For medium-size systems, within eighteen (18) months after the system exceeds the lead or copper action level; or

2. For small systems, within twenty-four (24) months after the system exceeds the lead or copper action level.

(c) Step 3: If the cabinet requires a system to perform corrosion control studies pursuant to paragraph (b) of this subsection, the system shall complete the studies required by Section 5(3) of this administrative regulation within eighteen (18) months after the cabinet notifies the system that the studies be conducted.

(d) Step 4: If the system has performed corrosion control studies pursuant to paragraph (b) of this subsection, the cabinet shall approve or designate optimal corrosion control treatment pursuant to Section 5(4) of this administrative regulation within six (6) months after completion of step 3 in paragraph (c) of this subsection.

(e) Step 5: The system shall install the optimal corrosion control treatment required by Section 5(5) of this administrative regulation within twenty-four (24) months after the cabinet approves or designates the treatment.

(f) Step 6: The system shall complete the follow-up sampling required by Sections 9(4)(b) and 10(3) of this administrative regulation within thirty-six (36) months after the cabinet approves or designates optimal corrosion control treatment.

(g) Step 7: The cabinet shall review the system's installation of treatment and approve or designate optimal water quality control parameters pursuant to Section 5(6) of this administrative regulation within six (6) months after completion of step 6 in paragraph (f) of this subsection.

(h) Step 8: The system shall operate in compliance with the optimal water quality control parameters approved or designated by the cabinet pursuant to Section 5(7) of this administrative regulation and shall continue to conduct the tap sampling required by Sections 9(4)(c) and 10(4) of this administrative regulation.

Section 5. Description of Corrosion Control Treatment Requirements. Each system shall complete the corrosion control treatment requirements described below which are applicable to the system under Section 4 of this administrative regulation.

(1) System recommendation regarding corrosion control treatment. Based upon the results of lead and copper tap monitoring and water quality parameter monitoring, small and medium-size water systems exceeding the lead or copper action level shall recommend installation of one (1) or more of the corrosion control treatments listed in subsection (3)(a) of this section which the system believes constitutes optimal corrosion control for that system. The cabinet may require the system to conduct additional water quality parameter monitoring in accordance with Section 10(2) of this administrative regulation to assist the cabinet in reviewing the system's recommendation.

(2) Cabinet decision to require studies of corrosion control treatment (applicable to small and medium size systems). Small or medium-size systems that exceed the lead or copper action level may be required to perform corrosion control studies under subsection (3) of this section to identify optimal corrosion control treatment for the system.

(3) Performance of corrosion control studies.

(a) A public water system performing corrosion control studies shall evaluate the effectiveness of each of the following treatments, and, if appropriate, combinations of the following treatments, to identify the optimal corrosion control treatment for that system:

1. Alkalinity and pH adjustment;

2. Calcium hardness adjustment; and

3. The addition of a phosphate or silicate based corrosion inhibitor at a concentration sufficient to maintain an effective residual concentration in all test tap samples.

(b) The water system shall evaluate each of the corrosion control treatments using either pipe rig or loop tests, metal coupon tests, partial-system tests, or analyses based on documented analogous treatments with other systems of similar size, water chemistry and distribution system configuration.

(c) The water system shall measure the following water quality parameters in tests conducted under this subsection before and after evaluating the corrosion control treatments listed above:

1. Lead;

2. Copper;

3. pH;

4. Alkalinity;

5. Calcium;

6. Conductivity;

7. Orthophosphate (when an inhibitor containing a phosphate compound is used);

8. Silicate (when an inhibitor containing a silicate compound is used); and

9. Water temperature.

(d) The water system shall identify all chemical or physical constraints that limit or prohibit the use of a particular corrosion control treatment and document the constraints with at least one (1) of the following:

1. Data and documentation showing that a particular corrosion control treatment has adversely affected other water treatment processes when used by another water system with comparable

water quality characteristics; or

2. Data and documentation demonstrating that the water system has previously attempted to evaluate a particular corrosion control treatment and has found that the treatment is ineffective or adversely affects other water quality treatment processes.

(e) The water system shall evaluate the effect of the chemicals used for corrosion control treatment on other water quality treatment processes.

(f) On the basis of an analysis of the data generated during each evaluation, the water system shall recommend to the cabinet in writing the treatment option that the corrosion control studies indicate constitutes optimal corrosion control treatment for that system. The water system shall provide a rationale for its recommendation along with all supporting documentation specified in paragraphs (a) through (e) of this subsection.

(4) Cabinet designation or approval of a designated optimal corrosion control treatment. (a) Based upon consideration of available information including, where applicable, studies performed under subsection (3) of this section and a system's recommended treatment alternative, the cabinet shall either approve the corrosion control treatment option recommended by the system, or designate alternative corrosion control treatments from among those listed in subsection (3)(a) of this section. When approving or designating optimal treatment the cabinet shall consider the effects that additional corrosion control treatment will have on water quality parameters and on other water quality treatment processes.

(b) The cabinet shall notify the system of its decision on optimal corrosion control treatment in writing and explain the basis for this determination. If the cabinet requests additional information to aid its review, the water system shall provide the information.

(5) Installation of optimal corrosion control. Each system shall properly install and operate throughout its distribution system the optimal corrosion control treatment approved by the cabinet under subsection (4) of this section.

(6) Cabinet review of treatment and specification of optimal water quality control parameters. The cabinet shall evaluate the results of all lead and copper tap samples and water quality parameter samples submitted by the water system and determine whether the system has properly installed and operated the optimal corrosion control treatment approved by the cabinet in subsection (4) of this section.

(a) Upon reviewing the results of tap water and water quality parameter monitoring by the system, both before and after the system installs optimal corrosion control treatment, the cabinet shall approve:

1. A minimum value or a range of values for pH measured at each entry point to the distribution system;

2. A minimum pH value, measured in all tap samples. Such value shall be equal to or greater than seven and zero-tenths (7.0), unless the cabinet determines that meeting a pH level of seven and zero-tenths (7.0) is not technologically feasible or is not necessary for the system to optimize corrosion control;

3. If a corrosion inhibitor is used, a minimum concentration or a range of concentrations for the inhibitor, measured at each entry point to the distribution system and in all tap samples, that the cabinet determines is necessary to form a passivating film on the interior walls of the pipes of the distribution system;

4. If alkalinity is adjusted as part of optimal corrosion control treatment, a minimum concentration or a range of concentrations for alkalinity, measured at each entry point to the distribution system and in all tap samples; and

5. If calcium carbonate stabilization is used as part of corrosion control, a minimum concentration or a range of concentrations for calcium, measured in all tap samples.

(b) The values for the applicable water quality control parameters listed above shall be those that the cabinet determines reflect optimal corrosion control treatment for the system. The cabinet may designate values for additional water quality control parameters determined by the cabinet to reflect optimal corrosion control for the system. The cabinet shall notify the system in writing of these determinations and explain the basis for its decisions.

(7) All systems shall maintain water quality parameter values at or above minimum values or within ranges designated or approved by the cabinet under subsection (6) of this section in each sample collected under Section 10(4) of this administrative regulation. If the water quality parameter value of any sample is below the minimum value or outside the range designated or approved by the cabinet, then the system is out of compliance with this subsection. As specified in Section 10(4) of this administrative regulation, the system may take a confirmation sample for any water quality parameter value no later than three (3) days after the first sample. If a confirmation sample is taken, the result shall be averaged with the first sampling result and the average shall be used for any compliance determinations under this subsection. The cabinet may delete results of obvious sampling errors from this calculation.

(8) Upon its own initiative, or in response to a request by a water system or other interested parties, the cabinet may modify the optimal corrosion control treatment under subsection (4) of this section or optimal water quality control parameters under subsection (6) of this section. A request for modification by a system or other interested party shall be in writing, explain why the modification is appropriate, and provide supporting documentation. The cabinet may modify its determination if it concludes that change is necessary to ensure that the system continues to optimize corrosion control treatment. A revised determination shall be made in writing, set forth the new treatment requirements, explain the basis for the cabinet's decision, and provide an implementation schedule for completing the treatment modifications.

Section 6. Source Water Treatment Requirements. (1) Deadlines for completing source water treatment steps. Systems shall complete the applicable source water monitoring and treatment requirements, described in the referenced portions of subsection (2) of this section and Sections 9 and 11 of this administrative regulation, by the following deadlines.

(a) Step 1: A system exceeding the lead or copper action level shall complete the lead and copper source water monitoring required by Section 11(2) of this administrative regulation and make a treatment recommendation to the cabinet pursuant to subsection (2)(a) of this section within six (6) months after exceeding the lead or copper action level.

(b) Step 2: The cabinet shall make a determination regarding source water treatment as provided by subsection (2)(b) of this section within six (6) months after submission of monitoring results under paragraph (a) of this subsection.

(c) Step 3: If the cabinet requires installation of source water treatment, the system shall install the treatment required by subsection (2)(c) of this section within twenty-four (24) months after completion of paragraph (b) of this subsection.

(d) Step 4: The system shall complete the follow-up tap water monitoring required by Section 9(4)(b) of this administrative regulation and the source water monitoring required by Section 11(3) of this administrative regulation within thirty-six (36) months after completion of paragraph (b) of this subsection.

(e) Step 5: The cabinet shall review the system's installation and operation of source water treatment and specify maximum permissible source water levels pursuant to subsection (2)(d) of this section within six (6) months after completion of paragraph (d) of this subsection.

(f) Step 6: The system shall operate in compliance with the maximum permissible lead and copper source water levels designated by the cabinet pursuant to subsection (2)(d) of this section and shall continue the source water monitoring required by Section 11(4) of this administrative regulation.

(2) Description of source water treatment requirements.

(a) Any system which exceeds the lead or copper action level shall recommend in writing to the cabinet the installation and operation of

one (1) of the source water treatments listed in paragraph (b) of this subsection. A system may recommend that no treatment be installed based upon a demonstration that source water treatment is not necessary to minimize lead and copper levels at users' taps.

(b) The cabinet shall evaluate the results of all source water samples submitted by the water system to determine whether source water treatment is necessary to minimize lead or copper levels in water delivered to users' taps. If the cabinet determines that treatment is needed, the cabinet shall either require installation and operation of the source water treatment recommended by the system or require the installation and operation of another source water treatment from among the following: ion exchange, reverse osmosis, lime softening or coagulation, and filtration. If the cabinet requests additional information to aid in its review, the water system shall provide the information by the date specified by the cabinet in its request. The cabinet shall notify the system in writing of its determination and set forth the basis for its decision.

(c) Each system shall properly install and operate the source water treatment designated by the cabinet under paragraph (b) of this subsection.

(d) The cabinet shall review the source water samples taken by the water system both before and after the system installs source water treatment, and determine if the system has properly installed and operated the source water treatment designated by the cabinet. Based upon its review, the cabinet shall designate the maximum permissible lead and copper concentrations for finished water entering the distribution system. The maximum permissible lead and copper concentrations shall reflect the contaminant removal capability of the treatment, assuming the treatment is properly operated and maintained. The cabinet shall notify the system in writing and explain the basis for its decision.

(e) Each water system shall maintain lead and copper levels below the maximum permissible concentrations designated by the cabinet at each sampling point monitored in accordance with Section 11 of this administrative regulation. The system is in violation of this subsection if the level of lead or copper at any sampling point is greater than the maximum permissible concentration designated by the cabinet.

(f) Upon its own initiative or in response to a request by a water system or other interested party, the cabinet may modify its determination of the source water treatment under paragraph (b) of this subsection, or maximum permissible lead and copper concentrations for finished water entering the distribution system under paragraph (d) of this subsection. A request for modification by a system or other interested party shall be in writing, explain why the modification is appropriate, and provide supporting documentation. The cabinet may modify its determination if it concludes that a change is necessary to ensure that the system continues to minimize lead and copper concentrations in source water. A revised determination shall be made in writing, set forth the new treatment requirements, explain the basis for the cabinet's decision, and provide an implementation schedule for completing the treatment modifications.

Section 7. Lead Service Line Replacement Requirements. (1) Systems that fail to meet the lead action level in tap samples taken pursuant to Section 9(4)(b) of this administrative regulation, after installing corrosion control or source water treatment, shall replace lead service lines in accordance with the requirements of this section. If a system is in violation of Section 4 or 6 of this administrative regulation for failure to install source water or corrosion control treatment, the cabinet may require the system to commence lead service line replacement under this section after the date by which the system was required to conduct monitoring under Section 9(4)(b) of this administrative regulation has passed.

(2) A system shall replace annually at least seven (7) percent of the initial number of lead service lines in its distribution system. The initial number of lead service lines is the number of lead lines in place when the replacement program begins. The system shall identify the initial number of lead service lines in its distribution system based upon a materials evaluation, including the evaluation required under Section 9(1) of this administrative regulation. The first year of lead service line replacement shall begin on the date the action level was exceeded in tap sampling referenced in subsection (1) of this section.

(3) A system is not required to replace an individual lead service line if the lead concentration in all service line samples from that line, taken pursuant to Section 9(2)(c) of this administrative regulation, is less than or equal to 0.015 mg/l.

(4) A water system shall replace the entire service line up to the building inlet, unless it demonstrates to the satisfaction of the cabinet under subsection (5) of this section that it controls less than the entire service line. If the water system controls less than the entire service line, the system shall replace the portion of the line which the cabinet determines is under the system's control. The system shall notify the user served by the line that the system will replace the portion of the service line under its control and shall offer to replace the building owner's portion of the line, but is not required to bear the cost of replacing the building owner's portion of the line. For buildings where only a portion of the lead service line is replaced, the water system shall inform the residents that the system will collect a first flush tap water sample after partial replacement of the service line is completed if a resident so desires. If a resident accepts the offer, the system shall collect the sample and report the results to the resident within fourteen (14) days following partial lead service line replacement.

(5) A water system shall be presumed to control the entire lead service line up to the building inlet, unless the system demonstrates to the satisfaction of the cabinet, in a letter submitted under Section 13(5)(d) of this administrative regulation, that it does not have any of the following forms of control over the entire line (as established by applicable legal authority): authority to set standards for construction, repair, or maintenance of the line; authority to replace, repair, or maintain the service line; or ownership of the service line. The cabinet shall review the information supplied by the system and determine if the system controls less than the entire service line and, if the system controls less than the entire service line, shall determine the extent of the system's control. The cabinet's determination shall be in writing and explain the basis for its decision.

(6) A system shall replace lead service lines on a shorter schedule than that required elsewhere in this section, taking into account the number of lead service lines in the system, if a shorter replacement schedule is feasible. The cabinet shall make the feasibility determination and set the replacement schedule in writing and notify the system of its finding within six (6) months after the system is triggered into lead service line replacement based on monitoring referenced in subsection (1) of this section.

(7) A system may cease replacing lead service lines if first draw samples collected pursuant to Section 9(2)(b) of this administrative regulation meet the lead action level during each of two (2) consecutive monitoring periods and the system submits the results to the cabinet. If the first draw tap samples in the water system thereafter exceed the lead action level, the system shall recommence replacing lead service lines pursuant to subsection (2) of this section.

(h) To demonstrate compliance with subsections (1) to (4) of this section, a system shall report to the cabinet the information specified in Section 13(5) of this administrative regulation.

Section 8. Public Education and Supplemental Monitoring Requirements. A water system that exceeds the lead action level, based on tap water samples collected in accordance with Section 9 of this administrative regulation, shall deliver the public education materials contained in subsections (1) and (2) of this section in accordance with the requirements of subsection (3) of this section.

(1) Content of written materials. A water system shall include the following text in all of the printed materials it distributes through its lead public education program. Any additional information presented

by a system shall be consistent with the information below and be in plain English that can be understood by laypersons.

(a) Introduction. The United States Environmental Protection Agency (EPA) and {insert name of water supplier} are concerned about lead in your drinking water. Although most homes have very low levels of lead in their drinking water, some homes in the community have lead levels above the EPA action level of fifteen (15) parts per billion (ppb), or 0.015 milligrams of lead per liter of water (mg/l). Under Federal law we are required to have a program in place to minimize lead in your drinking water by {insert date when corrosion control will be completed for your system}. This program includes corrosion control treatment, source water treatment, and public education. We are also required to replace each lead service line that we control if the line contributes lead concentrations of more than fifteen (15) ppb after we have completed the comprehensive treatment program. If you have any questions about how we are carrying out the requirements of the lead regulation please give us a call at {insert water system's phone number}. This brochure explains the simple steps you can take to protect you and your family by reducing your exposure to lead in drinking water.

(b) Health effects of lead. Lead is a common metal found throughout the environment in lead-based paint, air, soil, household dust, food, certain types of pottery porcelain and pewter, and water. Lead can pose a significant risk to your health if too much of it enters your body. Lead builds up in the body over many years and can cause damage to the brain, red blood cells and kidneys. The greatest risk is to young children and pregnant women. Amounts of lead that won't hurt adults can slow down normal mental and physical development of growing bodies. In addition, a child at play often comes into contact with sources of lead contamination - like dirt and dust - that rarely affect an adult. It is important to wash children's hands and toys often, and to try to make sure they only put food in their mouths.

(c) Lead in drinking water. 1. Lead in drinking water, although rarely the sole cause of lead poisoning, can significantly increase a person's total lead exposure, particularly the exposure of infants who drink baby formulas and concentrated juices that are mixed with water. The EPA estimates that drinking water can make up 20 percent or more of a person's total exposure to lead.

2. Lead is unusual among drinking water contaminants in that it seldom occurs naturally in water supplies like rivers and lakes. Lead enters drinking water primarily as a result of the corrosion, or wearing away, of materials containing lead in the water distribution system and household plumbing. These materials include lead-based solder used to join copper pipe, brass and chrome plated brass faucets, and in some cases, pipes made of lead that connect your house to the water main (service lines). In 1986, Congress banned the use of lead solder containing greater than two-tenths (0.2) percent lead, and restricted the lead content of faucets, pipes and other plumbing materials to eight and zero-tenths (8.0) percent.

3. When water stands in lead pipes or plumbing systems containing lead for several hours or more, the lead may dissolve into your drinking water. This means the first water drawn from the tap in the morning, or later in the afternoon after returning from work or school, can contain fairly high levels of lead.

(d) Steps you Can take in the home to reduce exposure to lead in drinking water.

1. Despite our best efforts mentioned earlier to control water corrosivity and remove lead from the water supply, lead levels in some homes or buildings can be high. To find out whether you need to take action in your own home, have your drinking water tested to determine if it contains excessive concentrations of lead. Testing the water is essential because you cannot see, taste, or smell lead in drinking water. Some local laboratories that can provide this service are listed at the end of this booklet. For more information on having your water tested, please call {insert phone number of water system}.

2. If a water test indicates that the drinking water drawn from a tap in your home contains lead above 15 ppb, then you should take the following precautions:

a. Let the water run from the tap before using it for drinking or cooking any time the water in a faucet has gone unused for more than six (6) hours. The longer water resides in your home's plumbing the more lead it may contain. Flushing the tap means running the cold water faucet until the water gets noticeably colder, usually about fifteen (15) to thirty (30) seconds. If your house has a lead service line to the water main, you may have to flush the water for a longer time, perhaps one (1) minute, before drinking. Although toilet flushing or showering flushes water through a portion of your home's plumbing system, you still need to flush the water in each faucet before using it for drinking or cooking. Flushing tap water is a simple and inexpensive measure you can take to protect your family's health. It usually uses less than one (1) or two (2) gallons of water and costs less than {insert a cost estimate based on flushing two (2) times a day for thirty (30) days} per month. To conserve water, fill a couple of bottles for drinking water after flushing the tap, and whenever possible use the first flush water to wash the dishes or water the plants. If you live in a high-rise building, letting the water flow before using it may not work to lessen your risk from lead. The plumbing systems have more, and sometimes larger pipes than smaller buildings. Ask your landlord for help in locating the source of the lead and for advice on reducing the lead level.

b. Try not to cook with, or drink water from the hot water tap. Hot water can dissolve more lead more quickly than cold water. If you need hot water, draw water from the cold tap and heat it on the stove.

c. Remove loose lead solder and debris from the plumbing materials installed in newly constructed homes, or homes in which the plumbing has recently been replaced, by removing the faucet strainers from all taps and running the water from three (3) to five (5) minutes. Thereafter, periodically remove the strainers and flush out any debris that has accumulated over time.

d. If your copper pipes are joined with lead solder that has been installed illegally since it was banned in 1986, notify the plumber who did the work and request that he or she replace the lead solder with lead-free solder. Lead solder looks dull gray, and when scratched with a key looks shiny. In addition, notify your Kentucky Department for Environmental Protection about the violation.

e. Determine whether or not the service line that connects your home or apartment to the water main is made of lead. The best way to determine if your service line is made of lead is by either hiring a licensed plumber to inspect the line or by contacting the plumbing contractor who installed the line. You can identify the plumbing contractor by checking the city's record of building permits which should be maintained in the files of the Kentucky Department for Housing, Building and Construction. A licensed plumber can at the same time check to see if your home's plumbing contains lead solder, lead pipes, or pipe fittings that contain lead. The public water system that delivers water to your home should also maintain records of the materials located in the distribution system. If the service line that connects your dwelling to the water main contributes more than fifteen (15) ppb to drinking water, after our comprehensive treatment program is in place, we are required to replace the line. If the line is only partially controlled by the {insert name of the city, county, or water system that controls the line}, we are required to provide you with information on how to replace your portion of the service line, and offer to replace that portion of the line at your expense and take a follow-up tap water sample within 14 days of the replacement. Acceptable replacement alternatives include copper, steel, iron, and plastic pipes.

f. Have an electrician check your wiring. If grounding wires from the electrical system are attached to your pipes, corrosion may be greater. Check with a licensed electrician or your local electrical code to determine if your wiring can be grounded elsewhere. DO NOT attempt to change the wiring yourself because improper grounding can cause electrical shock and fire hazards.

3. The steps described above will reduce the lead concentrations in your drinking water. However, if a water test indicates that the drinking water coming from your tap contains lead concentrations in excess of fifteen (15) ppb after flushing, or after we have completed our actions to minimize lead levels, then you may want to take the following additional measures:

a. Purchase or lease a home treatment device. Home treatment devices are limited in that each unit treats only the water that flows from the faucet to which it is connected, and all of the devices require periodic maintenance and replacement. Devices such as reverse osmosis systems or distillers can effectively remove lead from your drinking water. Some activated carbon filters may reduce lead levels at the tap, however all lead reduction claims should be investigated. Be sure to check the actual performance of a specific home treatment device before and after installing the unit.

b. Purchase bottled water for drinking and cooking.

4. You can consult a variety of sources for additional information. Your family doctor or pediatrician can perform a blood test for lead and provide you with information about the health effects of lead. State and local government agencies that can be contacted include:

a. {Insert the name of city or county department of public utilities} at {insert phone number} can provide you with information about your community's water supply, and a list of local laboratories that have been certified by EPA for testing water quality;

b. {Insert the name of city or county department that issues building permits} at {insert phone number} can provide you with information about building permit records that should contain the names of plumbing contractors that plumbed your home; and

c. The Cabinet for Human Resources at (502) 564-3970 or the {insert the name of the city or county health department} at {insert phone number} can provide you with information about the health effects of lead and how you can have your child's blood tested.

5. The following is a list of some State approved laboratories in your area that you can call to have your water tested for lead. {Insert names and phone numbers of at least two (2) laboratories}.

(2) Content of broadcast materials. A water system shall include the following information in all public service announcements submitted under its lead public education program to television and radio stations for broadcasting:

(a) Why should everyone want to know the facts about lead and drinking water? Because unhealthy amounts of lead can enter drinking water through the plumbing in your home. That's why I urge you to do what I did. I had my water tested for {insert free or $ per sample}. You can contact the {insert the name of the city or water system} for information on testing and on simple ways to reduce your exposure to lead in drinking water.

(b) To have your water tested for lead, or to get more information about this public health concern, please call {insert the phone number of the city or water system}.

(3) Delivery of a public education program.

(a) In communities where a significant proportion of the population speaks a language other than English, public education materials shall be communicated in the appropriate languages.

(b) A community water system that fails to meet the lead action level on the basis of tap water samples collected in accordance with Section 9 of this administrative regulation shall, within sixty (60) days:

1. Insert notices in each customer's water utility bill containing the information in subsection (1) of this section, along with the following alert on the water bill itself in large print: "SOME HOMES IN THIS COMMUNITY HAVE ELEVATED LEAD LEVELS IN THEIR DRINKING WATER. LEAD CAN POSE A SIGNIFICANT RISK TO YOUR HEALTH. PLEASE READ THE ENCLOSED NOTICE FOR FURTHER INFORMATION."

2. Submit the information in subsection (1) of this section to the editorial departments of the major daily and weekly newspapers circulated throughout the community.

3. Deliver pamphlets or brochures that contain the public education materials in subsection (1)(b) and (d) of this section to facilities and organizations, including the following:

a. Public schools or local school boards;

b. City or county health department;

c. Women, infants, and children and head start programs whenever available;

d. Public and private hospitals and clinics;

e. Pediatricians;

f. Family planning clinics; and

g. Local welfare agencies.

4. Submit the public service announcement in subsection (2) of this section to at least five (5) of the radio and television stations with the largest audiences that broadcast to the community served by the water system.

(c) A community water system shall repeat the tasks contained in paragraph (b)1., 2., and 3. of this subsection every twelve (12) months, and the tasks contained in paragraph (b)4. of this subsection every six (6) months for as long as the system exceeds the lead action level.

(d) Within sixty (60) days after it exceeds the lead action level, a nontransient noncommunity water system shall deliver the public education materials contained in subsection (1)(a), (b) and (d) of this section as follows:

1. Post informational posters on lead in drinking water in a public place or common area in each of the buildings served by the system; and

2. Distribute informational pamphlets or brochures on lead in drinking water to each person served by the nontransient noncommunity water system.

(e) A nontransient noncommunity water system shall repeat the tasks contained in paragraph (d) of this subsection at least once during each calendar year in which the system exceeds the lead action level.

(f) A water system may discontinue delivery of public education materials if the system has met the lead action level during the most recent six (6) month monitoring period conducted pursuant to Section 9 of this administrative regulation. Such a system shall recommence public education in accordance with this section if it subsequently exceeds the lead action level during any monitoring period.

(4) Supplemental monitoring and notification of results. A water system that fails to meet the lead action level on the basis of tap samples collected in accordance with Section 9 of this administrative regulation shall offer to sample or have sampled the tap water of any customer who requests it and to arrange, at the customer's or its own expense, for the requested sampling to take place. The system is not required to pay for collecting or analyzing the sample, nor is the system required to collect and analyze the sample itself.

Section 9. Monitoring Requirements for Lead and Copper in Tap Water. (1) Sample site location.

(a) By the applicable date for commencement of monitoring under subsection (4)(a) of this section, each water system shall complete a materials evaluation of its distribution system to identify a pool of targeted sampling sites that meets the requirements of this section, and which is sufficiently large to ensure that the water system can collect the number of lead and copper tap samples required in subsection (3) of this section. All sites from which first-draw samples are collected shall be selected from this pool of targeted sampling sites. Sampling sites may not include faucets that have point-of-use or point-of-entry treatment devices designed to remove inorganic contaminants.

(b) A water system shall use the information on lead, copper, and galvanized steel that it is required to collect under 401 KAR 8:350, Section 1(6)(a) when conducting a materials evaluation. When an evaluation of the information collected pursuant to 401 KAR 8:350 is insufficient to locate the requisite number of lead and copper sampling sites that meet the targeting criteria in this subsection, the water system shall review the sources of information listed below to

identify a sufficient number of sampling sites. In addition, the system shall seek to collect the information listed below where possible in the course of its normal operations (e.g., checking service line materials when reading water meters or performing maintenance activities):

1. All plumbing codes, permits, and records in the files of the building department which indicate the plumbing materials that are installed within publicly and privately owned structures connected to the distribution system;

2. All inspections and records of the distribution system that indicate the material composition of the service connections that connect a structure to the distribution system; and

3. All existing water quality information, which includes the results of all prior analyses of the system or individual structures connected to the system, indicating locations that may be particularly susceptible to high lead or copper concentrations.

(c) Tier 1 samplings sites. 1. The sampling sites selected for a community water system's sampling pool ("Tier 1 sampling sites") shall consist of single family structures that:

a. Contain copper pipes with lead solder installed after 1982 or contain lead pipes; or

b. Are served by a lead service line.

2. When multiple-family residences comprise at least twenty (20) percent of the structures served by a water system, the system may include these types of structures in its sampling pool.

(d) Any community water system with insufficient Tier 1 sampling sites shall complete its sampling pool with Tier 2 sampling sites, consisting of buildings, including multiple-family residences that:

1. Contain copper pipes with lead solder installed after 1982 or contain lead pipes; or

2. Are served by a lead service line.

(e) Any community water system with insufficient Tier 1 and Tier 2 sampling sites shall complete its sampling pool with "Tier 3 sampling sites", consisting of single family structures that contain copper pipes with lead solder installed before 1983.

(f) The Tier 1 sampling sites selected for a nontransient noncommunity water system shall consist of buildings that:

1. Contain copper pipes with lead solder installed after 1982 or contain lead pipes; or

2. Are served by a lead service line.

(g) A nontransient noncommunity water system with insufficient Tier 1 sites that meet the targeting criteria in paragraph (f) of this subsection shall complete its sampling pool with sampling sites that contain copper pipes with lead solder installed before 1983.

(h) Any water system whose sampling pool does not consist exclusively of Tier 1 sites shall demonstrate in a letter submitted to the cabinet under Section 13(1)(b) of this administrative regulation why a review of the information listed in paragraph (b) of this subsection was inadequate to locate a sufficient number of Tier 1 sites. Any community water system which includes Tier 3 sampling sites in its sampling pool shall demonstrate in such a letter why it was unable to locate a sufficient number of Tier 1 and Tier 2 sampling sites.

(i) Any water system whose distribution system contains lead service lines shall draw fifty (50) percent of the samples it collects during each monitoring period from sites that contain lead pipes, or copper pipes with lead solder, and fifty (50) percent of the samples from sites served by a lead service line. A water system that cannot identify a sufficient number of sampling sites served by a lead service line shall demonstrate in a letter submitted to the cabinet under Section 13(1)(d) of this administrative regulation why the system was unable to locate a sufficient number of the sites. Such a water system shall collect first draw samples from all of the sites identified as being served by the lines.

(2) Sample collection methods. (a) All tap samples for lead and copper collected in accordance with this administrative regulation, with the exception of lead service line samples collected under Section 7(3) of this administrative regulation, shall be first-draw samples.

(b) Each first-draw tap sample for lead and copper shall be one (1) liter in volume and shall have stood motionless in the plumbing system of each sampling site for at least six (6) hours. First- draw samples from residential housing shall be collected from the cold-water kitchen tap or bathroom sink tap. First-draw samples from a nonresidential building shall be collected at an interior tap from which water is typically drawn for consumption. First-draw samples may be collected by the system or the system may allow residents to collect first-draw samples after instructing the residents of the sampling procedures specified in this paragraph. Acidification of first-draw samples may be performed up to fourteen (14) days after the sample is collected. If the sample is not acidified immediately after collection, then the sample shall stand in the original container for at least twenty-eight (28) hours after acidification. If a system allows residents to perform sampling, the system may not challenge, based on alleged errors in sample collection, the accuracy of sampling results.

(c) Each service line sample shall be one (1) liter in volume and shall have stood motionless in the lead service line for at least six (6) hours. Lead service line samples shall be collected in one (1) of the following three (3) ways:

1. At the tap after flushing the volume of water between the tap and the lead service line. The volume of water shall be calculated based on the interior diameter and length of the pipe between the tap and the lead service line;

2. Tapping directly into the lead service line; or

3. If the sampling site is a building constructed as a single-family residence, allowing the water to run until there is a significant change in temperature which would be indicative of water that has been standing in the lead service line.

(d) A water system shall collect each first-draw tap sample from the same sampling site from which it collected a previous sample. If, for any reason, the water system cannot gain entry to a sampling site in order to collect a follow-up tap sample, the system may collect the follow-up tap sample from another sampling site in its sampling pool as long as the new site meets the same targeting criteria, and is within reasonable proximity of the original site.

(3) Number of samples. Water systems shall collect at least one (1) sample during each monitoring period specified in subsection (4) of this section from the number of sites listed in the first column below ("standard monitoring"). A system conducting reduced monitoring under subsection (4)(d) of this section may collect one (1) sample from the number of sites specified in the second column below during each monitoring period specified in subsection (4)(d) of this section.

System Size (# People Served)	# of sites (Standard Monitoring)	# of sites (Reduced Monitoring)
greater than 100,000	100	50
10,001-100,000	60	30
3,301 to 10,000	40	20
501 to 3,300	20	10
101 to 500	10	5
less than or equal to 100	5	5

(4) Timing of monitoring.

(a) Initial tap sampling. The first six (6) month monitoring period for small, medium-size and large systems shall begin on the following dates:

System Size (# People Served)	First Six (6) Month Monitoring Period Begins On
greater than 50,000	January 1, 1992
3,301 to 50,000	July 1, 1992
less than or equal to 3,300	July 1, 1993

1. All large systems shall monitor during two (2) consecutive six (6) month periods.

2. All small and medium-size systems shall monitor during each six (6) month monitoring period until:

a. The system exceeds the lead or copper action level and is therefore required to implement the corrosion control treatment requirements under Section 4 of this administrative regulation, in which case the system shall continue monitoring in accordance with paragraph (b) of this subsection; or

b. The system meets the lead and copper action levels during two (2) consecutive six (6) month monitoring periods, in which case the system may reduce monitoring in accordance with paragraph (d) of this subsection.

(b) Monitoring after installation of corrosion control and source water treatment.

1. Any large system which installs optimal corrosion control treatment pursuant to Section 4(4)(d) of this administrative regulation shall monitor during two (2) consecutive six (6) month monitoring periods by the date specified in Section 4(4)(e) of this administrative regulation.

2. Any small or medium-size system which installs optimal corrosion control treatment pursuant to Section 4(5)(e) of this administrative regulation shall monitor during two (2) consecutive six (6) month monitoring periods by the date specified in Section 4(5)(f) of this administrative regulation.

3. Any system which installs source water treatment pursuant to Section 6(1)(c) of this administrative regulation shall monitor during two (2) consecutive six (6) month monitoring periods by the date specified in Section 6(1)(d) of this administrative regulation.

(c) After the cabinet specifies the values for water quality control parameters under Section 5(6) of this administrative regulation, the system shall monitor during each subsequent six (6) month monitoring period, with the first monitoring period to begin on the date the cabinet specifies the optimal values under Section 5(6) of this administrative regulation.

(d) Reduced monitoring. 1. A small or medium-size water system that meets the lead and copper action levels during each of two (2) consecutive six (6) month monitoring periods may reduce the number of samples in accordance with subsection (3) of this section, and reduce the frequency of sampling to once per year.

2. Any water system that maintains the range of values for the water quality control parameters reflecting optimal corrosion control treatment specified by the cabinet under Section 5(6) of this administrative regulation during each of two (2) consecutive six (6) month monitoring periods may request that the cabinet allow the system to reduce the frequency of monitoring to once per year and to reduce the number of lead and copper samples in accordance with subsection (3) of this section. The cabinet shall review the information submitted by the water system and shall make its decision in writing, setting forth the basis for its determination. The cabinet shall review, and where appropriate, revise its determination when the system submits new monitoring or treatment data, or when other data relevant to the number and frequency of tap sampling become available.

3. A small or medium-size water system that meets the lead and copper action levels during three (3) consecutive years of monitoring may reduce the frequency of monitoring for lead and copper from annually to once every three (3) years. Any water system that maintains the range of values for the water quality control parameters reflecting optimal corrosion control treatment specified by the cabinet under Section 5(6) of this administrative regulation during three (3) consecutive years of monitoring may request that the cabinet allow the system to reduce the frequency of monitoring from annually to once every three (3) years. The cabinet shall review the information submitted by the water system and shall make its decision in writing, setting forth the basis for its determination. The cabinet shall review, and where appropriate, revise its determination when the system submits new monitoring or treatment data, or when other data relevant to the number and frequency of tap sampling becomes available.

4. A water system that reduces the number and frequency of sampling shall collect the samples from sites included in the pool of targeted sampling sites identified in subsection (1) of this section. Systems sampling annually or less frequently shall conduct the lead and copper tap sampling during the months of June, July, August or September.

5. A small or medium-size water system subject to reduced monitoring that exceeds the lead or copper action level shall resume sampling in accordance paragraph (c) of this subsection and collect the number of samples specified for standard monitoring under subsection (3) of this section. The system shall also conduct water quality parameter monitoring in accordance with Section 10(2), (3), or (4) of this administrative regulation, as appropriate, during the monitoring period in which it exceeded the action level. Any water system subject to reduced monitoring frequency that fails to operate within the range of values for the water quality control parameters specified by the cabinet under Section 5(6) of this administrative regulation shall resume tap water sampling in accordance with paragraph (c) of this subsection and collect the number of samples specified for standard monitoring under subsection (3) of this section.

(5) Additional monitoring by systems. The results of any monitoring conducted in addition to the minimum requirements of this section shall be considered by the system and the cabinet in making any determinations (i.e., calculating the ninetieth (90th) percentile lead or copper level) under this administrative regulation.

Section 10. Monitoring Water Quality Parameters. All large water systems and all small and medium-size systems that exceed the lead or copper action level shall monitor water quality parameters in addition to lead and copper in accordance with this section.

(1) General requirements.

(a) Sample collection methods.

1. Tap samples shall be representative of water quality throughout the distribution system taking into account the number of persons served, the different sources of water, the different treatment methods employed by the system, and seasonal variability. Tap sampling under this section is not required to be conducted at taps targeted for lead and copper sampling under Section 9(1) of this administrative regulation.

2. Samples collected at the entry points to the distribution system shall be from locations representative of each source after treatment. If a system draws water from more than one (1) source and the sources are combined before distribution, the system shall sample at an entry point to the distribution system during periods of normal operating conditions (i.e., when water is representative of all sources being used).

(b) Number of samples.

1. Public water systems shall collect two (2) tap samples for applicable water quality parameters during each monitoring period specified under subsections (2) to (5) of this section from the following number of sites.

System Size (# People Served)	# of Sites For Water Quality Parameters
greater than 100,000	25
10,001 to 100,000	10
3,301 to 10,000	3
501 to 3,300	2
101 to 500	1
less than or equal to 100	1

2. Public water systems shall collect two (2) samples for each applicable water quality parameter at each entry point to the distribution system during each monitoring period specified in subsection (2)

of this section. During each monitoring period specified in subsections (3) to (5) of this section, public water systems shall collect one (1) sample for each applicable water quality parameter at each entry point to the distribution system.

(2) Initial sampling. All large water systems shall measure the applicable water quality parameters as specified below at taps and at each entry point to the distribution system during each six (6) month monitoring period specified in Section 9(4)(a) of this administrative regulation. All small and medium-size systems shall measure the applicable water quality parameters at the tap and at each entry point to the distribution system during each six (6) month monitoring period specified in Section 9(4)(a) of this administrative regulation during which the system exceeds the lead or copper action level:

(a) pH;

(b) Alkalinity;

(c) Orthophosphate, when an inhibitor containing a phosphate compound is used;

(d) Silica, when an inhibitor containing a silicate compound is used;

(e) Calcium;

(f) Conductivity; and

(g) Water temperature.

(3) Monitoring after installation of corrosion control. A large system which installs optimal corrosion control treatment pursuant to Section 4(4)(d) of this administrative regulation shall measure the water quality parameters at the locations and frequencies specified below during each six (6) month monitoring period specified in Section 9(4)(b)1 of this administrative regulation. A small or medium-size system which installs optimal corrosion control treatment shall conduct this monitoring during each six (6) month monitoring period specified in Section 9(4)(b)2 of this administrative regulation in which the system exceeds the lead or copper action level.

(a) At taps, two (2) samples for:

1. pH;

2. Alkalinity;

3. Orthophosphate, when an inhibitor containing a phosphate compound is used;

4. Silica, when an inhibitor containing a silicate compound is used; and

5. Calcium, when calcium carbonate stabilization is used as a part of corrosion control.

(b) At each entry point to the distribution system, one (1) sample every two (2) weeks (bi-weekly) for:

1. pH;

2. When alkalinity is adjusted as part of optimal corrosion control, a reading of the dosage rate of the chemical used to adjust alkalinity, and the alkalinity concentration; and

3. When a corrosion inhibitor is used as part of optimal corrosion control, a reading of the dosage rate of the inhibitor used, and the concentration of orthophosphate or silica, whichever is applicable.

(4) Monitoring after water quality parameter values for optimal corrosion control are specified. After the cabinet specifies the values for applicable water quality control parameters reflecting optimal corrosion control treatment under Section 5(6) of this administrative regulation, all large systems shall measure the applicable water quality parameters in accordance with subsection (3) of this section during each monitoring period specified in Section 9(4)(c) of this administrative regulation. Any small or medium-size system shall conduct such monitoring during each monitoring period specified in Section 9(4)(c) of this administrative regulation in which the system exceeds the lead or copper action level. The system may take a confirmation sample for any water quality parameter value no later than three (3) days after the first sample is taken. If a confirmation sample is taken, the result shall be averaged with the first sampling result and the average shall be used for any compliance determinations under Section 5(7) of this administrative regulation. The cabinet may delete results of obvious sampling errors from this calculation.

(5) Reduced monitoring. (a) Any water system that maintains the range of values for the water quality parameters reflecting optimal corrosion control treatment during each of two (2) consecutive six (6) month monitoring periods under subsection (4) of this section shall continue monitoring at the entry points to the distribution system as specified in subsection (3)(b) of this section. The system may collect two (2) tap samples for applicable water quality parameters from the following reduced number of sites during each six (6) month monitoring period:

System Size (# People Served)	Reduced # of Sites for Water Quality Parameters
greater than 100,000	10
10,001 to 100,000	7
3,301 to 10,000	3
501 to 3,300	2
101 to 500	1
less than or equal to 100	1

(b) A water system that maintains the range of values for the water quality parameters reflecting optimal corrosion control treatment specified by the cabinet under Section 5(6) of this administrative regulation during three (3) consecutive years of monitoring may reduce the frequency with which it collects the number of tap samples for applicable water quality parameters specified in paragraph (a) of this subsection from every six (6) months to annually. A water system that maintains the range of values for the water quality parameters reflecting optimal corrosion control treatment specified by the cabinet under Section 5(6) of this administrative regulation during three (3) years of annual monitoring under this subsection may reduce the frequency with which it collects the number of tap samples for applicable water quality parameters specified in paragraph (a) of this subsection from annually to every three (3) years.

(c) A water system that conducts sampling annually shall collect these samples evenly throughout the year so as to reflect seasonal variability.

(d) A water system subject to reduced monitoring frequency that fails to operate within the range of values for the water quality parameters specified by the cabinet under Section 5(6) of this administrative regulation shall resume tap water sampling in accordance with the number and frequency requirements in subsection (4) of this section.

(6) Additional monitoring by systems. The results of any monitoring conducted in addition to the minimum requirements of this section shall be considered by the system and the cabinet in making any determinations (i.e., determining concentrations of water quality parameters) under this section or Section 5 of this administrative regulation.

Section 11. Monitoring Requirements for Lead and Copper in Source Water. (1) Sample location, collection methods, and number of samples.

(a) A water system that fails to meet the lead or copper action level on the basis of tap samples collected in accordance with Section 9 of this administrative regulation shall collect lead and copper source water samples in accordance with the requirements regarding sample location, number of samples, and collection methods specified in 401 KAR 8:250, Section 1(1) to (4). The timing of sampling for lead and copper shall be in accordance with subsections (2) and (3) of this section.

(b) If the results of sampling indicate an exceedance of maximum permissible source water levels established under Section 6(2)(d) of this administrative regulation, the cabinet may require the water system to collect one (1) additional sample as soon as possible after the initial sample was taken (but not to exceed two (2) weeks) at the same sampling point. If a confirmation sample required by the cabinet

is taken for lead or copper, then the results of the initial and confirmation sample shall be averaged in determining compliance with the maximum permissible levels specified by the cabinet. Any sample value below the detection limit shall be considered to be zero. Any value above the detection limit but below the Practical Quantitation Limit (PQL) shall either be considered as the measured value or be considered one-half (1/2) the PQL.

(2) Monitoring frequency after system exceeds tap water action level. A public water system which exceeds the lead or copper action level at the tap shall collect one (1) source water sample from each entry point to the distribution system within six (6) months after the exceedance.

(3) Monitoring frequency after installation of source water treatment. A public water system which installs source water treatment pursuant to Section 6(1)(c) of this administrative regulation shall collect an additional source water sample from each entry point to the distribution system during two (2) consecutive six (6) month monitoring periods by the deadline specified in Section 6(1)(d) of this administrative regulation.

(4) Monitoring frequency after maximum permissible source water levels are specified by the cabinet or the cabinet determines that source water treatment is not needed. (a) A system shall monitor at the frequency specified below if the cabinet specifies maximum permissible source water levels under Section 6(2)(d) of this administrative regulation or determines that the system is not required to install source water treatment under Section 6(2)(b) of this administrative regulation.

1. A water system using only groundwater shall collect samples once during the compliance period in effect when the applicable cabinet determination under this paragraph is made. The system shall collect samples once during each subsequent compliance period.

2. A water system using surface water, or a combination of surface and groundwater, shall collect samples once during each year: the first annual monitoring period shall begin on the date on which the applicable determination is made under this paragraph.

(b) A system is not required to conduct source water sampling for lead or copper if the system meets the action level for the specific contaminant in tap water samples during the entire source water sampling period applicable to the system under paragraph (a) of this subsection.

(5) Reduced monitoring frequency.

(a) A water system using only groundwater which demonstrates that finished drinking water entering the distribution system has been maintained below the maximum permissible lead or copper concentrations specified by the cabinet in Section 6(2)(d) of this administrative regulation during at least three (3) consecutive compliance periods under subsection (4)(a) of this section may reduce the monitoring frequency for lead or copper to once during each nine (9) year compliance cycle.

(b) A water system using surface water, or a combination of surface and groundwater, which demonstrates that finished drinking water entering the distribution system has been maintained below the maximum permissible lead and copper concentrations specified by the cabinet in Section 6(2)(d) of this administrative regulation for at least three (3) consecutive years may reduce the monitoring frequency in subsection (4)(a) of this section to once during each nine (9) year compliance cycle.

(c) A water system that uses a new source of water is not eligible for reduced monitoring for lead or copper until concentrations in samples collected from the new source during three (3) consecutive monitoring periods are below the maximum permissible lead and copper concentrations specified by the cabinet in Section 6(1)(e) of this administrative regulation.

Section 12. Analytical Methods. Analyses for lead, copper, pH, conductivity, calcium, alkalinity, orthophosphate, silica, and temperature shall be conducted in accordance with 40 CFR 141.89(1993), herein adopted without change.

Section 13. All water systems shall report all of the following information to the cabinet in accordance with this section.

(1) Reporting requirements for tap water monitoring for lead and copper and for water quality parameter monitoring.

(a) A water system shall report the information specified below for all tap water samples within the first ten (10) days following the end of each applicable monitoring period specified in Sections 9, 10, and 11 of this administrative regulation (i.e., every six (6) months, annually, or every three (3) years):

1. The results of all tap samples for lead and copper including the location of each site and the criteria under Section 9(1)(c), (d), (e), (f), and (g) of this administrative regulation under which the site was selected for the system's sampling pool;

2. A certification that each first-draw sample collected by the water system is one (1) liter in volume and, to the best of the knowledge of the water system, has stood motionless in the service line, or in the interior plumbing of a sampling site, for at least six (6) hours;

3. Where residents collected samples, a certification that each tap sample collected by the residents was taken after the water system informed them of the proper sampling procedures specified in Section 9(2)(b) of this administrative regulation;

4. The ninetieth (90th) percentile lead and copper concentrations measured from among all lead and copper tap water samples collected during each monitoring period, calculated in accordance with Section 3(4)(c) of this administrative regulation;

5. With the exception of initial tap sampling conducted pursuant to Section 9(4)(a) of this administrative regulation, the system shall designate any site which was not sampled during previous monitoring periods, and include an explanation of why sampling sites have changed;

6. The results of all tap samples for pH, and where applicable, alkalinity, calcium, conductivity, temperature, and orthophosphate or silica collected under Section 10(2) to (5) of this administrative regulation; and

7. The results of all samples collected at the entry point to the distribution system for applicable water quality parameters under Section 10(2) to (5) of this administrative regulation.

(b) By the applicable date in Section 9(4)(a) of this administrative regulation for commencement of monitoring, each community water system which does not complete its targeted sampling pool with Tier 1 sampling sites meeting the criteria in Section 9(1)(c) of this administrative regulation shall send a letter to the cabinet justifying its selection of Tier 2 or Tier 3 sampling sites under Section 9(1)(d) or (e) of this administrative regulation.

(c) By the applicable date in Section 9(4)(a) of this administrative regulation for commencement of monitoring, each nontransient, noncommunity water system which does not complete its sampling pool with Tier 1 sampling sites meeting the criteria in Section 9(1)(f) of this administrative regulation shall send a letter to the cabinet justifying its selection of sampling sites under Section 9(1)(g) of this administrative regulation.

(d) By the applicable date in Section 9(4)(a) of this administrative regulation for commencement of monitoring, each water system with lead service lines that is not able to locate the number of sites served by the lines required under Section 9(1)(i) of this administrative regulation shall send a letter to the cabinet demonstrating why it was unable to locate a sufficient number of the sites based upon the information listed in Section 9(1)(b) of this administrative regulation.

(e) Each water system that requests a reduction in the number and frequency of sampling shall submit to the cabinet the information required under Section 9(4)(d) of this administrative regulation.

(2) Source water monitoring reporting requirements.

(a) A water system shall submit to the cabinet the sampling results for all source water samples collected in accordance with

Section 11 of this administrative regulation within the first ten (10) days following the end of each source water monitoring period (i.e., annually, per compliance period, per compliance cycle) specified in Section 11 of this administrative regulation.

(b) With the exception of the first round of source water sampling conducted pursuant to Section 11(2) of this administrative regulation, the system shall specify any site which was not sampled during previous monitoring periods, and include an explanation of why the sampling point has changed.

(3) Corrosion control treatment reporting requirements. By the applicable dates under Section 4 of this administrative regulation, systems shall submit the following information to the cabinet:

(a) For systems demonstrating that they have already optimized corrosion control, information required in Section 4(2)(b) or (c) of this administrative regulation;

(b) For systems required to optimize corrosion control, their recommendation regarding optimal corrosion control treatment under Section 5(1) of this administrative regulation;

(c) For systems required to evaluate the effectiveness of corrosion control treatments under Section 5(3) of this administrative regulation, the information required by that subsection; and

(d) For systems required to install optimal corrosion control approved by the cabinet under Section 5(4) of this administrative regulation, a letter certifying that the system has completed installing that treatment.

(4) Source water treatment reporting requirements. By the applicable dates in Section 6 of this administrative regulation, public water systems shall submit the following information to the cabinet:

(a) If required under Section 6(2)(a) of this administrative regulation, their recommendation regarding source water treatment; and

(b) For systems required to install source water treatment under Section 6(2)(b) of this administrative regulation, a letter certifying that the system has completed installing the treatment approved or designated by the cabinet within twenty-four (24) months after the cabinet approves or designates the treatment.

(5) Lead service line replacement reporting requirements. Systems shall report the following information to the cabinet to demonstrate compliance with the requirements of Section 7 of this administrative regulation:

(a) Within twelve (12) months after a system exceeds the lead action level in sampling referred to in Section 7(1) of this administrative regulation, the system shall demonstrate in writing to the cabinet that it has conducted a materials evaluation, including the evaluation in Section 9(1) of this administrative regulation, to identify the initial number of lead service lines in its distribution system, and shall provide the cabinet with the system's schedule for replacing annually at least seven (7) percent of the initial number of lead service lines in its distribution system.

(b) Within twelve (12) months after a system exceeds the lead action level in sampling referred to in Section 7(1) of this administrative regulation, and every twelve (12) months thereafter, the system shall demonstrate to the cabinet in writing that the system has either:

1. Replaced in the previous twelve (12) months at least seven (7) percent of the initial lead service lines (or a greater number of lines specified by the cabinet pursuant to Section 7(6) of this administrative regulation) in its distribution system; or

2. Conducted sampling which demonstrates that the lead concentration in all service line samples from an individual line, taken pursuant to Section 9(2)(c) of this administrative regulation, is less than or equal to 0.015 mg/l. In these cases, the total number of lines replaced or which meet the criteria in Section 7(3) of this administrative regulation shall equal at least seven (7) percent of the initial number of lead lines identified under subsection (1) of this section (or the percentage specified by the cabinet pursuant to Section 7(6) of this administrative regulation).

(c) The annual letter submitted to the cabinet under paragraph (b) of this subsection shall contain the following information:

1. The number of lead service lines scheduled to be replaced during the previous year of the system's replacement schedule;

2. The number and location of each lead service line replaced during the previous year of the system's replacement schedule; and

3. If measured, the water lead concentration and location of each lead service line sampled, the sampling method, and the date of sampling.

(d) As soon as practicable, but no later than three (3) months after a system exceeds the lead action level in sampling referred to in Section 7(1) of this administrative regulation, any system seeking to rebut the presumption that it has control over the entire lead service line pursuant to Section 7(4) of this administrative regulation shall submit a letter to the cabinet describing the legal authority (e.g., state statutes, municipal ordinances, public service contracts or other applicable legal authority) which limits the system's control over the service lines and the extent of the system's control.

(6) Public education program reporting requirements. By December 31 of each year, any water system that is subject to the public education requirements in Section 8 of this administrative regulation shall submit a letter to the cabinet demonstrating that the system has delivered the public education materials that meet the content requirements in Section 8(1) and (2) of this administrative regulation and the delivery requirements in Section 8(3) of this administrative regulation. This information shall include a list of all the newspapers, radio stations, television stations, facilities and organizations to which the system delivered public education materials during the previous year. The water system shall submit the letter required by this paragraph annually for as long as it exceeds the lead action level.

(7) Reporting of additional monitoring data. A system which collects sampling data in addition to that required by this administrative regulation shall report the results to the cabinet by the end of the applicable monitoring period, under Sections 9, 10, and 11 of this administrative regulation, during which the samples are collected.

Section 14. Recordkeeping Requirements. Any system subject to this administrative regulation shall retain on its premises original records of all sampling data and analyses, reports, surveys, letters, evaluations, schedules, cabinet determinations, and any other information required by Sections 4 through 11 of this administrative regulation. Each water system shall retain the records required by this section for no fewer than twelve (12) years.

Section 15. Compliance for Systems Serving Less Than or Equal to 3,300 Persons. (1) Notwithstanding any other provision of this administrative regulation, water systems serving less than or equal to 3,300 persons shall be deemed by the cabinet to be in compliance with this administrative regulation if, within eight (8) months of written notification by the cabinet of monitoring requirements, results of the monitoring are received by the cabinet. Public water systems serving less than or equal to 3,300 persons shall comply with all of the above requirements of this administrative regulation on or before deadlines established by the cabinet. The deadlines shall be based on the initial monitoring and shall be consistent with the time-frames contained within Sections 3 through 14 of this administrative regulation.

(2) A small water system shall begin to monitor for lead and copper no later than January 1, 1998, and shall report to the cabinet the results of six (6) months of monitoring data on or before July 10, 1998.

(3) Nothing in this section relieves public water systems of any applicable requirement of federal regulations.

[~~Section 2. Severability. If any provision of this regulation is set aside by a court of competent jurisdiction, the remainder of this regulation remains in effect.~~]

E. DOUGLAS STEPHAN, Commissioner

PHILLIP J. SHEPHERD, Secretary

APPROVED BY AGENCY: April 14, 1994

FILED WITH LRC: April 15, 1994 at 11 a.m.

PUBLIC HEARING: A public hearing to receive comments on this proposed regulation has been scheduled for Wednesday, May 25, 1994 at 1:30 p.m. (ET), in the Auditorium of the State Office Building, Frankfort, Kentucky. Individuals interested in being heard at this hearing shall notify John T. Smither in writing at the address noted below by May 20, 1994, of their intent to attend the hearing and be heard. If no notification of intent to attend the hearing and be heard is received by that date, the hearing may be canceled. This hearing is open to the public. Any person wishing to be heard will be given an opportunity to comment on the proposed regulation. Persons testifying at the hearing are requested to provide the cabinet with a written copy of their testimony, if available. A transcript of the hearing may not be made unless a written request for a transcript is made at least five (5) days before the hearing. If you do not wish to be heard at the public hearing, you may submit written comments on the proposed regulation. Written comments must be received by John T. Smither at the address below no later than the close of business, (4:30 p.m. (ET)) May 25, 1994. The Natural Resources and Environmental Protection Cabinet does not discriminate on the basis of race, color, national origin, sex, religion, age, or disability. The meeting facility is accessible to people with disabilities. The cabinet will provide, upon request, reasonable accommodations including auxiliary aids and services necessary to afford individuals with a disability an equal opportunity to participate in all services, programs, and activities. If an interpreter or other auxiliary aid or service is needed, contact Mr. Smither at the address below before May 20, 1994 between 8 a.m. and 4:30 p.m. (ET).

CONTACT PERSON: John T. Smither, Manager, Drinking Water Branch, Division of Water, Department for Environmental Protection, 14 Reilly Road, Frankfort, Kentucky 40601, (502) 564-3410.

REGULATORY IMPACT ANALYSIS

Agency Contact: John T. Smither

(1) Type and number of entities affected: This administrative regulation will apply to approximately 534 community water systems and 166 nontransient noncommunity water systems. These numbers may vary from month to month. The number of samples required varies from a minimum of five to a maximum of 100 depending on population.

(a) Direct and indirect costs or savings to those affected: This administrative regulation will require monitoring for lead and copper. If a system exceeds the action level, engineering studies may be needed to determine optimum corrosion control water quality parameters, and analysis for lead or copper in source water. These studies could cost from $3,000 to $20,000 depending on the size of the system, and depth of analysis required. If, after steps to optimize corrosion control, stabilize water quality parameters and source water control have been taken, the water system continues to exceed the "action level" for lead or copper, lead service line replacement may be required. Replacing a service line could cost from $300 to $1,000 depending on length, and difficulty. Total cost will depend on the size of the system. Water systems will have up to 15 years to complete this replacement. Many water companies have been replacing lead service lines either on a regular basis or when they find one, for some time now.

1. First year: In the first year of this administrative regulation water systems will monitor for lead and copper.

2. Continuing costs or savings: If lead and copper contamination does not exceed the "action level" only monitoring will continue. If a public water system exceeds the action level an escalating series of remedial treatments must be employed until monitoring once again shows the system's lead and copper contamination falls below the "action level". If the systems lead and copper contamination stays below the "action level" monitoring may eventually be reduced.

3. Additional factors increasing or decreasing costs (note any effects upon competition): Nationally, tests thus far have shown that about 20% of public water systems exceed the action level. Thus far this has not been true in Kentucky. Large and medium water systems have been tested and have not exceeded the "action level". Testing has been conducted on systems serving as few as 2,500 persons and no action level has been exceeded, however, not all data on these small systems are in.

(b) Reporting and paperwork requirements: Public Water systems must report monitoring data to the Cabinet. If an action level is exceeded, water systems must submit a large field of action plans for reduced corrosivity, service line replacement, water quality parameter testing and follow-up studies for the Cabinet's review and approval. These studies could cost from $3,000 to $20,000 depending on the size of the system and complexity of the study.

(2) Effects on the promulgating administrative body: This administrative regulation will have significant effects on the Cabinet.

(a) Direct and indirect costs or savings: Additional personnel may be necessary to enforce this administrative regulation. The Division has requested about one and one half new persons to administer this regulation. In addition, money has been requested for third party contracts to provide technical assistance, some of which would be used for lead and copper. Each person year costs about $35,000.

1. First year: Currently, the Cabinet has two people dedicated to lead and copper. The Cabinet is currently administering this administrative regulation for large and medium water systems (about 195), through an enforcement agreement with EPA. The Cabinet has begun dealing with small systems.

2. Continuing costs or savings: At its peak, the Cabinet estimates that additional people may be needed to administer this administrative regulation.

3. Additional factors increasing or decreasing costs: The Cabinet estimates that additional people may be needed to administer this administrative regulation. The Cabinet believes the small systems will have the most significant impact on personnel requirements, but currently is only beginning to deal with these systems.

(b) Reporting and paperwork requirements: Reporting and paperwork requirements are significant both from water systems to the Cabinet and from the Cabinet to EPA. These requirements escalate as water systems exceed the "action level".

(3) Assessment of anticipated effect on state and local revenues: No affect on state or local revenues.

(4) Assessment of alternative methods; reasons why alternatives were rejected: This administrative regulation directly tracks federal requirements. Alternatives to this administrative regulation would make Kentucky inconsistent with federal requirements.

(5) Identify any statute, administrative regulation or government policy which may be in conflict, overlapping, or duplication: No statute, regulation, or policy conflicts, duplicates, or overlaps this administrative regulation.

(a) Necessity of proposed regulation if in conflict: No conflict exists.

(b) If in conflict, was effort made to harmonize the proposed administrative regulation with conflicting provisions: No conflict exists.

(6) Any additional information or comments:

TIERING: Was tiering applied? Yes. This administrative regulation takes into account the size and type of public water systems, allowing smaller systems more time to comply.

FISCAL NOTE ON LOCAL GOVERNMENT

1. Does this administrative regulation relate to any aspect of a local government, including any service provided by that local government? Yes

2. State what unit, part or division of local government this administrative regulation will affect. This administrative regulation

relates to public water systems. Local governments frequently own or operate public water systems.

3. State the aspect or service of local government to which this administrative regulation relates. This administrative regulation relates to the provision of potable drinking water.

4. Estimate the effect of this administrative regulation on the expenditures and revenues of a local government for the first full year the regulation is to be in effect. If specific dollar estimates cannot be determined, provide a brief narrative to explain the fiscal impact of the administrative regulation.

Revenues (+/-):

Expenditures (+/-):

Other Explanation: This administrative regulation will require public water systems to monitor for lead and copper contamination and provide remediation if the contaminants are found. The costs of this administrative regulation would ordinarily be passed through to consumers. However, a local government which owns a public water system could elect to absorb some or all of this cost.

FEDERAL MANDATE ANALYSIS COMPARISON

1. Federal statute or regulation constituting the federal mandate. 40 CFR Part 141 as amended at Federal Register 26547, June 7, 1991 establishes certain minimum requirements for implementation of the federal Safe Drinking Water Act (SDWA). The SDWA does not require states to apply for program delegation. It does authorize states to apply for program delegation. This eliminates the need for dual federal and state programs..

2. State compliance standards. This administrative regulation sets out requirements for lead and copper contamination and remediation.

3. Minimum or uniform-standards contained in the federal mandate. 40 CFR Part 141 sets out requirements for lead and copper contamination and remediation.

4. Will this administrative regulation impose stricter requirements, or additional or different responsibilities or requirements, than those required by the federal mandate? There is no federal mandate to implement the federal SDWA. The cabinet has implemented its state statutory authority in adopting this regulation.

5. Justification for the imposition of the stricter standard, or additional or different responsibilities or requirements. The standards are the same.

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

401 KAR 8:400. Synthetic organic chemicals.

RELATES TO: KRS Chapter 224, 40 CFR Part 141 (1993)

STATUTORY AUTHORITY: KRS 224.10-100, 224.10-110, [~~PL 93-523, The Safe Drinking Water Act, as amended in 1986 and by the Lead Contamination and Control Act of 1988, PL 100-572,~~] 42 USCA 300f, 300g, 300j, and 40 CFR 141.24(e), 141.24(h)(12), (13) (1993) [~~(g)(10), (11), (18)~~]

NECESSITY AND FUNCTION: KRS Chapter 224.10-110 directs the cabinet to enforce administrative [~~rules and~~] regulations adopted by the secretary for the regulation and control of the purification of water for public and semipublic use. The Safe Drinking Water Act, as amended by the Safe Drinking Water Act Amendments of 1986, provides for primary enforcement responsibility by states that have adopted regulations "no less stringent than the national primary drinking water regulations", as well as meeting other criteria stipulated by the Act. The Commonwealth of Kentucky has accepted and is currently exercising this [~~such~~] primary enforcement responsibility. This administrative regulation provides maximum contaminant levels and sampling and analytical requirements for certain organic chemicals. [~~This regulation repeals and replaces Section 8 of 401 KAR 6:015, with no substantial changes.~~]

Section 1. Synthetic Organic Chemicals Sampling and Analytical Requirements. (1) Monitoring of endrin for purposes of determining compliance with the maximum contaminant level listed in Section 4 of this administrative regulation shall be conducted as follows:

(a) For all community water systems utilizing surface water sources, analysis shall be conducted when other synthetic organic chemicals are analyzed by the system pursuant to the three (3) year compliance period beginning January 1, 1993. Samples analyzed shall be collected during the period of the year designated by the cabinet as the period when contamination by pesticides is most likely to occur. These analyses shall be repeated at intervals specified by the cabinet but not less frequently than at three (3) year intervals.

(b) For community water systems utilizing only groundwater sources, analyses shall be completed by those systems as specified by the cabinet.

(c) The cabinet shall determine compliance or initiate enforcement action based upon analytical results and other information compiled by cabinet personnel.

(2) If the result of an analysis made pursuant to subsection (1) of this section indicates that the level of endrin exceeds the maximum contaminant level for endrin listed in Section 4 of this administrative regulation, the supplier of water shall report to the cabinet within seven (7) days and perform three (3) additional analyses within one (1) month.

(3) When the average of four (4) analyses made pursuant to subsection (2) of this section, rounded to the same number of significant figures as the maximum contaminant level for endrin, exceeds the maximum contaminant level for endrin, the supplier of water shall report to the cabinet pursuant to 401 KAR 8:020, Section 2(7) and give notice to the public pursuant to 401 KAR 8:070. Monitoring after public notification shall be at a frequency designated by the cabinet and shall continue until the maximum contaminant level has not been exceeded in two (2) successive samples or until a monitoring schedule as a condition to a variance, exemption, or enforcement action becomes effective.

(4) For the initial analysis required by subsection (1)(a) and (b) of this section, data for surface water acquired within one (1) year prior to the effective date of this administrative regulation and data for groundwater acquired within three (3) years prior to the effective date of this administrative regulation may be substituted at the discretion of the cabinet.

Section 2. Analysis to determine compliance with the maximum contaminant level for endrin in Section 4 of this administrative regulation shall be performed in accordance with 40 CFR 141.24(e) (1993), hereby adopted without change.

Section 3. Except for aldicarb, aldicarb sulfoxide and aldicarb sulfone which shall be analyzed in accordance with 40 CFR 141.40, analysis of the contaminants listed in Section 4 of this administrative regulation for the purposes of determining compliance with the maximum contaminant level shall be conducted as follows:

(1) Groundwater systems shall take a minimum of one (1) sample at every entry point to the distribution system which is representative of each well after treatment (hereafter called a sampling point). Each sample shall be taken at the same sampling point unless conditions make another sampling point more representative of each source or treatment plant.

(2) Surface water systems shall take a minimum of one (1) sample at points in the distribution system that are representative of each source or at each entry point to the distribution system after treatment (hereafter called a sampling point). Each sample shall be taken at the same sampling point unless conditions make another

sampling point more representative of each source or treatment plant. For the purposes of this subsection, surface water systems include systems with a combination of surface and ground sources.

(3) If the system draws water from more than one (1) source and the sources are combined before distribution, the system shall sample at an entry point to the distribution system during periods of normal operating conditions (i.e., when water representative of all sources is being used).

(4) Monitoring frequency:

(a) Each community and nontransient noncommunity water system shall take four (4) consecutive quarterly samples for each contaminant listed in Section 4 of this administrative regulation during each compliance period beginning with the compliance period starting January 1, 1993.

(b) Systems serving more than 3,300 persons which do not detect a contaminant in the initial compliance period may reduce the sampling frequency to a minimum of two (2) quarterly samples in one (1) year during each repeat compliance period.

(c) Systems serving less than or equal to 3,300 persons which do not detect a contaminant in the initial compliance period may reduce the sampling frequency to a minimum of one (1) sample during each repeat compliance period.

(5) Each community and nontransient water system may apply to the cabinet for a waiver from the requirement of subsection (4) of this section. A system shall reapply for a waiver for each compliance period.

(6) A waiver may be granted by the cabinet, after evaluating the previous use, including transport, storage, or disposal, of the contaminant within the watershed or zone of contribution of the system. If a determination by the cabinet reveals no previous use of the contaminant within the watershed or zone of contribution, a waiver may be granted. If previous use of the contaminant is unknown or it has been used previously, then the following factors shall be used to determine whether a waiver is granted:

(a) Previous analytical results;

(b) The proximity of the system to a potential point or nonpoint source of contamination. Point sources include spills and leaks of chemicals at or near a water treatment facility or at manufacturing, distribution, or storage facilities, or from hazardous and municipal waste landfills and other waste handling or treatment facilities. Nonpoint sources include the use of pesticides to control insect and weed pests on agricultural areas, forest lands, home and gardens, and other land application uses;

(c) The environmental persistence and transport of the pesticide or PCBs;

(d) How well the water source is protected against contamination due to such factors as depth of the well and the type of soil and the integrity of the well casing;

(e) Elevated nitrate levels at the water supply source; and

(f) Use of PCBs in equipment used in the production, storage, or distribution of water (i.e., PCBs used in pumps, transformers, etc.).

(7) If an organic contaminant listed in Section 4 of this administrative regulation is detected, pursuant to subsection (18) of this section, in any sample, then:

(a) Each system shall monitor quarterly at each sampling point which resulted in a detection.

(b) The cabinet may decrease the quarterly monitoring requirement specified in paragraph (a) of this subsection if it has determined that the system is reliably and consistently below the maximum contaminant level. The cabinet shall not make this determination unless a groundwater system takes a minimum of two (2) quarterly samples and a surface water system takes a minimum of four (4) quarterly samples.

(c) If the cabinet determines the system is reliably and consistently below the maximum contaminant level the cabinet may allow the system to monitor annually. Systems which monitor annually shall monitor during the quarter that previously yielded the highest analytical result.

(d) Systems which have three (3) consecutive annual samples with no detection of a contaminant may apply to the cabinet for a waiver as specified in subsections (5) and (6) of this section.

(e) If monitoring results in detection of one (1) or more of the related contaminants, aldicarb, aldicarb sulfone, aldicarb sulfoxide and heptachlor, or heptachlor epoxide, then subsequent monitoring shall include analyses for all related contaminants.

(8) Systems which exceed the maximum contaminant levels as set within Section 4 of this administrative regulation, as determined by subsection (11) of this section, shall monitor quarterly. After the analytical results from a minimum of four (4) quarterly samples indicate that the system is in compliance and the cabinet determines the system is reliably and consistently below the MCL, as specified in subsection (11) of this section, the system shall monitor at the frequency specified in subsection (7)(c) of this section.

(9) The cabinet may require a confirmation sample for positive or negative results. If a confirmation sample is required by the cabinet, the result shall be averaged with the first sampling result and the average used for the compliance determination specified in subsection (11) of this section. The cabinet may delete results of obvious sampling errors from this calculation.

(10) The total number of samples a system shall analyze may be reduced by the cabinet, by allowing the use of compositing. Composite samples from a maximum of five (5) sampling points are allowed, if the detection limit of the method used for analysis is less than one-fifth (1/5) of the MCL. Compositing of samples shall be performed in the laboratory and analyzed within fourteen (14) days of sample collection.

(a) If the concentration in the composite sample detects one (1) or more contaminants listed in Section 4 of this administrative regulation, then a follow-up sample shall be taken and analyzed within fourteen (14) days from each sampling point included in the composite.

(b) If duplicates of the original sample taken from each sampling point used in the composite are available, the system may use these duplicates instead of resampling. The duplicate shall be analyzed and the results submitted to the cabinet within fourteen (14) days of collection.

(c) If the population served by the system is greater than 3,300 persons, then compositing may occur only at sampling points within a single system. In systems serving less than or equal to 3,300 persons, the cabinet may permit compositing among different systems if the five (5) sample limit is maintained.

(11) Compliance with Section 4 of this administrative regulation shall be based upon the analytical results obtained at each sampling point.

(a) For systems which are conducting monitoring at a frequency greater than annual, compliance shall be determined by a running annual average of all samples taken at each sampling point. If the annual average of any sampling point is greater than the maximum contaminant level, then the system shall be deemed to be out of compliance. If the initial sample or a subsequent sample would cause the annual average to be exceeded, then the system shall immediately be deemed to be out of compliance. Any samples below the detection limit shall be calculated as zero for purposes of determining the annual average.

(b) If monitoring is conducted annually, or less frequently, the system shall be deemed to be out of compliance if the level of a contaminant at any sampling point is greater than the MCL. If a confirmation sample is required by the cabinet, the determination of compliance shall be based on the average of two (2) samples.

(c) If a public water system has a distribution system separable from other parts of the distribution system with no inter-connections, the system may, with cabinet approval, give public notice to only that portion of the system which is out of compliance.

(12) Analysis for the contaminants listed in Section 4 of this

administrative regulation shall be conducted in accordance with 40 CFR 141.24(h)(12)(1993), hereby adopted without change.

(13) Analysis for PCBs shall be conducted in accordance with 40 CFR 141.24(h)(13)(1993), hereby adopted without change.

(14) If monitoring data collected after January 1, 1990, are generally consistent with the requirements of this section, then systems may, with cabinet approval, use that data to satisfy the monitoring requirement for the initial compliance period beginning January 1, 1993.

(15) The cabinet may increase the required monitoring frequency, where necessary, to detect variations within the system (e.g., fluctuations in concentration due to seasonal use, changes in water source).

(16) The cabinet may determine compliance or initiate enforcement action based upon analytical results and other information compiled by cabinet personnel.

(17) Each public water system shall monitor when designated by the cabinet within each compliance period.

(18) Detection, as used in this section, shall be greater than or equal to the following concentrations for each contaminant:

Contaminant	Detection Limit in mg/l
Alachlor	0.0002
Aldicarb	0.0005
Aldicarb sulfoxide	0.0005
Aldicarb sulfone	0.0008
Atrazine	0.0001
Benzo(a)pyrene	0.00002
Carbofuran	0.0009
Chlordane	0.0002
Dalapon	0.001
Dibromochloropropane (DBCP)	0.00002
Di(2-ethylhexyl)adipate	0.0006
Di(2-ethylhexyl)phthalate	0.0006
Dinoseb	0.0002
Diquat	0.0004
2,4-D	0.0001
Endothall	0.009
Endrin	0.00001
Ethylene dibromide (EDB)	0.00001
Glyphosate	0.006
Heptachlor	0.00004
Heptachlor epoxide	0.00002
Hexachlorobenzene	0.0001
Hexachlorocyclopentadiene	0.0001
Lindane	0.00002
Methoxychlor	0.0001
Oxamyl	0.002
Picloram	0.0001
Polychlorinated biphenyls (PCBs) (as decachlorobiphenyl)	0.0001
Pentachlorophenol	0.00004
Simazine	0.00007
Toxaphene	0.001
2,3,7,8-TCDD (Dioxin)	0.000000005
2,4,5-TP (Silvex)	0.0002

(19) Analysis under this administrative regulation shall only be conducted by laboratories that have received certification by EPA or the cabinet. To receive certification to conduct analyses for the contaminants in Section 4 of this administrative regulation the laboratory shall:

(a) Analyze Performance Evaluation samples which include those substances provided by EPA's Environmental Monitoring and Support Laboratory or equivalent samples provided by the cabinet; and

(b) Achieve quantitative results on the analyses that are within the following acceptance limits:

Contaminant	Acceptance limits (percent, unless otherwise noted)
DBPC	plus or minus 40
EDB	plus or minus 40
Alachlor	plus or minus 45
Atrazine	plus or minus 45
Benzo(a)pyrene	2 standard deviations
Carbofuran	plus or minus 45
Chlordane	plus or minus 45
Dalapon	2 standard deviations
Di(2-ethylhexyl)adipate	2 standard deviations
Di(2-ethylhexyl)phthalate	2 standard deviations
Dinoseb	2 standard deviations
Diquat	2 standard deviations
Endothall	2 standard deviations
Endrin	plus or minus 30
Glyphosate	2 standard deviations
Heptachlor	plus or minus 45
Heptachlor epoxide	plus or minus 45
Hexachlorobenzene	2 standard deviations
Hexachlorocyclopentadiene	2 standard deviations
Lindane	plus or minus 45
Methoxychlor	plus or minus 45
Oxamyl	2 standard deviations
PCBs (as Decachlorobiphenyl)	0 through 200
Picloram	2 standard deviations
Simazine	2 standard deviations
Toxaphene	plus or minus 45
Aldicarb	2 standard deviations
Aldicarb sulfoxide	2 standard deviations
Aldicarb sulfone	2 standard deviations
Pentachlorophenol	plus or minus 50
2,3,7,8-TCDD (Dioxin)	2 standard deviations
2,4-D	plus or minus 50
2,4,5-TP (Silvex)	plus or minus 50

Section 4. The following maximum contaminant levels for synthetic organic contaminants shall apply to community water systems and nontransient, noncommunity water systems:

CAS No.	Contaminant	MCL (mg/l)
(1) 15972-60-8	Alachlor	0.002
(2) 116-06-3	Aldicarb	0.003
(3) 1646-87-3	Aldicarb sulfoxide	0.004
(4) 1646-87-4	Aldicarb sulfone	0.003
(5) 1912-24-9	Atrazine	0.003
(6) 1563-66-2	Carbofuran	0.04
(7) 57-74-9	Chlordane	0.002
(8) 96-12-8	Dibromochloropropane	0.0002
(9) 94-75-7	2,4-D	0.07
(10) 106-93-4	Ethylene dibromide	0.00005
(11) 76-44-8	Heptachlor	0.0004
(12) 1024-57-3	Heptachlor epoxide	0.0002
(13) 58-89-9	Lindane	0.0002
(14) 72-43-5	Methoxychlor	0.04
(15) 1336-36-3	Polychlorinated biphenyls	0.0005
(16) 87-86-5	Pentachlorophenol	0.001
(17) 8001-35-2	Toxaphene	0.003
(18) 93-72-1	2,4,5-TP	0.05
(19) 50-32-8	Benzo(a)pyrene	0.0002
(20) 75-99-0	Dalapon	0.2
(21) 103-23-1	Di(2-ethylhexyl)adipate	0.4
(22) 117-81-7	Di(2-ethylhexyl)phthalate	0.006
(23) 88-85-7	Dinoseb	0.007
(24) 85-00-7	Diquat	0.02

(25) 145-73-3	Endothall	0.1
(26) 72-20-8	Endrin	0.002
(27) 1071-53-6	Glyphosate	0.7
(28) 118-74-1	Hexachlorobenzene	0.001
(29) 77-47-4	Hexachlorocyclopentadiene	0.05
(30) 23135-22-0	Oxamyl (Vydate)	0.2
(31) 1918-02-1	Picloram	0.5
(32) 122-34-9	Simazine	0.004
(33) 1746-01-6	2,3,7,8-TCDD (Dioxin)	3×10^{-8}

Section 5. The following are hereby identified as the best available technology, treatment technique, or other means available for achieving compliance with the maximum contaminant level for the synthetic organic contaminants identified in Section 4 of this administrative regulation and volatile organic compounds identified in 401 KAR 8:420.

CAS No.	Chemical	GRANULATED ACTIVATED CARBON	PACKED TOWER AERATION	OXIDATION
15972-60-8	Alachlor	X		
116-06-3	Aldicarb	X		
1646-88-4	Aldicarb sulfone	X		
1646-87-3	Aldicarb sulfoxide	X		
1912-24-9	Atrazine	X		
71-43-2	Benzene	X	X	
1563-66-2	Carbofuran	X		
56-23-5	Carbon tetrachloride	X	X	
57-74-9	Chlordane	X		
94-75-7	2,4-D	X		
96-12-8	Dibromochloropropane (DBCP)	X	X	
95-50-1	o-Dichlorobenzene	X	X	
107-06-2	1,2-Dichloroethane	X	X	
158-59-2	cis-1,2-Dichloroethylene	X	X	
158-60-5	trans-1,2-Dichloroethylene	X	X	
75-35-4	1,1-Dichloroethylene	X	X	
78-87-5	1,2-Dichloropropane	X	X	
106-93-4	Ethylene Dibromide (EDB)	X	X	
100-41-4	Ethylbenzene	X	X	
76-44-8	Heptachlor	X		
1024-57-3	Heptachlor epoxide	X		
58-89-9	Lindane	X		
72-43-5	Methoxychlor	X		
108-90-7	Monochlorobenzene	X	X	
106-46-7	para-Dichlorobenzene	X	X	
1336-36-3	Polychlorinated biphenyls (PCBs)		X	
87-86-5	Pentachlorophenol	X		
100-42-5	Styrene	X	X	
93-72-1	2,4,5-TP (Silver)	X		
127-18-4	Tetrachloroethylene	X	X	
71-55-6	1,1,1-Trichloroethane	X	X	
79-01-6	Trichloroethylene	X	X	
108-88-3	Toluene	X		
8001-35-2	Toxaphene	X	X	
75-01-4	Vinyl chloride		X	
1330-20-7	Xylene	X	X	
50-32-8	Benzo(a)pyrene	X		
75-99-0	Dalapon	X		
75-09-2	Dichloromethane		X	
103-23-1	Di(2-ethylhexyl)adipate	X	X	
117-81-7	Di(2-ethylhexyl)phthalate	X		
88-85-7	Dinoseb	X		
85-00-7	Diquat	X		
145-73-3	Endothall		X	
72-20-8	Endrin		X	
1071-53-6	Glyphosate		X	
118-74-1	Hexachlorobenzene		X	
77-47-3	Hexachlorocyclopentadiene	X	X	
23135-22-0	Oxamyl (Vydate)	X		
1918-02-1	Picloram	X		
122-34-9	Simazine	X		
120-82-1	1,2,4-Trichlorobenzene	X	X	

79-00-5	1,1,2-Trichloroethane	X	X
1746-01-6	2,3,7,8-TCDD (Dioxin)	X	

[Section 1. Organic Chemical Sampling, Analytical Techniques and Maximum Contaminant Levels. (1) Applicability. A community water system that obtains all or part of its water from surface water sources shall sample for organic chemicals and is subject to the provisions of this section. The cabinet may require a community water system which obtains its water from any groundwater source to sample for organic chemicals.

(2) Sampling frequency. Sampling for organic chemicals shall be performed no less than once every three (3) years, at a period of the year specified by the cabinet.

(3) Sampling points. The sampling point for the determination of organic chemicals shall be at any free flowing outlet of the distribution system.

(4) Maximum organic chemical limits. The following are the maximum contaminant levels for organic chemicals:

	Level, milligrams per liter
Chlorinated hydrocarbons:	
Endrin (1,2,3,4,10, 10 hexachloro-6,7 epoxy 1,4,4a,5,6,7,8,8a octa hydro 1,4 endo, endo 5,8 dimethano naphthalene)	0.0002
Lindane (1,2,3,4,5,6 hexachloro-cyclohexane, gamma isomer).	0.004
Methoxychlor (1,1,1 Trichloro 2, 2 bis (p methoxyphenyl) ethane).	0.1
Toxaphene ($C_{10}H_{10}Cl_8$ Technical Chlorinated Camphene, 67 69 percent chlorine).	0.005
Chlorophenoxys: 2,4 D, (2,4 Dichlorophenoxyacetic acid).	0.1
2,4,5 TP Silvex (2,4,5 Trichloro-phenoxyprepionic acid).	0.01

(5) Analytical methods. Analyses for organic chemicals shall be in accordance with methods approved for drinking water by the U.S. Environmental Protection Agency in accordance with 40 CFR 141.24(e) and (g) (10) (11) and (18) or by the cabinet.

(6) Organic chemical limit exceeded.

(a) If the results of an analysis for the organic chemicals listed above show that the maximum limits have been exceeded, the supplier of water shall report this information to the cabinet within seven (7) days and initiate three (3) additional analyses within one (1) month.

(b) When the average of the four (4) analyses made above, rounded to the same number of significant figures as the maximum contaminant level for the substance in question, exceeds the maximum contaminant level, the supplier of water shall report the violation to the cabinet and give the notice to the public specified in 401 KAR 8:070. Monitoring after public notification shall be at a frequency determined by the cabinet and shall continue until the maximum contaminant level has not been exceeded in two (2) successive samples, or until a monitoring schedule, as a condition to a variance, exemption or enforcement action, becomes effective.

Section 2. Variances and exemptions for organic chemicals shall be in accordance with 401 KAR 8:060 and in accordance with the provisions for variances for volatile organic chemicals as provided in 401 KAR 8:420, Section 8.

Section 3. Severability. If any provision of this regulation is set aside by a court of competent jurisdiction, the remainder of this regulation remains in effect.]

E. DOUGLAS STEPHAN, Commissioner
PHILLIP J. SHEPHERD, Secretary

APPROVED BY AGENCY: April 14, 1994

FILED WITH LRC: April 15, 1994 at 11 a.m.

PUBLIC HEARING: A public hearing to receive comments on this proposed regulation has been scheduled for Wednesday, May 25, 1994 at 1:30 p.m. (ET), in the Auditorium of the State Office Building, Frankfort, Kentucky. Individuals interested in being heard at this hearing shall notify John T. Smither in writing at the address noted below by May 20, 1994, of their intent to attend the hearing and be heard. If no notification of intent to attend the hearing and be heard is received by that date, the hearing may be canceled. This hearing is open to the public. Any person wishing to be heard will be given an opportunity to comment on the proposed regulation. Persons testifying at the hearing are requested to provide the cabinet with a written copy of their testimony, if available. A transcript of the hearing may not be made unless a written request for a transcript is made at least five (5) days before the hearing. If you do not wish to be heard at the public hearing, you may submit written comments on the proposed regulation. Written comments must be received by John T. Smither at the address below no later than the close of business, (4:30 p.m. (ET)) May 25, 1994. The Natural Resources and Environmental Protection Cabinet does not discriminate on the basis of race, color, national origin, sex, religion, age, or disability. The meeting facility is accessible to people with disabilities. The cabinet will provide, upon request, reasonable accommodations including auxiliary aids and services necessary to afford individuals with a disability an equal opportunity to participate in all services, programs, and activities. If an interpreter or other auxiliary aid or service is needed, contact Mr. Smither at the address below before May 20, 1994 between 8 a.m. and 4:30 p.m. (ET).

CONTACT PERSON: John T. Smither, Manager, Drinking Water Branch, Division of Water, Department for Environmental Protection, 14 Reilly Road, Frankfort, Kentucky 40601, (502) 564-3410.

REGULATORY IMPACT ANALYSIS

Agency Contact: John T. Smither

(1) Type and number of entities affected: This regulation will affect approximately 534 community and 166 nontransient non-community public water systems. This number may vary from month to month.

(a) Direct and indirect costs or savings to those affected: This regulation requires public water systems to monitor for certain synthetic organic chemicals as set forth in federal regulations published January 30, 1991 and July 17, 1992, within the next three years. These federal regulations are commonly referred to as Phase II and Phase V chemical regulations. Costs for the monitoring for the organic chemicals in this regulation in combination with other Phase II and Phase V regulations are estimated to be about $12,000 per system per year.

1. First year: Except for industrial, commercial, and federal facilities the Cabinet is currently undertaking to monitor for the first round of Phase II and Phase V chemicals for public water systems serving fewer than 10,000 people at no cost to the system. As long

as no MCL is violated thereby triggering the need for best available technology, these public water systems may not incur any costs for the first round of monitoring. Industrial, commercial, and federal facilities and facilities serving over 10,000 people will incur monitoring costs of about $12,000 per year.

2. Continuing costs or savings: Continuing costs for monitoring after the first round will be the responsibility of the public water system. Check sample monitoring will also be the responsibility of the public water system. Depending on what chemicals are found and at what levels, monitoring may continue as often as quarterly or as seldom as every three years.

3. Additional factors increasing or decreasing costs (note any effects upon competition): If a maximum contaminant level is exceeded, the public water system will be required to install best available technology to remove the contaminant. These technologies can vary depending on the chemical which needs to be removed and the difficulty in removing it. The costs of the technology can also vary depending on the technology used and intensity of treatment.

(b) Reporting and paperwork requirements: Data generated from monitoring for organic chemicals will have to be submitted to the Cabinet by the public water system. In most cases this data will be submitted to the Cabinet by laboratories on behalf of public water systems.

(2) Effects on the promulgating administrative body: This regulation will require the promulgating administrative body to maintain and track the data submitted by public water systems relating to organic chemicals, as well as follow-up data submitted with any necessary enforcement action.

(a) Direct and indirect costs or savings; Manipulation of data will be managed by current staff.

1. First year: Because the Cabinet is conducting the first round of monitoring on behalf of most public water systems serving less than 10,000 persons, laboratory resources of the Cabinet will be drawn upon heavily to implement this regulation. Field personnel for the Division of Water will also be called upon heavily for collecting samples.

2. Continuing costs or savings: While data management and enforcement of this regulation will be handled by current staff with little disruption, laboratory services will require a reduction of laboratory resources available to other programs in the Department. Field personnel of the Division of Water will work sample collection into their current schedule.

3. Additional factors increasing or decreasing costs: No other factors will increase or decrease costs.

(b) Reporting and paperwork requirements: Data generated as a result of this regulation will be managed using current computer tracking programs and will be forwarded to the Environmental Protection Agency using currently available facilities.

(3) Assessment of anticipated effect on state and local revenues: This regulation will have no affect on state revenues. Public water systems owned by local governments will eventually have to pick up costs associated with this regulation although in most cases, costs will be passed through to water consumers.

(4) Assessment of alternative methods; reasons why alternatives were rejected: This regulation tracks requirements of federal regulations. Alternatives to this regulation would make Kentucky's program inconsistent with federal requirements.

(5) Identify any statute, administrative regulation or government policy which may be in conflict, overlapping, or duplication: No statute, regulation, or policy conflicts, overlaps, or duplicates this regulation.

(a) Necessity of proposed regulation if in conflict: No conflict exists.

(b) If in conflict, was effort made to harmonize the proposed administrative regulation with conflicting provisions: No conflict exists.

(6) Any additional information or comments: None

TIERING: Was tiering applied? Yes. This regulation is tiered to take into consideration different types of water systems and different possible contaminants and solutions.

FISCAL NOTE ON LOCAL GOVERNMENT

1. Does this administrative regulation relate to any aspect of a local government, including any service provided by that local government? Yes

2. State what unit, part or division of local government this administrative regulation will affect. This regulation relates to public water systems. Local governments frequently own or operate public water systems.

3. State the aspect or service of local government to which this administrative regulation relates. This regulation relates to the provision of potable drinking water.

4. Estimate the effect of this administrative regulation on the expenditures and revenues of a local government for the first full year the regulation is to be in effect. If specific dollar estimates cannot be determined, provide a brief narrative to explain the fiscal impact of the administrative regulation.

Revenues (+/-): None available

Expenditures (+/-): None available

Other Explanation: This regulation requires public water systems to conduct monitoring for certain organic chemicals. If an MCL is violated, the system would have to install best available technology to remove the contaminant. The costs of this regulation would likely be passed to the consumer of water. However, a local government which owns a public water system could elect to absorb these costs.

FEDERAL MANDATE ANALYSIS COMPARISON

1. Federal statute or regulation constituting the federal mandate. 40 CFR 141.24 and 40 CFR 141.61 as amended at 56 Federal Register 3583 January 30, 1991, 56 Federal Register 30277 July 1, 1991, and 57 Federal Register 31841 July 17, 1992 establish certain minimum requirements for implementation of the federal Safe Drinking Water Act (SDWA). The SDWA does not require states to adopt the federal program, so there is no federal mandate. It does authorize states to apply for program delegation. This eliminates the need for dual federal and state programs.

2. State compliance standards. This regulation sets out monitoring and testing requirements, maximum contaminant levels and best available technology for certain synthetic organic chemicals.

3. Minimum or uniform standards contained in the federal mandate. The federal regulations set forth monitoring and testing requirements, maximum contaminant levels and best available technology for certain synthetic organic chemicals.

4. Will this administrative regulation impose stricter requirements, or additional or different responsibilities or requirements, than those required by the federal mandate? There is no federal mandate to implement the federal SDWA. The Cabinet has implemented its state statutory authority in adopting this regulation.

5. Justification for the imposition of the stricter standard, or additional or different responsibilities or requirements. The standards are the same.

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

401 KAR 8:420. Volatile organic chemicals.

RELATES TO: KRS Chapter 224, 40 CFR Part 141 (1993)
STATUTORY AUTHORITY: KRS 224.10-100, 224.10-110, [~~PL~~

~~93-523 The Safe Drinking Water Act as amended in 1986,~~] 40 CFR part 136, Appendix B (1993), 40 CFR 141.24 (1993) [~~(g)(10), (11), (15)~~], 42 USCA 300f, 300g, 300j

NECESSITY AND FUNCTION: KRS Chapter 224.10-110 directs the cabinet to enforce administrative [~~rules and~~] regulations adopted by the secretary for the regulation and control of the purification of water for public and semipublic use. The Safe Drinking Water Act, as amended by the Safe Drinking Water Act Amendments of 1986, provides for primary enforcement responsibility by states that have adopted regulations "no less stringent than the national primary drinking water regulations", as well as meeting other criteria stipulated by the Act. The Commonwealth of Kentucky has accepted and is currently exercising this [~~such~~] primary enforcement responsibility. This administrative regulation sets forth monitoring and testing requirements, maximum contaminant levels, and treatment technologies for certain volatile organic chemicals (VOCs), and is required to keep state administrative regulations "no less stringent than national primary drinking water regulations".

Section 1. Beginning with the initial compliance period, analysis of the contaminants listed in Section 3(1) of this administrative regulation for the purpose of determining compliance with the maximum contaminant level shall be conducted as follows:

(1) Groundwater systems shall take a minimum of one (1) sample at every entry point to the distribution system which is representative of each well after treatment, hereafter called a sampling point. Each sample shall be taken at the same sampling point unless conditions make another sampling point more representative of each source, treatment plant, or within the distribution system.

(2) Surface water systems, or combined surface and groundwater systems, shall take a minimum of one (1) sample at points in the distribution system that are representative of each source or at each entry point to the distribution system after treatment, hereafter called a sampling point. Each sample shall be taken at the same sampling point unless conditions make another sampling point more representative of each source, treatment plant, or within the distribution system.

(3) If the system draws water from more than one (1) source and the sources are combined before distribution, the system shall sample at an entry point to the distribution system during periods of normal operating conditions (i.e., when water representative of all sources is being used).

(4) Each community and nontransient noncommunity water system shall take four (4) consecutive quarterly samples for each contaminant listed in Section 3(1)(b) to (u) of this administrative regulation during each compliance period, beginning in the initial compliance period.

(5) If the initial monitoring for contaminants listed in Section 3(1)(a) to (h) of this administrative regulation and the monitoring for the contaminants listed in Section 3 (1)(i) to (u) of this administrative regulation as allowed in subsection (18) of this section, has been completed by December 31, 1992, and the system did not detect any contaminant listed in Section 3(1) of this administrative regulation, then each ground and surface water system shall take one (1) sample annually beginning with the initial compliance period.

(6) After a minimum of three (3) years of annual sampling, groundwater systems with no previous detection of any contaminant listed in Section 3(1) of this administrative regulation, may be allowed by the cabinet, to take one (1) sample during each compliance period.

(7) Each community and nontransient groundwater system which does not detect a contaminant listed in Section 3(1)(a) through (u) of this administrative regulation may apply to the cabinet for a waiver from the requirements of subsections (5) and (6) of this section after completing the initial monitoring. For the purposes of this section, a contaminant shall be detected if it is measured at greater than or equal to 0.0005 mg/l. A waiver shall be effective for no more than six (6) years or two (2) compliance periods. The cabinet may also issue waivers to small systems for the initial round of monitoring for 1,2,4-trichlorobenzene.

(8) The cabinet may grant a waiver after evaluating the following factors:

(a) Knowledge of previous use, including transport, storage, or disposal, of the contaminant within the watershed or zone of contribution of the system. If a determination by the cabinet reveals no previous use of the contaminant within the watershed or zone of contribution, a waiver may be granted.

(b) If previous use of the contaminant is unknown or it has not been used previously, then the following factors shall be used to determine if a waiver may be granted.

1. Previous analytical results;

2. The proximity of the system to a potential point or non-point source of contamination. Point sources include spills and leaks of chemicals at or near a water treatment facility or at manufacturing, distribution, or storage facilities, or from hazardous and municipal waste landfills and other waste handling or treatment facilities;

3. The environmental persistence and transport of the contaminants;

4. The number of persons served by the public water system and the proximity of a smaller system to a larger system; and

5. How well the water source is protected against contamination, such as whether it is a surface or groundwater system. Groundwater systems shall consider factors such as depth of the well, the type of soil, and wellhead protection. Surface water systems shall consider watershed protection.

(9) As a condition of the waiver a groundwater system shall take one (1) sample at each sampling point during the time the waiver is effective (i.e., one (1) sample during two (2) compliance periods or six (6) years) and update its vulnerability assessment considering the factors listed in subsection (8) of this section. Based on this vulnerability assessment the cabinet shall reconfirm that the system is nonvulnerable. If the cabinet does not make this reconfirmation within three (3) years of the initial determination, then the waiver is invalidated and the system is required to sample annually as specified in subsection (5) of this section.

(10) Each community and nontransient surface water system which does not detect a contaminant listed in Section 3(1)(a) to (u) of this administrative regulation may apply to the cabinet for a waiver from the requirements of subsection (5) of this section after completing the initial monitoring. Composite samples from a maximum of five (5) sampling points are allowed, if the detection limit of the method used for analysis is less than one-fifth (1/5) of the MCL. Systems meeting this criterion shall be determined by the cabinet to be nonvulnerable based on a vulnerability assessment during each compliance period. Each system receiving a waiver shall sample at a frequency specified by the cabinet.

(11) If a contaminant listed in Section 3 (1)(a) to (u) of this administrative regulation is detected at a level exceeding 0.0005 mg/l in any sample, then:

(a) The system shall monitor quarterly at each sampling point which resulted in a detection.

(b) The cabinet may decrease the quarterly monitoring requirement specified in paragraph (a) of this subsection if it determines that the system is reliably and consistently below the maximum contaminant level. The cabinet shall not make this determination unless a groundwater system takes a minimum of two (2) quarterly samples and a surface water system takes a minimum of four (4) quarterly samples.

(c) If the cabinet determines that the system is reliably and consistently below the maximum contaminant level, the system may, with written approval from the cabinet, monitor annually. Systems which monitor annually shall monitor during the quarters which previously yielded the highest analytical result.

(d) Systems which have three (3) consecutive annual samples with no detection of a contaminant may apply to the cabinet for a

waiver pursuant to subsection (7) of this section.

(e) Groundwater systems which have detected trichloroethylene, tetrachloroethylene, 1,2-dichloroethane, 1,1,1-trichloroethane, cis-1,2-dichloroethylene, trans-1,2-dichloroethylene, or 1,1-dichloroethylene shall monitor quarterly for vinyl chloride. A vinyl chloride sample shall be taken at each sampling point at which the compound was detected. If the results of the first analysis do not detect vinyl chloride, the cabinet may reduce the quarterly monitoring frequency for vinyl chloride to one (1) sample during each compliance period. Surface water systems shall monitor for vinyl chloride as specified by the cabinet.

(12) Systems which violate the requirements of Section 3(1)(a) to (u) of this administrative regulation, as determined by subsection (15) of this section, shall monitor quarterly. If a minimum of four (4) consecutive quarterly samples demonstrate that the system is in compliance pursuant to subsection (15) of this section and the cabinet determines that the system is reliably and consistently below the maximum contaminant level, the system may, with written approval from the cabinet, monitor at the frequency and times specified in subsection (11)(c) of this section.

(13) A confirmation sample may be required for positive or negative results. If a confirmation sample is required by the cabinet, the result shall be averaged with the first sampling result and the average shall be used for the compliance determination as specified by subsection (15) of this section. The cabinet may delete results of obvious sampling errors from this calculation.

(14) The total number of samples a system shall analyze may be reduced by the cabinet, by allowing the use of compositing. Composite samples from a maximum of five (5) sampling points are allowed, if the detection limit of the method used for analysis is less than one-fifth (1/5) of the MCL. Compositing of samples shall be performed in the laboratory and shall be analyzed within fourteen (14) days of sample collection.

(a) If the concentration in the composite sample is greater than or equal to 0.0005 mg/l for any contaminant listed in Section 3 of this administrative regulation, then a follow-up sample shall be taken and analyzed within fourteen (14) days from each sampling point included in the composite.

(b) If duplicates of the original sample taken from each sampling point used in the composite are available, the system may use these instead of resampling. The duplicate shall be analyzed and the results reported to the cabinet within fourteen (14) days of collection.

(c) Compositing shall take place only at sampling points within a single system, unless the population served by the system is less than or equal to 3,300 persons. In systems serving less than or equal to 3,300 persons, compositing among different systems may be permitted if the five (5) sample limit is maintained.

(d) Compositing samples prior to Gas Chromatograph analysis.

1. Add five (5) ml or equal larger amounts of each sample (up to five (5) samples are allowed) to a twenty-five (25) ml glass syringe. Special precautions shall be taken to maintain zero headspace in the syringe.

2. The samples shall be cooled at four (4)°C during this step to minimize volatilization losses.

3. Mix well and draw out a five (5) ml aliquot for analysis.

4. Follow sample introduction, purging, and desorption steps described in the method set forth in 40 CFR 141.24(f)(16) (1993) hereby adopted without change.

5. If less than five (5) samples are used for compositing, a proportionately small syringe may be used.

(e) Compositing samples prior to Gas Chromatograph/Mass Spectrometer analysis.

1. Inject five (5) ml or equal larger amounts of each aqueous sample (up to five (5) samples are allowed) into a twenty-five (25) ml purging device using the sample introduction technique described in the method.

2. The total volume of the sample in the purging device shall be twenty-five (25) ml.

3. Purge and desorb as described in the method set forth in 40 CFR 141.24(f)(16) (1993) hereby adopted without change.

(15) Compliance with Section 3(1)(a) to (u) of this administrative regulation shall be determined based upon the analytical results obtained at each sampling point.

(a) For systems which are conducting monitoring at a frequency greater than annual, compliance shall be determined by a running annual average of all samples taken at each sampling point. If the annual average of any sampling point is greater than the MCL, then the system shall be deemed to be out of compliance. If the initial sample or a subsequent sample would cause the annual average to be exceeded, then the system shall immediately be deemed to be out of compliance.

(b) If monitoring is conducted annually, or less frequently, the system shall be deemed to be out of compliance if the level of a contaminant at any sampling point is greater than the maximum contaminant level. If a confirmation sample is required by the cabinet, the determination of compliance shall be based on the average of two (2) samples.

(c) If a public water system has a distribution system separable from other parts of the distribution system with no inter-connections, the system may, with the approval of the cabinet, give public notice to only that area served by that portion of the system which is out of compliance.

(16) Analysis for the contaminants listed in Section 3(1)(a) to (u) of this administrative regulation shall be conducted in accordance with 40 CFR 141.24(f)(16) (1993) hereby adopted without change.

(17) Analysis under this section shall be conducted only by laboratories that are certified by EPA or the cabinet according to the following conditions; laboratories may conduct sample analysis under provisional certification until January 1, 1996:

(a) To receive certification to conduct analyses for the contaminants in Section 3(1)(b) to (u) of this administrative regulation the laboratory shall:

1. Analyze Performance Evaluation samples which include contaminants set forth in Section 3(1)(b) to (u) of this administrative regulation and are provided by EPA's Environmental Monitoring Systems Laboratory or equivalent samples provided by the cabinet;

2. Achieve the quantitative acceptance limits under subparagraphs 3 and 4 of this paragraph for at least eighty (80) percent of the regulated organic chemicals listed in Section 3(1)(b) through (u) of this administrative regulation;

3. Achieve quantitative results on the analyses performed under subparagraph 1 of this paragraph that are within plus or minus twenty (20) percent of the actual amount of the substances in the Performance Evaluation sample when the actual amount is greater than or equal to ten-thousandths (0.010) mg/l;

4. Achieve quantitative results on the analyses performed under subparagraph 1 of this paragraph that are within plus or minus forty (40) percent of the actual amount of the substances in the Performance Evaluation sample when the actual amount is less than ten-thousandths (0.010) mg/l; and

5. Achieve a method detection limit of 0.0005 mg/l, according to the procedures in Appendix B to 40 CFR Part 136 (1993) hereby adopted without change.

(b) To receive certification for vinyl chloride, the laboratory shall:

1. Analyze Performance Evaluation samples provided by EPA's Environmental Monitoring Systems Laboratory or equivalent samples provided by the cabinet;

2. Achieve quantitative results on the analyses performed under subparagraph 1 of this paragraph that are within plus or minus forty (40) percent of the actual amount of vinyl chloride in the Performance Evaluation sample.

3. Achieve a method detection limit of 0.0005 mg/l, according to the procedures in Appendix B to 40 CFR Part 136 (1993) hereby adopted without change; and

4. Obtain certification for the contaminants listed in Section 3(1)(b) through (u) of this administrative regulation.

(18) Monitoring data collected after January 1, 1988, and required by 401 KAR 8:440, may be used for purposes of initial monitoring compliance if approved by the cabinet. If the data are generally consistent with the other requirements of this section, the cabinet may use these data (i.e., a single sample rather than four (4) quarterly samples) to satisfy the initial monitoring requirement of subsection (4) of this section. Systems which use grandfathered samples and did not detect any contaminant listed in Section 3(1)(b) through (u) of this administrative regulation shall begin monitoring annually in accordance with subsection (5) of this section beginning with the initial compliance period.

(19) Increased monitoring where necessary to detect variations within the system may be required by the cabinet.

(20) Each approved laboratory shall determine the method detection limit (MDL), as defined in Appendix B to 40 CFR Part 136(1993), adopted without change, at which it is capable of detecting volatile organic chemicals. The acceptable MDL is 0.0005 mg/l. This concentration shall be the detection concentration for purposes of this section.

(21) Each public water system shall monitor when specified by the cabinet within each compliance period.

Section 2. Systems in operation before January 1, 1993, for purposes of initial monitoring, shall conduct analysis of the contaminants listed in Section 3(1)(a) through (h) of this administrative regulation for purposes of determining compliance with the maximum contaminant levels. The analyses shall be conducted as follows:

(1) Groundwater systems shall sample at points of entry to the distribution system that are representative of each well after any application of treatment. Sampling shall be conducted at the same location or a more representative location every three (3) months for one (1) year except as provided in subsection (7)(a) of this section.

(2) Surface water systems shall sample at points in the distribution system representative of each source or at entry points to the distribution system after any application of treatment. Surface water systems shall sample each source every three (3) months except as provided in subsection (7)(b) of this section. Sampling shall be conducted at the same location or a more representative location each quarter.

(3) If the system draws water from more than one (1) source and sources are combined before distribution, the system shall sample at an entry point to the distribution system during periods of normal operating conditions.

(4) (a) Beginning no later than January 1, 1988, all community water systems and nontransient, noncommunity water systems serving more than 10,000 people shall analyze all distribution or entry-point samples, as appropriate, representing all source waters.

(b) No later than January 1, 1989, all community water systems and nontransient noncommunity water systems serving from 3,300 to 10,000 people shall analyze all distribution or entry-point samples, as required in this section, representing all source waters.

(c) Beginning no later than January 1, 1991, all other community and nontransient, noncommunity water systems shall analyze distribution or entry-point samples, as required in this section, representing all source waters.

(5) The cabinet may require confirmation samples for positive or negative results. If a confirmation sample is required by the cabinet, the sample result shall be averaged with the first sample result and used for compliance determination in accordance with subsection (9) of this section. The cabinet may delete results of obvious sampling errors from this calculation.

(6) Analysis for vinyl chloride is required only for groundwater systems that have detected any of the following organic compounds: Trichloroethylene, tetrachloroethylene, 1,2-dichloroethane, 1,1,1-trichloroethane, cis-1,2-dichloroethylene, trans-1,2-dichloroethylene, or 1,1-dichloroethylene. The analysis for vinyl chloride is required at each distribution or entry point at which the organic compound was found. If the first analysis does not detect vinyl chloride, the cabinet may reduce the frequency of vinyl chloride monitoring to once every three (3) years for that sample location or other sample locations which are more representative of the same source. Surface water systems may be required to analyze for vinyl chloride.

(7) Up to five (5) samples from one (1) or more public water systems may be composited with approval from the cabinet. Compositing of samples shall be performed in the laboratory by the procedures listed in this subsection. Samples shall be analyzed within fourteen (14) days of collection. If any organic contaminant listed in Section 3(1) of this administration regulation is detected in the original composite sample, a sample from each source that made up the composite sample shall be reanalyzed individually within fourteen (14) days from sampling. The sample for reanalysis shall not be the original sample but may be a duplicate sample. If duplicates of the original samples are not available, new samples shall be taken from each source used in the original composite and analyzed for volatile organic chemicals. Reanalysis shall be completed within fourteen (14) days of the date the second sample is taken. To composite samples, the following procedure shall be followed:

(a) Compositing samples prior to gas chromatograph analysis:

1. Add five (5) ml or equal larger amounts of each sample (up to five (5) samples are allowed) to a twenty-five (25) ml glass syringe. Special precautions shall be taken to maintain zero headspace in the syringe;

2. The samples shall be cooled at negative four (-4)° C during this step to minimize volatilization losses;

3. Mix well and draw out a five (5) ml aliquot for analysis;

4. Follow sample introduction, purging, and desorption steps described in the method found in 40 CFR 141.24(g)(10) (1993), hereby adopted without change; and

5. If less than five (5) samples are used for compositing, a proportionately smaller syringe may be used.

(b) Compositing samples prior to gas chromatograph/mass spectrometer analysis:

1. Inject five (5) ml or equal larger amounts of each aqueous sample (up to five (5) samples are allowed) into a twenty-five (25) ml purging device using the sample introduction technique described in the method found at 40 CFR 141.24(g)(10) (1993), adopted without change;

2. The total volume of the sample in the purging device shall be twenty-five (25) ml; and

3. Purge and desorb as described in the method in at 40 CFR 141.24(g)(10).

(8) The cabinet may reduce the monitoring frequency specified in subsection (1) and (2) of this section, as explained in subsection (7)(a) and (b) of this section.

(9) Compliance with Section 3(1) of this administrative regulation shall be determined based on the results of the running annual average of quarterly sampling for each sampling location. If the average for one (1) location is greater than the maximum contaminant level, the system shall be in noncompliance with this administrative regulation. If a public water system has a distribution system separable from other parts of the distribution system with no interconnections, only that part of the system that exceeds any maximum contaminant level as specified in Section 3 of this administrative regulation shall not be in compliance with this administrative regulation. The cabinet may reduce the public notice requirement so that it applies only to that portion of the system which is not in compliance. If any one (1) sample result would cause the annual average to be exceeded, the system shall be immediately in violation. For systems that only take one (1) sample per location because no VOCs were detected, compliance shall be based on that one (1) sample.

(10) Analysis under this section shall be conducted in accordance with the provisions of 40 CFR 141.24(g)(10) (1993) hereby adopted

without change.

(11) Analysis under this section shall be conducted only by laboratories that have received conditional approval by EPA or the cabinet according to the following conditions:

(a) To receive conditional approval to conduct analyses for benzene, vinyl chloride, carbon tetrachloride, 1,2-dichloroethane, trichloroethylene, 1,1-dichloroethylene, 1,1,1-trichloroethane, and paradichlorobenzene the laboratory shall:

1. Analyze Performance Evaluation samples which include these substances and are provided by EPA's Environmental Monitoring and Support Laboratory or equivalent samples provided by the cabinet;

2. Achieve the quantitative acceptance limits under subparagraphs 3 and 4 of this paragraph for at least six (6) of the seven (7) subject organic chemicals. The cabinet may allow fewer than six (6) of the seven (7) subject organic chemicals;

3. Achieve quantitative results on the analyses performed under subparagraph 1 of this paragraph that are within plus or minus twenty (20) percent of the actual amount of the substances in the Performance Evaluation sample when the actual amount is greater than or equal to 0.010 mg/l;

4. Achieve quantitative results on the analyses performed under subparagraph 1 of this paragraph that are within plus or minus forty (40) percent of the actual amount of the substances in the Performance Evaluation sample when the active amount is less than 0.010 mg/l;

5. Achieve a method detection limit of 0.0005 mg/l, according to the procedures in Appendix B to 40 CFR Part 136 (1993) hereby adopted without change; and

6. Be currently approved by EPA or the cabinet for the analyses of trihalomethanes.

(b) To receive conditional approval for vinyl chloride, the laboratory shall:

1. Analyze Performance Evaluation samples provided by EPA's Environmental Monitoring and Support Laboratory or equivalent samples provided by the cabinet;

2. Achieve quantitative results on the analyses performed under subparagraph 1 of this paragraph that are within plus or minus forty (40) percent of the actual amount of vinyl chloride in the Performance Evaluation sample;

3. Achieve a method detection limit of 0.0005 mg/l, according to the procedures in Appendix B to 40 CFR Part 136 (1993); and

4. Receive approval or be currently approved by EPA or the cabinet under paragraph (a) of this subsection.

(12) If monitoring data collected after January 1, 1983 are consistent with the other requirements in this section, the cabinet may use that data to represent the initial monitoring if the system is determined by the cabinet not to be vulnerable under the requirements of this section. In addition, the results of EPA's Groundwater Supply Survey may be used in a similar manner for systems supplied by a single well.

(13) The cabinet may increase required monitoring to detect variations within the system.

(14) The cabinet may determine compliance or initiate enforcement action based upon analytical results and other information compiled by cabinet personnel.

(15) Each approved laboratory shall determine the method detection limit (MDL), as defined in Appendix B to 40 CFR Part 136 (1993), at which it is capable of detecting volatile organic chemicals. The acceptable MDL is 0.0005 mg/l, which shall be the detection level for purposes of subsections (5) through (8) of this section.

~~[Section 1. Applicability. All community public water systems and all nontransient noncommunity public water systems shall comply with this regulation.~~

~~(1) Systems serving over 10,000 persons. Beginning no later than January 1, 1988, all water systems serving more than 10,000 persons shall begin analysis of their water systems in accordance with this regulation.~~

~~(2) Systems serving 3,300 persons to 10,000 persons, inclusive. Beginning no later than January 1, 1989, all systems serving 3,300 people to 10,000 people, inclusive, shall begin analysis of their water systems in accordance with this regulation.~~

~~(3) Other systems. No later than January 1, 1991, all other community and nontransient noncommunity water systems shall comply with this regulation.~~

~~(4) How population determined. For the purpose of this regulation, the number of persons served shall be determined in accordance with 401 KAR 8:200.~~

~~(5) Cabinet may sample. The cabinet may elect to perform the monitoring required by this regulation on behalf of a public water system, if all required schedules are met or advanced. The responsibility for compliance with this regulation remains with the public water system.~~

~~Section 2. Sampling Locations. Sampling locations for the purpose of complying with this regulation shall be as follows:~~

~~(1) Groundwater systems. Groundwater systems shall sample at points of entry to the distribution system representative of each well after any application of treatment. All samples shall be taken from the same or a more representative location for each entry point to the distribution system.~~

~~(2) Surface water systems. Surface water systems shall sample at points in the distribution system representative of each source or at entry points to the distribution system after any application of treatment. All samples shall be taken from the same or a more representative location for each source of water.~~

~~(3) If the system draws from more than one (1) source and the sources are combined before distribution, the system shall sample at an entry point to the distribution system during periods of normal operation.~~

~~(4) The cabinet may require check samples or confirmation samples for either positive or negative results. The cabinet may delete any obvious sampling errors. Confirmation samples shall be averaged with previous samples for the purpose of complying with this regulation.~~

~~Section 3. Monitoring Frequency. Monitoring frequency for community and nontransient noncommunity water systems shall be as follows:~~

~~(1) First year. Monitoring shall be quarterly for a period of one (1) year or until such time as the cabinet reduces the monitoring frequency in accordance with this regulation.~~

~~(2) Subsequent monitoring.~~

~~(a) For groundwater systems where VOCs are not detected in the first or any subsequent sample and the system is not vulnerable, as prescribed in Section 4 of this regulation, the cabinet may reduce monitoring to be repeated no less than once every five (5) years.~~

~~(b) For groundwater systems which are vulnerable, as prescribed in section 4 of this regulation, but where VOCs are not detected, the cabinet may reduce the monitoring frequency to no less than once every three (3) years for a system with more than 500 connections and once every five (5) years for a system with 500 or fewer connections.~~

~~(c) If VOCs are detected in a groundwater system, the cabinet will not reduce the monitoring frequency and monitoring shall continue on a quarterly basis.~~

~~(d) For surface water systems where VOCs are not detected in the first year of quarterly sampling or in subsequent samples, and the system is not vulnerable, as prescribed in section 4 of this regulation, the cabinet may reduce the monitoring frequency to no less than once every five (5) years.~~

~~(e) When VOCs are not detected in the first year of quarterly sampling or any subsequent sample, but the system is vulnerable, as prescribed in Section 4 of this regulation, a year of quarterly monitor-~~

~~ing must be repeated every three (3) years for systems larger than 500 connections and every five (5) years for systems of 500 or fewer connections.~~

~~(f) When VOCs are detected in any sample, monitoring shall continue on a quarterly basis.~~

~~(g) The cabinet may, if it finds that VOCs detected in a public water system are consistently below the maximum contaminant level, as prescribed in this regulation, for three (3) consecutive years, reduce the quarterly testing to annual testing for a surface or groundwater system.~~

~~Section 4. Vulnerability. Criteria for establishing the vulnerability of public water systems to volatile organic chemicals (VOCs).~~

~~(1) All systems vulnerable until proven otherwise. For the purpose of this regulation, all public water systems shall be considered vulnerable until the system demonstrates to the cabinet's satisfaction that it is not vulnerable based on the criteria outlined in this regulation.~~

~~(2) Cabinet may require information to test. Any public water system that wishes the cabinet to consider declaring the system nonvulnerable to VOC contamination shall submit a request to the cabinet. The request shall contain a detailed sanitary survey, as well as an explanation of why the system believes it is not vulnerable. Such explanation shall include the number of persons served by the system, the proximity of the public water system to other public water systems, the proximity of the system to commercial or industrial use, the method of disposal or storage of volatile synthetic organic chemicals, the methods utilized in the protection of the water source, and any other information the cabinet may require. Any previous testing which has resulted in a positive measurement of any contaminant listed in this regulation, except for disinfection by products, shall cause a public water system to be considered vulnerable, regardless of other factors, for a period of three (3) years.]~~

Section 3. ~~[5.]~~ Maximum Contaminant Levels for Certain Volatile Organic Chemicals, Treatment Techniques. (1) Community and nontransient noncommunity water systems. The following maximum contaminant levels of organic contaminants shall apply to community water systems and nontransient noncommunity water systems:

CAS No.	Chemical	MCL(mg/l)
(a) 75-01-4	Vinyl chloride	0.002
(b) 71-43-2	Benzene	0.005
(c) 56-23-5	Carbon tetrachloride	0.005
(d) 107-06-2	1,2-Dichloroethane	0.005
(e) 79-01-6	Trichloroethylene	0.005
(f) 106-46-7	para-Dichlorobenzene	0.075
(g) 75-35-4	1,1-Dichloroethylene	0.007
(h) 71-55-6	1,1,1-Trichloroethane	0.2
(i) 156-59-2	cis-1,2-Dichloroethylene	0.07
(j) 78-87-5	1,2-Dichloropropane	0.005
(k) 100-41-4	Ethylbenzene	0.7
(l) 108-90-7	Monochlorobenzene	0.1
(m) 95-50-1	o-Dichlorobenzene	0.6
(n) 100-42-5	Styrene	0.1
(o) 127-18-4	Tetrachloroethylene	0.005
(p) 108-88-3	Toluene	1
(q) 156-60-5	trans-1,2-Dichloroethylene	0.1
(r) 1330-20-7	Xylenes (total)	10
(s) 75-09-2	Dichloromethane	0.005
(t) 120-82-1	1,2,4-Trichlorobenzene	0.07
(u) 79-00-5	1,1,2-Trichloroethane	0.005

(2) The following, granular activated carbon (GAC), packed tower aeration (PTA), or oxidation (OX) as indicated in the table below, are the best technology, treatment technique, or other means available for achieving compliance with the maximum contaminant level for synthetic organic contaminants identified in this administrative regulation and 401 KAR 8:400:

CAS No.	Chemical	Method for Determining Compliance[1]
15972-60-8	Alachlor	GAC
116-06-3	Aldicarb	GAC
1646-87-3	Aldicarb sulfone	GAC
1646-87-3	Aldicarb sulfoxide	GAC
1912-24-9	Atrazine	GAC
71-43-2	Benzene	GAC or PTA
1563-66-2	Carbofuran	GAC
56-23-5	Carbon tetrachloride	GAC or PTA
57-74-9	Chlordane	GAC
94-75-7	2,4-D	GAC
96-12-8	Dibromochloropropane (DBCP)	GAC or PTA
95-50-1	o-Dichlorobenzene	GAC or PTA
107-06-2	1,2-Dichloroethane	GAC or PTA
156-59-2	cis-1,2-Dichloroethylene	GAC or PTA
156-60-5	trans-1,2-Dichloroethylene	GAC or PTA
75-35-4	1,1-Dichloroethylene	GAC or PTA
78-87-5	1,2-Dichloropropane	GAC or PTA
106-93-4	Ethylene Dibromide (EDB)	GAC or PTA
100-41-4	Ethylbenzene	GAC or PTA
76-44-8	Heptachlor	GAC
1024-57-3	Heptachlor epoxide	GAC
58-89-9	Lindane	GAC
72-43-5	Methoxychlor	GAC
108-90-7	Monochlorobenzene	GAC or PTA
106-46-7	para-Dichlorobenzene	GAC or PTA
1336-36-3	Polychlorinated biphenyls (PCB)	GAC
87-86-5	Pentachlorophenol	GAC
100-42-5	Styrene	GAC or PTA
93-72-1	2,4,5-TP (Silvex)	GAC
127-18-4	Tetrachloroethylene	GAC or PTA
71-55-6	1,1,1-Trichloroethane	GAC or PTA
79-01-6	Trichloroethylene	GAC or PTA
108-88-3	Toluene	GAC
8001-35-2	Toxaphene	GAC or PTA
75-01-4	Vinyl chloride	PTA
1330-20-7	Xylene	GAC or PTA
50-32-8	Benzo(a)pyrene	GAC
75-99-0	Dalapon	GAC
75-09-2	Dichloromethane	PTA
103-23-1	Di(2-ethylhexyl)adipate	GAC or PTA
117-81-7	Di(2-ethylhexyl)phthalate	GAC
88-85-7	Dinoseb	GAC
85-00-7	Diquat	GAC
145-73-3	Endothall	GAC
72-20-8	Endrin	GAC
1071-53-6	Glyphosate	OX
118-74-1	Hexachlorobenzene	GAC
77-47-3	Hexachlorocyclopentadiene	GAC or PTA
23135-22-0	Oxamyl (Vydate)	GAC
1918-02-1	Picloram	GAC
122-34-9	Simaxine	GAC
120-82-1	1,2,4-Trichlorobenzene	GAC or PTA
79-00-5	1,1,2-Trichloroethane	GAC or PTA
1746-01-6	2,3,7,8-TCDD (Dioxin)	GAC

[1]GAC Granular activated carbon; PTA - Packed Tower aeration; and OX - Oxidation.

~~[Maximum contaminant~~

Contaminant	level in mg/l
Benzene	0.005
Vinyl Chloride	0.002
Carbon tetrachloride	0.005
1,2 Dichloroethane	0.005
Trichloroethylene	0.005
1,1 Dichloroethylene	0.007
1,1,1 Trichloroethane	0.200
para Dichlorobenzene	0.075

(2) Best available treatment. The following are the best technology treatment techniques for achieving compliance with the maximum contaminant levels for the synthetic organic chemicals identified in subsection (1) of this section:

(a) Central treatment using packed tower aeration for all of the above; or

(b) Central treatment using granular activated carbon for all these chemicals except vinyl chloride.

(3) Point of entry devices. Public water systems may use point of entry devices to comply with maximum contaminant levels only if they meet the requirements of this subsection:

(a) It is the responsibility of the public water system to operate and maintain the point of entry treatment system.

(b) The public water system shall develop and obtain cabinet approval for a monitoring plan before point of entry devices are installed for compliance. Under the plan approved by the cabinet, point of entry devices shall provide health protection equivalent to central water treatment. "Equivalent" means that the water would meet all primary and secondary drinking water standards and would be of acceptable quality similar to that of water distributed by a well operated central treatment plant. In addition to the VOCs, monitoring shall include physical measurements and observations such as total flow treated and the mechanical condition of the treatment equipment.

(c) Effective technology shall be properly applied under a plan approved by the cabinet and the microbiological safety of the water shall be maintained.

1. The cabinet shall require adequate certification of performance and field testing, including a rigorous engineering design review of the point of entry devices.

2. The design and application of the point of entry devices shall consider the tendency for increase in heterotrophic bacteria concentrations in water treated with activated carbon. It may be necessary to use frequent backwashing, postcontactor disinfection, and heterotrophic plate count monitoring to ensure that the microbiological safety of the water is not compromised.

(d) All consumers shall be protected. Every building connected to the system shall have a point of entry device installed, maintained, and adequately monitored. The public water system shall assure the cabinet that every building is subject to treatment and monitoring, and that the rights and responsibilities of the public water system customer convey with title upon sale of property.

(e) Public water systems shall not use bottled water or point of use devices to achieve compliance with an MCL. Bottled water or point of use devices may be used on a temporary basis with cabinet approval, to avoid an unreasonable risk to health.

Section 6. Sampling and Testing Procedures for Volatile Organic Chemicals. (1) Compliance methodology. Compliance with this regulation shall be based upon the results of the running annual average of quarterly sampling for each sampling location. Results of sample analysis shall be submitted to the cabinet within ten (10) days of the end of the compliance period for which the sample was taken. If one location's average is greater than the MCL, the system shall be deemed to be out of compliance. If a public water system has a distribution system separable from other parts of the distribution system, with no interconnections, only that part of the system that exceeds any MCL, as specified in Section 5 of this regulation, shall be deemed out of compliance. The cabinet may reduce the public notice requirement as to that portion of the system which is out of compliance. If any one (1) sample result would cause the annual average to be exceeded, then the system shall be deemed to be out of compliance immediately. For systems that only take one (1) sample per location because no VOCs were detected, compliance shall be based on that one (1) sample.

(2) Analytical methods. Analysis under this regulation shall be conducted in accordance with methods approved for drinking water by the U.S. Environmental Protection Agency or by the cabinet, in accordance with 40 CFR 141.24 (g)(10), 1987, or by the cabinet, and shall be conducted by a laboratory with approval for such analysis in accordance with 40 CFR 141.24(g) (11), 1987.

(3) Composite samples. The cabinet or individual public water system may choose to composite up to five (5) samples from one (1) or more public water systems. Compositing of samples shall be performed in the laboratory by the procedures listed below. Samples shall be analyzed within fourteen (14) days of collection. If any VOC is detected in the original composite sample, a sample from each source that made up the composite sample shall be reanalyzed individually within fourteen (14) days from sampling. The sample for reanalysis shall not be the original sample, but can be a duplicate sample. If duplicates of the original samples are not available, new samples shall be taken from each source used in the original composite and analyzed for VOCs. Reanalysis shall be accomplished within fourteen (14) days of the second sample. The following procedure shall be followed as to composite samples:

(a) Compositing samples prior to gas chromatograph (GC) analysis.

1. Add five (5) ml, or equal larger amounts, of each sample (up to five (5) samples are allowed) to a twenty five (25) ml glass syringe. Zero head space in the syringe shall be maintained.

2. The samples shall be cooled at four (4) degrees Centigrade during this step to minimize volatilization losses.

3. Mix well and draw out a five (5) ml aliquot for analysis.

4. Follow sample introduction, purging, and desorption steps described in the method.

5. If less than five (5) samples are used for compositing, a proportionately smaller syringe may be used.

(b) Compositing samples prior to gas chromatograph/mass spectrometer (GC/MS) analysis.

1. Inject five (5) ml or equal larger amounts of each aqueous sample (up to five (5) samples are allowed) into a twenty five (25) ml purging device, using the sample introduction technique described in the method.

2. The total volume of the sample in the purging device shall be twenty five (25) ml.

3. Purge and desorb as described in the method.

(4) Vinyl chloride in groundwater systems. Analysis for vinyl chloride is required only for groundwater systems that have detected one (1) or more of the following two (2) carbon organic compounds: trichloroethylene; tetrachloroethylene; 1,2 dichloroethane; 1,1,1 trichloroethane; cis 1,2 dichloroethylene; trans1,2 dichloroethylene; or 1,1 dichloroethylene. The analysis for vinyl chloride is required at each distribution or entry point at which one (1) or more of the two (2) carbon organic compounds were found. If the first analysis does not detect vinyl chloride, the cabinet may reduce the frequency of vinyl chloride monitoring to once every three (3) years for that sample location or other sample locations which are more representative of the same source. Surface water systems may be required to analyze for vinyl chloride at the discretion of the cabinet.

(5) Analysis by certified laboratory required. Analysis under this section shall only be conducted by laboratories certified in accordance with 401 KAR 8:040 and certified in accordance with 40 CFR 141.24(g)(11) as to volatile organic chemicals. In addition, laborato-

~~ries certified for volatile organic chemicals shall comply with 40 CFR 141.24(g)(15).]~~

Section 4. [~~7.~~] Miscellaneous Provisions. (1) Increased monitoring. The cabinet may increase required monitoring if [~~where~~] necessary to detect variations within the system.

(2) Compliance and enforcement. The cabinet may determine compliance or initiate enforcement action based upon analytical results and other information.

~~[(3) Systems with less than 150 service connections. Public water systems supplying fewer than 150 service connections may comply with the requirements of this regulation if the owner or operator notifies the cabinet prior to January 1, 1991, that the system is available for sampling.]~~

(3) [~~(4)~~] Purchasers. Public water systems which purchase water from a public water system[~~s~~] which is [~~are~~] monitoring for VOCs under this administrative regulation are exempt from the requirements of this administratie regulation if they do not alter the water in any way. Public water systems which purchase water and do alter or treat the water in any way may be required by the cabinet to comply with the requirements of this administrative regulation.

(4) [~~(5)~~] Other monitoring. If the cabinet has reason to believe that any public water system may be contaminated with VOCs, it may require the system to monitor for VOCs at any time.

Section 5. [~~8.~~] Variances. Variances from the maximum contaminant levels for synthetic organic chemicals may be granted pursuant to 401 KAR 8:060.

~~[(1) Best available treatment installed. Community and nontransient noncommunity (NTNC) public water systems shall install or use either packed tower aeration or granular activated carbon (except for vinyl chloride) treatment technology before the cabinet may consider a variance, unless the system can demonstrate through comprehensive engineering assessments, which may include pilot plant studies, that such treatment technologies would achieve only a de minimis reduction in contaminants. The cabinet may then issue a schedule of compliance that requires the system being granted the variance to examine other treatment methods as a condition of obtaining the variance. If, after the system installs packed tower aeration or granular activated carbon (except for vinyl chloride) technology, the system still does not meet the MCL, that system shall be eligible for a variance from this regulation. If a system has demonstrated that packed tower aeration or granular activated carbon would achieve only a de minimis reduction and has, through examination of other treatment methods, discovered another treatment method which may be technically feasible, the system may request that the cabinet certify that the method is feasible. If the cabinet certifies, based on studies by the system and other relevant information, that the treatment is technically feasible, the cabinet may require such treatment be installed by the system.~~

~~(2) Bottled water or point of use device. The cabinet may require public water systems to use bottled water or point of use devices or other means as a condition of granting a variance from the requirements of this regulation, provided the following requirements are met:~~

~~(a) Public water systems that use bottled water as a condition for receiving a variance shall develop and put into place a monitoring program approved by the cabinet that provides reasonable assurances that the bottled water meets all MCLs. The system shall monitor a representative sample of the bottled water, for all contaminants in this regulation, in the first quarter that it supplies bottled water to the public and annually thereafter. Results of the monitoring shall be provided annually to the cabinet.~~

~~(b) In lieu of monitoring, the water system may provide the cabinet with certification from the bottled water company that the bottled water supplied is in compliance with all applicable state and federal regulations. The certification shall be satisfactory to the cabinet.~~

~~(c) The public water system is responsible for the provision of sufficient quantities of bottled water to every person supplied by the system, via door to door bottled water delivery.~~

~~(d) Any public water systems that use point of use devices as a condition for obtaining a variance from this regulation shall meet the following requirements:~~

~~1. The public water system shall operate and maintain the point of use treatment system;~~

~~2. The public water system shall develop a monitoring plan and obtain cabinet approval for the plan before point of use devices are installed for compliance. This monitoring plan shall provide health protection equivalent to a monitoring plan for central water treatment;~~

~~3. The public water system shall properly apply effective technology, under a plan approved by the cabinet, and shall maintain the microbiological safety of the water;~~

~~4. The public water system shall obtain an adequate certification of performance from the cabinet, perform field testing, and, if not included in the certification process, perform a rigorous engineering design review of the point of use devices;~~

~~5. The design and application of the point of use devices shall consider the tendency for increase in heterotrophic bacteria concentrations in water treated with activated carbon. It may be necessary to use frequent backwashing, postcontactor disinfection, and heterotrophic plate count monitoring to ensure that the microbiological safety of the water is not compromised; and~~

~~6. The public water system shall protect all consumers. Every building connected to the system shall have a point of use device installed, maintained, and adequately monitored. The system shall be assure the cabinet that every building is subject to treatment and monitoring, and that the rights and responsibilities of the public water system customer convey with title upon sale of the property.~~

~~(e) The cabinet may require a public water system to use bottled water or point of use devices as a condition for granting an exemption or variance from this regulation.]~~

Section 6. [~~9.~~] Compliance Schedules. (1) Temporary. Any public water system found to be in violation of any maximum contaminant level set by this administrative regulation shall immediately submit to the cabinet a plan to mitigate the [~~such~~] violation on a short-term basis until best available technology can be put in place. The [~~Such~~] short-term measures shall be employed immediately upon approval of the cabinet. These measures may include the feeding of powdered activated carbon, changing the source of water, providing bottled water, or other processes approved by the cabinet.

(2) Best available technology. Any public water system showing a violation of the maximum contaminant levels established by this administrative regulation shall come into compliance with this administrative regulation, establishing best available technology to reduce the contamination to acceptable limits. [~~Such~~] Compliance shall be achieved on the following schedule:

(a) For public water systems serving greater than 10,000 persons, within twelve (12) months of the notice of violation.

(b) For public water systems serving less than or equal to 10,000 persons, but greater than or equal to 3,300 persons, within eighteen (18) months of notice of violation.

(c) For public water systems serving less than 3,300 persons, within twenty-four (24) months of the notice of violation.

(d) The cabinet may approve, in writing, a compliance schedule other than that provided in this section; however, short term mitigation procedures shall be maintained to the cabinet's satisfaction, from the time of initial approval of the public water system's plan to employ short term remediation to the time of installation and satisfactory testing of best available technology.

(3) Public notification. Nothing herein shall relieve the public water system from the requirements for public notification contained in 401 KAR 8:070.

~~[Section 10. Severability. If any provision of this regulation is set aside by a court of competent jurisdiction, the remainder of this regulation remains in effect.]~~

E. DOUGLAS STEPHAN, Commissioner
PHILLIP J. SHEPHERD, Secretary
APPROVED BY AGENCY: April 14, 1994
FILED WITH LRC: April 15, 1994 at 11 a.m.

PUBLIC HEARING: A public hearing to receive comments on this proposed regulation has been scheduled for Wednesday, May 25, 1994 at 1:30 p.m. (ET), in the Auditorium of the State Office Building, Frankfort, Kentucky. Individuals interested in being heard at this hearing shall notify John T. Smither in writing at the address noted below by May 20, 1994, of their intent to attend the hearing and be heard. If no notification of intent to attend the hearing and be heard is received by that date, the hearing may be canceled. This hearing is open to the public. Any person wishing to be heard will be given an opportunity to comment on the proposed regulation. Persons testifying at the hearing are requested to provide the cabinet with a written copy of their testimony, if available. A transcript of the hearing may not be made unless a written request for a transcript is made at least five (5) days before the hearing. If you do not wish to be heard at the public hearing, you may submit written comments on the proposed regulation. Written comments must be received by John T. Smither at the address below no later than the close of business, (4:30 p.m. (ET)) May 25, 1994. The Natural Resources and Environmental Protection Cabinet does not discriminate on the basis of race, color, national origin, sex, religion, age, or disability. The meeting facility is accessible to people with disabilities. The cabinet will provide, upon request, reasonable accommodations including auxiliary aids and services necessary to afford individuals with a disability an equal opportunity to participate in all services, programs, and activities. If an interpreter or other auxiliary aid or service is needed, contact Mr. Smither at the address below before May 20, 1994 between 8 a.m. and 4:30 p.m. (ET).

CONTACT PERSON: John T. Smither, Manager, Drinking Water Branch, Division of Water, Department for Environmental Protection, 14 Reilly Road, Frankfort, Kentucky 40601, (502) 564-3410.

REGULATORY IMPACT ANALYSIS

Agency Contact: John T. Smither

(1) Type and number of entities affected: This administrative regulation applies to about 534 community and 166 nontransient noncommunity public water systems. This number can vary from month to month.

(a) Direct and indirect costs or savings to those affected: This administrative regulation requires monitoring for 21 volatile organic chemicals, thirteen of which are new as a result of federal regulations published by the Environmental Protection Agency on January 30, 1991 and July 17, 1992, usually referred to as Phase II and Phase V chemical regulations. Monitoring for the first round of Phase II and Phase V monitoring will be conducted by the cabinet for most public water systems serving less than 10,000 persons. Monitoring for systems serving over 10,000 persons, as well as industrial commercial, and federal facilities, will be the responsibility of the public water system.

1. First year: The Cabinet will monitor the first round of the chemicals in this administrative regulation for systems serving less than 10,000 persons. However, check samples or increased monitoring as a result of a detection or violation of an MCL will be the responsibility of the public water system. Systems serving more than 10,000 persons and all industrial, commercial and federal facilities will be responsible for monitoring.

2. Continuing costs or savings: Monitoring after the first round will be the responsibility of the public water system regardless of size. The amount of monitoring required will depend on detections or violations found in the first round.

3. Additional factors increasing or decreasing costs (note any effects upon competition): If a maximum contaminant level is violated, the public water system will be required to install best available technology. The cost of this technology will vary with the technology used and the extent of contamination, and can range from about $13,000 for granular activated carbon to $60,000 for packed tower aeration.

(b) Reporting and paperwork requirements: Public water systems are required to submit data generated by monitoring to the Cabinet. If an MCL is violated additional reports are likely.

(2) Effects on the promulgating administrative body: This administrative regulation will require the Cabinet to manage data generated under this administrative regulation. In addition any enforcement and follow-up required will have to be managed. The Cabinet is also conducting the first round of monitoring of new contaminants required by this administrative regulation.

(a) Direct and indirect costs or savings: Data management and enforcement actions required as a result of this administrative regulation will be absorbed by current staff.

1. First year: Monitoring will require substantial amounts of laboratory time as well as time required from field staff to collect samples. While these tasks will be accomplished by current staff, it will require a reduction in the availability of laboratory services and field staff services to other programs.

2. Continuing costs or savings: First round monitoring will require three years to complete.

3. Additional factors increasing or decreasing costs: No other factors will increase or decrease costs.

(b) Reporting and paperwork requirements: The Cabinet will report data generated by this administrative regulation to the Environmental Protection Agency. This will be managed through currently used computer reporting systems.

(3) Assessment of anticipated effect on state and local revenues: This administrative regulation will have no affect on state revenue. Public water systems owned by local governments will eventually have to pick up the costs of this administrative regulation, however, most cost increases are expected to be passed through to consumers.

(4) Assessment of alternative methods; reasons why alternatives were rejected: This administrative regulation tracks Federal requirements. Any alternative to this administrative regulation would be inconsistent with federal requirements.

(5) Identify any statute, administrative regulation or government policy which may be in conflict, overlapping, or duplication: No statute, regulation or policy conflicts, overlaps, or duplicates, with this administrative regulation.

(a) Necessity of proposed regulation if in conflict: No conflict exists.

(b) If in conflict, was effort made to harmonize the proposed administrative regulation with conflicting provisions: No conflict exists.

(6) Any additional information or comments: None

TIERING: Was tiering applied? Yes. This administrative regulation is tiered to consider the type of water system regulated and the type of chemical which may be found.

FISCAL NOTE ON LOCAL GOVERNMENT

1. Does this administrative regulation relate to any aspect of a local government, including any service provided by that local government? Yes

2. State what unit, part or division of local government this administrative regulation will affect. This administrative regulation relates to public water systems. Local governments frequently own or operate public water systems.

3. State the aspect or service of local government to which this administrative regulation relates. This administrative regulation relates

to the provision of potable drinking water.

4. Estimate the effect of this administrative regulation on the expenditures and revenues of a local government for the first full year the regulation is to be in effect. If specific dollar estimates cannot be determined, provide a brief narrative to explain the fiscal impact of the administrative regulation.

Revenues (+/-): None available.

Expenditures (+/-): None available.

Other Explanation: This administrative regulation requires public water systems to monitor for certain volatile organic chemicals. If a maximum contaminant level is exceeded the system shall install the best available technology to remove the contaminant. The costs of this administrative regulation will likely be passed through to the consumer of water. However, a local government which owns a public water system could elect to absorb these costs.

FEDERAL MANDATE ANALYSIS COMPARISON

1. Federal statute or regulation constituting the federal mandate. 40 CFR 141.24 and 40 CFR 141.61 as amended at 56 Federal Register 3583 January 30, 1991, 56 Federal Register 30277 July 1, 1991, and 57 Federal Register 31841 July 17, 1992 establish certain minimum requirements for implementation of the federal Safe Drinking Water Act (SDWA). The SDWA does not require states to apply for program delegation. It does authorize states to apply for program delegation. This eliminates the need for dual federal and state programs.

2. State compliance standards. This administrative regulation sets forth monitoring and testing requirements, maximum contaminant levels, and best available technology for certain volatile organic chemicals.

3. Minimum or uniform standards contained in the federal mandate. The federal regulations set forth monitoring and testing requirements, maximum contaminant levels and best available technology for certain volatile organic chemicals.

4. Will this administrative regulation impose stricter requirements, or additional or different responsibilities or requirements, than those required by the federal mandate? There is no federal mandate to implement the federal SDWA. The cabinet has implemented its state statutory authority in adopting this regulation.

5. Justification for the imposition of the stricter standard, or additional or different responsibilities or requirements. The standards are the same.

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

401 KAR 8:440. Special testing for unregulated inorganic and synthetic organic chemicals.

RELATES TO: KRS Chapter 224, 40 CFR Part 141 (1993)

STATUTORY AUTHORITY: KRS 224.10-100, 224.10-110, 40 CFR 141 (1993), [~~PL 93-523, The Safe Drinking Water Act, as amended in 1986, and by the Lead Contamination and Control Act of 1988,~~] 42 USCA 300f, 300g, 300j

NECESSITY AND FUNCTION: KRS 224.10-110 directs the cabinet to enforce the administrative [~~rules and~~] regulations adopted by the secretary for the regulation and control of the purification of water for public and semipublic use. The Safe Drinking Water Act, as amended by the Safe Drinking Water Act Amendments of 1986, provides for primary enforcement responsibility by states that have adopted regulations "no less stringent than the national primary drinking water regulations", as well as meeting other criteria stipulated by the Act. The Commonwealth of Kentucky has accepted and is currently exercising this [~~such~~] primary enforcement responsibility. This administrative regulation lists certain volatile synthetic organic chemicals which, while unregulated, nevertheless shall [~~must~~] be monitored by community and nontransient noncommunity public water systems.

Section 1. Applicability. All community and nontransient noncommunity water systems shall comply with this administrative regulation.

(1) Public water systems shall complete the monitoring required by this administrative regulation by December 31, 1995. [~~Systems serving over 10,000 persons. Systems serving over 10,000 people shall complete the initial monitoring required by this regulation by the effective date of this regulation. Systems serving 3,300 to 10,000 people shall complete the initial monitoring required by this regulation by the effective date of this regulation. Systems serving less than 3,300 people shall complete the initial monitoring required by this regulation by January 1, 1991.~~]

(2) Cabinet may monitor. The cabinet may elect to conduct this monitoring on behalf of a water system or all water systems, if all deadlines are met. However, [~~Responsibility for testing remains with~~] the public water system shall be responsible for monitoring.

Section 2. Sampling Sites. (1) Surface water source. Surface water systems shall sample at points in the distribution system representative of each water source or at entry points to the distribution system after any application of treatment. The minimum number of samples is one (1) year of quarterly samples per water source.

(2) Groundwater source. Groundwater systems shall sample at points of entry to the distribution system representative of each well after any application of treatment. The minimum number of samples is one (1) sample per entry point to the distribution system.

(3) Confirmation samples. The cabinet may require confirmation samples for positive or negative results.

Section 3. Applicability. (1) All community and nontransient noncommunity water systems shall monitor for the following contaminants:

(a) Chloroform
(b) Bromodichloromethane
(c) Chlorodibromomethane
(d) Bromoform
(e) Chlorobenzene [~~trans-1,2-Dichlorethylene~~]
(f) m-Dichlorobenzene [~~Chlorobenzene~~]
(g) 1,1-Dichloropropene [~~m-Dichlorobenzene~~]
(h) 1,1-Dichloroethane [~~Dichloromethane~~]
(i) 1,1,2,2-Tetrachloroethane [~~cis-1,2-Dichloroethylene~~]
(j) 1,3-Dichloropropane [~~o-Dichlorobenzene~~]
(k) Dibromomethane
(l) Chloromethane [~~1,1-Dichloropropene~~]
(m) Bromomethane [~~Tetrachloroethylene~~]
(n) 1,2,3-Trichloropropane [~~Toluene~~]
(o) 1,1,1,2-Tetrachloroethane [~~p-Xylene~~]
(p) Chloroethane [~~o-Xylene~~]
(q) 2,2-Dichloropropane [~~m-Xylene~~]
(r) o-Chlorotoluene [~~1,1-Dichloroethane~~]
(s) p-Chlorotoluene [~~1,2-Dichloropropane~~]
(t) Bromobenzene [~~1,1,2,2-Tetrachloroethane~~]
(u) 1,3-Dichloropropene [~~Ethylbenzene~~]
[~~(v) 1,3-Dichloropropane~~
~~(w) Styrene~~
~~(x) Chloromethane~~
~~(y) Bromomethane~~
~~(z) 1,2,3-Trichloropropane~~
~~(aa) 1,1,1,2-Tetrachloroethane~~
~~(bb) Chloroethane~~
~~(cc) 1,1,2-Trichloroethane~~

~~(dd) 2,2-Dichloropropane~~
~~(ee) o-Chlorotoluene~~
~~(ff) p-Chlorotoluene~~
~~(gg) Bromobenzene~~
~~(hh) 1,3-Dichloropropene~~]
(v) [~~(ii)~~] Ethylene dibromide (EDB)
(w) [~~(jj)~~] 1,2-Dibromo-3-Chloropropane (DBCP)

(2) Sampling for EDB and DBCP may be waived by the cabinet if the system demonstrates to the satisfaction of the cabinet that it is not vulnerable to these two chemicals.

(3) Monitoring for the following compounds may be required by the cabinet.

(a) 1,2,4-Trimethylbenzene
(b) 1,2,4-Trichlorobenzene
(c) 1,2,3-Trichlorobenzene
(d) n-Propylbenzene
(e) n-Butylbenzene
(f) Naphthalene
(g) Hexachlorobutadiene
(h) 1,3,5-Trimethylbenzene
(i) p-Isopropyltoluene
(j) Isopropylbenzene
(k) Tert-Butylbenzene
(l) Sec-Butylbenzene
(m) Fluorotrichloromethane
(n) Dichlorodifluoromethane
(o) Bromochloromethane

(4) Instead of performing the monitoring required by this section, a community water system or nontransient, noncommunity water system serving fewer than 150 service connections may send a letter stating that its system is available for sampling.

(5) The sampling required under this administrative regulation shall be repeated no less than every five years (5) from the initial sample. After January 1, 1993, sampling for the contaminants listed in this section shall be incorporated into the three (3) year compliance period used by the public water system for those contaminants regulated in 401 KAR 8:420.

Section 4. Analytical Methods. (1) Approved methods. Analyses for compliance with this administrative regulation shall be in accordance with 40 CFR 141.40(g) (1993) hereby adopted without change.

(2) Laboratory certification required. Analysis under this administrative regulation [~~section~~] shall only be conducted by laboratories certified by EPA or the cabinet in accordance with 401 KAR 8:040 and 40 CFR 141.24(g)(11) (1993) hereby adopted without change. [~~In addition to the other requirements, each laboratory analyzing for EDB and DBCP shall achieve a method detection limit for EDB and DBCP of 0.00002 mg/l, according to the procedures approved by the cabinet.~~]

(3) Compositing of samples for chemicals listed in Section 3 of [~~under~~] this administrative regulation may be performed for up to five (5) samples. [~~in accordance with regulated organic chemicals as set forth in 401 KAR 8:420, Section 6(2)(a).~~]

Section 5. Monitoring of the contaminants listed in subsections (11) and (12) of this section shall be conducted as follows:

(1) Each community and nontransient noncommunity water system shall take four (4) consecutive quarterly samples at each sampling point for each contaminant listed in subsection (11) of this section and shall submit the results to the cabinet. Monitoring shall be completed by December 31, 1995.

(2) Each community and nontransient noncommunity water system shall take one (1) sample at each sampling point for each contaminant listed in subsection (12) of this section and shall submit the results to the cabinet. Monitoring shall be completed by December 31, 1995.

(3) Each community and nontransient noncommunity water system may apply to the cabinet for a waiver from the requirements of subsections (1) and (2) of this section.

(4) The cabinet may grant a waiver from the requirements of subsection (1) of this section based on the criteria specified in 401 KAR 8:400, Section 3(6). The cabinet may grant a waiver from the requirements of subsection (2) of this section if previous analytical results indicate contamination would not occur, if the data were collected after January 1, 1990.

(5) Groundwater systems shall take a minimum of one (1) sample at every entry point to the distribution system which is representative of each well after treatment, hereafter called a sampling point. Each sample shall be taken at the same sampling point unless conditions make another sampling point more representative of each source or treatment plant.

(6) Surface water systems shall take a minimum of one (1) sample at points in the distribution system that are representative of each source or at each entry point to the distribution system after treatment (hereafter called a sampling point). Each sample shall be taken at the same sampling point unless conditions make another sampling point more representative of each source or treatment plant. For purposes of this subsection, surface water systems include systems with a combination of surface and ground sources.

(7) If the system draws water from more than one (1) source and the sources are combined before distribution the system shall sample at an entry point to the distribution system during periods of normal operating conditions (i.e. when water representative of all sources is being used).

(8) Confirmation samples for positive or negative results may be required.

(9) The total number of samples a system shall analyze may be reduced, with the approval of the cabinet, by the use of compositing. Composite samples from a maximum of five (5) sampling points are allowed. Compositing of samples shall be performed in the laboratory and the composite sample shall be analyzed within fourteen (14) days of collection. If the population served by the system is greater than 3,300 persons, compositing may only be permitted at sampling points within a single system. In systems serving less than or equal to 3,300 persons, the cabinet may permit compositing among different systems if the five (5) sample limit is maintained.

(10) Instead of performing the monitoring required by this section, a community water system or nontransient noncommunity water system serving fewer than 150 service connections may submit a letter to the cabinet stating that the system is available for sampling.

(11) Unregulated organic contaminants:
Aldrin
Butachlor
Carbaryl
Dicamba
Dieldrin
3-Hydroxycarbofuran
Methomyl
Metolachlor
Metribuzin
Propachlor

(12) Unregulated inorganic contaminants:
Sulfate

(13) Analysis for the contaminants listed in this section shall be conducted in accordance with 40 CFR 141.40(n)(11),(12) (1993) hereby adopted without change.

Section 6. [~~5.~~] Results. (1) Time limits. A copy of the results of monitoring under this administrative regulation shall be forwarded to the cabinet by the owner or operator of the community or nontransient noncommunity water system within thirty (30) days of receipt.

(2) Notification. The community or nontransient noncommunity water system shall notify the persons served by it that the monitoring required by this administrative regulation has been completed and

that the results are available for examination. The [~~Such~~] notice shall be within three (3) months of receipt of the results and may be served in either of the following methods:

(a) The system shall place the notice in a daily or weekly newspaper of general circulation in the area. If this option is chosen, the page of the newspaper containing the advertisement shall be forwarded to the cabinet within fourteen (14) days of publication.

(b) The system shall mail the notice either directly or in water bills to each customer. If this option is chosen the system shall forward a copy of the notice to the cabinet within fourteen (14) days of the mailing, with an affidavit signed by the owner or operator of the water system stating how and when the notice was delivered.

(3) Content of notices. Notices required by this administrative regulation shall contain the name and address of the water system, an explanation of the monitoring which took place, a place where the results of the monitoring may be reviewed, hours when the results may be reviewed, and the name and telephone number of a person whom the customer may contact for information regarding the results.

[~~Section 5. Severability. If any provision of this regulation is set aside by a court of competent jurisdiction, the remainder of this regulation remains in effect.~~]

E. DOUGLAS STEPHAN, Commissioner
PHILLIP J. SHEPHERD, Secretary
APPROVED BY AGENCY: April 14, 1994
FILED WITH LRC: April 15, 1994 at 11 a.m.

PUBLIC HEARING: A public hearing to receive comments on this proposed regulation has been scheduled for Wednesday, May 25, 1994 at 1:30 p.m. (ET), in the Auditorium of the State Office Building, Frankfort, Kentucky. Individuals interested in being heard at this hearing shall notify John T. Smither in writing at the address noted below by May 20, 1994, of their intent to attend the hearing and be heard. If no notification of intent to attend the hearing and be heard is received by that date, the hearing may be canceled. This hearing is open to the public. Any person wishing to be heard will be given an opportunity to comment on the proposed regulation. Persons testifying at the hearing are requested to provide the cabinet with a written copy of their testimony, if available. A transcript of the hearing may not be made unless a written request for a transcript is made at least five (5) days before the hearing. If you do not wish to be heard at the public hearing, you may submit written comments on the proposed regulation. Written comments must be received by John T. Smither at the address below no later than the close of business, (4:30 p.m. (ET)) May 25, 1994. The Natural Resources and Environmental Protection Cabinet does not discriminate on the basis of race, color, national origin, sex, religion, age, or disability. The meeting facility is accessible to people with disabilities. The cabinet will provide, upon request, reasonable accommodations including auxiliary aids and services necessary to afford individuals with a disability an equal opportunity to participate in all services, programs, and activities. If an interpreter or other auxiliary aid or service is needed, contact Mr. Smither at the address below before May 20, 1994 between 8 a.m. and 4:30 p.m. (ET).

CONTACT PERSON: John T. Smither, Manager, Drinking Water Branch, Division of Water, Department for Environmental Protection, 14 Reilly Road, Frankfort, Kentucky 40601, (502) 564-3410.

REGULATORY IMPACT ANALYSIS

Agency Contact: John T. Smither

(1) Type and number of entities affected: This regulation applies to 534 community and 166 nontransient noncommunity water systems. This number may vary from month to month.

(a) Direct and indirect costs or savings to those affected: This regulation requires public water systems to conduct monitoring for certain unregulated (i.e. no maximum contaminant level) chemicals. This monitoring consists of 4 quarterly samples. Monitoring for this regulation and the other Phase II and Phase V chemicals will cost approximately $12,000 per system according to EPA estimates.

1. First year: For most public water systems serving under 10,000 persons, the cabinet will conduct this monitoring at no cost to the system. An exception to this will be industrial, commercial, and federal facilities. Systems serving over 10,000 persons, industrial, commercial and federal facilities must pick up this cost.

2. Continuing costs or savings: The cabinet will absorb monitoring costs for systems serving less than 10,000 persons for one year. Any later tests will be paid for by the system. Industrial, commercial, and federal facilities as well as systems serving over 10,000 persons will pay for all costs.

3. Additional factors increasing or decreasing costs (note any effects upon competition): Public notification costs to explain the results of this monitoring will be the responsibility of the public water system. Public notification may be by newspaper or mail. Depending on the newspaper this could range from a few dollars to $100.00. Direct mail costs depend on the size of the system.

(b) Reporting and paperwork requirements: Public water systems shall notify the public when this monitoring is complete and explain when and where the results may be viewed.

(2) Effects on the promulgating administrative body: The Cabinet will conduct the monitoring required by this regulation for public water systems serving less than 10,000 persons.

(a) Direct and indirect costs or savings: Field personnel and laboratory personnel will be dedicated to this effort. Some oversight will be necessary to ensure public notifications take place as required.

1. First year: Field resources and laboratory resources absorbed by this effort will reduce the amount of time that these personnel may dedicate to other programs.

2. Continuing costs or savings: This monitoring will take place over a three year period.

3. Additional factors increasing or decreasing costs: No other factors will effect costs.

(b) Reporting and paperwork requirements: Cabinet personnel will be required to assure public notification of the availability of data takes place.

(3) Assessment of anticipated effect on state and local revenues: This regulation will have no effect on state or local revenue.

(4) Assessment of alternative methods; reasons why alternatives were rejected: This regulation tracks federal requirements. Alternative methods would be inconsistent with federal requirements.

(5) Identify any statute, administrative regulation or government policy which may be in conflict, overlapping, or duplication: No statute, regulation, or government policy conflicts, overlaps, or duplicates this regulation.

(a) Necessity of proposed regulation if in conflict: No conflict exists.

(b) If in conflict, was effort made to harmonize the proposed administrative regulation with conflicting provisions: No conflict exists.

(6) Any additional information or comments: None

TIERING: Was tiering applied? Yes. This regulation is tiered to take into consideration different types of public water systems.

FISCAL NOTE ON LOCAL GOVERNMENT

1. Does this administrative regulation relate to any aspect of a local government, including any service provided by that local government? Yes

2. State what unit, part or division of local government this administrative regulation will affect. This regulation relates to public water systems. Local governments frequently own or operate public water systems.

3. State the aspect or service of local government to which this administrative regulation relates. This regulation relates to the provision of potable drinking water.

4. Estimate the effect of this administrative regulation on the expenditures and revenues of a local government for the first full year the regulation is to be in effect. If specific dollar estimates cannot be determined, provide a brief narrative to explain the fiscal impact of the administrative regulation.

Revenues (+/-):

Expenditures (+/-):

Other Explanation: This regulation requires public water systems to monitor for certain organic and inorganic chemicals. Public water systems will generally pass the costs for this monitoring through to its customers. However, a local government which owns a public water system could elect to absorb these costs.

FEDERAL MANDATE ANALYSIS COMPARISON

1. Federal statute or regulation constituting the federal mandate. 40 CFR 141.40 as amended at 56 Federal Register 3592 January 30, 1991, and 57 Federal Register 31845 July 17, 1992 establish certain minimum requirements for implementation of the federal Safe Drinking Water Act (SDWA). The SDWA does not require states to apply for program delegation. It does authorize states to apply for program delegation. This eliminates the need for dual federal and state programs.

2. State compliance standards. This regulation provides for monitoring and testing requirements for certain organic and inorganic chemicals.

3. Minimum or uniform standards contained in the federal mandate. The federal regulation provides for monitoring and testing requirements for certain organic and inorganic chemicals.

4. Will this administrative regulation impose stricter requirements, or additional or different responsibilities or requirements, than those required by the federal mandate? There is no federal mandate to implement the federal SDWA. The cabinet has implemented its state statutory authority in adopting this regulation.

5. Justification for the imposition of the stricter standard, or additional or different responsibilities or requirements. The standard is the same.

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

401 KAR 8:500. Disinfection by-products.

RELATES TO: KRS Chapter 224, 40 CFR Part 141, 40 CFR 142.60

STATUTORY AUTHORITY: KRS 224.10-10, 224.10-110, ~~[PL 93-523, The Safe Drinking Water Act, as amended in 1986, and by the Lead Contamination and Control Act of 1988,]~~ 42 USCA 300f, 300g, 300j, 40 CFR 141.29, ~~[Section]~~ 141.30~~[(e)]~~

NECESSITY AND FUNCTION: KRS 224.10-110 directs the cabinet to enforce administrative ~~[rules and]~~ regulations adopted by the secretary for the regulation and control of the purification of water for public and semipublic use. The Safe Drinking Water Act, as amended by the Safe Drinking Water Act Amendments of 1986, provides for primary enforcement responsibility by states that have adopted regulations "no less stringent than the national primary drinking water regulations", as well as meeting other criteria stipulated by the Act. The Commonwealth of Kentucky has accepted and is currently exercising ~~[such]~~ primary enforcement responsibility. This administrative regulation sets forth the requirements for by-products of disinfectants used to purify drinking water. Such by-products may, when consumed over a long period of time, cause adverse health affects. This administrative regulation stipulates who shall ~~[must]~~ test for the ~~[such]~~ by-products and what actions are to be taken when they are found.

Section 1. Applicability. Each community public water system serving 10,000 or more persons that adds a disinfectant as part of its treatment process shall monitor for trihalomethanes. The cabinet may provide technical assistance in sampling and sample analysis for trihalomethanes. Consecutive community water systems, where there is a seller and one (1) or more purchasers of water and the combined population of the systems involved exceeds 10,000 or more persons, shall be required to sample for trihalomethanes, pursuant to this administratie regulation, as follows:

(1) Seller responsible. If ~~[When]~~ a buyer does not practice booster disinfection or alter the water ~~[in any way]~~, the seller shall be responsible for monitoring. Sampling shall be performed pursuant to this administrative regulation at a point in the buyer's distribution system which reflects the longest period of retention.

(2) Buyer responsible. If a buyer practices booster disinfection or alters the water ~~[in any way]~~, monitoring shall be the responsibility of the buyer and sampling shall be performed pursuant to this administrative regulation. The raw water sample shall be taken at the point of entry into the system of the buyer and ahead of the booster chlorination point.

(3) Public notification. A public water ~~[Any]~~ system determined by the cabinet to be the major contributor to violations of maximum contaminant levels for total trihalomethanes shall notify the public in accordance with 401 KAR 8:070.

(4) If the maximum contaminant level for total trihalomethanes, as set forth in Section 4 of this administrative regulation, is exceeded by any system in consecutive public water systems, each public water system contributing to the total trihalomethanes shall be deemed to be in violation of Section 4 of this administrative regulation and shall be responsible for costs of bringing the total trihalomethanes to within regulatory requirements throughout the consecutive public water systems. Each public water system may propose to the cabinet separately or jointly with other consecutive public water systems, how best to apply best available technology to comply with this administrative regulation. The cabinet shall negotiate with each affected public water system to establish a time frame for compliance with this subsection.

Section 2. Sampling Frequency. Public water systems serving more than 10,000 persons shall monitor quarterly for trihalomethanes.

Section 3. Sampling Locations. Samples shall be taken on the following basis:

(1) Raw water. One (1) untreated or raw water sample to determine interference factors.

(2) Normal usage points. Three (3) samples shall be taken from a free-flowing tap at points in the distribution system which reflect normal average daily usage or turnover.

(3) Maximum residence point. One (1) sample shall be taken from a free-flowing tap in the system which reflects the longest time period of retention within the distribution system, but shall not be taken on a dead-end.

(4) Time frame. Each ~~[All]~~ quarterly sample[s] shall be taken in the same week and at the same designated sample points during each quarter.

(5) Total samples. The minimum number of samples required for each system shall depend upon the number of treatment plants in the system. Each system shall collect four (4) samples from the distribution system per quarter for each treatment plant. One (1) raw water control sample shall be taken from each plant intake per quarter.

(6) Multiple plant operations. In multiple plant operations, sampling shall reflect the distribution from each plant.

Section 4. Maximum Trihalomethane Limits. The maximum

contaminant level for total trihalomethanes (TTHMs) is [~~one tenth~~ {]0.10[}] milligrams per liter (mg/l).

(1) How computed. The results of all analyses performed each quarter shall be averaged and reported in a format supplied or approved by the cabinet. All samples collected shall be used in computing the average, unless the analytical results are invalidated by the cabinet.

(2) Running average. Compliance shall [~~will~~] be determined by [~~on~~] a running annual average of the four (4) most recent quarterly samples.

Section 5. Reduction in Sampling Frequency. Upon receipt of a written request[~~, and at the discretion of the cabinet,~~] the requirement of a sampling frequency of four (4) samples-per -quarter per year for each treatment plant used by the system may be reduced by the cabinet to a minimum of one (1) sample for TTHMs per quarter. A [~~Such~~] reduction in frequency shall only be considered if, after one (1) full year of monitoring in accordance with the original schedule, it has been demonstrated that the water delivered to consumers is below the TTHM MCL of [~~one tenth {~~]0.10[}] mg/l. The minimum single sample for TTHM shall then be taken at a point in the distribution system that reflects maximum residence time. If a minimum single sample per quarter exceeds the MCL for TTHM, and is confirmed by at least one (1) check sample, the system shall comply with the four (4) samples-per-quarter sampling frequency for one (1) year before reduced frequency may again be requested. Significant changes in the water source or treatment program may be grounds for requiring four (4) samples per quarter.

Section 6. Increase in Sampling Frequency. If analytical results from quarterly sampling show a TTHM arithmetic sum above acceptable limits, the cabinet may place the system on a monthly monitoring schedule until acceptable levels are achieved for three (3) consecutive months.

Section 7. Sampling and Analytical Methods. (1) Approved methods. Sampling and analyses conducted pursuant to this administrative regulation [~~section~~] shall be conducted in accordance with 40 CFR 141.30(e) (1993) hereby adopted without change.

(2) Certified laboratories. The cabinet will only accept analytical data from laboratories which have participated in the U.S. Environmental Protection Agency performance evaluation program and which have been certified by the cabinet or the Environmental Protection Agency.

Section 8. Total Trihalomethane Levels Exceeded. If the average annual TTHM level is exceeded, the community water system shall notify the public pursuant to 401 KAR 8:070.

Section 9. Requirements for Making Significant Treatment Modifications. Before a system makes any significant modification in its existing treatment process in order to achieve compliance with this administrative regulation, the system shall obtain written cabinet approval of a detailed plan for the [~~such~~] modification. A [~~Any~~] plan to modify a disinfection practice shall require the system, at a minimum, to:

(1) Evaluate the water system for sanitary defects and evaluate the source water for bacteriological quality;

(2) Evaluate its existing treatment practices, consider improvements that minimize disinfectant demand and optimize finished water quality throughout the distribution system;

(3) Provide baseline data from water quality surveys of the distribution system. The [~~Such~~] data shall include the monitoring results for:

(a) Total coliform and fecal coliform bacteria;

(b) Fecal streptococci;

(c) Standard plate counts at thirty-five (35) degrees Celsius [~~centigrade~~] and twenty (20) degrees Celsius [~~centigrade~~];

(d) Phosphate;

(e) Ammonia nitrogen; and

(f) Total organic carbon;

(4) Provide additional similar monitoring to assure continued maintenance of optimal bacteriological quality in finished water after unit treatment or disinfection modifications;

(5) Demonstrate an active disinfectant residual throughout the distribution system [~~at all times~~] during and after the modification; and

(6) Provide additional monitoring for chlorate, chlorite, and chlorine dioxide, if [~~when~~] chlorine dioxide is used as a disinfectant.

Section 10. Self-monitoring Reporting Requirements. Each laboratory [~~All laboratories~~] performing monitoring and TTHM analyses for drinking water systems shall hold a valid certification pursuant to 401 KAR 8:040. Public water systems shall submit results to the cabinet, [~~on a form provided by the cabinet,~~] within ten (10) days following the end of the compliance period for which the analysis was completed.

Section 11. Variance Procedures for Total Trihalomethanes. (1) When considered. Applications for a variance from the maximum acceptable contaminant level (MCL) of [~~one tenth {~~]0.10[}] mg/l will be considered by the cabinet if [~~when~~] the public water system making application presents evidence that:

(a) The best treatment technology, treatment techniques or other means generally available for achieving compliance with the MCL are not available;

(b) The best treatment method is not technically appropriate or technically feasible for that system; and

(c) Only marginal reduction in TTHM levels would be realized if the treatment methods specified in subsection (2) of this section were utilized.

(2) Best technology. The following technology, treatment techniques or other generally available means for achieving compliance with the MCL for total trihalomethanes are considered the best available:

(a) The use of chloramines as an alternate or supplemental disinfectant or oxidant;

(b) The use of chlorine dioxide as an alternate or supplemental disinfectant or oxidant;

(c) Improved clarification for THM precursor reduction;

(d) Moving the point of chlorination to reduce TTHM formation and, if [~~where~~] necessary, substituting chloramines, chlorine dioxide or potassium permanganate for the use of chlorine as a preoxidant; and

(e) The use of powdered activated carbon for THM precursor or TTHM reduction seasonally or intermittently, at dosages not to exceed ten (10) mg/l on an annual average basis.

(3) When cabinet will grant variance. The cabinet, upon making a finding that information submitted by the applicant system supports a decision that best treatment technology or techniques are not available and effective, will consider a variance under the following conditions:

(a) Granting the variance will not result in an unreasonable risk to health; and

(b) The public water system proposes a compliance schedule, within one (1) year of the date the variance is granted, which examines the technological, economic and reduction feasibility of one (1) or more of the following treatment methods:

1. Introduction of off-line water storage for THM precursor reduction;

2. Aeration for TTHM reduction, where geographically and environmentally appropriate;

3. Introduction of clarification where not currently practiced;

4. Consideration of alternate sources of raw water; and

5. Use of ozone as an alternate or supplemental disinfectant or

oxidant.

(c) The public water system implements [~~such~~] quality control measures [~~as~~] the cabinet may require during the period ending on the date it complies with this administrative regulation.

(d) If the cabinet determines that a treatment method identified in 401 KAR 8:500, Section 11(3)(b) is technically feasible, economically reasonable, and will achieve TTHM reductions commensurate with the costs incurred with the installation and use of the [~~such~~] treatment method, the cabinet shall require the system to install and use that treatment method in connection with a compliance schedule. The cabinet's decision shall be based upon studies performed by the system and other information submitted to the cabinet by the system in accordance with 401 KAR 8:060.

(4) [~~In no event shall~~] The cabinet shall not require a system to install or use a treatment method not described in this section to obtain or maintain a variance from the TTHM regulation or in connection with any variance compliance schedule.

[~~Section 12. Severability. If any provision of this regulation is set aside by a court of competent jurisdiction, the remainder of this regulation remains in effect.~~]

E. DOUGLAS STEPHAN, Commissioner
PHILLIP J. SHEPHERD, Secretary
APPROVED BY AGENCY: April 14, 1994
FILED WITH LRC: April 15, 1994 at 11 a.m.

PUBLIC HEARING: A public hearing to receive comments on this proposed regulation has been scheduled for Wednesday, May 25, 1994 at 1:30 p.m. (ET), in the Auditorium of the State Office Building, Frankfort, Kentucky. Individuals interested in being heard at this hearing shall notify John T. Smither in writing at the address noted below by May 20, 1994, of their intent to attend the hearing and be heard. If no notification of intent to attend the hearing and be heard is received by that date, the hearing may be canceled. This hearing is open to the public. Any person wishing to be heard will be given an opportunity to comment on the proposed regulation. Persons testifying at the hearing are requested to provide the cabinet with a written copy of their testimony, if available. A transcript of the hearing may not be made unless a written request for a transcript is made at least five (5) days before the hearing. If you do not wish to be heard at the public hearing, you may submit written comments on the proposed regulation. Written comments must be received by John T. Smither at the address below no later than the close of business, (4:30 p.m. (ET)) May 25, 1994. The Natural Resources and Environmental Protection Cabinet does not discriminate on the basis of race, color, national origin, sex, religion, age, or disability. The meeting facility is accessible to people with disabilities. The cabinet will provide, upon request, reasonable accommodations including auxiliary aids and services necessary to afford individuals with a disability an equal opportunity to participate in all services, programs, and activities. If an interpreter or other auxiliary aid or service is needed, contact Mr. Smither at the address below before May 20, 1994 between 8 a.m. and 4:30 p.m. (ET).

CONTACT PERSON: John T. Smither, Manager, Drinking Water Branch, Division of Water, Department for Environmental Protection, 14 Reilly Road, Frankfort, Kentucky 40601, (502) 564-3410.

REGULATORY IMPACT ANALYSIS

Agency Contact: John T. Smither

(1) Type and number of entities affected: This regulation affects community public water systems serving populations larger than 10,000, and consecutive community public water systems where the combined population of the water system supplying the water and the water systems purchasing the water is greater than 10,000. Currently, this is about 258 public water systems, with 139 supplying water and 119 systems purchasing water.

(a) Direct and indirect costs or savings to those affected: Systems testing for trihalomethanes and not finding violations of the maximum contaminant levels will not be affected by this amendment. Consecutive systems with violations will be affected. At this time four public water systems are in violation of THM maximum contaminant levels, and are liable for remedial action under current regulations. The proposed amendment will make systems partially liable for remediation of violations in a purchasing system.

1. First year: Conversion of public water systems from chlorine to some other disinfection system can vary with the type of disinfection system converted to, as well as the size of the system involved. One system which recently converted to chloramines incurred an initial cost of about $125,000. Another system which converted to chlorine dioxide estimated an additional cost of $.30 (thirty cents) per household per month.

2. Continuing costs or savings: Additional costs will continue to be incurred by customers to pay for capitalization of the initial outlay as well as ongoing testing. Ten cents to thirty cents per household per month seems likely.

3. Additional factors increasing or decreasing costs (note any effects upon competition): No other factors will increase or decrease costs. Public water systems are monopolies so there is no effect on competition.

(b) Reporting and paperwork requirements: This amendment will not affect reporting or paperwork requirements.

(2) Effects on the promulgating administrative body: This amendment will have no effects on the promulgating administrative body.

(a) Direct and indirect costs or savings: There will be no direct or indirect costs or savings.

1. First year: No costs or savings.

2. Continuing costs or savings: None

3. Additional factors increasing or decreasing costs: None

(b) Reporting and paperwork requirements: This amendment will not increase or decrease reporting or paperwork requirements.

(3) Assessment of anticipated effect on state and local revenues: This amendment will have no effect on state revenues. Local revenues may be affected if the public water system is owned by local government.

(4) Assessment of alternative methods; reasons why alternatives were rejected: Trihalomethanes are best dealt with on a distribution system wide basis. The current regulation makes purchasing systems totally responsible for trihalomethane violations even though a significant portion of the problem is created by the seller. The proposed amendment seeks to rectify this inequity.

(5) Identify any statute, administrative regulation or government policy which may be in conflict, overlapping, or duplication: No statute, administrative regulation, or government policy conflicts, overlaps, or duplicates this regulation.

(a) Necessity of proposed regulation if in conflict: No conflict exists.

(b) If in conflict, was effort made to harmonize the proposed administrative regulation with conflicting provisions: No conflict exists.

(6) Any additional information or comments: This proposed amendment attempts to allow the Cabinet to deal with trihalomethane violations in an effective and equitable manner. It will allow costs for remediation to be spread over a larger group of customers therefore holding down costs per household. It will also hold all public water systems responsible for trihalomethane problems to which they contribute. Under the current regulation, purchasing systems which boost chlorination and realize trihalomethane violations are solely responsible for remediation even though they may contribute only a small portion of the problem. This amendment will help rectify this problem.

Tiering: Was tiering applied? Yes. This regulation is tiered, although the proposed amendment only applies to a specific group of community public water systems.

FISCAL NOTE ON LOCAL GOVERNMENT

1. Does this administrative regulation relate to any aspect of a local government, including any service provided by that local government? Yes

2. State what unit, part or division of local government this administrative regulation will affect. Some public water systems are owned by, or affiliated with local governments.

3. State the aspect or service of local government to which this administrative regulation relates. This regulation affects community public water systems serving over 10,000 people either individually or consecutively.

4. Estimate the effect of this administrative regulation on the expenditures and revenues of a local government for the first full year the regulation is to be in effect. If specific dollar estimates cannot be determined, provide a brief narrative to explain the fiscal impact of the administrative regulation.

Revenues (+/-): None

Expenditures (+/-): None

Other Explanation: Public water systems owned by local governments may incur some costs as a result of this regulation, however, in most cases any costs will be passed through to the consumer of the water.

FEDERAL MANDATE ANALYSIS COMPARISON

1. Federal statute or regulation constituting the federal mandate. 40 CFR 141.29 allows states to treat consecutive public water systems as a single system. Kentucky has elected to use this option for trihalomethane regulation. This is not a mandatory provision but is expressly allowed.

2. State compliance standards. The cabinet treats consecutive public water systems serving over 10,000 persons the same as a single system serving over 10,000 persons for trihalomethane regulations.

3. Minimum or uniform standards contained in the federal mandate. 40 CFR 141.29 allows states to treat interconnected systems as a single system.

4. Will this administrative regulation impose stricter requirements, or additional or different responsibilities or requirements, than those required by the federal mandate? Yes. 40 CFR 141.30 does not require trihalomethane testing in any system serving fewer than 10,000 persons although 40 CFR 141.29 allows this to be required in consecutive systems.

5. Justification for the imposition of the stricter standard, or additional or different responsibilities or requirements. The cabinet believes that the dynamics of consecutive distribution systems serving over 10,000 people are the same as a single distribution system serving over 10,000 persons for the purpose of trihalomethane formulation. Therefore, the cabinet believes that such systems should be tested for trihalomethanes.

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

401 KAR 8:600. Secondary standards.

RELATES TO: KRS Chapter 224, 40 CFR Part 143 (1993)

STATUTORY AUTHORITY: KRS 224.10-100, KRS 224.10-110, 40 CFR 143 (1993), ~~[PL 93-523, The Safe Drinking Water Act, as amended in 1986 and by the Lead Contamination and Control Act of 1988,]~~ 42 USCA 300f, 300g, 300j

NECESSITY AND FUNCTION: KRS 224.10-110 directs the cabinet to enforce the rules and regulations adopted by the secretary for the administrative regulation and control of the purification of water for public and semipublic use. The Safe Drinking Water Act, as amended by the Safe Drinking Water Act amendments of 1986, provides for primary enforcement responsibility by states that have adopted regulations "no less stringent than the national primary drinking water regulations", as well as meeting other criteria stipulated by the Act. The Commonwealth of Kentucky has accepted and is currently exercising ~~[such]~~ primary enforcement responsibility. This administrative regulation provides maximum contaminant levels, and requirements for the sampling and testing for contaminants which do not have a direct impact on the health of consumers, but may discourage the utilization of drinking water or discredit the supplies. Provisions for these contaminants are referred to as "secondary standards".

Section 1. Secondary Contaminants. (1) Applicability. All suppliers of water for public and semipublic drinking water systems shall sample for secondary contaminants at the direction of the cabinet.

(2) New sources of water. An analysis for these contaminants shall be performed when a new source of water supply is proposed to the cabinet for preliminary approval pursuant to 401 KAR 8:100. Excessive amounts of these contaminants or excessive costs of their removal may be grounds for rejection of the proposed source of water.

(3) Existing sources of water. Existing producers of water shall sample for, and make analysis for, the secondary contaminants listed in this section, at the frequency prescribed by the cabinet. Treatment shall be adequate to assure that the secondary contaminant level does not exceed the maximum level limits set forth in this administrative regulation.

(4) Sampling point. Samples may be taken from a free-flowing tap in the distribution system, except that hydrogen sulfide (H_2S) shall be measured at the entry point to the distribution system.

(5) Secondary contaminant maximum levels. The following lists the maximum allowable levels of secondary contaminants:

CONTAMINANT	LEVEL
Aluminum	0.05 TO 0.2 MG/L
Chloride	250 mg/l
Color	15 color units
Copper	1.0 mg/l
Corrosivity	Noncorrosive
Fluoride	2.0 mg/l
Foaming agents	0.5 mg/l
Iron	0.3 mg/l
Manganese	0.05 mg/l
Odor	3 threshold odor number
pH 6.5-8.5	
Silver	0.1 mg/l
Sulfate	250 mg/l
Total dissolved solids (TDS)	500 mg/l
Zinc	5 mg/l

~~[~~

~~Chemical Symbol~~	~~Name~~	~~Unit[6]~~	~~Maximum Level~~
~~Cl~~	~~Chloride~~	~~mg/l~~	~~250.0~~
	~~Color[1]~~	~~Platinum Cobalt~~	~~15.0~~
~~Cu~~	~~Copper~~	~~mg/l~~	~~1.0~~
	~~Corrosivity~~		~~Noncorrosive~~
	~~Fluoride~~	~~mg/l~~	~~2.0~~
~~H_2S~~	~~Hydrogen Sulfide~~	~~mg/l~~	~~0.05~~
~~Fe~~	~~Iron~~	~~mg/l~~	~~0.3~~

~~Mn~~	~~Manganese~~	~~mg/l~~	~~0.05~~
	~~Odor[1]~~	~~Threshold Number~~	~~3.0~~
	~~Phenols~~	~~mg/l~~	~~0.001~~
~~SO_4~~	~~Sulfate~~	~~mg/l~~	~~250.0~~
~~Zn~~	~~Zinc~~	~~mg/l~~	~~5.0~~
~~TDS~~	~~Total Dissolved Solids~~	~~mg/l~~	~~500.0~~

~~[1]Surface supplies only.~~

~~[2]Milligrams per liter (mg/l) is the same as parts per million (ppm).~~]

(6) Sample collection and measurement technique. Samples shall be taken and analyzed in accordance with 40 CFR 143.4, hereby adopted without change. [~~the methods set forth in Standard Methods.~~]

(7) Secondary contaminants maximum limits exceeded. If any of the secondary contaminant maximum allowable levels limit as set forth in this administrative regulation [~~herein~~], is [~~are~~] exceeded by a supplier of water, the cabinet may direct that supplier to modify the treatment procedure or to locate a more suitable source of water.

(8) Public water systems which exceed secondary maximum contaminant levels for fluoride, but do not exceed the primary maximum contaminant level as stipulated in 401 KAR 8:250, shall notify the public pursuant to 401 KAR 8:070, except the notice required for all billing units shall be annual, the notice to all new billing units shall be at the time service begins, and the state public health officer shall be notified.

[~~Section 2. Standard Methods for the Examination of Water and Wastewater, 16th Edition, 1985, prepared and jointly published by the American Public Health Association, the American Water Works Association, and the Water Pollution Control Federation is hereby incorporated by reference. This publication is printed, distributed and may be obtained by contacting the Publication Office, American Public Health Association, 1015 15th Street NW, Washington, D.C. 20005.~~

~~Section 3. Severability. If any provision of this regulation is set aside by a court of competent jurisdiction, the remainder of this regulation remains in effect.~~]

E. DOUGLAS STEPHAN, Commissioner
PHILLIP J. SHEPHERD, Secretary

APPROVED BY AGENCY: April 14, 1994

FILED WITH LRC: April 15, 1994 at 11 a.m.

PUBLIC HEARING: A public hearing to receive comments on this proposed regulation has been scheduled for Wednesday, May 25, 1994 at 1:30 p.m. (ET), in the Auditorium of the State Office Building, Frankfort, Kentucky. Individuals interested in being heard at this hearing shall notify John T. Smither in writing at the address noted below by May 20, 1994, of their intent to attend the hearing and be heard. If no notification of intent to attend the hearing and be heard is received by that date, the hearing may be canceled. This hearing is open to the public. Any person wishing to be heard will be given an opportunity to comment on the proposed regulation. Persons testifying at the hearing are requested to provide the cabinet with a written copy of their testimony, if available. A transcript of the hearing may not be made unless a written request for a transcript is made at least five (5) days before the hearing. If you do not wish to be heard at the public hearing, you may submit written comments on the proposed regulation. Written comments must be received by John T. Smither at the address below no later than the close of business, (4:30 p.m. (ET)) May 25, 1994. The Natural Resources and Environmental Protection Cabinet does not discriminate on the basis of race, color, national origin, sex, religion, age, or disability. The meeting facility is accessible to people with disabilities. The cabinet will provide, upon request, reasonable accommodations including auxiliary aids and services necessary to afford individuals with a disability an equal opportunity to participate in all services, programs, and activities. If an interpreter or other auxiliary aid or service is needed, contact Mr. Smither at the address below before May 20, 1994 between 8 a.m. and 4:30 p.m. (ET).

CONTACT PERSON: John T. Smither, Manager, Drinking Water Branch, Division of Water, Department for Environmental Protection, 14 Reilly Road, Frankfort, Kentucky 40601, (502) 564-3410.

REGULATORY IMPACT ANALYSIS

Agency Contact: John T. Smither

(1) Type and number of entities affected: This regulation applies to approximately 825 public and semipublic water systems. This number may change from month to month.

(a) Direct and indirect costs or savings to those affected: The amendment to this regulation will add to the list of secondary contaminants which must be monitored.

1. First year: New sources for public water systems will have to be analyzed for additional secondary contaminants. Other public water systems will be tested when necessary. These tests will represent a cost of less than $100.

2. Continuing costs or savings: Unless a problem comes up, additional monitoring will not occur more than annually.

3. Additional factors increasing or decreasing costs (note any effects upon competition): If a public water system exceeds an MCL for a secondary contaminant it must provide treatment to reduce the contaminant or find a different source of water.

(b) Reporting and paperwork requirements: Results of monitoring must be submitted to the Cabinet.

(2) Effects on the promulgating administrative body: The amendment to this regulation will have no substantial effect on the promulgating administrative body. Presently, the Cabinet is maintaining records and this regulation requires that it add a few more parameters to those records.

(a) Direct and indirect costs or savings: This amendment will bring no measurable cost or savings.

1. First year: No measurable effect.

2. Continuing costs or savings: No measurable effect.

3. Additional factors increasing or decreasing costs: No other factors will increase or decrease costs.

(b) Reporting and paperwork requirements: The amendment to this regulation will require a few more parameters on secondary contaminant reports.

(3) Assessment of anticipated effect on state and local revenues: This regulation will not affect state or local revenue.

(4) Assessment of alternative methods; reasons why alternatives were rejected: This regulation tracks federal requirements. Alternative methods would be inconsistent with federal requirements.

(5) Identify any statute, administrative regulation or government policy which may be in conflict, overlapping, or duplication: No statute, regulation, or government policy conflicts, overlaps, or duplicates this regulation.

(a) Necessity of proposed regulation if in conflict: No conflict exists.

(b) If in conflict, was effort made to harmonize the proposed administrative regulation with conflicting provisions: No conflict exists.

(6) Any additional information or comments: None

TIERING: Was tiering applied? Yes. Secondary contaminants, while not injurious to public health, can be very unpleasant for drinking water. Therefore, all new sources of water are screened. If contaminants are found they must either be treated or a different source of water found.

FISCAL NOTE ON LOCAL GOVERNMENT

1. Does this administrative regulation relate to any aspect of a local government, including any service provided by that local government? Yes

2. State what unit, part or division of local government this administrative regulation will affect. This regulation relates to public water systems. Local governments frequently own or operate public water systems.

3. State the aspect or service of local government to which this administrative regulation relates. This regulation relates to the provision of potable drinking water.

4. Estimate the effect of this administrative regulation on the expenditures and revenues of a local government for the first full year the regulation is to be in effect. If specific dollar estimates cannot be determined, provide a brief narrative to explain the fiscal impact of the administrative regulation.

Revenues (+/-):

Expenditures (+/-):

Other Explanation: This regulation requires monitoring for secondary contaminants. Public water systems will usually pass through the cost of this monitoring to the consumer of water. However, a local government which owns a public water system could elect to absorb some or all of these costs.

FEDERAL MANDATE ANALYSIS COMPARISON

1. Federal statute or regulation constituting the federal mandate. 40 CFR 143.3 as amended at 56 Federal Register 3597 establishes certain minimum requirements for implementation of the federal Safe Drinking Water Act (SDWA). The SDWA does not require states to apply for program delegation. It does authorize states to apply for program delegation. This eliminates the need for dual federal and state programs..

2. State compliance standards. This regulation sets out monitoring and testing requirements for certain secondary contaminants.

3. Minimum or uniform standards contained in the federal mandate. The federal regulation sets out monitoring and testing requirements for certain secondary contaminants.

4. Will this administrative regulation impose stricter requirements, or additional or different responsibilities or requirements, than those required by the federal mandate? There is no federal mandate to implement the federal SDWA. The cabinet has implemented its state statutory authority in adopting this regulation.

5. Justification for the imposition of the stricter standard, or additional or different responsibilities or requirements. The standards are the same.

DEPARTMENT OF CORRECTIONS
(Proposed Amendment)

501 KAR 6:020. Corrections policies and procedures.

RELATES TO: KRS Chapters 196, 197, 439

STATUTORY AUTHORITY: KRS 196.035, 197.020, 439.470, 439.590, 439.640

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

Section 1. Pursuant to the authority vested in the Department of Corrections the following policies and procedures, revised April 15, 1994 [~~February 15, 1994~~], are incorporated by reference and shall be referred to as Corrections Policies and Procedures. Copies of the procedures may be obtained from the Office of the General Counsel, Kentucky Department of Corrections, State Office Building, Frankfort, Kentucky 40601 or may be reviewed at the Office of General Counsel weekdays from 8 a.m. to 4:30 p.m.

1.1	Legal Assistance for Corrections Staff
1.2	News Media
01-04-01	The operation of Contracted Adult Correctional Facilities
1.6	Extraordinary Occurrence Reports
1.9	Institutional Duty Officer
1.11	Population Counts and Reporting Procedures
1.12	Operation of Motor Vehicles by Department of Corrections Employees
2.1	Inmate Canteen
2.2	Warden's Fund
2.10	Surplus Property
3.12	Institutional Staff Housing
4.2	Staff Training and Development
4.3	Firearms and Chemical Agents Training
6.1	Open Records Law
7.2	Asbestos Abatement
8.1	Occupational Exposure to Bloodborne Pathogens
8.4	Emergency Preparedness
9.1	Use of Force
9.4	Transportation of Inmates to Funerals or Bedside Visits
9.6	Contraband
9.7	Storage, Issue and Use of Weapons Including Chemical Agents
9.8	Search Policy
9.9	Transportation of Inmates
9.10	Security Inspections
9.11	Tool Control
9.18	Informants
9.19	Found Lost or Abandoned Property
10.2	Special Management Inmates
10.3	Safekeepers
10.4	Special Needs Inmates
11.2	Nutritional Adequacy of the Diet for Inmates
11.3	Special Diet Procedures
13.1	Pharmacy Policy and Formulary
13.2	Health Maintenance Services
13.3	Medical Alert System
13.4	Health Program Audits
13.5	Acquired Immune Deficiency Syndrome
13.6	Sex Offender Treatment Program
13.9	Dental Services
14.2	Personal Hygiene Items
14.3	Marriage of Inmates
14-04-01	Legal Services Program
14.6	Inmate Grievance Procedures
15.1	Hair and Grooming Standards
15.2	Offenses and Penalties
15.3	Meritorious Good Time
15-05-01	Restoration of Forfeited Good Time
15.6	Adjustment Procedures and Programs
15.7	Inmate Account Restriction
16.1	Inmate Visits
16.2	Inmate Correspondence
16.3	Telephone Calls
16.4	Inmate Packages
17-01-01	Inmate Personal Property
17.2	Assessment Center Operations
17.3	Controlled Intake of Inmates
18.1	Classification of the Inmate

18.5 Custody/Security Guidelines
18.6 Classification Document
18.7 Transfers
~~[18.8 Guidelines for Transfers Between Institutions (Deleted 4/15/94)]~~
18.9 Out-of-state Transfers
18-10-01 Preparole Progress Reports
18.11 Kentucky Correctional Psychiatric Center Transfer Procedures
18.12 Referral Procedure for Inmates Adjudicated Guilty But Mentally Ill
18.13 Population Categories
18.15 Protective Custody
19.1 Government Services Projects
19.2 Community Services Projects
19.3 Inmate Wage Program ~~[(Amended 2/15/94)]~~
20.1 Educational Programs and Educational Good Time
21.1 Staffing Pattern for the First Incarceration Shock Treatment Program (FIST)
21.2 Phase I: Program Selection Assessment Criteria
21.3 Program Schedule - Phase II and Phase III
21.4 Platoon Size and Composition
21.5 Physical Conditions Program Component
21.6 Group and Individual Counseling
21.7 Drug and Alcohol Abuse Counseling and Treatment
21.8 Work Programs Component
21.9 Education and Life Management
21.10 Auxiliary Services
21.11 Offenses and Penalties
22.1 Privilege Trips
25.1 Gratuities
25.2 Public Official Notification of Release of an Inmate
25.3 Prerelease Program
25.4 Inmate Furloughs
25.6 Community Center Program (Amended 4/15/94)
25.7 Expedient Release
25.8 Extended Furloughs
25.10 Administrative Release of Inmates (Amended 4/15/94)
27-01-01 Probation and Parole Procedures
27-02-01 Duties of Probation and Parole Officers
27-03-01 Workload Formula Supervisor/Staff Ratio
27-05-01 Testimony, Court Demeanor and Availability of Legal Services
27-06-01 Availability of Supervision Services
27-06-02 Equal Access to Services
27-07-01 Cooperation with Law Enforcement Agencies
27-08-01 Use of Force
27-09-01 Kentucky Community Resources Directory
27-10-01 Advanced Supervision
27-11-01 Intensive Supervision
27-12-01 Supervision: Case Classification
27-12-02 Risk/Needs Assessment
27-12-03 Initial Interview
27-12-04 Conditions of Regular Supervision/Request for Modification
27-12-05 Releasee's Report
27-12-06 Grievance Procedures for Offenders
27-12-07 Employment, Education/Vocational Referral
27-12-08 Supervision Plan
27-12-09 Casebook
27-12-10 Guidelines for Monitoring Supervision Fee
27-12-11 Guidelines for Monitoring Financial Obligations Ordered by the Releasing Authority
27-12-12 Other Financial Obligations (Not Ordered by Releasing Authority)
27-12-13 Community Service Work
27-12-14 Client Travel Restrictions
27-13-01 Drug and Alcohol Testing of Offenders
27-13-02 Alcohol Detection
27-14-01 Interstate Compact Transfers
27-14-02 Interstate Compact Out-of-state Probation and Parole Violation
27-15-01 Supervision Report; Violations, Unusual Incidents
27-16-01 Search; Seizure; Chain of Custody; Disposal of Evidence
27-17-01 Absconder Procedures
27-18-01 Probation and Parole Issuance of Detainer/Warrant
27-19-01 Preliminary Revocation Hearing
27-20-01 Division of Probation and Parole Controlled Intake Program
27-20-02 Prisoner Intake Notification
27-20-03 Prisoner Status Change
27-21-01 Apprehension and Transportation of Probation and Parole Violators
27-22-01 Fugitive Unit - Apprehensions
27-22-02 Fugitive Unit - Transportation of Fugitives
27-23-01 In-state Transfer
27-24-01 Closing Supervision Report
27-24-02 Reinstatement of Clients to Active Supervision
27-25-01 Application for Final Discharge from Parole
27-26-01 Assistance to Former Clients and Dischargees
27-27-01 Restoration of Civil Rights
27-28-01 Firearms/Explosives: Application for Relief from Disability
27-29-01 Parole Review Dates Modification
28-01-01 Probation and Parole Investigation Reports (Introduction, Definitions, Confidentiality, Timing, and General Comments)
28-01-02 Probation and Parole Investigation Reports (Administrative Responsibilities)
28-01-03 Probation and Parole Investigation Reports (Presentence/Postsentence Investigation Interview Procedure)
28-01-04 Probation and Parole Investigation Reports (Presentence/Postsentence Verification, Composition, Case Material and Submission Schedules)
28-01-05 Probation and Parole Investigation Reports (Computation of Jail Custody Credit)
28-01-06 Probation and Parole Investigation Reports (Misdemeanant Presentence Investigation Reports for the Circuit and District Courts)
28-01-07 Probation and Parole Investigation Reports (Supplemental Postsentence Investigation Report, Case Material, and Submission Schedule)
28-01-08 Probation Parole Investigation Reports (Partial Investigation Reports and Submission Schedule)
28-01-09 Release of Information of Factual Content on Presentence/Postsentence Investigation Reports
28-02-01 Expedient Release Program
28-03-01 Parole Plans/Halfway Houses/Extended Furlough/Sponsorship/Gradual Release
28-04-01 Furlough Verifications
28-05-01 Out-of-state Investigations.

JACK C. LEWIS, Commissioner
APPROVED BY AGENCY: April 13, 1994
FILED WITH LRC: April 13, 1994 at 4 p.m.
PUBLIC HEARING: A public hearing on this regulation has been scheduled for May, 26, 1994, at 9 a.m., in the Auditorium of the State Office Building. Those interested in attending this hearing shall notify in writing: Jack Damron, Kentucky Department of Corrections, Office of General Counsel, 2nd Floor, State Office Building, Frankfort, Kentucky 40601 or Louis Smith, Office of Adult Institutions, 5th Floor, State Office Building, Frankfort, Kentucky 40601.

REGULATORY IMPACT ANALYSIS

Agency Contact Person: Jack Damron

(1) Type and number of entities affected: 2,948 employees of the Department of Corrections, 8,729 inmates, 14,211 parolees and probationers, and all visitors to state correctional institutions.

(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 - All of the costs involved with the implementation of the regulations are included in the operational budget.

2. Continuing costs or savings: Same as 2(a)1.

3. Additional factors increasing or decreasing costs: Same as 2(a)1.

(b) Reporting and paperwork requirements: Monthly submission of policy revisions.

(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:

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

(6) Any additional information or comments: None

TIERING: Was tiering applied? No. All policies are administered in a uniform manner and because the regulation applies equally to all employees, inmates, parolees and visitors. Disparate treatment of any of these classes may produce complaints by that class and could raise questions of arbitrary action on the part of the agency. The "equal protection" and "due process" clauses of the 14th Amendment of the U.S. Constitution may be violated as well as Sections 2 and 3 of the Kentucky Constitution which prohibit unequal or arbitrary treatment of persons.

DEPARTMENT OF CORRECTIONS
(Proposed Amendment)

501 KAR 6:030. Kentucky State Reformatory.

RELATES TO: KRS Chapters 196, 197, 439

STATUTORY AUTHORITY: KRS 196.035, 197.020, 439.470, 439.590, 439.640

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

Section 1. Pursuant to the authority vested in the Department of Corrections the following policies and procedures, revised April 15 [~~March 15~~], 1994, are incorporated by reference and shall be referred to as Kentucky State Reformatory Policies and Procedures. Copies of the procedures may be obtained from the Office of the General Counsel, Department of Corrections, State Office Building, Frankfort, Kentucky 40601 or may be reviewed at the Office of General Counsel weekdays from 8 a.m. to 4:30 p.m.

KSR 01-00-09	Public Information and News Media Relations
KSR 01-00-10	Entry Authorization for All Cameras and Tape Recorders Brought into the Institution
KSR 01-00-15	Cooperation and Coordination with Oldham County Court
KSR 01-00-19	Personal Service Contract Personnel
KSR 01-00-20	Consent Decree Notification to Inmates
KSR 02-00-01	Inmate Canteen
KSR 02-00-03	Screening Disbursements from Inmate Personal Accounts
KSR 02-00-11	Inmate Personal Accounts
KSR 02-00-12	Institutional Funds and Issuance of Checks
KSR 04-00-02	Staff Training and Development
KSR 05-00-01	Officers' Daily Housing Security and Safety Log
KSR 05-00-02	Research Activities
KSR 05-00-03	Management Information Systems
KSR 06-00-01	Inmate Master File
KSR 06-00-02	Records Audit
KSR 06-00-03	Kentucky Open Records Law and Release of Psychological/ Psychiatric Information
KSR 07-00-02	Institutional Tower Room Regulations
KSR 07-00-04	Handling of PCB Articles and Containers
KSR 07-00-05	Proper Removal of Transformers
KSR 07-00-06	Asbestos Abatement
KSR 07-00-07	Discharge Monitoring Report (DMR)
KSR 07-00-08	Control of Hazardous Energy (Lockout or Tagout)
KSR 07-00-09	Inventory Control of Underground Storage Tanks
KSR 08-00-07	Inmate Family Emergency - Life Threatening Illness or Death in Inmate's Immediate Family
KSR 08-00-08	Death of an Inmate/Notification of Inmate Family in Case of Serious Injury, Critical Medical Emergency, Major Surgery or Death
KSR 08-00-10	Hazardous Chemicals and Material Safety Data Sheet
KSR 09-00-04	Horizontal Gates/Box 1 Entry and Exit Procedure
KSR 09-00-05	Gate I Entrance and Exit Procedure Limited Issue
KSR 09-00-09	Contraband, Dangerous Contraband and Search Policy
KSR 09-00-21	Crime Scene Camera
KSR 09-00-22	Collection, Preservation, and Identification of Physical Evidence
KSR 09-00-23	Drug Abuse Testing
KSR 09-00-25	Inmate Motor Vehicle Operator's License
KSR 09-00-26	Contraband Outside Institutional Perimeter
KSR 09-00-27	Construction Crew Entry/Exit
KSR 09-00-28	Restricted Areas
KSR 09-00-29	Transportation of Inmates
KSR 09-00-30	Parole Board
KSR 09-00-31	Forced Cell Move in Medium or Maximum Area
KSR 10-00-10	Unit D - and Unit E - Special Management Inmate Legal Access
KSR 10-00-11	Unit D - Behavior Problem Control
KSR 10-00-13	Unit D - Property Room Access
KSR 10-01-01	Unit D - Staffing Pattern, Staff Allocation, Position Description, Staff Selection, Training and Evaluation, Time and Attendance, and Unit Personnel Records
KSR 10-01-02	Unit D - General Operational Procedures
KSR 10-01-03	Unit D - Inmate Tracking System and Records System
KSR 10-01-04	Unit D - Administrative Segregation
KSR 10-01-05	Unit D - Disciplinary Segregation
KSR 10-01-06	Unit D - Protective Custody
KSR 10-01-07	Unit D - Geriatrics
KSR 10-01-08	Unit D - Safekeepers and Pretrial Contract Hold Status Inmates
KSR 10-01-09	Unit D - Hold Ticket Residents

KSR 10-02-01	Department of Corrections Division of Mental Health's Intensive Services Transitional Program: Staffing Pattern, Staff Allocation, Position Description, Staff Selection, Training, Time and Attendance (Amended 4/15/94) [~~Mental Health Staffing Pattern~~]
KSR 10-02-02	Unit E Designated Staff Visits
KSR 10-02-03	Unit E-1 Convalescent Care
KRS 10-02-04	Department of Corrections Division of Mental Health's Intensive Services Transitional Program: General Operating Procedures (Amended 4/15/94) [~~Unit E General Operating Procedures~~]
KSR 11-00-01	Meal Planning for the General Population
KSR 11-00-02	Special Diets
KSR 11-00-03	Food Service Inspections
KSR 11-00-04	Dining Room Rules and Dress Code for Inmates
KSR 11-00-06	Health Standards/Regulations for Food Service Employees
KSR 11-00-07	Early Chow Line Passes for Medically Designated Inmates
KSR 12-00-01	Inmate Summer Dress Regulations
KSR 12-00-03	State Items Issued to Inmates
KSR 12-00-07	Regulations for Inmate Barbershop
KSR 12-00-09	Treatment of Inmates with Body Lice
KSR 13-00-02	Hospital Operations, Rules and Regulations
KSR 13-00-03	Medication for Inmates Leaving Institution Grounds
KSR 13-00-04	Medical and Dental Care
KSR 13-00-05	Medical Records
KSR 13-00-08	Institutional Laboratory Procedures
KSR 13-00-09	Institutional Pharmacy Procedures
KSR 13-00-10	Requirements for Medical Personnel
KSR 13-00-11	Health Evaluation
KSR 13-00-12	Vision Care/Optometry Services
KSR 13-00-14	Periodic Health Examinations for Inmates
KSR 13-00-15	Medical Alert System
KSR 13-00-16	Suicide Prevention and Intervention Program
KSR 13-00-17	Special Care
KSR 13-02-01	Mental Health Services
KSR 13-02-02	Mentally Retarded Inmates
KSR 13-02-03	Suicide Prevention and Intervention Program
KSR 13-02-04	Department of Corrections Division of Mental Health's Intensive Services Transitional Program: Program Description (Amended 4/15/94) [~~Division of Mental Health's Residential Services~~]
KSR 13-02-05	Access to Intensive Services Programs Operated at Kentucky State Reformatory by the Division of Mental Health (Added 4/15/94)
KSR 14-00-01	Inmate Rights
KSR 14-00-04	Inmate Grievance Procedure
KSR 15-00-02	Regulations Prohibiting Inmate Control or Authority Over Other Inmate(s)
KSR 15-00-05	Differential Status for SU (QUIT) Inmates
KSR 15-00-06	Inmate I.D. Cards
KSR 15-00-07	Inmate Rules and Discipline - Adjustment Committee Procedures
KSR 15-00-08	Firehouse Living Area
KSR 15-00-09	Smoking and No Smoking Areas for Inmates and Staff
KSR 15-00-10	Program Services for Special Housing Placement
KSR 15-01-01	Operational Procedures and Rules and Regulations for Unit A, B & C: Functions of Assigned Personnel
KSR 15-01-02	Operational Procedures and Rules and Regulations for Unit A, B, & C: Staff Operational Procedures
KSR 15-01-03	Operational Procedures and Rules and Regulations for Unit A, B & C: Inmate Rules and Regulations
KSR 15-01-04	Institutional Medical and Fire Safety Service: Unit Application
KSR 15-01-05	Operational Procedures Rules and Regulations for Unit A, B, & C: Institutional Inmate Services
KSR 15-01-06	Operational Procedures and Rules and Regulations for Unit A, B & C: Inmate Honor Housing Criteria and Regulations
KSR 16-00-02	Inmate Correspondence and Mailroom Operations
KSR 16-00-03	Inmate Access to Telephones
KSR 16-01-01	Visiting Regulations
KSR 16-01-02	Lawn Visit Procedure and Regulations
KSR 16-01-03	Night Visit Regulations
KSR 17-00-05	Dormitory 10 Operations
KSR 17-00-06	Identification Department Admission and Discharge Procedures
KSR 17-00-07	Inmate Personal Property
KSR 17-00-08	Repair of Inmate Owned Appliances by Outside Dealers
KSR 18-00-04	Returns from Other Institutions
KSR 18-00-05	Transfer of Residents to Kentucky Correctional Psychiatric Center, and Referral Procedure for Residents Adjudicated Guilty but Mentally Ill
KSR 18-00-06	Classification and Special Notice Form
KSR 18-00-07	Kentucky State Reformatory Placement Committee
KSR 19-00-01	Inmate Work Incentives
KSR 19-00-02	On-the-job Training Program
KSR 19-00-03	Safety Inspections of Inmate Work Assignment Locations
KSR 19-00-05	Food Service On-The-Job Training and Workers Rules
KSR 20-00-01	Technical and Adult Basic Level Learning Center Programs
KSR 20-00-04	Criteria for Participation in A College Program
KSR 20-00-06	English as a Second Language [~~(Added 3/15/94)~~]
KSR 21-00-01	Legal Aide Office and Inmate Law Library Services and Supervision
KSR 21-00-02	Inmate Library Services
KSR 21-00-03	Library Services for Unit D
KSR 22-00-03	Inmate Organizations
KSR 22-00-07	Inmate Magazine
KSR 22-00-08	Privilege Trips
KSR 23-00-02	Chaplain's Responsibility and Inmate Access to Religious Representatives
KSR 23-00-03	Religious Programming
KSR 25-00-01	Discharge of Inmates to Hospital or Nursing Home
KSR 25-00-02	Violations of Law or Code of Conduct by Inmates on Parole Furlough
KSR 25-00-03	Preparole Progress Report

JACK C. LEWIS, Commissioner

APPROVED BY AGENCY: April 13, 1994

FILED WITH LRC: April 13, 1994 at 4 p.m.

PUBLIC HEARING: A public hearing on this regulation has been scheduled for May 26, 1994 at 9 a.m., in the State Office Building Auditorium. Those interested in attending this hearing shall notify in writing: Jack Damron and William Seabold, Department of Corrections, 2nd Floor, State Office Building, Frankfort, Kentucky 40601.

REGULATORY IMPACT ANALYSIS

Agency Contact Person: Jack Damron

(1) Type and number of entities affected: 534 employees of the Kentucky State Reformatory, 1279 inmates, and all visitors to state correctional institutions.

(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 - All of the costs involved with the implementation of the regulations are included in the operational budget.

2. Continuing costs or savings: Same as 2(a)1.

3. Additional factors increasing or decreasing costs: Same as 2(a)1.

(b) Reporting and paperwork requirements: Monthly submission of policy revisions.

(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:

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

(6) Any additional information or comments: None

TIERING: Was tiering applied? No. Tiering was not appropriate in this administrative regulation because the administrative regulation applies equally to all those individuals or entities regulated by it. Disparate treatment of any person or entity subject to this administrative regulation could raise questions of arbitrary action on the part of the agency. The "equal protection" and "due process" clauses of the 14th Amendment of the U.S. Constitution may be implicated as well as Sections 2 and 3 of the Kentucky Constitution.

DEPARTMENT OF CORRECTIONS
(Proposed Amendment)

501 KAR 6:050. Luther Luckett Correctional Complex.

RELATES TO: KRS Chapters 196, 197, 439

STATUTORY AUTHORITY: KRS 196.035, 197.020, 439.470, 439.590, 439.640

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

Section 1. Pursuant to the authority vested in the Department of Corrections the following policies and procedures, revised April 15 [~~January 14~~], 1994 are incorporated by reference and shall be referred to as Luther Luckett Correctional Complex Policies and Procedures. Copies of the procedures may be obtained from the Office of the General Counsel, Department of Corrections, State Office Building, Frankfort, Kentucky 40601 or may be reviewed at the Office of General Counsel weekdays from 8 a.m. to 4:30 p.m.

LLCC 01-12-01 Duty Officer Responsibilities (Amended 4/15/94)
LLCC 01-13-01 Smoking: LLCC Facility [~~(Added 1/14/94)~~]
LLCC 02-01-02 Fiscal Management: Accounting Procedures
LLCC 02-01-03 Fiscal Management: Agency Funds
LLCC 02-01-04 Fiscal Management: Insurance
LLCC 02-03-01 Fiscal Management: Audits
LLCC 08-01-01 Offender Records (Amended 4/15/94)
LLCC 08-04-01 Storage of Expunged Records
LLCC 08-05-01 Psychological and Psychiatric Reports
LLCC 11-09-01 Rules and Regulations of the Unit
LLCC 11-13-01 Inmate Dress and Use of Access Areas
LLCC 11-18-02 Use of Monitor Telephone
LLCC 11-19-01 Unit Shakedowns/Control of Excess Property
LLCC 11-20-01 Program Services for "Special Needs"/Mentally Ill Inmates [~~(Amended 1/14/94)~~]
LLCC 12-01-01 Special Management Inmates
LLCC 12-01-02 Pretrial Contract Hold Status
LLCC 13-01-01 Dining Room Guidelines
LLCC 13-04-01 Food Service: Meals
LLCC 13-04-02 Food Service: Menu, Nutrition and Special Diets
LLCC 13-05-02 Medical Screening of Food Handlers
LLCC 13-06-01 Food Service: Inspections and Sanitation
LLCC 13-07-01 Food Service: Purchasing, Storage and Farm Products
LLCC 13-08-01 OJT Food Service Training Placement
LLCC 14-01-01 Sanitation, Living Condition Standards, and Clothing Issue
LLCC 14-05-01 Institutional Inspections
LLCC 15-01-01 Health Maintenance Services; Sick Call and Pill Call
LLCC 15-03-01 Pharmacy
LLCC 15-03-02 Pharmacy Personnel
LLCC 15-03-03 Distribution, Procurement and Control
LLCC 15-03-04 Inmate - Self Administration of Medication (Amended 4/15/94)
LLCC 15-03-05 Use of Psychotropic Medications
LLCC 15-05-02 Licensure and Training Standards
LLCC 15-06-02 Specialized Health Services
LLCC 15-06-03 Emergency Medical/Dental Care Services
LLCC 15-06-04 First Aid/CPR Training Program
LLCC 15-06-05 Suicide Prevention and Intervention Program
LLCC 15-07-01 Health Records
LLCC 15-08-01 Special Diets
LLCC 15-14-01 Informed Consent
LLCC 15-15-01 Medical Restraints
LLCC 15-16-01 Health Education/Special Health Programs
LLCC 15-17-01 Serious and Infectious Diseases (Amended 4/15/94)
LLCC 16-01-01 Inmate Rights and Responsibilities
LLCC 16-03-01 Inmate Legal Services (Amended 4/15/94)
LLCC 18-01-01 Inmate Correspondence
LLCC 18-02-01 Inmate Visiting [~~(Amended 1/14/94)~~]
LLCC 18-02-03 Extended Visit and Furloughs [~~(Amended 1/14/94)~~]
LLCC 18-02-04 Meritorious Visits [~~(Amended 1/14/94)~~]
LLCC 18-03-01 Entry and Identification of Visitors for Inmate Visitation [~~(Amended 1/14/94)~~]
LLCC 18-03-03 Inmate Visiting Disciplinary Segregation Administrative Segregation
LLCC 18-03-04 Parole Hearings
LLCC 20-01-01 Personal Property Control [~~(Amended 1/14/94)~~]
LLCC 20-04-01 Inmate Canteen Committee
LLCC 20-04-02 Inmate Canteen
LLCC 20-04-03 Canteen Purchase Limits
LLCC 20-05-01 Inmate Control of Personal Funds
LLCC 20-05-02 Storage and Disposition of Monies Received on Weekends, Holidays, and Between 4 p.m. and 8 a.m. Weekdays
LLCC 20-05-03 Theft of Inmate Personal Property [~~(Amended 1/14/94)~~]
LLCC 20-06-01 Procedure for Sending Appliances to Outside Dealers for Repair [~~(Amended 1/14/94)~~]
LLCC 21-02-01 Classification/Security Levels [~~(Amended 1/14/94)~~]
LLCC 21-03-01 Classification Process
[~~LLCC 22-01-01 OJT/Job Assignments (Deleted 4/15/94)~~]
LLCC 23-01-01 Academic School
LLCC 26-01-01 Religious Services (Amended 4/15/94)
LLCC 26-01-02 Prayer
LLCC 28-03-01 Temporary Release/Community Center Release
LLCC 28-04-01 Preparole Progress Report

LLCC 28-04-02 Parole Eligibility Dates

JACK C. LEWIS, Commissioner
APPROVED BY AGENCY: April 13, 1994
FILED WITH LRC: April 13, 1994 at 4 p.m.
PUBLIC HEARING: A public hearing on this regulation has been scheduled for May 26, 1994, at 9 a.m., in the Auditorium of the State Office Building. Those interested in attending this hearing shall notify in writing: Jack Damron and William Seabold, Department of Corrections, 5th Floor, State Office Building, Frankfort, Kentucky 40601.

REGULATORY IMPACT ANALYSIS

Agency Contact Person: Jack Damron
(1) Type and number of entities affected: 288 employees of the Luther Luckett Correctional Complex, 1044 inmates, and all visitors to state correctional institutions.
(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 - All of the costs involved with the implementation of the regulations are included in the operational budget.
2. Continuing costs or savings: Same as 2(a)1.
3. Additional factors increasing or decreasing costs: Same as 2(a)1.
(b) Reporting and paperwork requirements: Monthly submission of policy revisions.
(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:
(b) If in conflict, was effort made to harmonize the proposed administrative regulation with conflicting provisions:
(6) Any additional information or comments: None
TIERING: Was tiering applied? No. Tiering was not appropriate in this administrative regulation because the administrative regulation applies equally to all those individuals or entities regulated by it. Disparate treatment of any person or entity subject to this administrative regulation could raise questions of arbitrary action on the part of the agency. The "equal protection" and "due process" clauses of the 14th Amendment of the U.S. Constitution may be implicated as well as Sections 2 and 3 of the Kentucky Constitution.

DEPARTMENT OF CORRECTIONS
(Proposed Amendment)

501 KAR 6:060. Northpoint Training Center.

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

Section 1. Pursuant to the authority vested in the Department of Corrections the following policies and procedures, revised April 15 [~~February 15~~], 1994, are incorporated by reference and shall be referred to as Northpoint Training Center Policies and Procedures. Copies of the procedures may be obtained from the Office of the General Counsel, Department of Corrections, State Office Building, Frankfort, Kentucky 40601 or may be reviewed at the Office of General Counsel weekdays from 8 a.m. to 4:30 p.m.

NTC 01-05-01 Extraordinary Occurrence Reports
NTC 01-10-01 Legal Assistance for Staff
NTC 01-11-01 Political Activities of Merit Employees
NTC 01-15-01 Establishment of the Warden as Chief Executive Officer
NTC 01-17-01 Relationships with Public, Media and Other Agencies
NTC 02-02-02 Warden's Participation in the Agency Budgeting Process [~~(Amended 2/15/94)~~]
NTC 02-03-01 Fiscal Management: Audits
NTC 02-04-01 Internal Control and Monitoring of Accounting Procedures [~~(Amended 2/15/94)~~]
NTC 02-07-02 Chapel Fund [~~(Amended 2/15/94)~~]
NTC 02-08-01 Inmate Canteen [~~(Amended 2/15/94)~~]
NTC 02-10-01 Insurance Coverage [~~(Amended 2/15/94)~~]
NTC 02-12-01 Inmate Accounts [~~(Amended 2/15/94)~~]
NTC 04-01-01 Training and Staff Development
NTC 04-04-01 Firearms and Chemical Agents Training
NTC 06-01-01 Offender Records
NTC 06-01-02 Records - Release of Information
NTC 06-01-03 Taking Offender Record Folders onto the Yard
NTC 08-05-01 The Fire and Safety Officer
NTC 08-05-02 Fire Procedures
NTC 08-05-03 Fire Prevention
NTC 08-05-04 Storage of Flammables and Dangerous Chemicals and Their Use
NTC 08-07-01 Safety Standards
NTC 10-01-01 Special Management Unit
NTC 10-02-01 Protective Custody Unit
NTC 10-03-01 Protective Custody [~~(Amended 2/15/94)~~]
NTC 11-03-01 Food Services: General Guidelines
NTC 11-04-01 Food Service: Meals
NTC 11-04-02 Menu, Nutrition and Special Diets
NTC 11-05-02 Health Standards and Regulations for Food Service Employees
NTC 11-06-01 Inspection and Sanitation
NTC 11-07-01 Purchasing and Storage of Food Products
NTC 12-01-01 Institutional Inspection
NTC 12-02-01 Personal Hygiene for Inmates; Clothing and Linens
NTC 12-02-02 Issuance of Personal Hygiene Products
NTC 13-01-01 Emergency Medical Care Plan
NTC 13-01-02 Emergency and Specialized Health Services
NTC 13-02-01 Administration and Authority for Health Services
NTC 13-03-01 Sick Call and Pill Call
NTC 13-04-01 Utilization of Pharmaceutical Products
NTC 13-05-01 Dental Services
NTC 13-05-03 Dental Radiation Levels
NTC 13-05-04 Attest Steam Incubator
NTC 13-06-01 Licensure and Training Standards
NTC 13-07-01 Provisions for Health Care Delivery
NTC 13-08-01 Medical and Dental Records
NTC 13-09-01 Special Diets
NTC 13-11-01 Inmate Health Screening and Evaluation
NTC 13-12-01 Special Health Care Programs
NTC 13-17-01 Inmates Assigned to Health Services
NTC 13-19-01 Mental Health Care Program (Amended 4/15/94)

NTC 13-19-03	Suicide Prevention and Intervention Program
NTC 13-20-01	Infectious Disease
NTC 13-20-02	Infection Control
NTC 13-20-03	Disposal of Biohazard Waste
NTC 13-21-01	Vision Care and Optometry Services
NTC 13-22-01	Informed Consent
NTC 13-23-01	Special Needs Inmates
NTC 14-01-01	Legal Services Program
NTC 14-01-02	Receiving, Viewing, Handling and Storage of Video Tapes (Amended 4/15/94)
NTC 14-02-01	Inmate Grievance Procedure
NTC 14-03-01	Inmate Rights and Responsibilities
NTC 14-03-02	Board of Claims
NTC 15-01-01	Restoration of Forfeited Good Time
NTC 15-02-01	Due Process/Disciplinary Procedures
NTC 15-02-02	Extra Duty Assignments
NTC 15-02-03	Hearing Officer
NTC 15-03-01	Rules for Inmates Assigned to Outside Detail
NTC 15-03-02	Rules and Regulations for General Population Dormitories
NTC 15-04-01	Inmate Identification
NTC 16-01-01	Mail Regulations
NTC 16-02-01	Visiting
NTC 16-02-02	Extended and Special Visits
NTC 16-02-03	Honor Dorm and Outside Detail Dorm Visiting [(Amended 2/15/94)]
NTC 16-02-04	Controlled Visitation [(Amended 2/15/94)]
NTC 16-03-01	Inmate Furloughs
NTC 16-05-01	Telephone Use and Control
NTC 17-01-01	Personal Property Control
NTC 17-01-02	Authorized Inmate Personal Property
NTC 17-01-03	Unauthorized Inmate Property
NTC 17-01-04	Disposition of Unauthorized Property
NTC 17-01-05	State Issue and Required Inmate Clothing
NTC 17-03-01	Assessment/Orientation
NTC 18-01-01	Preparole Progress Report
NTC 18-02-01	Classification
NTC 18-02-02	Classification - 48 Hour Notification
NTC 18-03-01	Special Notice Form
NTC 18-05-01	Transfers of Inmates
NTC 18-05-02	Transfer of Inmates to Kentucky Correctional Psychiatric Center
NTC 19-01-01	Inmate Work Program
NTC 19-01-03	Temporary Leave from Job Assignment
NTC 19-02-01	Correctional Industries
NTC 19-02-02	Guidelines for Correctional Industries
NTC 20-01-01	Educational Programs
NTC 20-02-02	Live Work Projects in Vocational School Classes
NTC 21-01-01	Library Services
NTC 22-03-01	Conducting Inmate Organizational Meetings and Programs
NTC 23-01-01	Religious Services
NTC 23-03-01	Marriage of Inmates
NTC 24-04-01	Honor Status (Amended 4/15/94)
NTC 24-05-01	Unit Management
NTC 25-01-01	Release Preparation Program
NTC 25-01-02	Temporary Release/Community Center Release
NTC 25-01-03	Graduated Release
NTC 25-02-01	Funeral Trips and Bedside Visits
NTC 25-03-01	Inmate Release Procedure
NTC 26-01-01	Citizen Involvement and Volunteer Services Program

JACK C. LEWIS, Commissioner

APPROVED BY AGENCY: April 13, 1994

FILED WITH LRC: April 13, 1994 at 4 p.m.

PUBLIC HEARING: A public hearing on this regulation has been scheduled for May 26, 1994, at 9 a.m., in the State Office Building Auditorium. Those interested in attending this hearing shall notify in writing: Jack T. Damron and William Seabold, Department of Corrections, 5th Floor, State Office Building, Frankfort, Kentucky 40601.

REGULATORY IMPACT ANALYSIS

Agency Contact Person: Jack Damron

(1) Type and number of entities affected: 266 employees of the Northpoint Training Center, 942 inmates, and all visitors to state correctional institutions.

(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 - All of the costs involved with the implementation of the regulations are included in the operational budget.

2. Continuing costs or savings: Same as 2(a)1.

3. Additional factors increasing or decreasing costs: Same as 2(a)1.

(b) Reporting and paperwork requirements: Monthly submission of policy revisions.

(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:

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

(6) Any additional information or comments: None

TIERING: Was tiering applied? No. Tiering was not appropriate in this administrative regulation because the administrative regulation applies equally to all those individuals or entities regulated by it. Disparate treatment of any person or entity subject to this administrative regulation could raise questions of arbitrary action on the part of the agency. The "equal protection" and "due process" clauses of the 14th Amendment of the U.S. Constitution may be implicated as well as Sections 2 and 3 of the Kentucky Constitution.

DEPARTMENT OF CORRECTIONS
(Proposed Amendment)

501 KAR 6:070. Kentucky Correctional Institution for Women.

RELATES TO: KRS Chapters 196, 197, 439

STATUTORY AUTHORITY: KRS 196.035, 197.020, 439.470, 439.590, 439.640

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

Section 1. Pursuant to the authority vested in the Department of Corrections the following policies and procedures, revised April 15, 1994 [~~1993~~] are incorporated by reference and shall be referred to as Kentucky Correctional Institution for Women Policies and Procedures.

Copies of the procedures may be obtained from the Office of the General Counsel, Department of Corrections, State Office Building, Frankfort, Kentucky 40601 or may be reviewed at the Office of General Counsel on weekdays between 8 a.m. to 4:30 p.m.

KCIW 01-08-01 News Media Access (Amended 4/15/94)
KCIW 02-01-01 Comprehensive Insurance Coverage
KCIW 02-02-01 Fiscal Management: Audits
KCIW 02-02-04 Institution Purchasing Procedures
KCIW 02-03-01 Inventory Control of Nonexpendable Personal Property
KCIW 02-03-02 Inventory and Control of Stores
KCIW 02-04-01 Accounting Procedures
KCIW 02-05-01 Inmate Canteen and Staff Canteen
KCIW 06-01-01 Inmate Records
KCIW 06-01-02 Transfers to Community Centers and the Minimum Security Unit
KCIW 06-01-03 Storage of Expunged Records
KCIW 10-01-01 Special Management Unit General Operation and Regulations
KCIW 10-01-02 Special Management Unit Programs, Placement and Review
KCIW 10-01-04 Special Security
KCIW 11-01-01 Food Service Operation Inspections
KCIW 11-01-02 Budgeting, Accounting, and Purchasing Procedures for Food Products [~~(Amended 4/15/93)~~]
KCIW 11-02-01 Menu Preparation/Special Diets
KCIW 11-03-01 General Guidelines for Food Service Workers [~~(Amended 4/15/93)~~]
KCIW 11-04-01 Health Regulations and General Guidelines for the Food Service Area [~~(Amended 4/15/93)~~]
KCIW 11-07-01 Special Religious Diets (Added 4/15/94)
KCIW 12-01-01 Control of Pests and Vermin
KCIW 12-02-01 Laundry and Clothing Issuance
KCIW 12-02-03 Donated Items (Amended 4/15/94)
KCIW 12-04-01 Sanitation and General Living Conditions
KCIW 12-04-02 Hair Care Services
KCIW 13-01-01 Provision of Medical and Dental Care
KCIW 13-01-02 Preliminary Health Screening and Appraisal
KCIW 13-01-03 Use of Pharmaceutical Products
KCIW 13-03-01 Emergency Care
KCIW 13-03-02 Infirmary Care and Outside Services
KCIW 13-04-01 Medical Alert System
KCIW 13-04-02 Psychiatric/Psychological Services
KCIW 13-06-01 Informed Consent
KCIW 13-07-01 Detoxification and Alcohol or Chemical Dependency Guidelines
KCIW 13-08-01 Medical Examination for Employees
KCIW 13-09-01 Suicide Prevention and Intervention Program
KCIW 13-11-01 Infection Control
KCIW 14-01-02 Inmate Rights
KCIW 14-02-01 Access to Attorneys and Designated Counsel Substitutes
KCIW 14-04-01 Inmate Grievance Procedure
[~~KCIW 15-03-01 Inmate Rule Book (Deleted 4/15/94)~~]
KCIW 15-06-01 Restriction Guidelines
KCIW 16-01-01 Inmate Correspondence
KCIW 16-02-01 Inmate Access to Telephone
[~~KCIW 16-02-02 Intra-Institution Phone Calls (Deleted 4/15/94)~~]
KCIW 16-03-01 Inmate Visiting Regulations
KCIW 16-03-02 Unauthorized Items for Picnic Lunches, Food Packages and Regular Packages
KCIW 16-04-01 Inmate Indigent Fund
KCIW 16-05-01 Inmate Packages
KCIW 17-01-01 Assessment Center Operation and Reception Programs
KCIW 17-01-02 Assessment/Classification Center Operations, Rules and Regulations
KCIW 17-01-03 Assessment and Classification Unit Property Guidelines
KCIW 17-02-01 Identification Department Admissions
KCIW 17-05-01 Inmate Personal Property Guidelines
KCIW 18-01-02 Institutional Housing Assignments
KCIW 18-01-03 Honor Program (Amended 4/15/94)
KCIW 18-02-01 Classification Procedures
KCIW 18-05-01 Special Needs Inmates
KCIW 18-06-01 Institutional Status Codes
KCIW 19-01-01 Inmate Work/Program Assignments
KCIW 19-03-01 Landscape and Maintenance Work Details
KCIW 20-01-01 Education Programs
KCIW 20-01-03 Vocational Education: Curriculum Flexible Schedule, Upgrade Programs and Release Preparation Program
KCIW 20-01-04 Entry - Exit Vocational School
KCIW 20-01-05 Vocational Programs: Approved, Assessed and Contain Guidelines for Vocational Records
KCIW 20-01-06 Vocational Education: Staffing Patterns/Requirements
KCIW 20-01-07 Vocational Counselor
KCIW 20-01-08 Vocational Education: Community Resources and the Integration with Academic Progress
KCIW 20-01-09 Vocational Education: Support Equipment
KCIW 20-01-10 Control of Flammable, Hazardous, Toxic and Caustic Materials in the Vocational Area
KCIW 22-01-04 Inmate Club Activities
KCIW 23-01-01 Religious Services
KCIW 25-01-01 Preparole Progress Report
KCIW 25-02-01 Temporary Release/Community Center
KCIW 25-02-02 Furloughs
KCIW 25-03-01 Escorted Community Leave

JACK C. LEWIS, Commissioner
APPROVED BY AGENCY: April 13, 1994
FILED WITH LRC: April 13, 1993 at 4 p.m.
PUBLIC HEARING: A public hearing on this regulation has been scheduled for May 26, 1994 at 9 a.m., in the State Office Building Auditorium. Those interested in attending this hearing shall notify in writing: Jack Damron and William Seabold, Department of Corrections, 2nd Floor, State Office Building, Frankfort, Kentucky 40601.

REGULATORY IMPACT ANALYSIS

Agency Contact Person: Jack Damron
(1) Type and number of entities affected: 144 employees of the Kentucky Correctional Institution for Women, 397 inmates, and all visitors to state correctional institutions.
(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 - All of the costs involved with the implementation of the regulations are included in the operational budget.
2. Continuing costs or savings: Same as 2(a)1.
3. Additional factors increasing or decreasing costs: Same as 2(a)1.
(b) Reporting and paperwork requirements: Monthly submission of policy revisions.
(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:

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

(6) Any additional information or comments: None

TIERING: Was tiering applied? No. Tiering was not appropriate in this administrative regulation because the administrative regulation applies equally to all those individuals or entities regulated by it. Disparate treatment of any person or entity subject to this administrative regulation could raise questions of arbitrary action on the part of the agency. The "equal protection" and "due process" clauses of the 14th Amendment of the U.S. Constitution may be implicated as well as Sections 2 and 3 of the Kentucky Constitution.

DEPARTMENT OF CORRECTIONS
(Proposed Amendments)

501 KAR 6:120. Blackburn Correctional Complex.

RELATES TO: KRS Chapters 196, 197, 439

STATUTORY AUTHORITY: KRS 196.035, 197.020, 439.470, 439.590, 439.640

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

Section 1. Pursuant to the authority vested in the Department of Corrections the following policies and procedures, revised April 15, 1994 [~~October 11, 1993~~], are incorporated by reference and shall be referred to as Blackburn Correctional Complex and Procedures. Copies of the procedures may be obtained from the Office of the General Counsel, Department of Corrections, State Office Building, Frankfort, Kentucky 40601 or may be reviewed at the Office of General Counsel weekdays 8 a.m. to 4:30 p.m.

BCC 01-05-01 Duty Officer and Acting Warden
BCC 01-07-01 Extraordinary Occurrence Reports
BCC 01-09-01 Legal Assistance for Staff
BCC 01-11-01 Roles of Consultants, Contract Employees, Volunteers and Employees of Other Agencies
BCC 01-13-01 Relationships with Public, Media, and Other Agencies
BCC 01-15-01 Internal Affairs Office
BCC 01-16-01 Tours of Blackburn Correctional Complex
BCC 01-19-01 Inmate Access to BCC Staff [~~Amended 10/11/93~~]
BCC 02-01-01 Inmate Canteen (Amended 4/15/94)
BCC 02-02-01 Fiscal Responsibility
BCC 02-02-02 Fiscal Management: Accounting Procedures
BCC 02-02-03 Fiscal Management: Checks (Amended 4/15/94)
BCC 02-02-04 Fiscal Management: Budget
BCC 02-02-05 Fiscal Management: Insurance
BCC 02-02-06 Fiscal Management: Audits
BCC 02-04-01 Billing Method for Health Services Staff Paid by Personal Service Contract
BCC 02-05-01 Property Inventory
BCC 02-06-01 Purchasing
BCC 02-07-01 Inmate Personal Accounts
BCC 04-02-01 Firearms Training [~~Amended 10/11/93~~]
BCC 04-03-01 Educational Assistance Program
BCC 05-01-01 Inmate Participation in Authorized Research
BCC 06-01-01 Storage of Expunged Records
BCC 06-02-01 Records - Release of Information
BCC 06-02-02 Offender Records
BCC 06-03-01 Reporting Inmate Misconduct Following Favorable Recommendation by the Parole Board
BCC 08-02-01 Natural Disaster Plan (Tornado)
BCC 08-03-01 Emergency Preparedness Plan Manual
BCC 08-04-01 Fire Safety Plan, Drills and Related Staff Duties [~~Amended 10/11/93~~]
BCC 08-04-02 Immediate Release of Inmates from Locked Areas [~~Amended 10/11/93~~]
BCC 08-05-01 Duties of Fire Safety Officer
BCC 08-06-01 Storage Control and Accountability of Flammable, Toxic, Caustic and Other Hazardous Materials
BCC 08-07-01 Facility Furnishings: Exit and Emergency Lights and Noncombustible Containers
BCC 09-01-01 Inclement Weather/Emergency Condition Operation [~~Amended 10/11/93~~]
BCC 09-02-01 Restricted Areas [~~Amended 10/11/93~~]
BCC 09-02-02 Inmate Pass System to Restricted Areas
BCC 09-02-03 Regulation of Inmate Movement
BCC 09-02-04 Radio Escorted Yard Movement During Daylight Savings Time (November 1 - April 30) [~~Amended 10/11/93~~]
BCC 09-03-01 Inmate Identification (Amended 4/15/94)
BCC 09-04-02 Complex Entry & Exit
BCC 09-05-01 Key Control
BCC 09-06-02 Transportation to Courts
BCC 09-07-01 Drug Abuse and Intoxicants Testing [~~Amended 10/11/93~~]
BCC 09-08-02 Use of Restraints
BCC 09-09-01 Population Counts and Count Documentation [~~Amended 10/11/93~~]
BCC 09-10-03 Development of Institutional Post Orders
BCC 09-10-04 Governmental Services, Study Release Officer Post Orders [~~Amended 10/11/93~~]
BCC 09-10-05 Unit A-1 Post Orders
BCC 09-10-06 Recreation Post Orders: Observation
BCC 09-10-07 Entrance Gate Post Orders
BCC 09-10-08 Visiting Area Post Orders
BCC 09-10-09 Security Staff General Orders
BCC 09-10-10 Dining Room Officer Post Orders
BCC 09-12-01 Use of Physical Force; Prohibition of Personal Abuse and Corporal Punishment
BCC 09-13-01 Perimeter Patrol
BCC 09-14-01 Prohibiting Inmate Authority Over Other Inmates
BCC 09-15-01 Search Policy/Disposition of Contraband [~~Amended 10/11/93~~]
BCC 09-16-01 Security Activity Logs
BCC 09-17-01 Institutional Supervisor Inspections
BCC 09-18-01 Use of State Vehicles and Staff Owned Vehicles
BCC 09-19-01 Duties and Responsibilities of the Institutional Captain [~~Amended 10/11/93~~]
BCC 09-19-02 Duties and Responsibilities of the Shift Supervisor
BCC 09-20-01 Inmate Death
BCC 09-21-01 Tool Control
BCC 09-22-01 Emergency Communication System
BCC 10-01-01 Special Management Inmates [~~Amended 10/11/93~~]
BCC 10-01-02 Short-Term Administrative Segregation Holding Area [~~Amended 10/11/93~~]
BCC 11-01-01 Menu and Special Diets [~~Amended 10/11/93~~]
BCC 11-02-01 Food Service: Inspection, Health Protection and Sanitation [~~Amended 10/11/93~~]
BCC 11-03-01 Food Service: Meals [~~Amended 10/11/93~~]
BCC 11-04-01 Dining Room Guidelines

BCC 11-05-01 Food Service Security: Knife & Other Sharp Instrument/Utensil Control
BCC 11-06-01 Purchasing, Storage and Farm Products [~~(Amended 10/11/93)~~]
BCC 11-07-01 Food Service Operations Manual
BCC 12-02-01 Personal Hygiene Items
BCC 12-02-02 Personal Hygiene for Inmates: Clothing, Linens and Shower Facilities [~~(Amended 10/11/93)~~]
BCC 12-05-01 Barber Shop Services
BCC 12-06-01 BCC Housekeeping Plan
BCC 13-01-01 Sick Call and Pill Call [~~(Amended 10/11/93)~~]
BCC 13-02-01 Administration and Authority for Health Services
BCC 13-03-01 Provisions of Health Care Delivery [~~(Amended 10/11/93)~~]
BCC 13-04-01 Licensure and Training Standards [~~(Amended 10/11/93)~~]
BCC 13-05-01 Medical Alert System
BCC 13-06-01 Health Care Practices
BCC 13-07-01 Emergency Medical Care Plan [~~(Amended 10/11/93)~~]
BCC 13-07-02 Emergency and Specialized Health Services [~~(Amended 10/11/93)~~]
BCC 13-07-03 Immediate Medical Treatment for Person's Injured by Weapon or Chemical Agent [~~(Amended 10/11/93)~~]
BCC 13-08-01 Inmate Health Screening and Evaluation [~~(Amended 10/11/93)~~]
BCC 13-09-01 Prohibition on Medical Experimentation
BCC 13-10-01 Dental Services [~~(Amended 10/11/93)~~]
BCC 13-11-01 Suicide Prevention and Intervention Program
BCC 13-12-01 Use of Pharmaceutical Products [~~(Amended 10/11/93)~~]
BCC 13-12-02 Parenteral Administration of Medications and Use of Psychotropic Drugs
BCC 13-13-01 Inmate Health Education [~~(Amended 10/11/93)~~]
BCC 13-14-01 Management of Serious and Infectious Diseases [~~(Amended 10/11/93)~~]
BCC 13-15-01 Informed Consent [~~(Amended 10/11/93)~~]
BCC 13-16-01 Health Records [~~(Amended 10/11/93)~~]
BCC 13-17-01 Notification of Inmate Family in the Event of Serious Illness, Injury or Surgery
BCC 13-19-01 Physicians Referrals/Continuity of Care [~~(Amended 10/11/93)~~]
BCC 13-20-01 Chronic and Convalescent Care [~~(Amended 10/11/93)~~]
BCC 13-22-01 Psychiatric and Psychological Services, Handling of Mentally Retarded Inmates and Transfers [~~(Amended 10/11/93)~~]
BCC 13-23-01 First Aid Kits
BCC 14-01-01 Office of Public Advocacy Attorney Visits
BCC 14-02-01 Law Library [~~(Amended 10/11/93)~~]
BCC 14-03-01 Inmate Grievance Procedure
BCC 14-04-01 Inmate Rights and Responsibilities [~~(Amended 10/11/93)~~]
BCC 14-05-01 Inmate Claims
BCC 14-06-01 Legal and Support Services for Indigent Inmates
BCC 15-02-01 Meritorious Living Unit (B-1)
BCC 15-02-02 Room Assignment
BCC 15-03-01 Rules and Regulations for Dormitories [~~(Amended 10/11/93)~~]
BCC 15-04-01 Restoration of Forfeited Good Time
BCC 15-05-01 Extra Duty Assignments [~~(Amended 10/11/93)~~]
BCC 16-01-01 Inmate Furloughs [~~(Amended 10/11/93)~~]
BCC 16-02-01 Inmate Visiting (Amended 4/15/94)
BCC 16-03-01 Inmate Packages
BCC 16-03-02 Outgoing Inmate Packages (Amended 4/15/94)
BCC 16-03-03 Inmate Correspondence
BCC 17-02-01 Authorized Inmate Personal Property
BCC 17-03-01 Processing of New Inmates From Local Jails
BCC 18-01-01 Classification: Institutional Classification and Reclassification
BCC 18-02-01 Racial Balance in Living Areas [~~(Amended 10/11/93)~~]
BCC 19-01-01 Inmate Work Programs
BCC 19-02-01 Classification of Inmates to Governmental Service Program
BCC 19-03-01 Correctional Industries [~~(Amended 10/11/93)~~]
BCC 20-01-01 Academic and Vocational School [~~(Amended 10/11/93)~~]
BCC 20-02-01 College Programs
BCC 20-04-01 Educational Program Evaluation
BCC 20-05-01 Educational Program Planning
BCC 20-06-01 Academic and Vocational Curriculum
BCC 21-01-01 Library Services
BCC 22-01-01 Arts and Crafts/Production and Sale of Items
BCC 22-02-01 Privileged Trips
BCC 22-03-01 Recreational Employees
BCC 22-04-01 Recreation and Inmate Activities
BCC 22-04-02 Inmate Clubs and Organizations
BCC 22-04-03 Conducting Inmate Organizational Meetings and Programs
BCC 22-04-04 Recreation Program Availability
BCC 22-04-05 Supervision of Leisure-time Craft Club Activities and Materials
BCC 22-06-01 Music Club
BCC 22-08-01 Unit Recreation Program
BCC 22-09-01 Use of Inmates in Recreation Programs
BCC 23-01-01 Religious Services [~~(Amended 10/11/93)~~]
BCC 24-01-01 Duties and Responsibilities of Classification and Treatment Officers (Amended 4/15/94)
BCC 24-02-01 Duties and Responsibilities of the Unit Director and Assistant to the Unit Director (Amended 4/15/94)
BCC 24-03-01 Social Services (Amended 4/15/94)
BCC 25-01-01 Inmate Check Out Procedure [~~(Amended 10/11/93)~~]
BCC 25-02-02 Temporary Release and [/] Community Center Release (Amended 4/15/94)
BCC 25-05-01 Supplemental Preparole Progress Reports (Amended 4/15/94)
BCC 26-01-01 Citizen Involvement and Volunteer Service Program (Amended 4/15/94)

JACK C. LEWIS, Commissioner
APPROVED BY AGENCY: April 13, 1994
FILED WITH LRC: April 13, 1994 4 p.m.
PUBLIC HEARING: A public hearing on this regulation has been scheduled for May 26, 1994, at 9 a.m., in the State Office Building Auditorium. Those interested in attending this hearing shall notify in writing: Jack Damron or William Seabold, Department of Corrections, 2nd Floor, State Office Building, Frankfort, Kentucky 40601.

REGULATORY IMPACT ANALYSIS

Agency Contact Person: Jack Damron
(1) Type and number of entities affected: 92 employees of the Blackburn Correctional Complex, 403 inmates, and all visitors to state correctional institutions.
(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 - All of the costs involved with the implementation of the regulations are included in the operational budget.
2. Continuing costs or savings: Same as 2(a)1.

3. Additional factors increasing or decreasing costs: Same as 2(a)1.

(b) Reporting and paperwork requirements: Monthly submission of policy revisions.

(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:

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

(6) Any additional information or comments: None

TIERING: Was tiering applied? No. Tiering was not appropriate in this administrative regulation because the administrative regulation applies equally to all those individuals or entities regulated by it. Disparate treatment of any person or entity subject to this administrative regulation could raise questions of arbitrary action on the part of the agency. The "equal protection" and "due process" clauses of the 14th Amendment of the U.S. Constitution may be implicated as well as Sections 2 and 3 of the Kentucky Constitution.

DEPARTMENT OF CORRECTIONS
(Proposed Amendment)

501 KAR 6:140. Bell County Forestry Camp.

RELATES TO: KRS Chapters 196, 197, 439

STATUTORY AUTHORITY: KRS 196.035, 197.020, 439.470, 439.590, 439.640

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

Section 1. Pursuant to the authority vested in the Department of Corrections the following policies and procedures, revised April [~~March~~] 15, 1994 are incorporated by reference and shall be referred to as Bell County Forestry Camp Policies and Procedures. Copies of the procedures may be obtained from the Office of the General Counsel, Department of Corrections, State Office Building, Frankfort, Kentucky 40601 or may be reviewed at the Office of General Counsel weekdays from 8 a.m. to 4:30 p.m.

BCFC 01-02-01	Organization and Assignment of Responsibility
BCFC 01-04-02	Extraordinary Occurrence Procedure
BCFC 01-05-01	Procedures Office: Duties and Responsibilities
BCFC 01-08-01	Public Information and Inmate Access to News Media
BCFC 01-09-01	Staff Participation in Professional Organization and Conferences; Provision for Leave and Reimbursement for Expenses
BCFC 01-11-01	Institutional Duty Officer's Responsibilities
BCFC 02-01-02	Fiscal Management: Accounting Procedures
BCFC 02-01-03	Fiscal Management: Agency Funds
BCFC 02-01-04	Fiscal Management: Insurance
BCFC 02-01-05	Fiscal Management: Budget
BCFC 02-01-06	Fiscal Management: Audit
BCFC 02-02-01	Inmate Accounts
BCFC 02-02-02	Inmate Control of Personal Funds
BCFC 02-02-03	Storage and Disposition of Inmate Monies Received on Weekends, Holidays, and Between 4 p.m. and 8 a.m. Weekdays
BCFC 02-03-01	Purchase Orders
BCFC 02-04-01	Processing of Invoices
BCFC 02-05-01	BCFC Materials Receiving Procedure
BCFC 02-06-01	Property Inventory
BCFC 04-01-01	Employee Training and Development [~~(Amended 3/15/94)~~]
BCFC 05-01-01	Information System
BCFC 06-01-01	Offender Records
BCFC 06-02-01	Storage of Expunged Records
BCFC 06-03-01	Court Trips
BCFC 06-03-02	Receipt of Order of Appearance
BCFC 07-04-01	Smoking Control
BCFC 08-02-01	Fire Prevention
BCFC 08-03-01	Fire Procedures
BCFC 08-03-02	Fire Extinguishers and Their Use
BCFC 08-09-01	Guidelines for the Control and Use of Flammable, Toxic, and Caustic Substances
BCFC 08-09-02	OSHA Hazard Communication Program
BCFC 08-10-01	Bell County Forestry Camp Emergency Response Team [~~(Added 3/15/94)~~]
BCFC 09-06-01	Search Policy/Disposition of Contraband
BCFC 09-14-01	Bell County Forestry Camp - Restricted Area
BCFC 10-01-01	Special Management Inmates
BCFC 11-01-01	Food Services: General Guidelines
BCFC 11-02-01	Food Service: Security
BCFC 11-03-01	Dining Room Guidelines
BCFC 11-04-01	Food Service: Meals
BCFC 11-04-02	Food Service: Menu, Nutrition and Special Diets
BCFC 11-05-02	Health Requirements of Food Handlers
BCFC 11-06-01	Food Service: Inspection and Sanitation
BCFC 11-07-01	Food Service: Purchasing, Storage and Farm Products
BCFC 11-08-01	Staff/Visitor Meals
BCFC 12-01-01	Sanitation, Living Conditions Standards, and Clothing Issues
BCFC 12-01-02	Bed Areas, Assignments/Conditions Standards
BCFC 12-02-01	Issuance of Clean Laundry and Receiving of Dirty Laundry
BCFC 12-03-01	Personal Hygiene Items: Issuance and Placement Schedule
BCFC 12-03-02	Barbershop Services and Equipment Control
BCFC 12-04-01	Institutional Inspections
BCFC 12-05-01	Fire Safety and Use of Noncombustible Receptacles
BCFC 12-06-01	Pest Control
BCFC 13-01-01	Organization of Health Services
BCFC 13-02-01	Health Maintenance Services: Sick Call and Pill Call
BCFC 13-03-01	Dental Policy/Sick Call
BCFC 13-04-01	Inmate Medical Screenings and Health Evaluations
BCFC 13-05-01	Licensure and Training Standards
BCFC 13-06-01	Suicide Prevention and Intervention Program
BCFC 13-06-02	First Aid/CPR Training Program
BCFC 13-06-03	Emergency Medical/Dental Care Services
BCFC 13-07-01	Health Records
BCFC 13-08-01	Special Diets
BCFC 13-09-01	Notification of Inmate, Family in the Event of Serious Illness, Surgery, or Inmate Death
BCFC 13-10-01	Health Education/Special Health Programs
BCFC 13-11-01	Informed Consent
BCFC 13-12-01	Mental Health/Provision of Psychiatric Services by KCPC
BCFC 13-12-02	Transfer of Inmates to Kentucky Correctional Psychiatric Center (KCPC)
BCFC 13-13-01	Identification of Special Needs Inmates

BCFC 13-14-01 Use of Pharmaceutical Products
BCFC 13-15-01 Medical Restraints
BCFC 13-16-01 Specialized Health Services
BCFC 13-17-01 Vision Care/Optometry Services
BCFC 13-18-01 Infection Control
BCFC 13-19-01 Exposure Control Plan
BCFC 14-01-01 Inmate Rights and Responsibilities [~~(Amended 3/15/94)~~]
BCFC 14-02-01 Legal Services Program [~~(Amended 3/15/94)~~]
BCFC 14-03-01 Inmate Grievance Procedure [~~(Amended 3/15/94)~~]
BCFC 15-01-01 Due Process/Disciplinary Procedures
BCFC 16-01-01 Inmate Visiting
BCFC 16-02-01 Telephone Communications
BCFC 16-03-01 Mail Regulations
BCFC 16-03-02 Inmate Packages
BCFC 17-01-01 BCFC Inmate Receiving and Orientation Process (Amended 4/15/94) [~~Assessment/Orientation Procedure~~]
[~~BCFC 17-02-01 Inmate Reception Process (Deleted 4/15/94)~~]
BCFC 17-03-01 Inmate Personal Property (Added 4/15/94)
BCFC 17-04-01 BCFC Inmate Property Control (Amended 4/15/94) [~~Unauthorized Items~~]
BCFC 17-05-01 Inmate Canteen (Amended 4/15/94)
BCFC 18-01-01 Institutional Classification Committee
BCFC 18-02-01 Classification Document
BCFC 18-03-01 Classification Process
BCFC 18-03-02 Classification Program Planning
BCFC 18-03-03 Population Category Status
BCFC 18-04-01 Instructions for Six Month Review
BCFC 18-05-01 Transfers to Other Minimum Security Institutions
BCFC 19-01-01 Job and Vocational Program Assignments
BCFC 19-02-01 Government Service Details
BCFC 20-01-01 Academic School
BCFC 20-01-02 Testing and Verification Procedure
BCFC 20-02-01 Educational Program Planning
BCFC 20-03-01 Academic Curriculum
BCFC 21-01-01 Library Services
BCFC 22-01-01 Recreation and Inmate Activities
BCFC 22-02-01 Inmate Clubs and Organizations
BCFC 22-02-02 Conducting Inmate Organizational Meetings and Programs
BCFC 22-03-01 Privilege Trips
BCFC 23-01-01 Religious Service
BCFC 23-02-01 Visitors for Religious Programs
BCFC 23-03-01 Marriage of Inmates
BCFC 24-01-01 Social Services and Counseling Program
BCFC 24-01-02 Casework Services
BCFC 25-01-01 Release Preparation Program Description
BCFC 25-02-01 Temporary Release/Community Center Release
BCFC 25-02-02 Furloughs
BCFC 25-03-01 Preparole Progress Report
BCFC 25-03-02 Parole Eligibility Dates
BCFC 25-04-01 Inmate Discharge Procedure
BCFC 26-01-01 Citizen Involvement and Volunteer Services Program

JACK C. LEWIS, Commissioner
APPROVED BY AGENCY: April 13, 1994
FILED WITH LRC: April 13, 1994 at 4 p.m.
PUBLIC HEARING: A public hearing on this regulation has been scheduled for May 26, 1994 at 9 a.m., in the State Office Building Auditorium. Those interested in attending this hearing shall notify in writing: Jack Damron and William Seabold, Department of Corrections, 2nd Floor, State Office Building, Frankfort, Kentucky 40601.

REGULATORY IMPACT ANALYSIS

Agency Contact Person: Jack Damron
(1) Type and number of entities affected: 43 employees of the Bell County Forestry Camp, 200 inmates, and all visitors to state correctional institutions.
(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 - All of the costs involved with the implementation of the regulations are included in the operational budget.
2. Continuing costs or savings: Same as 2(a)1.
3. Additional factors increasing or decreasing costs: Same as 2(a)1.
(b) Reporting and paperwork requirements: Monthly submission of policy revisions.
(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:
(b) If in conflict, was effort made to harmonize the proposed administrative regulation with conflicting provisions:
(6) Any additional information or comments: None
TIERING: Was tiering applied? No. All policies are administered in a uniform manner.

TRANSPORTATION CABINET
Department of Highways
Division of Traffic
(Proposed Amendment)

603 KAR 4:035. Logo signs [~~Advertising devices~~]; placement along fully controlled [~~limited~~] access highways [~~of four (4) or more lanes~~].

RELATES TO: KRS 177.0734 through 177.0738 [~~830 to 177.890~~]
STATUTORY AUTHORITY: KRS 177.0734 through 177.0738 [~~860, 177.865~~]
NECESSITY AND FUNCTION: KRS 177.0734 through 177.0738 [~~860 and 177.865~~] require the Commissioner of Highways to prescribe by administrative regulations reasonable standards for the erection of specific information panels [~~placement of advertising devices~~] within highway rights-of-way to provide directional information for business establishments offering goods and services in the interest of the traveling public. This administrative regulation sets forth the criteria to be followed in the erection and maintenance of specific motorist signing designed to inform motorists where travel related goods and services are available.

Section 1. Definitions. (1) "Business location" means a place of business where more than one (1) motorist service is available.
(2) "Business sign" means a separately attached sign mounted on the specific information panel to show the name, brand name or trademark of a qualified motorist service available near the interchange.
(3) "Clear zone" means the area between the edge of the driving-lane of a fully controlled access highway and an imaginary line running parallel to the highway but thirty (30) feet (9.15 meters) away

from the highway.

(4) "Combination specific information sign" means a specific information sign with more than one (1) of the services "gas", "food", "lodging" or "camping" listed on it.

(5) "Contractor" means the entity selected by the Department of Highways pursuant to KRS Chapter 45A and 600 KAR 1:100 to administer the specific information signing program in Kentucky. The activities of the contractor shall include but not be limited to marketing, determination of business eligibility, maintenance, erection and removal of the specific information panels and installation and removal of business signs.

(6) "Contract year" means July 1 through the following June 30.

(7) "Cover" means place a protective shield over a business sign to prohibit viewing of the sign.

(8) "Double exit interchange" means a grade-separated crossing of roadways having two (2) mainline off-ramps in one (1) direction to provide access to the crossroad.

(9) "Fully controlled access highway" means a highway, limited to interstate highways and state parkways, that gives preference to through traffic and has access only at selected public roads and that has no at-highway grade crossings or intersections.

(10) "Highway guide sign" means an official highway sign which is erected by the Department of Highways to give directions; to furnish advance notice of the approach to intersections or interchanges; to direct drivers into appropriate lanes; to identify routes, and directions on those routes; to show distances to destinations; to indicate access to general motorist services, rest, scenic and recreational areas; and to provide other information of value to the traveling public.

(11) "Interchange" means a junction of two (2) or more highways by a system of separate levels that permit traffic to pass from one to another without the crossing of traffic streams.

(12) "Intersection" means a junction of two (2) roads at the same grade level.

(13) "Logo" means a business sign.

(14) "Motorist service" means a place of business or a business location providing gas, food, lodging, or camping facilities or a combination thereof.

(15) "Primary motorist service" means a business location which gives precedence to one (1) motorist service over any other motorist service available at that business location.

(16) "Ramp sign" means a sign that is placed along the ramp or at the ramp terminal for service facilities which have business logos displayed along the main roadway.

(17) "Secondary motorist service" means one (1) or more motorist services available at a business location which are subordinate to the primary motorist service.

(18) "Single exit interchange" means a grade-separated crossing of roadways having one (1) mainline off-ramp per direction to provide access to the crossroad.

(19) "Specific information panel" means an official sign placed within the highway right-of-way with the words "GAS," "FOOD", "LODGING", OR "CAMPING", or combinations thereof, and space for one (1) or more individual business signs which may be attached to the panel.

(20) "Trailblazing sign" means a sign similar to a ramp sign used on nonfully controlled access highways from which a service is available to indicate the direction to the service. [~~The following terms when used in the regulation shall have the following meaning:~~

~~(1) "Specific information panel" means an official sign placed within the highway right-of-way with the words "GAS," "FOOD," "LODGING," or "CAMPING," or combinations thereof, and space for one (1) or more individual business signs which may be attached to the panel.~~

~~(2) "Business sign" means a separately attached sign mounted on the specific information panel to show the brand name or trademark of qualified motorist services available near the interchange.~~

~~(3) "Business location" means a place of business where more than one (1) motorist service is available.~~

~~(4) "Logo" means a distinctive symbol or sign used by a motorist service business as a means of identification of its products or business.~~

~~(5) "Single exit interchange" means a grade separated crossing of roadways having one (1) mainline off ramp per direction to provide access to the crossroad.~~

~~(6) "Double exit interchange" means a grade separated crossing of roadways having two (2) mainline off ramps in one (1) direction to provide access to the crossroad.~~

~~(7) "Intersection" means a junction of two (2) roads at the same grade level.~~

~~(8) "Motorist service" means a place of business or a business location providing gas, food, lodging, or camping facilities or a combination thereof.~~

~~(9) "Primary motorist service" means a business location which gives precedence to one (1) motorist service over any other motorist service available at that business location.~~

~~(10) "Secondary or incidental motorist service" means one (1) or more motorist services available at a business location which are subordinate to the primary motorist service.~~]

Section 2. General Provisions. The Commissioner, Department of Highways, shall authorize the placement of specific [~~motorist service~~] information panels with business signs within the right-of-way of fully controlled [~~limited~~] access highways [~~of four (4) or more travel lanes in conformance with the Federal Highway Administration's (FHWA's) adopted standards as contained in Federal Highway Program Manual (FHPM) 6-8-3-8~~]. The Department of Highways shall control the erection and maintenance of [~~said~~] panels and signs in accordance with the "Manual on Uniform Traffic Control Devices" (MUTCD) as incorporated by reference in 603 KAR 5:050 and with the provisions of this administrative regulation. [~~the following criteria:~~]

Section 3. Application and Contracts for Specific Information Signs. (1) Application for a business to place a logo on a specific information panel shall be on "Application for Highway Logo Signing" forms prepared by the Kentucky Logo Sign Group, Inc. in November 1993. This form is incorporated by reference as a part of this administrative regulation.

(2) The notice by the business to the Department of Highways' contractor of the number, type and placement of each logo sign shall be on "Logo Program Billing Information" forms prepared by the Kentucky Logo Sign Group, Inc. in November, 1993. This form is incorporated by reference as a part of this administrative regulation.

(3) The contract to be entered into between the participating business and the Department of Highways' contractor shall be the "Highway Logo Program Agreement" form prepared by the Kentucky Logo Sign Group, Inc. in November, 1993. Addenda to this form may be included in the contract where appropriate. This form is incorporated by reference as a part of this administrative regulation.

(4) All forms incorporated by reference as a part of this administrative regulation may be viewed, copied or obtained from the Kentucky Logo Sign Group, Inc., Suite 6, State National Bank Building, 305 Ann Street, Frankfort, Kentucky 40601. Its telephone number is 1-800-469-5646. The forms may also be viewed, copied, or obtained from the Division of Traffic, 501 High Street, Mail Code 1-3, Frankfort, Kentucky 40622. Its telephone number is (502) 564-3020. Its hours of operation are 8 a.m. through 4:30 p.m. eastern time on weekdays.

Section 4. Location and Erection of Specific Information Panels. (1) A specific information panel bearing separately attached business signs shall not be erected less than 800 feet (244 meters) [~~between the previous interchange and 800 feet~~] in advance of the exit direction sign at the interchange where motorist services are available.

(2) Spacing between each specific information panel shall [~~also~~] be at a minimum of 800 feet (244 meters) and shall be spaced at least 800 feet (244 meters) from any [~~not conflict or interfere with~~] other highway guide signs in existence or proposed for that area.

(3) A specific information panel shall not be erected if there is insufficient space between the previous interchange and the interchange where the motorist services are available for the required highway guide signs and a specific information panel.

[~~(2) Business signs separately attached on a specific information panel shall show the logo, name, brand, and/or trademark of motorist services conveniently accessible from the interchange. All business signs shall be furnished to the Department of Highways by the business at no cost to the department and shall be manufactured to the standard specifications of the department. An exception to this subsection, subsection (17) of this section and Section 3(8) of this regulation is any business sign which must be replaced as a result of a change in regulations and policy may be provided by the Department of Highways at no cost to the business.~~]

(4) A [~~(3) No~~] specific information panel shall not [~~s may~~] be erected at an interchange or intersection which intersects another limited access facility.

(5) A specific information panel shall not be erected [~~nor~~] at any interchange or intersection which does not have a convenient reentry in the same [~~desired~~] direction of travel.

(6)(a) Not more than one (1) specific information panel for "GAS," "FOOD," "LODGING," or "CAMPING" shall be erected in each direction for an interchange or intersection.

(b) In one (1) [~~the~~] direction of travel, the successive panels shall be erected in the order of [~~for~~] "CAMPING," "LODGING," "FOOD," and "GAS" unless a combination specific information sign is erected [~~in that order~~].

(c) At interchanges with insufficient space available in a single direction for four (4) specific information panels, service signing preference shall be in the order "gas", "food", "lodging", and "camping", with "gas" having the highest priority.

[~~(4) Specific information panels may be permitted inside urban areas where interchange spacing is a minimum of two (2) miles and where the roadside development or terrain is such that motorist services are not readily identifiable from the traveled way for a reasonable distance in advance of an exit.~~]

(7) The specific information panels shall be located to:

(a) Take advantage of natural terrain;

(b) Have the least impact on the scenic environment; and

(c) Avoid visual conflict with other signs within the highway right-of-way.

(8) Unprotected sign panel supports located within the clear zone shall be of a breakaway design.

Section 5. Interchange Specific Information Panel Composition. (1) A specific information panel shall have a blue background with a white reflectorized border.

(2) The directional arrows and all letters and numbers used in the name of the type of service and the directional legend shall be white and reflectorized.

(3) All letters used in the name of service and the directional legend shall be ten (10)-inch (254-millimeter) capital letters.

(4) All numbers shall be ten (10) inches (254 millimeters) in height.

(5) The size of the specific information panel shall comply with the requirements of the MUTCD.

(6) An average measured retroreflectivity of fifty (50) percent or greater shall be maintained on each specific information panel.

(7)(a) [~~(5)~~] For single exit interchanges, a standard full-size specific information panel shall accommodate a maximum of six (6) business signs. [~~for "GAS," and four (4) business signs for "FOOD," "LODGING," and "CAMPING."~~]

(b) In instances when the number of businesses does not warrant a full-size panel, a half-size or combination panel may be used.

(8) If [~~Where~~] service facilities are not visible from a ramp terminal, supplemental "GAS," "FOOD," "LODGING," or "CAMPING" logos shall be placed along the ramp or at the ramp terminal with a directional arrow and mileage (kilometers) to the service. [~~In exceptional cases, additional business signs may be considered by the Department of Highways.~~]

(9)(a) [~~(6)~~] For double exit interchanges, the specific information panel shall consist of two (2) sections, one (1) for each exit, mounted on the same base.

(b) The top section shall display business signs for the first exit and the lower section shall display business signs for the second exit.

(c) Each section [~~This panel~~] shall accommodate a maximum of three (3) business signs for each service [~~"GAS," and two (2) business signs for "FOOD," "LODGING," and "CAMPING"~~] per exit.

(d) If [~~Where~~] a type of motorist service is to be signed for only one (1) exit, one (1) section of the specific information panel [~~sign~~] may be omitted or a single exit interchange sign may be used. [~~In exceptional cases, additional business signs may be considered by the Department of Highways.~~]

(10) In areas where not more than four (4) qualified businesses are available for each of two (2) or more types of services:

(a) Business signs for two (2) types of services may be displayed on the same combination specific information sign;

(b) Up to three (3) business signs may be displayed for each of service shall be displayed in combination on a panel;

(c) If four (4) business signs are displayed for one (1) type of service on a combination specific information sign, no more than two (2) business signs for the other type of service shall be displayed on the combination specific information sign; and

(d) The name of each type of service shall be displayed above its respective business signs.

(11) Business signs shall not be combined on a panel as described in subsection (10) of this section if:

(a) It is anticipated that additional service businesses shall become available in the near future; or

(b) It becomes necessary to display a fourth or fifth business sign for a type of service displayed in combination.

(12)(a) Except at unnumbered exits, the exit number shall be displayed above the names of the types of services; and

(b) At unnumbered exits, the legend "NEXT RIGHT" or "NEXT LEFT" shall be displayed above the names of the types of services.

[~~(7) Criteria for installation of specific information panels with intersections at grade is significantly different. Provisions of distance from the crossroad, size of information panels and business signs, number of business signs per panel, distance between panels, and selection of businesses for qualification for business signs shall conform to standards and specifications as described in FHPM 6-8-3-8 and the state MUTCD.~~]

Section 6. Ramp Signs. (1) At single-exit interchanges, exit ramp signs shall be installed except that the logos for facilities visible from the ramp terminal may be omitted.

(2) Business signs on ramp signs shall be duplicates of the corresponding logos installed along the main roadway, but reduced in size.

(3) Ramp signs shall include distances to the service facilities. Directions shall be indicated by arrows.

(4) Ramp signing may be used on ramps at double-exit interchanges.

Section 7. Business Signs. (1) Each business sign shall have a legend and border. However, if the business identification symbols or trademarks are used alone for a business sign, the border may be omitted.

(2) Each business sign on the specific information panel shall be contained within a forty-eight (48)-inch (1219.2-millimeter) wide and

thirty-six (36)-inch (914.4-millimeter) high rectangular background area which includes the border, if required.

(3) The principal legend shall be legible from the main traveled way of the highway under normal driving conditions.

(4) A symbol or trademark shall be reproduced in the colors and general shape consistent with customary use and an integral legend shall be in proportionate size.

(5) A message, symbol or trademark which resembles any official traffic control device shall be prohibited.

(6) The vertical and horizontal spacing between business signs on specific information panels shall not exceed eight (8) inches (203.2 millimeters) and twelve (12) inches (304.8 millimeters), respectively.

(7) The required reflectivity, material composition, and adhesiveness of the business signs are set forth in the "LOGO PROGRAM SPECIFICATIONS" form 99-133 last revised by the Kentucky Transportation Cabinet in April, 1991. This form is incorporated by reference as a part of this administrative regulation.

(8) If a business ceases to exist or is not in operation for thirty (30) days [~~any reason, in accordance with the standards under which a business sign was placed on a specific information panel~~], the business sign shall be immediately covered or removed as circumstances of each closing or cessation of business dictate.

(9) Any business which operates on a seasonal basis shall make provisions for removing or covering business signs during the off season. Businesses of this type shall notify the Department of Highways' contractor in writing thirty (30) days before the [~~such~~] opening or [~~and~~] closing occurs.

(10) In the absence of an official trademark or logo, the official name as indicated in partnership agreements, incorporation documents, or otherwise documented may be substituted on the business sign.

(11)(a) Descriptive advertising words, phrases or slogans shall not be allowed on a business sign; i.e., "Open 24 Hours," "Joe's 24-Hour Market," "Free Coffee," "Credit Cards Accepted," etc.

(b) Descriptive words which are part of the official name of the business shall be permitted on a business sign; i.e., "hotel," "motel," "inn," "lodge," "restaurant," "cafe," "cafeteria," "diner," or others with a similar meaning.

(c) The word "Diesel" on a "GAS" business sign shall be permitted.

(12) Not more than one (1) business with a particular name, business symbol, brand, trademark or logo shall be permitted on one (1) specific information panel.

(13) If there is more than one (1) eligible business at an interchange with the same business symbol, brand, trademark or logo, more than one (1) business symbol, brand, trademark or logo with the same design may be placed on a ramp sign to indicate the distances to the individual businesses.

Section 8. Business Criteria and Eligibility. (1) In [~~(10) Only one (1) business sign pertaining to a business location shall be permitted in each direction of travel in advance of an interchange or intersection; except that in~~] the absence of adequate motorist service business signs to fill a specific information panel with primary motorist service signs, secondary [~~or incidental~~] motorist service business signs may be allowed on those unfilled panels.

(2) If [~~(11) At a business location where more than one (1) motorist service is available, only the primary motorist service shall be considered for the purpose of permitting business signs on a specific information panel; except that if~~] a space is not available for the primary motorist service, a secondary [~~or incidental~~] motorist service may be considered if space is available on the [a] specific information panel for that type of service [~~sign~~].

(3) [~~(12)~~] Secondary [~~or incidental~~] motorist services shall not be considered until all businesses with a primary motorist service have been allowed an opportunity to have their business signs placed on the specific information panel pertaining to that type motorist service.

(4) [~~(13)~~] In selecting secondary [~~or incidental~~] services, the same criteria as required for primary motorist services shall be used to determine their qualification for a business sign.

(5)(a) A business [~~(14) Only those businesses~~] within a three (3) mile (4.83 kilometer) limit in any direction from the centerline of a fully controlled [~~four (4) lane limited~~] access road interchange shall have first priority [~~be eligible~~] to place signs on information panels.

(b) [~~except that,~~] If within that three (3) mile (4.83) kilometer) limit and adequate number of services of the type being considered are not available, second priority shall be an additional three (3) miles (4.83) kilometers). [~~the Commissioner of Highways may extend the limit in three (3) mile increments until services of the type being considered, or fifteen (15) miles are reached.~~]

(c) Priority shall be extended in three (3) mile (4.83 kilometer) increments until an adequate number of services of the type being considered are available or fifteen (15) miles (24.15 kilometers) is reached.

(d) A business further than fifteen (15) miles (24.15 kilometers) from the interchange shall not be eligible to qualify for placement of a business sign. However, any business at a distance greater than fifteen (15) miles (24.15 kilometers) from the interchange with a business sign in place on January 1, 1994, may continue to display the business sign until the business fails to meet another criterion of this administrative regulation.

[~~(15) In the absence of exit number guide signs, the words "Next Right/Left" shall be used.~~]

(6) [~~(16)~~] A business with one (1) or more advertising devices [~~signs~~] in violation of KRS 177.830 through 177.890 on any route controlled by this statute or in violation of 603 KAR 3:080 [~~and regulations pertaining thereto,~~] shall not be eligible to qualify for a business sign until all violations have been removed.

(7) A business with one (1) or more advertisements on signs which are in violation of KRS 177.830 through 177.890 or 603 KAR 3:080 shall not be eligible to qualify for a business sign until all violations have been removed.

[~~(17) In the absence of an official trademark or logo, the official name as indicated in partnership agreements, incorporation documents, or otherwise documented may be substituted. Descriptive advertising words, phrases or slogans shall not be allowed on a business sign; i.e., "Open 24 Hours," "Joe's 24 Hour Market," "Free Coffee," "Credit Cards Accepted," etc. Only the following descriptive words which are part of the official name will be permitted: "hotel," "motel," "inn," "lodge," "restaurant," "cafe," "cafeteria," "diner," or others with a similar meaning. The only exception to this provision is the word "Diesel" on a "GAS" business sign.~~

~~(18) In no case shall more than one (1) business with the same name, trademark or logo be permitted on the same specific information panel.~~]

Section 9. [~~3.~~] Requirements for Obtaining Business Signs. A motorist service business located at, or conveniently accessible from, an interchange or intersection shall be eligible for placement of a business sign on a specific information panel if it qualifies under the following conditions:

(1) Each business shall offer written assurance that it conforms with all applicable laws and administrative regulations concerning the provision of public accommodations with regard to race, religion, color, sex, age, disability [~~handicap~~], or national origin.

(2) To qualify for a "GAS" business sign, a business shall:

(a) [~~must~~] Be in operation seven (7) days a week, and continuously open for sixteen (16) hours a day; and[~~, as a minimum, have~~]

(b) Have motor vehicle fuel, oil, water, drinking water, restroom facilities, and a telephone [~~available~~].

(3) To qualify for a "FOOD" business sign, a business shall:

(a) [~~must~~] Be licensed in accordance with KRS Chapter 219;

(b) [~~or approved by the appropriate state and/or local regulatory agency, and, as a minimum,~~] Be in continuous operation to serve

three (3) meals a day, seven (7) days a week; [~~, sixteen (16) hours a day beginning no later than 7 a.m.,~~]

(c) Have a [~~reasonable~~] seating capacity for a minimum of six (6) guests at sit-down, eat-in service; and

(d) Have a telephone [~~available~~].

(4) To qualify for a "LODGING" business sign, a facility shall:

(a) [~~must~~] Be licensed in accordance with KRS Chapter 219; [~~or approved by the appropriate state and/or local regulatory agency,~~]

(b) Have a minimum of two (2) rooms available for [~~adequate~~] sleeping accommodations; and

(c) Have a [~~public~~] telephone.

(5) To qualify for a "CAMPING" business sign, a facility shall:

(a) [~~must~~] Be licensed in accordance with KRS Chapter 219; and [~~or approved by the appropriate state and/or local regulatory agency,~~]

(b) Have a minimum of ten (10) [~~adequate~~] parking accommodations which have [~~,~~] modern sanitary facilities, and drinking water.

(6)(a) Qualifying businesses nearest to the interchange or intersection shall receive preference in the selection process.

(b) A qualifying food business which is open sixteen (16) hours a day beginning no later than 7 a.m. each day shall have priority over another qualifying food business which does not provide service for this entire time period. Distance from the interchange shall only be considered in determining priority after the business hours have been considered.

(c) If a new qualifying business comes into existence nearer the interchange or intersection than one which already has a business sign displayed on a fully utilized panel, the new business may have its business sign displayed at the beginning of the next contract year. The [~~and the~~] business farthest from the interchange shall [~~will~~] have its business sign removed at the end of the contract year if the closer business has applied to have its business sign displayed and has been approved for the program.

(7)(a) The qualifying business shall pay to the department's contractor an annual fee of $600, in advance, for each [~~mainline~~] business sign placed on the fully controlled access highway for gas, food, and lodging and $300 for camping.

(b) The annual fee for the first year shall [~~must~~] accompany the initial application.

(c) The first year's annual fee may be prorated on a monthly basis with each portion of a month the business sign is up requiring payment of one-twelfth (1/12) of the fee.

(d) The yearly renewal fee shall be due forty-five (45) [~~thirty (30)~~] days prior to the annual renewal date.

(e) The payment of this fee guarantees that the business sign will be displayed for one (1) contract year or portion of the first contract year as long as the business does not violate any [~~s no~~] part of their agreement with the Department of Highways' contractor.

(8) If a sign or signs for a business is [~~must be~~] removed for any reason, a fee of $100 shall be charged for the reinstallation of the sign [~~such sign(s)~~] for each business at each interchange.

(9) [~~Business sign logos shall be delivered to the appropriate Highway District within sixty (60) days of notification of approval by the Department of Highways. Failure to deliver the business sign within this specified time period may result in the forfeiture of the fee, and another business or businesses may be given the opportunity to qualify for the vacated space.~~

~~(10)~~] The qualifying business shall be responsible for damages to business signs caused by acts of vandalism or natural causes requiring repair or replacement of business signs.

(10) A [~~No~~] business sign shall not be displayed which:

(a) Would [~~will~~] misinform the traveling public; or

(b) [~~which~~] Is unsightly, badly faded, or in a state of dilapidation. In these [~~such~~] instances the business shall provide a new or renovated business sign.

Section 10. Trailblazing Signs For Campgrounds. (1) Only those campgrounds within fifteen (15) miles (24.15 kilometers) of the centerline of a fully controlled access highway shall be eligible for new trailblazing signs.

(2) Only one (1) specific service trailblazing sign shall be erected for each business with a logo. This sign shall be placed a minimum of 300 feet (91.5 meters) in advance of the intersection from which the camping service is available.

(3) A trailblazing sign shall not be erected or displayed if the business is visible from a point on the fully controlled access highway within 300 feet (91.5 meters) prior to intersection.

Section 11. [~~4.~~] Measurements. (1) Measurements in the selection of qualified businesses for business signs shall be from the juncture of the center line, measured between the center edges of the main traveled way of the fully controlled [~~a four (4) lane limited~~] access road and the center line of a nonlimited access crossroad.

(2) Selection of businesses for display of business signs shall begin at the point of measurement described in subsection (1) of this section to the nearest point of vehicle travel to the exit from the crossroad or public thoroughfare to the particular motorist service.

[~~Section 5. Application forms, criteria for selection of businesses with motorist services, standards of quality of business logos and any other information relative to the activities and functions necessary and authorized by KRS 177.860, 177.865 and this regulation, to implement and administer such law and regulations may be obtained by writing the Transportation Cabinet, Frankfort, Kentucky 40622.~~]

Section 12. [~~6. Revocation of~~] Business Sign Contract. (1)(a) A business sign contract between a participating business and the department's contractor shall be approved by the Transportation Cabinet prior to the erection of a business sign.

(b) Each business sign and contract shall be subject to review by the Transportation Cabinet at any time.

(c) Failure to comply with any of the requirements [~~regulations~~] set forth herein including nonpayment by the participating business shall be cause for the revocation of a business sign contract.

(d) If the contract is revoked for cause, the prepaid fees for a contract year or portion thereof, shall not be refunded.

(2) If the Department of Highways or its contractor determines that a contract, business, or business sign does not comply with the requirements of this administrative regulation, [~~In such instances~~] the Department of Highways' contractor shall notify the business in writing of the violation[~~(s)~~].

(3) If the business fails to comply with the requirements of this administrative regulation within fifteen (15) days after receiving the [~~such~~] notification, the Department of Highways' contractor shall take immediate action to cancel the contract and remove, replace, or cover the [~~any such~~] business signs.

Section 13. [~~7.~~] Appeal to the Commissioner of Highways for Exemption. (1)The Commissioner of Highways may grant an exemption to a business from the necessity of complying with any of the requirements set forth in this administrative regulation provided:

(a) It is determined by the commissioner that the [~~such~~] exemption is in the public interest;

(b) [~~and also provided~~] The business conforms to the Federal Highway Administration standards for specific information signs; and [~~provided further that a~~]

(c) That business which conforms to all the requirements set forth in this administrative regulation [~~section~~] shall be given a preference over a business not conforming to all of the [~~said~~] requirements in qualifying for placement of a business sign on a specific information panel.

(2) Any request for an exemption by a business to the Commissioner of Highways shall be filed in the form of an appeal as prescribed for in Section 15 [~~8~~] of this administrative regulation.

Section 14. The Department of Highways' contractor shall apply for an encroachment permit pursuant to 603 KAR 5:150 for each new specific service sign proposed to be erected or removed from state-owned right-of-way.

Section 15. [8.] Appeal of Department of Highways Action. (1) Any business or person aggrieved by the action taken by the Department of Highways or its contractor in administering this administrative [these rules and] regulation[s] may request a formal hearing before the Commissioner of the Department of Highways.

(2) The request for the formal hearing shall:

(a) Be filed in writing with the Commissioner, Department of Highways, 501 High Street, Frankfort, Kentucky 40622; and

(b) [shall] Set forth the nature of the complaint and the grounds for the appeal.

(3) Upon receipt of a request for a hearing, the general counsel of the Transportation Cabinet shall assign the matter to a hearing examiner.

(4) The hearing examiner shall schedule a date for the hearing as soon as the schedules of the parties needed at the hearing allow provided that the time shall not exceed sixty (60) days after receipt of the request for hearing.

(5) The hearing shall be recorded.

(6) The rules of evidence shall not apply.

(7)(a) The hearing examiner shall prepare and submit his report with a recommendation within sixty (60) days of the hearing.

(b) The report and recommendation shall be submitted to the Commissioner of Highways with copies served to the party which requested the hearing.

(8) Any party to the hearing may within twenty (20) days file with the Commissioner of Highways his exceptions to the report and recommendation of the hearing examiner.

(9) The commissioner shall within ten (10) days of receiving the exceptions and within thirty (30) days of receiving the report and recommendation of the hearing examiner issue an official order setting forth the final action of the Department of Highways.

J.M. YOWELL, P.E., State Highway Engineer
JERRY ANGLIN, Deputy Secretary & Highway Commissioner
DON C. KELLY, P.E., Secretary

APPROVED BY AGENCY: April 14, 1994

FILED WITH LRC: April 15, 1994 at 10 a.m.

PUBLIC HEARING: A public comment hearing will be held on this administrative regulation on May 25, 1994 at 1:30 p.m., local prevailing time in Room 1003 of the State Office Building located at the corner of High and Clinton Streets, Frankfort, Kentucky. Any person who intends to attend this hearing must in writing by May 20, 1994 so notify this agency. If no notification of intent to attend the hearing is received by this date, the hearing may be cancelled. This hearing is open to the public. Any person who attends will be given the opportunity to comment on the administrative regulation. A transcript of the public comment hearing will not be made unless a written request for a transcript is made. The party requesting the transcript will be responsible for paying the cost of its preparation. If you do not wish to attend the public hearing, you may submit written comments on the administrative regulation. If the hearing is held, written comments will be accepted until the close of the hearing. If the hearing is cancelled, written comments will only be accepted until May 20, 1994. Send written notification of intent to attend the public comment hearing or written comments on the administrative regulation to Sandra G. Pullen, Staff Assistant, Transportation Cabinet, 10th Floor, State Office Building, 501 High Street, Frankfort, Kentucky 40622, (502) 564-4890.

REGULATORY IMPACT ANALYSIS

Agency Contact Person: Sandra G. Pullen

(1) Type and number of entities affected: All travelers using Kentucky's interstate highways and parkways as well as the 800 businesses which are eligible to and choose to purchase a logo sign.

(a) Direct and indirect costs or savings to those affected: In addition to the cost of preparing the logo, each business is charged $600 per year for the display of the logo signs along the interstate highways and parkways.

1. First year: A cost of $600 for each interchange. However, the receipts gained by the participating businesses would exceed that amount - in most instances, exceed it greatly.

2. Continuing costs or savings: Same

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

(b) Reporting and paperwork requirements: Each participating business must apply to participate in the program.

(2) Effects on the promulgating administrative body: Only a minor since the state has privatized administration of the logo program, there will be very little effect of the Transportation Cabinet.

(a) Direct and indirect costs or savings: None

1. First year:

2. Continuing costs or savings:

3. Additional factors increasing or decreasing costs:

(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 Transportation Cabinet participated with the Governor's Highway Signage and Tourism Task Force. One of the primary recommendations of the Task Force was that the Transportation Cabinet not adopt more stringent requirements regarding signs for tourism entities than the criteria included in the "Manual on Uniform Traffic Control Devices". Therefore, many of the changes in this administrative regulation are the proposed liberalization of the standards relating to the logo program so that Kentucky will no longer be more stringent that the federal guidelines.

(5) Identify any statute, administrative regulation or governmental 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? Yes. Tiering was applied by allowing different eligibility criteria between the extremely rural areas and the more populous areas.

FEDERAL MANDATE ANALYSIS COMPARISON

1. Federal statute or regulation constituting the federal mandate. There is no true federal mandate. However, the Federal Highway Administration through its regulation 23 CFR Part 655 requires that the traffic control devices on all public highways or streets be in substantial conformance with the Manual on Uniform Traffic Control Devices. Logo signs are included in the manual. However, the primary requirement beyond limiting the placement, size, color and services listed, is that each state choosing to have a logo sign program, have its policies approved by the Federal Highway Administration.

2. State compliance standards. The state compliance standards set forth in this administrative regulation meet the federal requirements, but do not exceed them. They are no more stringent.

3. Minimum or uniform standards contained in the federal mandate. Same as adopted in the state administrative regulation.

4. Will this administrative regulation impose stricter requirements, or additional or different responsibilities or requirements, than those

required by the federal mandate? No

5. Justification for the imposition of the stricter standard, or additional or different responsibilities or requirements. Not applicable.

LABOR CABINET
Department of Workplace Standards
Division of Employment Standards and Mediation
(Proposed Amendment)

803 KAR 1:085. Fringe benefits.

RELATES TO: KRS 337.505 to 337.550

STATUTORY AUTHORITY: KRS Chapter 13A [~~337.520(1)~~]

NECESSITY AND FUNCTION: KRS 337.520(1) authorizes the commissioner to make regulation he may deem appropriate to carry out the provisions and purposes of KRS 337.505 to 337.550. The function of this regulation is to interpret the prevailing wage and fringe benefit provisions of KRS 337.505 to 337.550.

Section 1. The Statutory Provisions. The Commissioner of the Department of Workplace Standards has the authority to determine schedules of rates of prevailing wages and of the amount of fringe benefits included therein as defined in KRS 337.505. The statute defines the term "prevailing wage" as the sum of:

(1) "The basic hourly rate paid;" and

(2) "An additional amount per hour equal to the hour rate of contribution irrevocably made to be made by an employer on behalf of employees within each classification of construction to a trustee or to a third person pursuant to an enforceable commitment to carry out a financially responsible plan or program, which was communicated in writing to the employees affected, for the following fringe benefits: medical or hospital care, pensions on retirement, death compensation for injuries or illness resulting from occupational activity or insurance to provide any of the foregoing, unemployment benefits, life insurance, disability and sickness insurance, accident insurance, vacation and holiday pay, defraying costs of apprenticeship or other similar programs, or other bona fide fringe benefits, but only where the employer is not required by other federal, state or local law to provide any of such benefits; provided, said additional amount may, at the discretion of the employer, be paid either in cash to the employee or by contributions for fringe benefits, or partly in cash and partly by such contributions."

Section 2. The Basic Hourly Rate of Pay. The basic hourly rate paid is that part of a laborer, workman, and mechanic's wage which the commissioner would have determined and included in his determination as the portion of the wage in which a cash payment was made directly to the laborer, workman, and mechanic. It does not include fringe benefits.

Section 3. Rate of Contribution for Fringe Benefits. (1) Under the statute, the commissioner is obligated to make a separate finding of the rate of contribution of fringe benefits. Only the amount of contributions for fringe benefits which meets the requirements of the statute will be considered by the commissioner.

(2) The rate of contribution is an hourly rate and will be reflected in the wage determination as such. [~~The rate of contribution is ordinary an hourly rate and will be reflected in the wage determination as such. In some cases, however, the contribution for certain fringe benefits may be expressed in a formula or method of payment other than an hourly rate. In such cases, the commissioner may in his discretion express in the wage determination the rate of contribution used in the formula or method or may convert it to an hourly rate of pay whenever he finds that such action would facilitate the administration of the law.~~]

Section 4. Contribution Irrevocably Made to a Trustee or to a Third Person. Under the fringe benefits provisions of KRS 337.505 the amount of contributions for fringe benefits must be made to a trustee or to a third person irrevocably. The third person must be one who is not affiliated with the employer. The trustee must assume the usual fiduciary responsibilities imposed upon trustees by applicable law. The trust or fund must be set up in such a way that in no event will the employer be able to recapture any of the contributions paid in or in any way divert the funds to his own use or benefit. Although contributions made to a trustee or third person pursuant to a benefit plan must be irrevocably made, this does not prevent return to the employer any sums which he had paid in excess of the contributions actually called for by the plan, as where such excess payments result from error or from the necessity of making payments to cover the estimated cost of contributions at a time when the exact amount of the necessary contributions under the plan is not yet ascertained.

Section 5. Plan or Program. Under the statute, the contributions for fringe benefits must be made pursuant to an enforceable commitment to carry out a financially responsible plan or program which was communicated in writing to the affected employees. No type of fringe benefit will be eligible for consideration under this part unless:

(1) It provides fringe benefits described in the statute;

(2) It represents a commitment that can be legally enforced;

(3) It is carried out under a financially responsible plan or program; and

(4) The plan or program providing the benefits has been communicated in writing to the employees affected.

Section 6. Specific Fringe Benefits. (1) The statute lists all types of fringe benefits which the legislature considered to be common the construction industry as a whole. These include the following: medical or hospital care, pensions on retirement, death compensation for injuries or illness resulting from occupational activity, or insurance to provide any of the foregoing, unemployment benefits, life insurance, disability and sickness insurance, accident insurance, vacation and holiday pay, defraying costs of apprenticeship or other similar programs, other bona fide fringe benefits, but only where the employer is not required by other federal, state or local law to provide any of such benefits.

(2) The term "other bona fide fringe benefits" is the so-called open end provision of the statute. This was included so that new fringe benefits may be recognized by the commissioner as they become prevailing. To insure against considering and giving credit to any and all fringe benefits, some of which may be illusory or not genuine, the qualification was included that such fringe benefits must be "bona fide." No difficulty is anticipated in determining whether a particular fringe benefit is "bona fide" in the ordinary case where the benefits are those common in the construction industry and which are established under a usual plan or program. Employers may take credit for contributions made under conventional plans listed in subsection (1) of this section which are funded under a trust or insurance program.

(3) Where the plan is not the conventional type described in the preceding subsection, it will be necessary for the commissioner to examine the facts and circumstances to determine whether they are "bona fide" in accordance with the requirements of the statute. Employers seeking credit for such plans must request specific permission from the commissioner.

(4) The statute excludes fringe benefits which an employer is obligated to provide under other federal, state, or local law. No credit may be than for payments made for such benefits. For example, payment for workers' compensation insurance are not considered payments for fringe benefits under the statute.

Section 7. Meeting Wage Determination Obligations. (1) An employer performing work subject to a prevailing wage determination

may discharge his minimum wage obligations for the payment of both the straight time wages and fringe benefits by paying in cash the basic hourly rate and by making payments for fringe benefits of the types listed in the applicable wage determination, or by paying in cash the basic hourly rate and paying fringe benefits partly in cash and partly in contributions for fringe benefits.

(2) An employer may discharge his obligations for the payment of the basic hourly rates and the fringe benefits where both are contained in a wage determination in the following ways:

(a) By paying not less than the basic hourly rate to the laborers, workmen, and mechanics and by making the contributions for the fringe benefits in the wage determination, as specified therein.

(b) By paying not less than the basic hourly rate to the laborers, workmen, and mechanics and by making contributions for fringe benefits in a total amount not less than the total of the fringe benefits required by the wage determination.

(c) By paying in cash directly to the laborers, workmen, and mechanics the basic hourly rate and by making an additional cash payment in lieu of the required benefits.

Section 8. Overtime Payments. (1) The law includes amounts paid by an employer for fringe benefits in the computation of overtime under KRS 337.540(3). It is clear that in no event can the rate upon which premium pay for overtime is calculated be less than the amount determined by the commissioner as the basic hourly rate. Contributions by employees are not excluded from the basic rate upon which overtime is computed; that is, an employee's basic straight-time rate is computed on his earnings before any deductions are made for the employee's contributions to fringe benefits. The employer's contributions for fringe benefits may be excluded in computing such rate so long as the exclusions do not reduce the rate below the basic hourly rate contained in the wage determination.

(2) The statute permits an employer to pay a cash equivalent of any fringe benefits found prevailing by the commissioner. Such a cash equivalent would also be excludable in computing the rate upon which overtime is computed.

CAROL M. PALMORE, Secretary

APPROVED BY AGENCY: March 11, 1994

FILED WITH LRC: March 11, 1994 at 3 p.m.

PUBLIC HEARING: A public hearing on this administrative regulation shall be held on May 23, 1994, at 10:30 a.m (EDT), at the Kentucky Labor Cabinet, 1047 U.S. 127 South, Suite 3 Conference Room, Frankfort, Kentucky. Individuals interested in attending this hearing shall notify this agency in writing by May 18, 1994, five days prior to the hearing, of their intent to attend. If no notification of intent to attend the hearing is received by that date, the hearing may be canceled. This hearing is open to the public. Any person who attends will be given an opportunity to comment on the proposed administrative regulation. A transcript of the public hearing will not be made unless a written request for a transcript is made. If you do not wish to attend the public hearing, you may submit written comments on the proposed administrative regulation. Send written notification of intent to attend the public hearing or written comments on the proposed administrative regulation to: Bill Riggs, Kentucky Labor Cabinet, Division of Employment Standards & Mediation, 1047 U.S. 127 South, Suite 3, Frankfort, Kentucky 40601, (502) 564-2784.

REGULATORY IMPACT ANALYSIS

Agency Contact: Rex Hunt, Bill Riggs

(1) Type and number of entities affected: The amendments to this regulation affect all employers in the construction industry performing public works construction as regulated under KRS 337.505 to 337.550.

(a) Direct and indirect costs or savings to those affected: Affected employers could realize a cost savings based on number of hours per week worked on a public works project by their employees. Under current regulation, if an employee works one hour in a week, the fringe benefits could apply for all hours worked in that week. This pertains almost exclusively with truck drivers picking up or delivering goods on a construction project. The current statute calls for fringe benefits to be payable on an hourly basis, therefore, causing the employer to be responsible for fringe benefits on an hourly basis vs. weekly causing minimal savings by the employer.

1. First year: Minimal savings. An actual amount cannot be calculated because prevailing wage rates vary county by county.

2. Continuing costs or savings:

3. Additional factors increasing or decreasing costs (note any effects upon competition): There are no additional factors regarding these amendments which will increase or decrease costs. There will be no affect on competition.

(b) Reporting and paperwork requirements: These amendments will not entail any reporting or paperwork requirements.

(2) Effects on the promulgating administrative body: The promulgating body will not be affected by the adoption of these amendments.

(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: Fringe benefits will have to be calculated on an hourly rate as opposed to a weekly rate.

(3) Assessment of anticipated effect on state and local revenues: This amendment will have no anticipated effect on state and local revenues.

(4) Assessment of alternative methods; reasons why alternative were rejected: Alternative methods were not considered as these amendments are simply to cause regulation to comply with KRS 337.505.

(5) Identify any statute, administrative regulation or government policy which may be in conflict, overlapping, or duplication: Current regulation is in conflict with KRS 337.505.

(a) Necessity of proposed regulation if in conflict: Proposed regulation will comply with aforementioned statute.

(b) If in conflict, was effort made to harmonize the proposed administrative regulation with conflicting provisions: Proposed regulation change will bring into harmony the administrative regulation and current statute.

(6) Any additional information or comments: Conflict of the governing statute and regulation was raised by counsel for an employer.

TIERING: Was tiering applied? No. The regulations of the Division of Employment Standards and Mediation affect all employers working on prevailing wage projects.

FISCAL NOTE ON LOCAL GOVERNMENT

1. Does this administrative regulation relate to any aspect of a local government, including any service provided by that local government? Yes

2. State whether this administrative regulation will affect the local government or only a part or division of the local government. This regulation change affects any local government public works construction covered under KRS 337.505.

3. State the aspect or service of local government to which this administrative regulation relates. The proposed revision affects payment of fringe benefits to workers on public works projects.

4. How does this administrative regulation affect the local government or any service it provides? Could slightly reduce the cost of public works projects.

PUBLIC PROTECTION AND REGULATION CABINET
Department of Housing, Buildings and Construction
Division of Plumbing
(Proposed Amendment)

815 KAR 20:010. Definitions.

RELATES TO: KRS Chapter 318
STATUTORY AUTHORITY: KRS 13A.120, 318.130
NECESSITY AND FUNCTION: The department is directed by KRS 318.130 through the State Plumbing Code Committee to adopt and put into effect a State Plumbing Code. This regulation relates to the definitions needed to interpret other sections of the subsequent regulations or comprising the State Plumbing Code. This amendment creates an additional definition for use in the State Plumbing Code to clarify the type and size of rock to use for bedding under piping. It was approved by the Plumbing Code Committee and Board of Housing. [~~clarifies that piping which carries water or sewage is not a plumbing fixture.~~]

Section 1. Definition of Terms. (1) "Administrative authority" means the Department of Housing, Buildings and Construction or any person or agency authorized by the department to administer and enforce the provisions of the state plumbing code.

(2) "Air break (drainage system)" means a piping arrangement in which a drain from a fixture, appliance, or device discharges indirectly into another fixture, receptacle, or interceptor at a point below the flood level rim.

(3) "Air gap (drainage system)" means the unobstructed vertical distance through the free atmosphere between the outlet of waste pipe and the flood level rim of the receptacle into which it is discharging.

(4) "Air gap (water distribution system)" means the unobstructed vertical distance through the free atmosphere between the lowest opening from any pipe or faucet supplying water to a tank, plumbing fixture or other device and the flood level rim of the receptacle.

(5) "Anchors" means "supports".

(6) "Apprentice plumber" as defined in KRS 318.010(7).

(7) "Approved" means accepted or acceptable under an applicable specification stated or cited in this code.

(8) "Area drain" means a receptacle designed to collect surface or storm water from an open area.

(9) "Aspirator" means a fitting or device supplied with water or other fluid under positive pressure which passes through an integral orifice or "constriction" causing a vacuum. Aspirators are often referred to as "suction" apparatus, and are similar in operation to an ejector.

(10) "Autopsy table" means a fixture or table used for postmortem examination of a body.

(11) "Backflow" means the flow of water or other liquids, mixtures, or substances into the distributing pipes of a potable supply of water from any source or sources other than its intended source. back siphonage is one type of backflow.

(12) "Backflow connection" means any arrangement whereby backflow may occur (see cross connection).

(13) "Backflow preventer" means a device or means to prevent backflow.

(14) "Backflow preventer, reduced pressure zone type" means an assembly of differential valves and check valves including an automatically opened spillage port to the atmosphere.

(15) "Back siphonage" means the flowing back of used, contaminated, or polluted water from a plumbing fixture or vessel or other sources into a potable water supply pipe due to a negative pressure in such pipe.

(16)(a) "Basement" means the lowest level of a dwelling unit which is wholly or partly below the ground level in which the entrance and exit is made by use of a stairway or other mechanical means and which may or may not have an entrance and exit at the basement floor level.

(b) "Basement floor drains" means a drain placed in the basement floor of a residence which may or may not receive sanitary waste water.

(17) "Battery of fixtures" means any group of two (2) or more similar adjacent fixtures which discharge into a common horizontal waste or soil branch.

(18) "Bedpan hopper" means "clinical sink".

(19) "Bedpan steamer or boiler" means a fixture used for scalding bedpans or urinals by direct application of steam of boiling water.

(20) "Bedpan unit" means a small workroom in the nursing area designed and equipped for emptying, cleaning, and sometimes for steaming bedpans, and for no other purposes.

(21) "Bedpan washer and sterilizer" means a fixture designed to wash bedpans and to flush the contents into the sanitary drainage system. It may also provide for disinfecting utensils by scalding with steam or hot water.

(22) "Bedpan washer hose" means a device supplied with hot and cold water and located adjacent to a water closet or clinical sink to be used for cleaning bedpans.

(23) "Boiler blow-off" means an outlet on a boiler to permit emptying or discharge of sediment.

(24) "Boiler blow-off tank" means a vessel designed to receive the discharge from a boiler blow-off outlet and to cool the discharge to a temperature which permits its safe discharge to the drainage system.

(25) "Branch" means that part of the piping system which extends horizontally, at a slight grade, with or without lateral or vertical extensions or vertical arms, from the main to receive fixture outlets not directly connected to the main.

(26) "Branch, fixture" means "fixture branch".

(27) "Branch interval" means a distance along a soil or waste stack corresponding in general to a story height, but in no case less than eight (8) feet, within which the horizontal branches from one (1) floor or story of a building are connected to the stack.

(28) "Branch vent" means a vent connecting one (1) or more individual vents with a vent stack or stack vent.

(29) "Building" means a structure having walls and a roof designed and used for the housing, shelter, enclosure, or support of persons, animals or property.

(30) "Building classification" means the arrangement of buildings in classes according to occupancy.

(31) "Building drain" means that part of the lowest piping of a drainage system which receives the discharge from soil, waste, and other drainage pipes inside the walls of the building and conveys it to the building sewer beginning two (2) feet outside the building wall.

(32) "Building drain; combined" means a building drain which conveys both sewage and storm water or other drainage.

(33) "Building drain; sanitary" means a building drain which conveys sewage only.

(34) "Building drain; storm" means a building drain which conveys storm water or other drainage but not sewage.

(35) "Building gravity drainage system" means a drainage system which drains by gravity into the building sewer.

(36) "Building sewer" means that part of the drainage system which extends from the end of the building drain and conveys its discharge to a public sewer, private sewer, individual sewage-disposal system, or other point of disposal.

(37) "Building sewer; combined" means a building sewer which conveys both sewage and storm water or other drainage.

(38) "Building sewer; sanitary" means a building sewer which conveys sewage only.

(39) "Building sewer; storm" means a building sewer which conveys storm water or other drainage but no sewage.

(40) "Building subdrain" means that portion of a drainage system which does not drain by gravity into the building sewer.

(41) "Cesspools" means a lined and covered excavation in the

ground which receives a discharge of domestic sewage or other organic wastes from a drainage system, so designed as to retain the organic matter and solids, but permitting the liquids to seep through the bottom and sides.

(42) "Circuit vent" means a branch vent that serves two (2) or more traps and extends from the downstream side of the highest fixture connection of a horizontal branch to the vent stack.

(43) "Clinical sink (bedpan hopper)" means a fixture for the rinsing of bedpans and soiled linens. Such fixture shall have a trap size on not less than three (3) inches.

(44) "Code" as defined in KRS 318.010(11).

(45) "Combination fixture" means a fixture combining one (1) sink and laundry tray or a two (2) or three (3) compartment sink or laundry tray in one (1) unit.

(46) "Combined building drain" means "building drain; combined".

(47) "Combined building sewer" means "building sewer; combined".

(48) "Combination waste and vent system" means a specially designed system of waste piping embodying the horizontal wet venting of one (1) or more sinks or floor drains by means of a common waste and vent pipe adequately sized to provide free movement of air above the free water surface in the drain.

(49) "Common vent" means a vent connecting at the junction of two (2) fixture drains and serving as a vent for both fixture drains.

(50) "Conductor" means a pipe inside the building which conveys storm water from the roof to a storm or combined building drain.

(51) "Continuous vent" means a vertical vent that is a continuation of the drain to which it connects.

(52) "Continuous waste" means a drain from two (2) or more fixtures connected to a single trap.

(53) "Cross connection" means any physical connection or arrangement between two (2) otherwise separate piping systems, one (1) of which contains potable water and the other either water of unknown or questionable safety or steam, gas, or chemical whereby there may be a flow from one (1) system to the other, the direction of flow depending on the pressure differential between the two (2) systems. (See backflow and back siphonage.)

(54) "Dead end" means a branch leading from a soil, waste or vent pipe, building drain, or building sewer, and terminating at a developed length of two (2) feet or more by means of a plug, cap, or other closed fitting.

(55) "Developed length" means the length of a pipe line measured along the center line of the pipe and fittings.

(56) "Diameter" means the nominal diameter as designated commercially.

(57) "Domestic sewage" means the waterborne wastes derived from ordinary living processes.

(58) "Double offset" means two (2) changes of direction installed in succession or series in a continuous pipe.

(59) "Downspout" means "leader".

(60) "Drain" means any pipe which carries waste water or waterborne wastes in a building drainage system.

(61) "Drainage pipe" means "drainage system".

(62) "Drainage system" means includes all the piping, within public or private premises, which conveys sewage, rain water, or other liquid wastes to a point of disposal. It does not include the mains of a public sewer system or private or public sewage- treatment or disposal plant. Neither does this apply to plumbing appliances.

(63) "Drainage system (building gravity)" means a drainage system which drains by gravity into the building sewer.

(64) "Drainage system (subbuilding)" means "building subdrain".

(65) "Dry well" means "leaching well".

(66) "Dual vent" means "common vent".

(67) "Durham system" means a term used to describe soil or waste systems where all piping is of threaded pipe, tube, or other such rigid construction, using recessed drainage fittings to correspond to the types of piping.

(68) "Dwelling unit" means one (1) or more rooms with provision for living, sanitary and sleeping facilities arranged for the use of one (1) family or individual.

(69) "DWV" means an abbreviated term for drain, waste and vent piping as used in common plumbing practice.

(70) "Effective opening" means the minimum cross-sectional area at the point of water supply discharge, measured or expressed in terms of (i) diameter of a circle, or (ii) if the opening is not circular, the diameter of a circle of equivalent cross-sectional area.

(71) "Ejector" means "aspirator".

(72) "Existing work" means a plumbing system or any part thereof installed prior to the effective date of this code.

(73) "Farm" as associated with farmstead which is defined in KRS 318.010(8) means property that shall have a bona fide agricultural or horticultural use as defined by KRS 132.010(9) and (10) and qualified by and registered with the PVA in that county.

(74) "Fire line" means a system of pipes and equipment used exclusively to supply water for extinguishing fires.

(75) "Fixture" means "plumbing fixture".

(76) "Fixture branch" means the piping distance between a soil, waste and vent stack and the fixture trap.

(77) "Fixture drain" means the drain from the trap of a fixture to the junction of that drain with any other drain pipe.

(78) "Fixture supply" means the water supply pipe connecting a fixture to a branch water supply pipe or directly to a main water supply pipe.

(79) "Fixture unit, drainage (d.f.u.)" means a measure of the probable discharge into the drainage system by various types of plumbing fixtures. The drainage fixture-unit valve [~~value~~] for a particular fixture depends on its volume rate of drainage discharge, on the time duration of a single drainage operation, and on the average time between successive operations. (Note: In general, on small systems, one (1) drainage fixture unit approximates one (1) cubic foot per minute.)

(80) "Fixture unit, supply (s.f.u.)" means a measure of the probable hydraulic demand on the water supply by various types of plumbing fixtures. The supply fixture-unit valve [~~value~~] for a particular fixture depends on its volume rate of supply, on the time duration of a single supply operation, and on the average time between successive operations.

(81) "Flood level" means "flood level rim".

(82) "Flood level rim" means the edge of the receptacle from which water overflows.

(83) "Flooded" means the condition which results when the liquid in a container or receptacle rises to the flood-level rim.

(84) "Floor drain" means a drain placed in the floor of a building for the purpose of receiving sanitary waste water.

(85) "Floor pantry" means a workroom in the nursing area designed and equipped to prepare supplemental diets or beverages, and to assemble food trays at meal times if used in conjunction with decentralized food service.

(86) "Flow pressure" means the pressure in the water supply pipe near the faucet or water outlet while the faucet or water outlet is wide-open and flowing.

(87) "Flush valve" means a device located at the bottom of a tank for slushing water closets and similar fixtures.

(88) "Flushing type floor drain" means a drain which is equipped with an integral water supply enabling flushing of the drain receptor and trap.

(89) "Flushometer valve" means a device which discharges a predetermined quantity of water to fixtures for flushing purposes and is closed by direct water pressure.

(90) "Frost-proof closet" means a hopper with no water in the bowl and with the trap and water supply control valve located below frost line.

(91) "Grade" means the fall (slope) of a line of pipe in reference

to a horizontal plane. In drainage it is usually expressed as the fall in a fraction of an inch per foot length of pipe.

(92) "Grease interceptor" means "interceptor".

(93) "Grease trap" means "interceptor".

(94) "Grillage" means sand, pea gravel or limestone rock sizes #57 and smaller as defined by Kentucky Department of Highways and used for bedding for piping systems.

(95) "Hangers" means "supports".

(96) [~~(95)~~] "Horizontal branch drain" means a drain branch pipe extending laterally from a soil or waste stack or building drain, with or without vertical sections or branches, which receives the discharge from one (1) or more fixture drains and conducts it to the soil or waste stack or to the building drain.

(97) [~~(96)~~] "Horizontal pipe" means any pipe or fitting which makes an angle of less than forty-five (45) degrees with the horizontal.

(98) [~~(97)~~] "Hose bibb" means a sill cock, wall hydrant, or similar faucet with a downward angled threaded nozzle.

(99) [~~(98)~~] "Hot water" means water at a temperature of not less than 120 degrees Fahrenheit.

(100) [~~(99)~~] "House drain" means "building drain".

(101) [~~(100)~~] "House sewer" means "building sewer".

(102) [~~(101)~~] "Indirect waste pipe" means a waste pipe not directly connected with the drainage system, but which discharges into the drainage system through an air break or air gap into a trap, fixture, receptor or interceptor.

(103) [~~(102)~~] "Individual sewage disposal system" means a system for disposal of domestic sewage by means of a septic tank, cesspool or mechanical treatment, designed for use apart from a public sewer to serve a single establishment or building.

(104) [~~(103)~~] "Individual vent" means a pipe installed to vent a fixture drain. It connects with the vent system above the fixture served or terminates outside the building into the open air.

(105) [~~(104)~~] "Individual water supply" means a supply other than an approved public water supply which serves one (1) or more families.

(106) [~~(105)~~] "Industrial floor drain" means a drain placed in the floor of a building other than in a toilet room or shower room to receive waste water.

(107) [~~(106)~~] "Industrial wastes" means liquid wastes resulting from the processes employed in industrial and commercial establishments.

(108) [~~(107)~~] "Insanitary" means contrary to sanitary principles; injurious to health.

(109) [~~(108)~~] "Interceptor" means a device designed and installed so as to separate and retain deleterious, hazardous, or undesirable matter from normal wastes while permitting normal sewage or liquid wastes to discharge into the drainage system by gravity.

(110) [~~(109)~~] "Installed" means altered, changed or a new installation.

(111) [~~(110)~~] "Invert" means the lowest portion of the inside of any horizontal pipe.

(112) [~~(111)~~] "Kitchen sink unit" means a sink, double or single compartment, food waste disposer, and dishwasher placed in a unit so arranged that the dishwasher abuts the sink.

(113) [~~(112)~~] "Lavatory" means a hand basin such as in a bathroom.

(114) [~~(113)~~] "Leaching well or pit" means a pit or receptacle having porous walls which permit the contents to seep into the ground.

(115) [~~(114)~~] "Leader" means an exterior drainage pipe for conveying storm water from roof or gutter drains.

(116) [~~(115)~~] "Liquid waste" means the discharge from any fixture, appliance, area or appurtenance, which does not contain fecal matter.

(117) [~~(116)~~] "Load factor" means the percentage of the total connected fixture unit flow which is likely to occur at any point in the drainage system.

(118) [~~(117)~~] "Local vent stack" means a vertical pipe to which connections are made from the fixture side of traps and through which vapor and foul air may be removed from the fixture or device used on bedpan washers.

(119) [~~(118)~~] "Local ventilating pipe" means a pipe through which foul air is removed from a room or fixture.

(120) [~~(119)~~] "Loop vent" means a circuit vent which loops back to connect with a stack vent instead of a vent stack.

(121) [~~(120)~~] "Main" means the horizontal, vertical and continuous piping which receives the waste, soil, main or individual vents from fixture outlets, or traps, directly or through branch pipes.

(122) [~~(121)~~] "Main sewer" means "public sewer".

(123) [~~(122)~~] "Main vent" means the principal artery of the venting system to which vent branches may be connected. (Manufacturer's Floor Drain. See industrial floor drain.)

(124) [~~(123)~~] "Multiple dwelling" means a building containing more than two (2) dwelling units.

(125) [~~(124)~~] "Nominal pipe size" means a standard expression in inches and fractions thereof to designate the approximate inside diameter of a pipe, conduit or tube.

(126) [~~(125)~~] "Nonpotable water" means water not safe for drinking, personal or culinary use.

(127) [~~(126)~~] "Nuisance" means dangerous to human life or detrimental to health; whatever building, structure, or premise is not sufficiently ventilated, sewered, drained, cleaned or lighted, in reference to its intended or actual use; and whatever renders the air or human food or drink or water supply unwholesome.

(128) [~~(127)~~] "Nurses' station" means an area in the nursing unit separated from the corridor by counter or desk, designed to permit nurses to record and file each patient's history and progress, observation and control of corridor, preparation of medicines and maintain contact with patients, the hospital and the outside by local and public means of communication.

(129) [~~(128)~~] "Offset" means a combination of elbows or bends which bring one (1) section of the pipe out of line but into a line parallel with the other section.

(130) [~~(129)~~] "Oil interceptor" means "interceptor".

(131) [~~(130)~~] "Person" as defined in KRS 318.010(9).

(132) [~~(131)~~] "Pitch" means "grade".

(133) [~~(132)~~] "Plumber's apprentice" means any person other than a journeyman or master plumber, who, as his principal occupation, is engaged in working as an employee of a master plumber under the immediate and personal supervision of either a master or journeyman plumber in learning and assisting in the installation of plumbing.

(134) [~~(133)~~] "Plumbing" as defined in KRS 318.010(4).

(135) [~~(134)~~] "Plumbing appliance" means any one (1) of a special class of plumbing fixture which is intended to perform a special function. Its operation and control may be dependent upon one (1) or more energized components, such as motors, controls, heating elements, or pressure or temperature-sensing elements. Such fixtures may operate automatically through one (1) or more of the following actions: a time cycle, a temperature range, a pressure range, a measured volume or weight; or the fixture may be manually adjusted or controlled by the user or operator.

(136) [~~(135)~~] "Plumbing appurtenance" means a manufactured device, or a prefabricated assembly of component parts, and which is an adjunct to the basic piping system and plumbing fixtures. An appurtenance demands no additional water supply, nor does it add any discharge load to a fixture or the drainage system. It is presumed that it performs some useful function in the operation, maintenance, servicing, economy, or safety of the plumbing system.

(137) [~~(136)~~] "Plumbing fixture" means a receptacle or device which is either permanently or temporarily connected to the water distribution system of the premises, and demands a supply of water therefrom, or it discharges used water, liquid-borne waste materials, or sewage either directly or indirectly to the drainage system of the premises, or which requires both a water supply connection and a

discharge to the drainage system of the premises. Plumbing appliances as a special class of fixture are further defined. This definition does not include the piping which carries water or sewage.

(138) [~~(137)~~] "Plumbing inspector" means a duly authorized employee or agent of the Department of Housing, Buildings and Construction who is charged with the responsibility of inspecting plumbing installations and with the enforcement of the state plumbing laws and code.

(139) [~~(138)~~] "Plumbing repair" means as used in the code to mean replacing a part or putting together that which is torn or broken.

(140) [~~(139)~~] "Plumbing system" means the following: appliances and water heaters; the water supply distributing pipes; the fixtures and fixture traps; the soil, waste and vent pipes; the house drain and house sewer; the storm water drainage within a building with their devices, appurtenances and connections all within and adjacent to the building.

(141) [~~(140)~~] "Pool" means "swimming pool".

(142) [~~(141)~~] "Potable water" means water free from impurities present in amounts sufficient to cause disease or harmful physiological effects and conforming in its bacteriological and chemical quality to the requirements of the Division of Water Quality or the regulations of the Department of Housing, Buildings and Construction.

(143) [~~(142)~~] "Private or private use" means, in the classification of plumbing fixtures, private applies to fixtures in residences and apartments and to fixtures in private bathrooms of hotels as well as similar installations in other buildings where the fixtures are intended for the use of a family or an individual.

(144) [~~(143)~~] "Private sewer" means a sewer, serving two (2) or more buildings, privately owned, and not directly controlled by public authority.

(145) [~~(144)~~] "Public or public use" means, in the classification of plumbing fixtures, public applies to fixtures in general toilet rooms of schools, gymnasiums, hotels, railroad stations, public buildings, bars, public comfort stations, and other installations (whether pay or free) where a number of fixtures are installed so that their use is similarly unrestricted.

(146) [~~(145)~~] "Public sewer" means a common sewer directly controlled by public authority.

(147) [~~(146)~~] "Public water main" means a water supply pipe for public use controlled by public authority.

(148) [~~(147)~~] "Receptor" means a fixture or device which receives the discharge from indirect waste pipes.

(149) [~~(148)~~] "Relief vent" means an auxiliary vent which permits additional circulation of air in or between drainage and vent systems.

(150) [~~(149)~~] "Replace" means to put something new or rebuilt in the place of that which was existing.

(151) [~~(150)~~] "Return offset" means a double offset installed so as to return the pipe to its original alignment.

(152) [~~(151)~~] "Revent pipe" means "individual vent".

(153) [~~(152)~~] "Rim" means an unobstructed open edge of a fixture.

(154) [~~(153)~~] "Riser" means a water supply pipe which extends vertically one (1) full story or more to convey water to branches or to a group of fixtures.

(155) [~~(154)~~] "Roof drain" means a drain installed to receive water collecting on the surface of a roof and to discharge it into a leader or a conductor.

(156) [~~(155)~~] "Roughing-in" means the installation of all parts of the plumbing system which can be completed prior to the installation of fixtures. This includes drainage, water supply, and vent piping, and the necessary fixture supports.

(157) [~~(156)~~] "Safe waste" means "indirect waste".

(158) [~~(157)~~] "Sand interceptor" means "interceptor".

(159) [~~(158)~~] "Sand trap" means "interceptor".

(160) [~~(159)~~] "Sanitary sewer" means a sewer which carries sewage and excludes storm, surface, and ground water.

(161) [~~(160)~~] "Scrub sink" means a device usually located in the operating suite to enable operating personnel to scrub their hands prior to operating procedures. The hot and cold water supply is activated by a knee-action mixing valve or by wrist or pedal control.

(162) [~~(161)~~] "Seepage well or pit" means a covered pit with open-jointed lining into which septic tank effluent is received that will seep or leach into the surrounding porous soil.

(163) [~~(162)~~] "Separator" means "interceptor".

(164) [~~(163)~~] "Septic tank" means a watertight receptacle which receives the discharge of a building sanitary drainage system or part thereof, and is designed and constructed so as to digest organic matter through a period of detention and allow the liquids to discharge into the soil outside of the tank through a system of open joint or perforated piping, or a seepage pit.

(165) [~~(164)~~] "Sewage" means any liquid waste containing animal or vegetable matter in suspension or solution, and may include liquids containing chemicals in solution.

(166) [~~(165)~~] "Sewage ejectors" means a device for lifting sewage by entraining it in a high velocity jet of steam air or water.

(167) [~~(166)~~] "Side vent" means a vent connecting to the drain pipe through a fitting at an angle not greater than forty-five (45) degrees to the vertical.

(168) [~~(167)~~] "Size of pipe and tubing" means "diameter".

(169) [~~(168)~~] "Slope" means "grade".

(170) [~~(169)~~] "Soil pipe" means any pipe which conveys the discharge of water closets or similar fixtures, with or without the discharges from other fixtures, to the house drain.

(171) [~~(170)~~] "Soil vent" means "stack vent".

(172) [~~(171)~~] "Special wastes" means wastes which require special treatment before entry into the normal plumbing system.

(173) [~~(172)~~] "Special waste pipe" means pipes which convey special wastes.

(174) [~~(173)~~] "Stack" means any vertical line of soil, waste or vent piping.

(175) [~~(174)~~] "Stack group" means a group of fixtures located adjacent to the stack so that by means of proper fittings, vents may be reduced to a minimum.

(176) [~~(175)~~] "Stack vent" means the extension of a soil or waste stack above the highest horizontal drain connected to the stack.

(177) [~~(176)~~] "Stack venting" means a method of venting a fixture or fixtures through the soil or waste stack.

(178) [~~(177)~~] "Sterilizer, boiling type" means a fixture (nonpressure type), used for boiling instruments, utensils, and other equipment (used for disinfection). Some devices are portable, others are connected to the plumbing system.

(179) [~~(178)~~] "Sterilizer, instrument" means a device for the sterilization of various instruments.

(180) [~~(179)~~] "Sterilizer, pressure instrument washer-sterilizer" means a fixture (pressure vessel) designed to both wash and sterilize instruments during the operating cycle of the fixture.

(181) [~~(180)~~] "Sterilizer, pressure (autoclave)" means a fixture (pressure vessel) designed to use steam under pressure for sterilizing. Also called an autoclave.

(182) [~~(181)~~] "Sterilizer, utensil" means a device for the sterilization of utensils as used in hospital services.

(183) [~~(182)~~] "Sterilizer vent" means a separate pipe or stack, indirectly connected to the building drainage system at the lower terminal, which receives the vapors from nonpressure sterilizers, or the exhaust vapors from the pressure sterilizers, and conducts the vapors directly to the outer air. Sometimes called vapor, steam, atmospheric, or exhaust vent.

(184) [~~(183)~~] "Sterilizer, water" means a device for sterilizing water and storing sterile water.

(185) [~~(184)~~] "Still" means a device used in distilling liquids.

(186) [~~(185)~~] "Storm drain" means "building storm drain".

(187) [~~(186)~~] "Storm sewer" means a sewer used for conveying rain water, surface water, condensate, cooling water, or similar liquid wastes.

(188) [~~(187)~~] "Subsoil drain" means a drain which collects subsur-

face water and conveys it to a place of disposal.

(189) [~~(188)~~] "Sump" means a tank or pit, which receives sewage or liquid waste, located below the normal grade of the gravity system and which must be emptied by mechanical means.

(190) [~~(189)~~] "Sump pump" means a mechanical device other than an ejector or bucket for removing sewage or liquid waste from a sump.

(191) [~~(190)~~] "Supports" means devices for supporting and securing pipe, fixtures, and equipment.

(192) [~~(191)~~] "Swimming pool" means any structure, basin, chamber, or tank containing any artificial body of water for swimming, diving, wading or recreational bathing.

(193) [~~(192)~~] "Trap" means a fitting or device which provides a liquid seal to prevent the emission of sewer gases without materially affecting the flow of sewage or waste water through it.

(194) [~~(193)~~] "Trap arm" means that portion of a fixture drain between a trap and its vent.

(195) [~~(194)~~] "Trap primer" means a device or system of piping to maintain a water seal in a trap, typically installed where infrequent use of the trap would result in evaporation of the trap seal, such as floor drains.

(196) [~~(195)~~] "Trap seal" means the vertical distance between the crown weir and the top of the dip of the trap.

(197) [~~(196)~~] "Utility room" means a workroom in the patient nursing area, designed and equipped to facilitate preparation, cleaning and incidental sterilizing of the various supplies, instruments, utensils, etc., involved in nursing treatment and care, exclusive of medications handled in nurses' stations and bedpan cleaning and sterilizing.

(198) [~~(197)~~] "Vacuum" means any pressure less than exerted by the atmosphere.

(199) [~~(198)~~] "Vacuum breaker" means "backflow preventer".

(200) [~~(199)~~] "Vacuum breaker, nonpressure type (atmospheric)" means a vacuum breaker which is not designed to be subjected to static line pressure.

(201) [~~(200)~~] "Vacuum breaker, pressure type" means a vacuum breaker designed to operate under conditions of static line pressure.

(202) [~~(201)~~] "Vent pipe" means any pipe provided to ventilate a house drainage system and to prevent tray siphonage and back pressure.

(203) [~~(202)~~] "Vent system" means a pipe or pipes installed to provide a flow of air to or from a drainage system or to provide a circulation of air within such system to protect trap seals from siphonage and back pressure.

(204) [~~(203)~~] "Vertical pipe" means any pipe or fitting which makes an angle of forty-five (45) degrees or less with the vertical.

(205) [~~(204)~~] "Wall hung water closet" means a wall mounted water closet installed in such a way that no part of the water closet touches the floor.

(206) [~~(205)~~] "Waste pipe and special waste" means any pipe which receives the discharge of any fixture (except water closets or similar fixtures) and discharges to the house drain, soil or waste stacks. When such pipe does not connect directly with a house drain, waste or soil stack, it is termed a special waste.

(207) [~~(206)~~] "Water distributing pipe" means a pipe within the building or on the premises which conveys water from the water-service pipe or meter to the point of usage.

(208) [~~(207)~~] "Water lifts" means "sewage ejector".

(209) [~~(208)~~] "Water outlet" means a discharge opening through which water is supplied to a fixture, into the atmosphere (except into an open tank which is part of the water supply), to a boiler or heating system, to any devices or equipment requiring water to operate but which are not part of the plumbing system.

(210) [~~(209)~~] "Water riser pipe" means "riser".

(211) [~~(210)~~] "Water service pipe" means the pipe from the water main or other source of potable water supply to the water distributing system of the building served.

(212) [~~(211)~~] "Water supply stub" means a vertical pipe less than one (1) story in height supplying one (1) or more fixtures.

(213) [~~(212)~~] "Water supply system" means the water service pipe, the water-distributing pipes, and the necessary connecting pipes, fittings, control valves, and all appurtenances in or adjacent to the building or premises.

(214) [~~(213)~~] "Well, bored" means a well constructed by boring a hole in the ground with an auger and installing a casing.

(215) [~~(214)~~] "Well, drilled" means a well constructed by making a hole in the ground with a drilling machine of any type and installing casing and screen.

(216) [~~(215)~~] "Well, driven" means a well constructed by driving a pipe in the ground. The drive pipe is usually fitted with a well point and screen.

(217) [~~(216)~~] "Well, dug" means a well constructed by excavating a large diameter shaft and installing a casing.

(218) [~~(217)~~] "Wet vent" means a vent which receives the discharge of wastes other than from water closets.

(219) [~~(218)~~] "Yoke vent" means a pipe connecting upward from a soil or waste stack to a vent stack for the purpose of preventing pressure changes in the stack.

CHARLES A. COTTON, Commissioner
EDWARD J. HOLMES, Secretary
APPROVED BY AGENCY: March 17, 1994
FILED WITH LRC: March 30, 1994 at 11 a.m.

PUBLIC HEARING: A public hearing on this administrative regulation shall be held on May 24, 1994 at 10 a.m. in the office of the Department of Housing, Buildings and Construction, 1047 U.S. 127 South, Frankfort, Kentucky. Individuals interested in being heard at this hearing shall notify this agency in writing by May 19, 1994, (five days prior to the hearing) of their intent to attend. If no notification of intent to attend the hearing is received by that date, the hearing may be cancelled. This hearing is open to the public. Any person who attends will be given an opportunity to comment on the proposed administrative regulation. A transcript of the public hearing will not be made unless a written request for a transcript is received. If you do not wish to attend the public hearing, you may submit written comments on the proposed administrative regulation. Send written notification of intent to attend the public hearing or written comments on the proposed administrative regulation to: Judith G. Walden, Office of General Counsel, Department of Housing, Buildings and Construction, The 127 Building, 1047 U.S. 127 South, Frankfort, Kentucky 40601.

REGULATORY IMPACT ANALYSIS

Agency Contact Person: Judith G. Walden

(1) Type and number of entities affected: Users of the State Plumbing Code; master and journeymen plumbers.

(a) Direct and indirect costs or savings to those affected: No costs or savings effected with the implementation of this amendment.

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 reporting or paperwork required by users of the State Plumbing Code.

(2) Effects on the promulgating administrative body: Preparing amendment to code and distributing the information to users.

(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: No effect on state or local revenue with the implementation of this

amendment.

(4) Assessment of alternative methods; reasons why alternatives were rejected: State Plumbing Code Committee and Board of Housing review proposed amendments and accept on basis within limits defined.

(5) Identify any statute, administrative regulation or government policy which may be in conflict, overlapping, or duplication: No duplication 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:

TIERING: Was tiering applied? No. Same rock needed to stabilize all underground piping.

PUBLIC PROTECTION AND REGULATION CABINET
Department of Housing, Buildings and Construction
Division of Plumbing
(Proposed Amendment)

815 KAR 20:070. Plumbing fixtures.

RELATES TO: KRS Chapter 318

STATUTORY AUTHORITY: KRS 318.130

NECESSITY AND FUNCTION: The department is directed by KRS 318.130 through the State Plumbing Code Committee to adopt and put into effect a State Plumbing Code. This administrative regulation relates to the kind, type and quality of plumbing fixtures that shall be used in the construction of plumbing systems and identifies the manufacturer's specification number of the material accepted in those installations. This amendment is necessary to bring the regulation into compliance with the mandates of the federal government concerning the amount of water usage of plumbing fixtures. [~~correct references to various standards to comply with KRS Chapter 13A drafting rules.~~]

Section 1. Materials. Receptacles used as water closets, urinals, or for the disposal of human excreta, shall be of vitrified earthenware, hard natural stone, or cast-iron with a light color porcelain enameled on the inside, except as indicated in Section 4 of this administrative regulation.

Section 2. Installation. Plumbing fixtures shall be installed to allow access for cleaning. Where practical, all pipes from fixtures shall be run to the wall and no trap or pipe shall extend nearer to the floor than twelve (12) inches except laundry trays or similar fixtures.

Section 3. Water Closet Bowls. Water closet bowls shall be of one (1) piece construction and hold a sufficient quantity of water when filled to the trap overflow to prevent fouling of its interior surfaces, and it shall be provided with an integral flushing rim to flush the entire interior of the bowl.

Section 4. Plastic Water Closet Bowl and Tank. Plastic water closet bowl and tank shall be constructed with a polypropylene lining inside the one (1) piece bowl and tank. The outer surface of the bowl shall be constructed of PVC material and the filler material between the two (2) surfaces shall be made of polyurethane foam. The bowl shall have a three (3) inch water seal and shall have a two and one-eighth (2 1/8) inch waste opening passage.

Section 5. Frost-proof Closet. A frost-proof water closet may be installed only in a building that has at least a twelve (12) inch air break between it and any building used for habitation or occupancy. The room shall be tightly enclosed and accessible from the outside only. The soil pipe between the trap and hopper shall be of extra heavy cast-iron, four (4) inches in diameter and shall be light colored porcelain enamel on the inside. The building shall have a nonabsorbent floor. A frost-proof water closet shall have a four (4) inch vent.

Section 6. (1) Floor drains and shower drains. A floor drain or a shower drain shall be considered a plumbing fixture and shall be provided with a strainer.

(2) Shower drain pan construction. Shower pans shall be constructed without seams and shall extend to a minimum height of six (6) inches on all vertical walls. Shower pans shall not be required on a concrete floor before the outside grade level. Shower drain pans shall be constructed as follows:

(a) Of sheet lead weighing not less than four (4) pounds per square foot; or

(b) Of nonplasticized chlorinated polyethylene produced and labeled as ASTM D-412-66, D-1204-54 and D-568-61 and they shall be not less than 0.040 inches thick; or

(c) Of nonplasticized polyvinyl chloride (PVC) sheet material produced and labeled as ASTM D-1004, D-2204, D-412 and D-1790 and they shall be not less than 0.040 inches thick; or

(d) Of other approved material. Copies of ASTM specifications identified in this administrative regulation may be obtained by writing the American Society for Testing Materials, 1916 Race Street, Philadelphia, Pennsylvania 19103.

(3) Fiberglass bathtubs, showers, tub enclosures and shower stalls. Fiberglass bathtubs and tub enclosures shall be produced and labeled as ANSI Z 124.1. Acrylic-faced bathtubs shall be produced and labeled as ASTM E-84B or E-162. Fiberglass shower stalls and shower receptors shall be produced and labeled as ANSI Z 124.2.

(4) Metamorphosed carbonate aggregate polyester resinous martrix-marbleoid bathtubs, lavatories and shower stalls. Metamorphosed carbonate aggregate polyester resinous martrix-marbleoid bathtubs, shall be produced and labeled as ANSI Z 124-1, lavatories shall be produced and labeled as ANSI Z 124-3 and shower stalls shall be produced and labeled as ANSI Z 124-2. Copies of ANSI specifications identified in this administrative regulation may be obtained by writing the American National Standards Institute, 1430 Broadway, New York, New York 10018.

Section 7. Fixture Strainers. Fixtures, other than water closets and pedestal urinals, shall be provided with a strainer. The outlet area of the strainer shall not be less than the interior area of the trap.

Section 8. Fixture Overflow. The overflow from a fixture shall be optional, but if used, the overflow shall be connected to the inlet side of a trap and accessible for cleaning.

Section 9. Fixture Additions. Fixtures added to a plumbing system shall be installed to comply with all applicable sections of the State Plumbing Code.

Section 10. Defective Fixtures. Newly installed fixtures found defective or old fixtures found to be in an unusable condition, shall be repaired, replaced, or removed within thirty (30) days upon written notice from the department.

Section 11. Water Heaters. (1) A water heater designed for use as an appliance for supplying potable hot water for domestic or commercial purposes may be used for space heating if the water temperature does not exceed 140 degrees Fahrenheit. Water heaters shall be properly connected to the hot and cold water supply and shall be connected to an adequate size flue or chimney. A water heater shall not be connected to a flue serving a coal burning apparatus. The flue or chimney shall extend two (2) feet above the roof and shall be properly flashed and shall not terminate within six (6) feet of a door or window. A fuel fired water heater, with the exception of those having direct-vent or through the wall vent

systems, shall not be placed in any bathroom, toilet room or a room used for sleeping. If a water heater is placed in a closed room or closet, the door shall be a louver door or shall be properly ventilated to provide combustion air and circulation (see 815 KAR 20:120).

(2) Direct venting system location. Residential gas-fired direct vent and through the wall type water heaters shall be vented in accordance with the manufacturer's recommendations and shall be installed in accordance with the National Fire Prevention Association Pamphlet #54 adopted by reference in the Kentucky Fire Prevention Code filed in 815 KAR 10:040. The vent terminal of a direct vent appliance with an input of 50,000 BTU per hour or less shall be located at least nine (9) inches from any opening through which flue gases could enter a building, and an appliance with an input over 50,000 BTU per hour shall require a twelve (12) inch vent termination clearance. The bottom of the vent terminal and the air intake shall be located at least twelve (12) inches above grade" (see 815 KAR 20:120, Section 11).

Section 12. Conservation of Water. (1) Conservation of hot water.

(a) Showers. Showers used for other than safety reasons shall be equipped with approved flow control devices to limit total flow to a maximum of two and one-half (2.5) [~~three (3)~~] gpm per shower head.

(b) Lavatories.

1. Lavatories in restrooms of public facilities shall be equipped with outlet devices which limit the flow of domestic hot water to a maximum of 0.75 gpm.

2. Lavatory faucets [~~Lavatories~~] (other than those in restrooms of public facilities) [~~listed in subparagraph 1 of this paragraph) and sink faucets~~] shall be equipped with flow control devices which limit the flow of domestic hot water to a maximum of two (2.0) [~~four (4.0)~~] gpm.

3. Sink faucets shall be equipped with flow control devices which limit the flow of domestic hot water to a maximum of two and one-half (2.5) gpm.

(2) Conservation of cold water.

(a) Showers. Showers used for other than safety reasons shall be equipped with approved control devices to limit total flow to a maximum of two and one-half (2.5) [~~three (3.0)~~] gpm per shower head.

(b) Lavatory [~~Lavatories~~] and sink faucets.

1. Lavatory faucets: lavatory [~~Lavatories and sink~~] faucets shall be equipped with flow control devices which limit the flow of domestic cold water to a maximum of two (2.0) [~~four (4.0)~~] gpm.

2. Sink faucets: sink faucets shall be equipped with flow control devices which limit the flow of domestic cold water to a maximum of two and one-half (2.5) gpm.

(c) Water closets: water closets shall not exceed three and one-half (3.5) gallons per flush.

[~~1. Tank type water closets shall not exceed three and one half (3 1/2) gallons (thirteen and three tenths (13.3) liters) per flush.~~

~~2. Flushometer type water closets shall not exceed three and one half (3 1/2) gallons (thirteen and three tenths (13.3) liters) per flush.~~]

(d) Urinals: urinals shall not exceed one (1.0) gallon per flush.

[~~1. Tank type urinals shall not exceed three (3) gallons (eleven and four tenths (11.4) liters) per flush.~~

~~2. Flushometer type urinals shall not exceed one and one half (1 1/2) gallons (five and seven tenths (5.7) liters) per flush.~~

~~(3) Lavatory faucets located in restrooms intended for public use shall be of the metering or self closing type except those intended for the physically impaired.~~]

(3) [~~(4)~~] The provisions of this section shall apply to new construction, renovations and replacement in existing structures. Upon satisfactory compliance with the requirements of this section, the Division of Plumbing shall permit the installation of tank type water closets equipped with devices found by the inspector to meet applicable specifications in water closets having a tank capacity in excess of three and one-half (3 1/2) gallons (thirteen and three-tenths (13.3) liters). The Division of Plumbing may also allow the use of standard flush water closets and urinals which do not meet the specific specifications if, in the opinion of the division, the configuration of the building drainage system requires a greater quantity of water to adequately flush the system, or if the owner requests the use of antique fixtures which may not be equipped for reduced flow.

CHARLES A. COTTON, Commissioner
EDWARD J. HOLMES, Secretary
APPROVED BY AGENCY: March 17, 1994
FILED WITH LRC: March 30, 1994 at 11 a.m.

PUBLIC HEARING: A public hearing on this administrative regulation shall be held on May 24, 1994 at 10 a.m. in the office of the Department of Housing, Buildings and Construction, 1047 U.S. 127 South, Frankfort, Kentucky. Individuals interested in being heard at this hearing shall notify this agency in writing by May 19, 1994, (five days prior to the hearing) of their intent to attend. If no notification of intent to attend the hearing is received by that date, the hearing may be cancelled. This hearing is open to the public. Any person who attends will be given an opportunity to comment on the proposed administrative regulation. A transcript of the public hearing will not be made unless a written request for a transcript is received. If you do not wish to attend the public hearing, you may submit written comments on the proposed administrative regulation. Send written notification of intent to attend the public hearing or written comments on the proposed administrative regulation to: Judith G. Walden, Office of General Counsel, Department of Housing, Buildings and Construction, The 127 Building, 1047 U.S. 127 South, Frankfort, Kentucky 40601.

REGULATORY IMPACT ANALYSIS

Agency Contact Person: Judith G. Walden

(1) Type and number of entities affected: Licensed master and journeyman plumbers; users of the State Plumbing Code.

(a) Direct and indirect costs or savings to those affected: No costs or savings effected with the implementation of this amendment.

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 reporting or paperwork required by users of the State Plumbing Code.

(2) Effects on the promulgating administrative body: Preparing amendment to code and distributing the information to users.

(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: No effect on state or local revenue with the implementation of this amendment.

(4) Assessment of alternative methods; reasons why alternatives were rejected: State Plumbing Code Committee and Board of Housing review proposed amendments and accept on basis within limits defined.

(5) Identify any statute, administrative regulation or government policy which may be in conflict, overlapping, or duplication: No duplication 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:

TIERING: Was tiering applied? Yes. Different amounts of water flow depending on fixtures.

PUBLIC PROTECTION & REGULATION CABINET
Department of Housing, Buildings and Construction
Division of Plumbing
(Proposed Amendment)

815 KAR 20:120. Water supply and distribution.

RELATES TO: KRS Chapter 318
STATUTORY AUTHORITY: KRS 13A.120, 198B.040(10), 318.130
NECESSITY AND FUNCTION: The department is directed by KRS 318.130 through the State Plumbing Code Committee to adopt and put into effect a State Plumbing Code. This administrative regulation relates to the types of piping, pipe sizes for a potable water supply system and the methods to be used to protect and control it as well as identify and publish the manufacturer's specification number of the material accepted in those installations. This amendment was approved by the Plumbing Code Committee and the Board of Housing because the Division of Plumbing, having received notice of documented instances of failure with these fittings, recommended that this material be removed from the code. [~~in an effort to prevent accidents caused by sudden changes in water temperature in showers.~~]

Section 1. Definition of Terms. (1) "ASSE" means American Society of Sanitary Engineers and copies of specifications identified in this administrative regulation may be obtained by writing the American Society of Sanitary Engineers, P.O. Box 40362, Bay Village, Ohio 44140.

(2) "ASTM" means American Society for Testing Materials and copies of specifications identified in this administrative regulation may be obtained by writing the American Society for Testing Materials, 1916 Race Street, Philadelphia, PA 19103.

(3) "Critical level (CL)" means the level to which the vacuum breaker may be submerged before backflow will occur. If the CL marking is not shown on the vacuum breaker, the bottom of the device shall be taken as the CL.

(4) "DWV" means drain, waste and vent piping.

(5) "SDR" means standard dimensional ratio.

Section 2. Quality. (1) The bacteriological and chemical quality of the water supply shall comply with the administrative regulations of the department and other governing authorities. Toxic materials shall be kept out of the potable water system.

(a) The pipe conveying and the surfaces in contact with potable water shall be constructed of nontoxic materials.

(b) Chemicals or other substances that could produce either toxic conditions, taste, odor, or discoloration in a potable water system shall not be introduced into, or used in, the systems.

(c) The interior surface of a potable water tank shall not be lined, painted, or repaired with a material which will affect either the taste, odor, color, or potability of the water supply when the tank is placed in, or returned to, service. All interior tank coatings shall be from the list approved by the authority having jurisdiction.

(2) Potable water only shall be accessible to plumbing fixtures that supply water for drinking, bathing, culinary use or the processing of medicinal, pharmaceutical or food products.

(3) The potable water supply system shall be designed, installed, and maintained to prevent contamination from nonpotable liquids, solids, or gases being introduced into the potable water supply through cross connections or other piping connections to the system.

(4) Cross connections shall be prohibited except as approved by the authority having jurisdiction, and suitable protective devices shall be installed.

(5) Cross connections between a private water supply and a public water supply shall not be made.

(6) If cross connection control devices are properly installed, they create a closed water system. A properly sized thermal expansion tank shall be installed in the cold water supply located near the water heater.

(7) Backflow and back siphonage protection. Means of protection against backflow shall be as required in paragraphs (a) through (l) of this subsection in order of degree of protection provided. Backflow includes both back pressure and back siphonage.

(a) Air gap. Provides the best level of protection in all backflow situations. The minimum required air gap shall be determined as follows:

1. How measured. The minimum required air gap shall be measured vertically from the lowest end of a potable water outlet to the flood rim or line of the fixture or receptacle into which it discharges.

2. Size. The minimum required air gap shall be twice the effective opening of a potable water outlet, unless the outlet is a distance less than three (3) times the effective opening away from a wall or similar vertical surface, in which case the minimum required air gap shall be three (3) times the effective opening of the outlet. The minimum required air gap shall not be less than shown in the following table - Minimum Air Gaps for Plumbing Fixtures.

MINIMUM AIR GAPS FOR PLUMBING FIXTURES

Fixture	Minimum Air Gap	
	When not affected by near wall (inches)	When affected by near wall (inches)
Lavatories and other fixtures with effective opening not greater than 1/2 inch diameter	1	1 1/2
Sink, laundry trays, gooseneck bath faucets and other fixtures with effective openings not greater than 3/4 inch diameter	1 1/2	2 1/4
Over rim bath fillers and other fixtures with effective openings not greater than 1 inch diameter	2	3
Drinking water fountains - single orifice not greater than 7/16 (0.437) inch diameter or multiple orifices having total area of 0.150 square inches (area of circle 7/16 inch diameter)	1	1 1/2
Effective openings greater than 1 inch	2 x diameter of effective opening	3 x diameter of effective opening

NOTE 1. Side walls, ribs, or similar obstructions do not affect air gaps when spaced from inside edge of spout opening a distance greater than three (3) times the diameter of the effective opening for a single wall, or a distance greater than four (4) times the diameter of the effective opening for two (2) intersecting walls.

NOTE 2. Vertical walls, ribs, or similar obstructions extending from the water surface to or above the horizontal plane of the spout opening require a greater air gap when spaced closer to the nearest inside edge of spout opening than specified in NOTE 1 above. The effect of three (3) or more vertical walls or ribs has not been determined. In this case, the air gap shall be measured from the top of the wall.

(b) Reduced pressure principle back pressure backflow preventer. Reduced pressure principle back pressure backflow preventers provide the best mechanical protection against backflow available, and may be considered equivalent to an air gap in most situations.

(c) Double check valve assembly: applicable to low level of hazard back pressure backflow conditions only. These devices are manufactured assemblies consisting of two (2) independently acting check valves and including shutoff valves at each end, and petcocks and test gauges for testing the watertightness of each check valve.

(d) Pressure type vacuum breaker: applicable to back siphonage conditions only.

(e) Atmospheric type vacuum breaker: applicable to back siphonage conditions only. If applicable, all atmospheric type vacuum breakers shall be installed after the last cutoff valve on the water line. These devices may operate under normal atmospheric pressure when the critical level (CL) is installed at the required height in accordance with the following table:

CRITICAL LEVEL (CL) SETTINGS
FOR ATMOSPHERIC TYPE VACUUM BREAKERS

Fixture or Equipment	Method of Installation
Aspirators, ejectors, and and showers	CL at least 6 in. above flood level of receptacle
Bidets	CL at least 6 in. above flood level of receptacle
Cup beverage vending machines	CL at least 12 in. above flood level of machine
	On models without built-in vacuum breakers:
Dental units	On models without built-in vacuum breakers: CL at least 6 in. above flood level rim of bowl.
Dishwashing machines	CL at least 6 in. above flood level of machine
Flushometers (closet & urinal)	CL at least 6 in. above top of fixture supplied
Garbage can cleaning machines	CL at least 6 in. above flood level of machine
Hose bibs (sinks or receptacles)	CL at least 6 in. above flood level of receptacle served
Hose outlets	CL at least 6 in. above highest point on hose line
Laundry machines	CL at least 6 in. above flood level of machine
Lawn sprinklers	CL at least 12 in. above highest sprinkler or discharge outlet
Steam tables	CL at least 12 in. above flood level
Tanks & vats	CL at least 6 in. above flood level rim or line

NOTE 1. Critical level (CL) is defined as the level to which the vacuum breaker may be submerged before backflow will occur. If the CL marking is not shown on the vacuum breaker, the bottom of the device shall be taken as the CL.

(f) Barometric loop: applicable only to back siphonage conditions. The use of a barometric loop shall not be acceptable as the primary back siphonage preventer.

(g) Location of backflow and back siphonage preventers. Backflow and back siphonage preventers shall be in an accessible location, preferable in the same room as the fixture or connection they protect. Devices may be installed in utility or service spaces. Devices and air gaps shall not be subject to flooding or freezing.

(h) Inspection of devices. Periodic inspections shall be made of all backflow and back siphonage preventers to determine if they are in proper working condition. Reduced pressure principle back pressure backflow preventers shall be tested on at least an annual basis. Records shall be kept on all inspections.

(i) Approval of devices. Before any device for the prevention of backflow or back siphonage is installed, it shall have first been certified by a recognized testing laboratory acceptable to the plumbing official. Devices installed in a building potable water supply distribution system for protection against backflow shall be maintained in good working condition by the person or persons responsible for the maintenance of the system.

(j) Protection of potable water system. Potable water openings, outlets, and connections, except those serving residential units, shall be protected against backflow in accordance with paragraphs, (a) through (l) of this subsection.

(k) Degree of hazard. The protection required at any given outlet or connection shall be determined based on the degree of hazard posed by that outlet or connection as follows:

1. Severe hazard. Potential for contamination by toxic substances or disease-causing organisms.

2. Moderate hazard. Potential for contamination by nontoxic but objectionable substances.

3. Minor hazard. Potential for contamination by generally nontoxic, nonobjectionable substances, but which may cause the consumer to question the quality of water.

(l) Minimum acceptable protection. An opening or outlet shall be protected by an air gap between the opening and floor level rim whenever possible. The acceptable protection for various types of outlets or connections shall be as shown in the following table:

APPLICATION CHART

TYPE AND PRESSURE	DESCRIPTION	INSTALLED AT	EXAMPLES OF INSTALLATIONS	APPLICABLE SPECIFICATIONS
Reduced Pressure Principle Backflow Preventer For high hazard cross connections.	Two independent check valves with intermediate relief valve. Supplied with shut-off valves and ball-type test cocks.	All cross connections subject to backpressure or back siphonage where there is a high potential health hazard	Main Supply Lines Commercial Boilers Cooling Towers Hospital Equipment Processing Tanks	A.S.S.E. No. 1013 A.W.W.A. C506 FCCCHR of USC CSA B.64.4 Sizes 3/4 " - 10"

		from contamination. Continuous pressure.	Laboratory Equipment Waste Digesters Car Wash Sewage Treatment Lawn Sprinklers	
(A) Double Check Valve Assembly For low hazard cross connect-ions.	Two independent check valves. Supplied with shutoff valves and ball type test cocks.	All cross connect-ions subject to back pressure where there is a low potential health hazard or nuisance. Continuous pressure.	Main Supply Lines Food Cookers Tanks and Vats Commercial Pools	A.S.S.E. No. 1015 A.W.W.A. C506 FCCCHR of USC CSA B.64.5 Sizes 3/4" - 10"
(B) Dual Check Valve Backflow Preventer For low hazard applications.	Two independ-ent check valves. Checks are re-movable for testing	Cross connections where there is a low potential health hazard and moderate flow re-quirements.	Post ground hydrants.	A.S.S.E. No. 1024 Sizes 3/4" & 1"
(A) Backflow Pre-venter with In-termediate Atmos-pheric Vent For moderate hazard cross connections in small pipe sizes.	Two independent check valves with intermediate vac-uum breaker and relief valve.	Cross connections subject to back pressure or back siphonage where there is a mod-erate health hazard. Continuous pressure.	Boilers (Small) Cooling Towers (Small) Dairy Equipment Residential	A.S.S.E. No. 1012 CSA B.64.3 Sizes 1/2" & 3/4"
		Pump outlet to pre-vent backflow to carbon dioxide gas and carbonated water into the water supply sys-tem to beverage machines.	Postmix Carbonated Beverage Machine	Special Approvals
(B) Laboratory Faucet and Double Check Valve with Intermediate Vac-uum Breaker In small pipe sizes for mod-erate to low hazard.	Two independent check valves with intermediate vacuum breaker and relief vent.	Cross connection subject to back pressure or back siphonage where there is a mod-erate to low health hazard.	Laboratory Faucets and Pipe Lines Barber Shop and Beauty Parlor Sinks	A.S.S.E. No. 1035 (N-LF9)
(A) Atmospheric Vacuum Breakers For moderate to high hazard cross connections.	Single float and disc with large atmospheric port.	Cross connections not subject to backpressure or continuous pres-sure. Install at least 6" above fixture rim. Pro-tection against back siphonage only.	Process Tanks Dishwashers Soap Dispensers Washing Machines	A.S.S.E. No. 1001 ANSI.A112.1.1 CSA B.64.1.1 FCCCHR of USC Sizes 1/4" - 3"
(B) Antisiphon Pressure Breakers For moderate to high hazard cross connections.	Spring loaded single float and disc with inde-pendent 1st check. Supplied with shutoff valves and ball type test cocks.	This valve is de-signed for install-ation in a contin-uous pressure pota-ble water supply system 12" above the overflow level of the system being supplied. Protection against back siphonage only.	Laboratory Equipment Cooling Towers Comm. Laundry Mach. Swimming Pools Commercial Plating Tanks Lg. Total & Urinal Facilities Degreasers, Photo Tanks Livestock Water Systems Lawn Sprinklers	A.S.S.E. No. 1020 CSA B.64.1.2 FCCCHR of USC Sizes 1/2" - 2"
(C) Hose Connection Vacuum Breakers For residential and industrial	Single check with atmospheric vacuum breaker vent.	Install directly on hose bibs, service sinks and wall hydrants. Not for	Hose Bibs Service Sinks Hydrants	A.S.S.E. No. 1011 CSA B.64.2 Size 3/4" Hose

NOT TOXIC

hose supply outlets. continuous pressure.

CROSS CONNECTIONS, DEGREE OF HAZARD AND ACCEPTABLE PROTECTION FOR VARIOUS PLUMBING OUTLETS AND CONNECTIONS

	Degree of Hazard			Acceptable Protection				
					Backflow		Back siphonage	
Type of Connection	Severe	Moderate	Minor	Air Gap	Reduced Pressure Device	Double Check Valve Assembly	Pressure Type Vacuum Breaker	Atmospheric Type Vacuum Breaker
I. Connections subject to back pressure from:								
A. Pumps, tanks, and lines handling:								
1. Toxic substance	X			X	X			
2. Nontoxic subst.		X		X	X	X		
B. Boilers								
1. With chemical additives	X			X	X			
2. Without chemical additives		X		X	X	X		
C. Gravity due to obvious site conditions subject to:								
1. Contamination by toxic substances	X			X	X			
2. Contamination by nontoxic subst.		X		X	X	X		
II. Water outlets and connections not subject to back pressure:								
A. Connection to sewer or sewage pump	X			X				
B. Outlet to receptacles containing toxic substances	X			X	X		X	X
C. Outlet to receptacles containing nontoxic substances		X		X	X	X	X	X
D. Outlet into domestic water tanks			X	Each case treated separately				
E. Flush valve toilets	X			X	X		X	X
F. Flush valve urinals		X		X	X		X	X
G. Outlets with hose attachments subject to contamination from:								
1. Toxic substances	X			X	X		X	X
2. Nontoxic subst.		X		X	X	X	X	X
H. Outlets to recirculating cooling tower:								
1. With chemical additives	X			X	X			
2. Without chemical additives		X		X	X	X		

Section 3. Water Required. (1) A building equipped with plumbing fixtures and used for habitation or occupancy shall be equipped with a supply of potable water.

(2) In buildings used as residences or buildings in which people assemble or are employed, both hot and cold water shall be supplied.

Section 4. Water Service. (1) The water service piping to A building shall not be less than three-fourths (3/4) inch nominal pipe size but shall be of sufficient size to permit a continuous and ample flow of water to all fixtures in the building.

(2) The underground water service pipe from the main or water

supply system to the water distribution system shall not be less than five (5) feet apart horizontally from the house sewer and shall be separated by undisturbed or compacted earth except they may be placed in the same trench if:

(a) The bottom of the water service pipe at all points shall be at least eighteen (18) inches above the top of the sewer at its highest point.

(b) The water service pipe shall be placed on a solid shelf excavated at one (1) side of the common trench.

(c) The number of joints in the water service pipe shall be kept to a minimum.

Section 5. Distribution. (1) The water supply shall be distributed through a piping system entirely independent of any other piping system.

(2) Piping which has been used for purposes other than conveying potable water shall not be used for conveying potable water.

(3) Nonpotable water may be used for flushing water closets and urinals, if the water is piped in an independent system.

(a) If a dual water distribution system is used, the nonpotable water supply shall be durably and adequately identified by color markings and metal tags, or other appropriate method as may be approved by the governing authority. An outlet on the nonpotable water distribution system used for drinking or domestic purposes shall be permanently posted: DANGER - UNSAFE WATER. The branches, fittings or valves shall be identified by the word - "NONPOTABLE WATER" either by signs or brass tags that shall be permanently affixed to the pipe, fittings, valves, etc. These identification markings shall not be concealed. Their maintenance shall be the responsibility of the owner.

(4) Any backflow device or cross-connection control device shall be approved by the department.

(5) Combination stop and waste valves, cocks, or hydrants shall not be installed in the underground water distribution system without the installation of an approved backflow preventer.

(6) A private water supply shall not be interconnected with any public water supply.

(7) Water used for cooling of equipment or in other processes shall not be returned to the potable water system. The water shall be discharged into a drainage system through an air gap, or may be used for nonpotable purposes on written approval of the plumbing official.

Section 6. Water Supply to Fixtures. Plumbing fixtures shall be provided with a sufficient supply of water for flushing to keep them in a sanitary condition. A water closet or pedestal urinal shall be flushed by means of an approved tank or flush valve. The tank or valves shall furnish at least a sufficient amount of water to thoroughly cleanse the surface area of water closets, urinals or similar fixtures. If a water closet, urinal, or similar fixture is supplied directly from the water supply system through a flushometer or other valve, the valves shall be set above the fixture to prevent the possibility of polluting the potable water supply by back siphonage. These fixtures shall have a vacuum breaker. Plumbing fixtures, devices or appurtenances shall be installed in a manner that shall prevent any possibility of a cross connection between the potable water supply system, drainage system or other water system.

Section 7. Connections to Boilers. Potable water connections to boiler feed water systems in which boiler conditioning chemicals are introduced shall be made through an air gap, or provided with a reduced pressure principle backflow preventer located in the potable water line before the point where chemicals are introduced. Boilers shall be equipped with a check valve in the cold water supply to the boiler.

Section 8. Water Supply to Drinking Fountains. The orifice of a drinking fountain shall be provided with a protective cowl to prevent contamination of the potable water supply system.

Section 9. Sizing of Water Supply Piping. (1) The minimum size water service from the property line to the water heater shall be three-fourths (3/4) inch. The hot and cold water piping shall extend three-fourths (3/4) inch in size to the first fixture branch. No two and one-half (2 1/2) inch fixture branches are supplied from any one-half (1/2) inch pipe. (EXCEPTION: A combination of two (2) of the following fixtures may be connected utilizing the one-half (1/2) inch branch: a flush tank water closet, a lavatory or drinking fountain.)

(2) The following schedule shall be used for sizing the water supply piping to fixtures. The branch pipe to a fixture shall terminate not more than thirty (30) inches from the point of connection to the fixture and shall be brought to the floor or wall adjacent to the fixture. A concealed water branch pipe shall not be less than one-half (1/2) inch nominal pipe size.

Fixture Branches	Nominal Pipe Size (Inches)
Bath tubs	1/2
Combination sink and tray	1/2
Cuspidor	1/2
Drinking fountain	1/2
Dishwasher (domestic)	1/2
Kitchen sink (res.)	1/2
Kitchen sink (com.	1/2 or 3/4 as required
Lavatory	1/2
Laundry tray	1/2
Sinks (service, slop)	1/2
Sinks flushing rim	3/4
Urinal (flush tank)	1/2
Urinal (direct flush type)	1/2 or 3/4 as required
Water closet (tank type)	1/2
Water closet (flush valve type)	1
Hot water boilers	3/4
Hose bibs	1/2
Wall hydrant	1/2
Domestic clothes washer	1/2
Shower (single head)	3/4

(3) Water hammer. In building supply systems in which devices or appurtenances are installed utilizing quick acting valves that cause noises due to water hammer, protective devices such as air chambers or approved mechanical shock absorbers shall be installed as close as possible to the quick acting valve causing the water hammer.

(a) If mechanical shock absorbers are installed, they shall be in an accessible place.

(b) If mechanical devices are used, the manufactures specifications shall be followed as to location and method of installation.

Section 10. Water Supply Pipes and Fittings, Materials. Water supply piping for a potable water system shall be of galvanized wrought iron, galvanized steel, brass, Types K, L, and M copper, cast iron, Types R-K, R-L, and R-M brass tubing, standard high frequency welded tubing produced and labeled as ASTM B-586-73, fusion welded copper tubing produced and labeled as ASTM B-447-72 and ASTM B-251, DWV welded brass tubing produced and labeled as ASTM B-587-73, seamless stainless steel tubing, Grade H produced and labeled as ASTM A-268-68, filament-wound reinforced thermosetting resin pipe produced and labeled as ASTM D-2996 (red thread for cold water use and silver and green thread for hot and cold). Polyethylene (PE) plastic pipe produced and labeled as ASTM D-2239-69, cross-linked polyethylene (PEX), produced and labeled as ASTM F-876 for cold water only and ASTM F-877 for hot or cold water applications, copper tubing size PE produced and labeled as

ASTM D-2737 for water service only if installed with compression couplings, Poly(vinyl chloride) (PVC) plastic pipe produced and labeled as ASTM D-1785-69, Chlorinated Poly(vinyl chloride) (CPVC) plastic pipe produced and labeled as ASTM D-2846-70, Poly(vinyl chloride) (PVC) standard dimensional ratio (SDR) 21 and (SDR) 26 produced and labeled as ASTM D-2241-84, polybutylene (PB) plastic pipe produced and labeled as ASTM-D-3309-85b with brass or [,] copper [~~or celcon~~] fittings. [~~, Quicktite connection using a celcon asetal copolymer, polybutylene cone and stainless steel ring,~~] Plastic pipe and fittings shall bear the NSF seal of approval. [~~(EXCEPTION:~~] Polybutylene pipe utilizing insert fittings of brass or [,] copper [~~or celcon~~] shall use only copper clamping rings.[~~)~~] Polybutylene hot and cold water connectors to lavatories, sinks and water closets shall be produced and labeled as ASTM-D-3309-85b, and polybutylene plastic pipe produced and labeled as ASTM 2662 for cold water applications only. Fittings shall be brass, copper or approved plastic or galvanized cast iron or galvanized malleable iron. Piping or fittings that have been used for other purposes shall not be used for the water distribution system. All joints in the water supply system shall be made of screw, solder, or plastic joints. Cast iron water pipe joints may be caulked, screwed, or machine drawn. If Type M copper pipe, Type R-M brass tubing, standard high frequency welded tubing or stainless steel tubing is placed within a concrete floor or when it passes through a concrete floor, it shall be wrapped with an approved material to permit expansion or contraction. Polyethylene, PVC or CPVC shall not be used below ground under a house or building (refer also to 815 KAR 20:060 and 815 KAR 20:073).

Section 11. Temperature and Pressure Control Devices for Shower Installations. Temperature or pressure balance devices to prevent sudden unanticipated changes in water temperature shall be installed to serve all shower compartments and shower-bath combinations.

Section 12. Water Supply Control. (1) A main shutoff valve shall be provided near the curb, in or near the meter box or property line on the water service pipe. In addition, a main supply control valve shall be placed inside a foundation wall. The main supply control valve shall be accessible and provided with a drip or drain valve. A pit or similar type installation is prohibited for a potable water supply shutoff valve.

(2) Pressure on gravity tanks shall have their supply lines valved at or near their source.

(3) A family unit in a two (2) family or multifamily dwelling shall have the unit controlled by an arrangement of shutoff valves which will permit the unit to be shutoff without interfering with the cold water supply to other family units or portions of the building.

(4) In buildings other than dwellings, shutoff valves shall be installed to permit the water supply to the equipment to be isolated without interference with the supply to other equipment.

(5) A fixture or group of bath fixtures shall be valved and lawn sprinkler openings shall be valved. In residential construction all fixtures except bathtub and showers shall be valved individually or a group of fixtures shall be valved.

(6) A group of fixtures or a fixture group shall mean two (2) or more fixtures adjacent to or near each other in the same room or back-to-back on a common wall.

(7) The cold water branch to a hot water storage tank or water heater shall be provided with a shutoff valve located near the equipment and only serving this equipment.

Section 13. Water Supply Protection. All concealed water pipes, storage tanks, cisterns, and all exposed pipes or tanks subject to freezing temperatures shall be protected against freezing. Water services shall be installed at least thirty (30) inches in depth.

Section 14. Temperature and Pressure Relief Devices for Water Heaters. Temperature and pressure relief devices shall be installed on all water heaters on the hot water side not more than three (3) inches from the top of the heater. Temperature and pressure relief devices shall be of a type approved by the department. If a water heater is installed in a location that has a floor drain, the discharge from the relief device shall be piped to within two (2) inches of the floor; if a water heater is installed in a location that does not have a floor drain, the discharge from the relief device shall be piped to the outside of the building with an ell turned down and piped to within four (4) inches of the surface of the ground. The relief device may also discharge through an air gap to a sump basin, service sink, open receptacle or other point of discharge in which equivalent safety shall be provided as approved by the Division of Plumbing. Relief devices shall be installed on a pneumatic water system (see Section 17).

Section 15. Protection of a Private Water Supply or Source. Private water supplies or sources shall be protected from pollution in a manner approved by the department. The approval shall be obtained prior to.

Section 16. Domestic Solar Water Heaters. Domestic solar water heaters may have a "single wall heat exchanger" if the following conditions are met:

(1) The solar panel and the water heater exchanger use a nontoxic liquid such as propylene glycol or an equivalent; and

(2) The heat exchanger is pretested by the manufacturer to 450 PSI; and

(3) The water heater has a warning label advising that a nontoxic heat exchanger fluid shall be used at all times; and

(4) A pressure relief valve is installed at the highest point in the solar panel.

Section 17. Domestic Water Heater Preheating Device. A domestic water heater preheating device may be used and connected with the high pressure line from the compressor of a domestic home air conditioner or heat pump water heater. Double wall heat-exchangers with two (2) separate thicknesses separating the heat exchange fluid (other than potable water) from the potable water supply shall be provided. The water inlet to the heat exchange vessel shall be provided with a check valve, and adjacent to, and at the outlet side of the check valve, an approved pressure relief valve set to relieve at five (5) PSI above the maximum water pressure at the point of installation shall be provided if the heat exchange units contain more than twenty (20) pounds of refrigerants. This device shall be equipped with a temperature limit control that would actuate a pump that would circulate hot water from the water heater through the preheater device. Condensate drain water shall be piped in accordance to the plumbing code and in no instance shall it be permitted to drain into crawl space, or into a sewer or vent stack, or be installed in areas subject to freezing. If a drain is not available or if a drain is located above the vent, a condensate pump shall be utilized.

Section 18. Tanks and Vats, below Rim Supply. Tanks and vats with potable water supply below the rim shall be subject to the following requirements:

(1) Where a potable water outlet terminates below the rim of a tank or vat and the tank or vat has an overflow of diameter not less than given in the following table, sizes of overflow pipes for water supply tanks, the overflow pipe shall be provided with an air gap as close to the tank as possible.

SIZES FOR OVERFLOW PIPES
FOR WATER SUPPLY TANKS

Maximum capacity of water supply	Diameter of over-flow pipe	Maximum capacity of water supply	Diameter of over-flow pipe

line to tank	(inches ID)	line to tank	(inches ID)
0- 50 gpm	2	400- 700 gpm	5
50-150 gpm	2 1/2	700-1000 gpm	6
150-200 gpm	3	Over 1000 gpm	8

(2) The potable water outlet to the tank or vat shall terminate a distance not less than one and one-half (1 1/2) times the height to which water can rise in the tank above the top of the overflow. This level shall be established at the maximum flow rate of the supply to the tank or vat, and with all outlets, except the air gap overflow outlet closed.

(3) The distance from the outlet to the high water level shall be measured from the critical point of the potable water supply outlet.

Section 19. Water Distribution for Fan Coil Units. If a domestic water heater is used for heating purposes through a fan coil medium, its temperature shall not exceed 140 degrees Fahrenheit. It shall utilize not less than three-fourths (3/4) inch Type M copper in its piping and its run shall not exceed 140 feet between the water heater and the heating unit (relates to 815 KAR 20:070).

Section 20. Fire Protection Systems. Fire protection systems using water from the potable water distribution system shall be equipped with two (2) check valves, one (1) of which may be an alarm check valve.

Section 21. Water Distribution and Connections to Mobile Homes. (1) An adequate and safe water supply shall be provided to each mobile home conforming to the administrative regulations of the department.

(2) All materials, including pipes and fittings used for connections shall conform with the State Plumbing Code.

(3) An individual water connection shall be provided at an appropriate location for each mobile home space. The connection shall consist of a riser terminating at least four (4) inches above the ground with two and three-fourths (2 3/4) inch valve outlets with screw connection, one (1) for the mobile home water system and the other for lawn watering and fire control. The ground surface around the riser pipe shall be graded so as to divert surface drainage. The riser pipe shall be encased in an eight (8) inch vitrified clay pipe or an equivalent with the intervening space filled with an insulating material to protect it from freezing. An insulated cover shall be provided which shall encase both valve outlets but not prevent connection to the mobile home during freezing weather. A shutoff valve may be placed below the frost depth on the water service line, but in no instance shall this valve be a stop-and-waste cock.

Section 22. Conservation of Water (refer to 815 KAR 20:070).

CHARLES A. COTTON, Commissioner
EDWARD J. HOLMES, Secretary
APPROVED BY AGENCY: March 17, 1994
FILED WITH LRC: March 30, 1994 at 11 a.m.

PUBLIC HEARING: A public hearing on this administrative regulation shall be held on May 24, 1994 at 10 a.m. in the office of the Department of Housing, Buildings and Construction, 1047 U.S. 127 South, Frankfort, Kentucky. Individuals interested in being heard at this hearing shall notify this agency in writing by May 19, 1994, (five days prior to the hearing) of their intent to attend. If no notification of intent to attend the hearing is received by that date, the hearing may be cancelled. This hearing is open to the public. Any person who attends will be given an opportunity to comment on the proposed administrative regulation. A transcript of the public hearing will not be made unless a written request for a transcript is received. If you do not wish to attend the public hearing, you may submit written comments on the proposed administrative regulation. Send written notification of intent to attend the public hearing or written comments on the proposed administrative regulation to: Judith G. Walden, Office of General Counsel, Department of Housing, Buildings and Construction, The 127 Building, 1047 U.S. 127 South, Frankfort, Kentucky 40601.

REGULATORY IMPACT ANALYSIS

Agency Contact Person: Judith G. Walden

(1) Type and number of entities affected: Master and journeyman plumbers.

(a) Direct and indirect costs or savings to those affected: There will be no costs or savings with implementation of this amendment.

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: None created by amendment.

(2) Effects on the promulgating administrative body: None beyond requirements of updating State Plumbing code with approved amendments to regulation.

(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: State or local revenues will not be affected by amending regulation.

(4) Assessment of alternative methods; reasons why alternatives were rejected:. Plumbing Code Committee and Board of Housing review all proposed amendments and accept on basis within limits defined.

(5) Identify any statute, administrative regulation or government policy which may be in conflict, overlapping, or duplication: No known conflict.

(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. Only the material causing the leaking problem needed to be deleted from the code.

CABINET FOR HUMAN RESOURCES
Department for Medicaid Services
(Proposed Amendment)

907 KAR 1:150. Payments for alternative home and community based services for the mentally retarded.

RELATES TO: KRS 205.520

STATUTORY AUTHORITY: KRS 194.050, 42 USC 1396a, b, c, d, n, 42 CFR 441 Subpart G

NECESSITY AND FUNCTION: The Cabinet for Human Resources has responsibility to administer the Medicaid program [~~of Medical Assistance~~]. KRS 205.520 empowers the cabinet, by administrative regulation, to comply with any requirement that may be imposed or opportunity presented by federal law for the provision of medical assistance to Kentucky's indigent citizenry. This administrative regulation sets forth the payment provisions relating to home and community based services provided to the mentally retarded as an alternative to intermediate care facility services for the mentally retarded.

Section 1. Coverage. (1) The cabinet shall reimburse participating

providers of alternative intermediate services for the mentally retarded (AIS-[/]MR) for services to Medicaid recipients who:

(a) Meet patient status criteria for intermediate care for the mentally retarded; and

(b) Are authorized for the AIS-[/]MR service by the cabinet.

(2) In order to be covered, services shall be described and defined; and provided in accordance with the terms and conditions specified in 907 KAR 1:140, Alternative home and community based services for the mentally retarded.

Section 2. Payment Amounts. (1) Participating in-state AIS-[/]MR [~~case management, in-home training, homemaker and home health aide, personal care, residential care, day habilitation, habilitation, respite care and multiservice providers~~] certified in accordance with 907 KAR 1:140 shall be reimbursed a prospective rate per unit of service during the first year of participation based on a budgeted cost report in accordance with the Department for Medicaid Services' "Alternative Intermediate Service-[/]Mental Retardation (AIS-MR) Reimbursement Manual," dated December 15, 1993 [~~November 1, 1991~~] which is incorporated by reference in the administrative regulation. The Alternative Intermediate Service-[/]Mental Retardation Reimbursement Manual may be reviewed during working hours [(]8 a.m. to 4:30 p.m. eastern time [)] in the Office of the Commissioner, Department for Medicaid Services, 275 East Main Street, Frankfort, Kentucky 40621. Copies may also be obtained from that office upon payment of an appropriate fee which shall not exceed approximate cost.

(2) Final prospective payment rate setting.

(a) Reimbursement for each subsequent year (but not later than December 31, 1993) shall be made using a prospective rate per unit of service based on a budgeted cost report in which the budgetary assumptions made were based on an actual annual cost report of the prior fiscal year ending June 30.

1. [~~(3)~~] The annual cost report shall be subject to audit.

2. Audit adjustments to the annual cost report shall be carried through to the budgeted cost report based on the budgetary assumptions used in preparation of the budgeted rate.

(b) Prospective rates per unit of service for periods after December 31, 1993 shall be based on the audited annual cost report for the previous fiscal year.

(3) [~~(4)~~] Habilitation services payments for medical services and items such as dentures, eyeglasses, and hearing aids shall be paid at reasonable cost if they are prescribed for a recipient by a specialist as necessary for a client's habilitation and are not otherwise covered by the Medicaid program. The habilitation services shall be paid apart from the services paid through the cost report but shall be limited to reasonable cost. Minor home physical adaptations shall be paid on the basis of reasonable cost not to exceed $1,500 per client per patient year. The "patient year" for a client begins on the first day of admittance of the client to the AIS-[/]MR program, with a new patient year beginning for that client on that same day in each succeeding calendar year.

(4) [~~(5)~~] All payments and rates established shall be subject to the test of reasonableness.

(5) [~~(6)~~] Utilizing the formula described in 42 CFR 441.303(d)(1) as a guideline and applying accumulated statistical data, the cabinet shall set effective January 1 each year an annualized upper limit to be applied to the total payments for AIS-[/]MR services for the waiver year January 1 through December 31, applicable for waiver years beginning January 1, 1992 and thereafter.

(6) [~~(7)~~] The cabinet may reduce established rates or limit new rates by the percentage amount which will assure that the total payments to the providers do not exceed the annualized upper limit. Reduction factors shall (to the extent possible) be applied in a manner as to ensure an even flow of reimbursement to the AIS-[/]MR providers through the year, i.e., to ensure that the payments for any one (1) month shall not exceed by a substantial amount the prorated annual amount.

Section 3. Units of Service. The units of service shall be as follows:

(1) The residential care services unit of service: twenty-four (24) hours.

(2) Case management services shall have four (4) different units of service as follows:

(a) Intake, evaluation, and stay (for up to fourteen (14) days) in the core residence for preresidential placement or transition: one (1) unit.

(b) Intake and evaluation in the home of an in-home client: one (1) unit.

(c) Twenty-four (24) hours of continuing evaluation in a core residence: one (1) unit.

(d) One (1) month of ongoing case management for persons living at sites other than the core residence: one (1) unit.

(3) Habilitation services unit of service: one-fourth (1/4) hour.

(4) Day habilitation services unit of service: one (1) hour.

(5) In-home training services unit of service: one-fourth (1/4) hour.

(6) Homemaker and home health aide services unit of service: one-fourth (1/4) hour.

(7) Personal care services unit of service: one-fourth (1/4) hour.

(8) Respite care services shall have two (2) units of services as follows:

(a) Twenty-four (24) hours if respite care is provided continuously for twenty-four (24) hours or more; and

(b) One (1) hour if respite care is provided continuously for less than twenty-four (24) hours.

Section 4. Payment Exclusions and Limitations. (1) No payment shall include:

(a) The cost of room and board;

(b) The cost of maintenance, upkeep and improvements to the residence when it is a group home or other licensed facility.

(2) No payment shall be made to:

(a) An in-home training provider for routine care and supervision which would be provided by a family and which is duplicative of homemaker and personal care services;

(b) A day habilitation provider for prevocational and supported employment services for clients receiving them under the Rehabilitation Act of 1973 or the Education of the Handicapped Act or for a recipient who has not been in an intermediate care facility prior to receiving AIS/MR services;

(c) A case management provider for ongoing case management provided non-in-home clients during any evaluation period.

(3) Payment to a provider for one (1) hour units of respite care on the same day shall not exceed the budgeted rate for that provider for a twenty-four (24) hour unit of service of respite care.

~~[Section 5. Implementation. The amendments to this regulation shall apply to services provided on or after January 1, 1992.]~~

MASTEN CHILDERS II, Commissioner
FONTAINE BANKS, JR., Secretary

APPROVED BY AGENCY: April 6, 1994

FILED WITH LRC: April 13, 1994 at 11 a.m.

PUBLIC HEARING: A public hearing on this administrative regulation shall be held on May 24, 1994 at 9 a.m. in the Health Services Auditorium, Health Services Building, First Floor East, 275 East Main Street, Frankfort, Kentucky. Individuals interested in attending this hearing shall notify this agency in writing by May 19, 1994, five days prior to hearing, of their intent to attend. If no notification of intent to attend the hearing is received by that date, the hearing may be cancelled. The hearing is open to the public. Any person who attends will be given an opportunity to comment on the proposed administrative regulation. A transcript of the public hearing

will not be made unless a written request for a transcript is made. If you do not wish to attend the public hearing, you may submit written comments on the proposed administrative regulation. Send written notification of intent to attend the public hearing or written comments on the proposed administrative regulation to: W. K. Moore, Deputy Counsel for Administrative Law, Cabinet for Human Resources, 275 East Main Street - 4 West, Frankfort, Kentucky 40621, (502) 564-7900.

REGULATORY IMPACT ANALYSIS

Agency Contact Person: Masten Childers II

(1) Type and number of entities affected: All alternative home and community based services for the mentally retarded providers participating in the Medicaid Program.

(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: None

(2) Effects on the promulgating administrative body:

(a) Direct and indirect costs or savings: None

1. First year:

2. Continuing costs or savings:

3. Additional factors increasing or decreasing costs:

(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: No viable alternatives were identified.

(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: It is assumed that any administrative cost relating to this action will be absorbed within the current organization structure.

TIERING: Was tiering applied? No. Tiering was not appropriate in this administrative regulation because the administrative regulation applies equally to all those individuals or entities regulated by it. Disparate treatment of any person or entity subject to this administrative regulation could raise questions of arbitrary action on the part of the agency. The "equal protection" and "due process" clauses of the Fourteenth Amendment of the U.S. Constitution may be implicated as well as Sections 2 and 3 of the Kentucky Constitution.

FEDERAL MANDATE ANALYSIS COMPARISON

1. Federal statute or regulation constituting the federal mandate. Pursuant to 42 USC 1396a et seq., the Commonwealth of Kentucky has exercised the option to establish a Medicaid Program for indigent Kentuckians. Having elected to offer Medicaid coverage, the state must comply with federal requirements contained in 42 USC 1396 et seq.

2. State compliance standards. This administrative regulation does not set compliance standards.

3. Minimum or uniform standards contained in the federal mandate. This administrative regulation does not set minimum or uniform standards.

4. Will this administrative regulation impose stricter requirements, or additional or different responsibilities or requirements, than those required by the federal mandate? No. This administrative regulation does not set stricter requirements.

5. Justification for the imposition of the stricter standard, or additional or different responsibilities or requirements. No additional standard or responsibilities are imposed.

PROPOSED ADMINISTRATIVE REGULATIONS RECEIVED THROUGH NOON, APRIL 15, 1994

GENERAL GOVERNMENT CABINET
Kentucky Occupational Therapy Board

201 KAR 28:041. Repeal of 201 KAR 28:040, 28:080, and 28:100.

RELATES TO: KRS Chapter 319A
STATUTORY AUTHORITY: KRS 319A.070(3)
NECESSITY AND FUNCTION: 201 KAR 28:040 is no longer needed since the provisions of this administrative regulation relate to the grandfathering provisions of the law which have expired. 201 KAR 28:080 is no longer needed since the provisions of this administrative regulation have been included in another regulation. 201 KAR 28:100 is no longer needed since the provisions of this administrative regulation have been included in another regulation.

Section 1. 201 KAR 28:040, Waiver of examination; 201 KAR 28:080, Licenses; and 201 KAR 28:100, Late renewal, are hereby repealed.

CONSTANCE HEROLD, Board Chairman
APPROVED BY AGENCY; March 18,1 994
FILED WITH LRC: April 14, 1994 at 8 a.m.
PUBLIC HEARING: A public hearing on this administrative regulation shall be held on May 24, 1994 at 9 a.m. at the offices of the Division of Occupations and Professions, located at the Berry Hill Annex, 700 Louisville Road, Frankfort, Kentucky 40601. Individuals interested in being heard at this hearing shall notify this agency in writing by May 19, 1994, five days prior to the hearing, of their intent to attend. If no notification of intent to attend the hearing is received by that date, the hearing may be canceled. This hearing is open to the public. Any person who wishes to be heard will be given an opportunity to comment on the proposed administrative regulation. A transcript of the public hearing will not be made unless a written request for a transcript is made. If you do not wish to be heard at the public hearing, you may submit written comments on the proposed administrative regulation. Send written notification of intent to be heard at the public hearing or written comments on the proposed administrative regulation to the contact person.
CONTACT PERSON: David L. Nicholas, Director, Division of Occupations and Professions, P.O. Box 456, Frankfort, Kentucky 40602 (502) 564-3296.

REGULATORY IMPACT ANALYSIS
Contact Person: David Nicholas
(1) Type and number of entities affected: All licensed participants and promoters.
(a) Direct and indirect costs or savings to those affected: There are no costs associated with this regulation.
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: Repeal of various regulations which are no longer needed.
(a) Direct and indirect costs or savings: There will not be any 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: None
(3) Assessment of anticipated effect on state and local revenues: None
(4) Assessment of alternative methods; reasons why alternatives were rejected: The statute requires the promulgation of this regulation.
(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: Is tiering applied? No. All credentialed practitioners and applicants will be subject to this regulation in the same ways.

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

401 KAR 5:037. Groundwater protection plans.

RELATES TO: KRS 151.110, 151.232, 224, SB 241
STATUTORY AUTHORITY: KRS 224.01-010, 224.10-100, 224.70-100, 224.70-110
NECESSITY AND FUNCTION: KRS Chapter 224 requires the cabinet to adopt administrative regulations to protect waters of the Commonwealth and to prevent pollution of waters of the Commonwealth. This administrative regulation establishes the requirement to prepare and to implement groundwater protection plans to ensure protection for all current and future uses of groundwater and to prevent groundwater pollution.

Section 1. Definitions. The following definitions describe terms used in this administrative regulation. Terms not defined below shall have the meanings given to them by KRS 224.01-010 or if not so defined, the meanings attributed by common use.
(1) "Abandoned well" means a well not currently in use and not intended for future use.
(2) "Agriculture operation" means any farm operation on a tract of land, including all income-producing improvements and farm dwellings, together with other farm buildings and structures incident to the operation and maintenance of farms, situated on ten (10) contiguous acres or more of land used for the production of livestock, livestock products, poultry, poultry products, milk, milk products, or silviculture products, or for the growing of crops such as, but not limited to, tobacco, corn, soybeans, small grains, fruit and vegetables; or devoted to and meeting the requirements and qualifications for payment to agriculture programs under an agreement with the state or federal government.
(3) "Best management practices" means schedules of activities, prohibitions of practices, maintenance procedures, and other management practices to prevent or reduce the pollution of waters of the Commonwealth. Best management practices also include treatment requirements, operating procedures, and practices to control plant site run-off, spillage or leaks, sludge or waste disposal, or drainage from raw material storage.
(4) "Bore hole" means a hole drilled into the soil for exploratory or sampling purposes.
(5) "Bulk quantities" means undivided quantities of any substance equal to or greater than fifty-five (55) U. S. gallons liquid measure or 100 pounds net dry weight transported or held in an individual container.
(6) "Commercial" means services at stores, offices, restaurants, warehouses, and other service and nonmanufacturing activities,

excluding households and industries.

(7) "Container" means any portable enclosure in which a material is stored, transported, treated, disposed, or otherwise handled.

(8) "Core hole" means a hole drilled for the purpose of obtaining a rock sample.

(9) "Corrective action" means an activity or measure taken to remedy groundwater pollution.

(10) "Floor drain" means an opening in the floor used to collect spills, water, or other liquids.

(11) "Generic groundwater protection plan" means a groundwater protection plan that can be applied to activities conducted at different locations because the activities are substantially identical and because the potentials of the activities to pollute groundwater are substantially the same.

(12) "Groundwater" means the subsurface water occurring in the zone of saturation beneath the water table and perched water zones below the B soil horizon including water circulating through fractures, bedding planes, or solution conduits.

(13) "Groundwater pollution" means water pollution as defined in KRS 224.01-010 of groundwaters of the Commonwealth.

(14) "Groundwater protection plan" means a document that establishes a series of practices designed to prevent groundwater pollution.

(15) "Hydrogeologic sensitivity" means an assessment of the potential ease and speed of vertical infiltration or recharge of a liquid through the soil and the unsaturated zones combined with assessments of the maximum potential flow rate and dispersion potential after entry into the principal or uppermost saturated zone.

(16) "Industrial" means manufacturing or industrial processes, including, but not limited to, the following manufacturing processes: electric power generation; fertilizer or agricultural chemicals; food and related products or by products; inorganic chemicals; iron and steel manufacturing; leather and leather products; nonferrous metals manufacturing or foundries; organic chemicals; plastics and resins manufacturing; pulp and paper industry; rubber and miscellaneous plastic products; stone, glass, clay, and concrete products; textile manufacturing; transportation equipment; and water treatment.

(17) "Karst" means the type of geologic terrain underlain by carbonate rocks where significant solution of the rock has occurred due to flowing groundwater.

(18) "Land treatment" or "land disposal" means the application or incorporation of a pollutant onto or into the soil.

(19) "Loading and unloading areas" means areas used for loading and unloading, and related handling of raw materials, intermediate substances, products, wastes, or recyclable materials. Loading and unloading areas include, but are not limited to, areas used to load and unload drums, trucks, and railcars.

(20) "On-site sewage disposal system" means a complete system installed on a parcel of land, under the control of ownership of any person, which accepts sewage for treatment and ultimate disposal under the surface of the ground. The common terms "on-site sewage system" and "on-site system" also have the same meaning. This definition includes, but is not limited to, the following:

(a) A conventional system consisting of sewage pretreatment unit, distribution box, and lateral piping within rock-filled trenches or beds;

(b) A modified system consisting of a conventional system enhanced by shallower trench or bed placement, artificial drainage systems, dosing, alternating lateral fields, fill soil over the lateral field, or other necessary modifications to the site, system, or wasteload to overcome the site limitations;

(c) An alternative system consisting of a sewage pretreatment unit, necessary site modifications, wasteload modifications, and a subsurface soil absorption system using other methods and technologies than a conventional or modified system to overcome site limitations;

(d) Cluster systems which accept effluent from more than one (1) structure's or facility's sewage pretreatment unit and transport the collected effluent through a sewer system to one (1) or more common subsurface soil absorption systems or conventional, modified, or alternative design; and

(e) A holding tank which provides limited pretreatment and storage for off-site disposal where site limitations preclude immediate installation of a subsurface soil absorption system or connection to a municipal sewer.

(21) "Pesticide" means:

(a) Any substance or mixture of substances intended to prevent, destroy, control, repel, attract, or mitigate any pest;

(b) Any substance or mixture of substances intended to be used as a plant regulator, defoliant, or desiccant; or

(c) Any substance or mixture of substances intended to be used as a spray adjuvant.

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

(23) "Sinkhole" means a naturally occurring topographic depression in a karst area. Its drainage is subterranean and serves as a recharge source for groundwater and it is formed by the collapse of a conduit or the solution of bedrock.

(24) "Sinking stream" means a surface stream in a karst region that disappears underground usually through gradual seepage of flow along the channel bottom.

(25) "Storing" means the containing of materials, products, substances, wastes, or other pollutants on a temporary basis in such a manner as not to constitute disposal.

(26) "Surface impoundment" means a natural topographic depression, manmade excavation, or diked area formed primarily of earthen materials, although it may be lined with manmade materials, which is designed to hold an accumulation of liquids or solids.

(27) "Water well" or "well" means any excavation or opening in the surface of the earth that is drilled, cored, bored, washed, driven, jetted, or otherwise constructed when the actual or intended use in whole or in part of an excavation is the removal of water for any purpose, including but not limited to culinary and household purposes, animal consumption, food manufacture, use of geothermal resources for domestic heating purposes and industrial, irrigation, and dewatering purposes.

(28) "Wellhead protection area" means the surface and subsurface area surrounding a water well, well field, or spring, supplying a public water system, through which pollutants are reasonably likely to move toward and reach the water well, well field or spring or an area defined as a wellhead protection area in a county water supply plan.

(29) "Zone of saturation" means the zone in which all the subsurface voids in the rock or soil are filled with water.

Section 2. Scope and Applicability. (1) Scope. The goal of this administrative regulation is the prevention of groundwater pollution. This administrative regulation identifies certain activities for which groundwater protection plans shall be prepared and implemented. This administrative regulation also identifies certain activities for which groundwater protection plans are not required.

(2) Applicability. Except for activities as provided in subsections (3) and (4) of this section any person responsible for conducting any of the following activities shall prepare and implement a groundwater protection plan in accordance with the requirements of this administrative regulation:

(a) Storing or related handling of pesticides or fertilizers for commercial purposes;

(b) Storing or related handling of pesticides or fertilizers for the purpose of distribution to a retail sales outlet;

(c) Applying of pesticides or fertilizers for commercial purposes;

(d) Applying of fertilizers or pesticides for public right-of-way maintenance or institutional lawn care;

(e) Land treatment or land disposal of a pollutant;

(f) Storing, treating, disposing, or related handling of hazardous waste, solid waste, or special waste in landfills, incinerators, surface impoundments, tanks, drums or other containers, or in piles;

(g) Commercial or industrial storing or related handling in bulk quantities of raw materials, intermediate substances or products, finished products, substances held for recycling, or other pollutants held in tanks, drums or other containers, or in piles;

(h) Transmission in pipelines of raw materials, intermediate substances or products, finished products, or other pollutants;

(i) Installation or operation of on-site sewage disposal systems;

(j) Storing or related handling of road oils, dust suppressants, or deicing agents at a central location;

(k) Application or related handling of road oils, dust suppressants or deicing materials;

(l) Mining and associated activities;

(m) Installation, construction, operation, or abandonment of wells, bore holes, or core holes;

(n) Collection or disposal of pollutants in an industrial or commercial facility through the use of floor drains which are not connected to on-site sewage disposal systems, closed-loop collection or recovery systems, or privately- or publicly-owned treatment works;

(o) Impoundment or containment of pollutants in surface impoundments, lagoons, pits, or ditches; or

(p) Commercial or industrial transfer, including loading and unloading, in bulk quantities of raw materials, intermediate substances or products, finished products, substances held for recycling, or other pollutants.

(3) General exclusion. Any person who conducts an activity identified in subsection (2) of this section shall not be required to prepare or to implement a groundwater protection plan for that activity if that person can demonstrate by substantial evidence based on the factors set forth in this subsection, the activity has no reasonable potential of altering the physical, thermal, chemical, biological, or radioactive properties of the groundwater in a manner, condition, or quantity that will be detrimental to the public health or welfare, to animal or aquatic life, to the use of groundwater as present or future sources of public water supply or to the use of groundwater for recreational, commercial, industrial, agricultural, or other legitimate purposes. The demonstration shall at a minimum consider the following factors:

(a) Hydrogeologic sensitivity at or near the location of the activity;

(b) Quantity of the pollutants, including the cumulative potential to pollute from small discharges, spills, or releases which individually would not have the potential to pollute;

(c) Physical, chemical, and biological characteristics of the pollutants such as solubility, mobility, toxicity, concentration, and persistence;

(d) Use of the pollutants at the locations of the activities; and

(e) Present and potential uses of the groundwater.

(4) Specific exclusions. The provisions of this administrative regulation shall not apply to the following activities:

(a) Normal use or consumption of products sized and packaged for personal use by individuals;

(b) Retail marketing of products sized and packaged for personal use or consumption by individuals;

(c) Activities conducted entirely inside enclosed buildings if:

1. The building has a floor sufficient to prevent the release of pollutants to groundwater; and

2. There are no floor drains, or all floor drains within the building are connected to an on-site sewage disposal system, closed-loop collection or recovery system or a privately- or publicly-owned treatment works;

(d) Storing, related handling, or transmission in pipelines of pollutants that are gases at standard temperature and pressure;

(e) Storing municipal solid waste in a container located on property where the municipal solid waste is generated and which is used solely for the purpose of collection and temporary storage of that municipal solid waste prior to off-site disposal;

(f) Activities associated with sewer lines or water lines;

(g) Storing water in ponds, lakes or reservoirs;

(h) Impounding stormwater, silt, or sediment in surface impoundments;

(i) Application of chloride-based deicing materials used on roads or parking lots;

(j) Emergency response activities conducted in accordance with local, state, and federal law;

(k) Fire fighting activities;

(l) Conveyance or related handling by motor vehicle, rolling stock, vessel, or aircraft;

(m) Agricultural activities at agriculture operations; or

(n) Application by commercial applicators of fertilizers or pesticides on lands used for agriculture operations.

(5) Relationship to other programs. Nothing in this administrative regulation shall abrogate the duty of a person to comply with the statutes and other administrative regulations administered by the cabinet, with the statutes and administrative regulations administered by other state and federal agencies, or with statutes and ordinances administered by a local government.

Section 3. Preparation of Groundwater Protection Plans. (1) General requirements. A groundwater protection plan establishes a series of practices to be followed by the person required to prepare and to implement it. The practices established by a groundwater protection plan shall be designed and implemented in a manner that will prevent groundwater pollution. This section describes the contents of site-specific and generic groundwater protection plans. Any person conducting an activity identified in Section 2(2) of this administrative regulation shall determine if an exclusion of Section 2(3) or (4) of this administrative regulation applies to that activity.

(2) Deadlines for preparation and implementation. Except for activities excluded by Section 2(3) or (4) of this administrative regulation, any person required to prepare and to implement a groundwater protection plan pursuant to Section 2 of this administrative regulation, shall prepare and implement a site-specific or generic groundwater protection plan within one (1) year of the effective date of this administrative regulation, or upon commencement of the regulated activity, whichever is later.

(3) Elements of generic and site-specific groundwater protection plans. Both generic and site-specific groundwater protection plans shall contain the following:

(a) General information regarding the facility and its operation, including the name of the facility, the address of the facility, and the name of the person responsible for implementing the plan;

(b) Identification of all activities identified in Section 2(2) of this administrative regulation and not excluded by Section 2(3) or (4) of this administrative regulation;

(c) Identification of all practices chosen for the plan to protect groundwater from pollution;

(d) An implementation schedule for the practices selected for the plan;

(e) A description of and implementation schedule for employee training necessary to ensure implementation of the plan;

(f) An inspection schedule requiring regular inspections as needed to ensure that all practices established are in place and properly functioning;

(g) A certification by the person responsible for implementing the plan or a duly authorized representative that the plan complies with the requirements of this administrative regulation, and that the person responsible for implementing the plan has reviewed the terms of the plan and will implement its provisions.

(4) Selection of practices for groundwater protection. Any person required to prepare a groundwater protection plan pursuant to this section shall evaluate technological means for protection of groundwater from pollution that may result from activities addressed by the

plan and shall select practices for the plan which protect groundwater from pollution. The groundwater protection practices chosen for a groundwater protection plan may include but are not limited to:

(a) Equipment design;

(b) Operational procedures;

(c) Preventive maintenance techniques;

(d) Construction techniques;

(e) Personnel training;

(f) Spill response capabilities;

(g) Alternative materials or processes;

(h) Implementation of new technology;

(i) Modification of facility or equipment;

(j) Spill prevention control and countermeasure plans;

(k) Best management practices;

(l) Hazardous waste contingency plans;

(m) Other plans prepared pursuant to other programs which protect groundwater from pollution;

(n) Runoff or infiltration control systems;

(o) Siting considerations; and

(p) Any other practice which will protect groundwater from pollution.

(5) Specific practices. In selecting practices to protect groundwater for the activities identified in Section 2(2) of this administrative regulation and not excluded by Section 2(3) or (4) of this administrative regulation any person preparing a groundwater protection plan shall consider the nature of the pollutant and the hydrogeologic characteristics at or near the location of the activity and shall comply with the provisions of this subsection in selecting those practices:

(a) Loading and unloading areas. Loading and unloading areas shall have spill prevention and control procedures and operation procedures designed to prevent groundwater pollution. Spill containment and cleanup equipment shall be readily accessible.

(b) On-site sewage disposal systems. No person shall install a new or replace an existing on-site sewage disposal system if a publicly- or privately-owned treatment works capable of treating the pollutants to be discharged is available.

(c) Floor drains. Any person using existing floor drains shall evaluate those floor drains to determine if they discharge to an on-site sewage disposal system, to a closed-loop collection or recovery system, or to privately- or publicly-owned treatment works. If drains are identified which do not discharge to an on-site sewage disposal system, a closed-loop collection or recovery system, or privately- or publicly-owned treatment works, that person shall terminate the discharge or connect it to an on-site sewage disposal system, a closed-loop collection or recovery system, or a privately- or publicly-owned treatment works. No person shall install a floor drain unless it is connected to an on-site sewage disposal system, closed-loop collection or recovery system, or privately- or publicly-owned treatment works.

(d) Tanks and sumps. Any person using a tank or sump shall prepare and implement good housekeeping practices, operating procedures, operator training, and spill response procedures. In addition, any person using a tank or sump shall consider leak control devices, secondary containment, integrity testing, mechanical inspections, and overfill protection devices. Additional containment is not required for sumps and tanks that are used solely to provide secondary containment.

(e) New surface impoundments, lagoons, pits or ditches. Any person who constructs a new surface impoundment, lagoon, pit or ditch which will contain a pollutant shall evaluate the site's hydrogeology and shall design and operate it to minimize discharges to soil. However, soils may be used to construct liners under appropriate conditions. All necessary and appropriate measures shall be taken to prevent groundwater pollution. The person shall consider the use of liners, secondary containment, leak detection devices, and other appropriate and effective control systems. Additional containment is not required for new surface impoundments, lagoons, pits, and ditches that are used solely to provide secondary containment.

(6) Exceptions to specific requirements.

(a) The provisions of subsection (5) of this section shall not apply to activities that are governed by other federal, state or regulatory programs that meet the requirements of subsection (7) of this section while the person conducting the activities remains in compliance with the other program.

(b) Variances from the provisions of subsection (5) of this section may be granted by the cabinet upon a showing of good cause, but in no event shall any person required to prepare a groundwater protection plan pursuant to this section take any actions contrary to the provisions of subsection (5) of this section without prior written approval of the cabinet.

(7) Incorporation of requirements of other regulatory programs.

(a) Groundwater protection activities required by other federal, state, or local regulatory programs may be incorporated into a site-specific or generic groundwater protection plan by reference if the other regulatory program contains the following:

1. Management and design standards;

2. Mandatory monitoring for groundwater pollution or methods of detecting discharges, spills, or releases to groundwater; and

3. Specific corrective action criteria.

(b) The plan shall identify each activity covered by the other regulatory program. The person responsible for implementing the plan shall certify compliance with the other regulatory program. The provisions of the other program shall be the groundwater protection plan for purposes of this administrative regulation for the activities covered by the other regulatory program. If activities identified in Section 2(2) of this administrative regulation and not excluded in Section 2(3) or (4) of this administrative regulation are conducted which are not covered by the other regulatory program, the plan shall contain separate practices designed to protect groundwater from pollution for each activity not covered by the other regulatory program.

(8) Generic groundwater protection plans. A generic groundwater protection plan may govern all or part of a person's activities. A generic groundwater protection plan shall not be sufficient by itself if it does not address all activities conducted by the person that are identified in Section 2(2) of this administrative regulation and not excluded by Section 2(3) or (4) of this administrative regulation. A generic groundwater protection plan shall be prepared in accordance with subsections (1) through (7) of this section.

(a) A person responsible for preparing and implementing a groundwater protection plan required by this administrative regulation may apply one (1) provision of the plan to all substantially identical activities if factors identified in Section 2(3) of this administrative regulation do not cause substantial differences in the potential to pollute among locations. If substantial differences do exist, the plan shall provide separate site-specific or region-specific preventive measures, as necessary, for the activities.

(b) A person responsible for preparing a groundwater protection plan governed by this section may use a generic groundwater protection plan prepared by another person or group, including a trade organization, if:

1. The activities identified in the generic groundwater protection plan are substantially identical;

2. The factors identified in Section 2(3) of this administrative regulation do not cause substantial differences in the potentials to pollute among locations; and

3. The groundwater protection plan has been reviewed and approved by the cabinet.

(c) A generic groundwater protection plan may consist of requirements imposed by other regulatory programs designed to protect groundwater or programs offering technical assistance for groundwater protection if the cabinet has approved the requirements of the other program as a generic groundwater protection plan. Any person using a generic groundwater protection plan from another

program pursuant to this paragraph as a part of, or all of, his plan shall certify in his plan that he is subject to the program and in compliance with its provisions. Any activities which are not addressed by the program shall be addressed separately in the groundwater protection plan.

(d) Any person conducting an activity listed in this subsection who does not prepare a groundwater protection plan for that activity or does not use another approved generic groundwater protection plan for that activity shall implement the provisions of the generic groundwater protection plan prepared by the cabinet. The cabinet, in cooperation with other appropriate state agencies, shall prepare generic groundwater protection plans for:

1. Use of existing residential septic systems; and

2. Construction, operation, closure, and capping of water wells.

(e) A generic groundwater protection plan that has been approved by the cabinet may be incorporated by reference in a facility's groundwater protection plan; however, each person responsible for implementing the generic plan at a site shall maintain a copy of the plan at an appropriate, accessible location. Any person using a generic groundwater protection plan shall identify the activities governed by the plan and attach the identification to the copy of the generic plan.

(f) Any person preparing a new or revised generic groundwater protection plan to be approved by the cabinet shall submit that plan to the cabinet for approval. When that person submits that plan to the cabinet that person shall also place a notice in a statewide newspaper and a trade publication likely to be read by those affected by the groundwater protection plan. That notice shall provide for a thirty (30) day comment period and shall identify activities that are addressed by the proposed generic groundwater protection plan. The notice shall describe the procedure for review by the public of the plan and the procedures and time frames for providing comments. The cabinet shall also notify by mail anyone who has requested in writing to be placed on a mailing list for purposes of this administrative regulation.

Section 4. Implementation of Groundwater Protection Plans. (1) Record retention requirements.

(a) Any site-specific groundwater protection plan required by Sections 2 through 4 of this administrative regulation, and any documentation evidencing compliance with the provisions of the plan, shall be retained by the person responsible for implementing the plan, at the location of the activity if the location is normally attended at least eight (8) hours per day, or at the nearest office of that person's activity if the facility is not so attended.

(b) Any generic groundwater protection plan and any documentation evidencing compliance with the provisions of the plan, shall be retained by the person responsible for implementing the plan, in as many locations as necessary to ensure compliance. Individual homeowners are not required to maintain a copy of the generic groundwater protection plan for residential septic systems at their residences.

(c) Unless the cabinet approves another retention period for a person, all records evidencing compliance shall be maintained and available for review by the cabinet for a period of six (6) years after their preparation.

(2) Amendment of groundwater protection plans. Prior to conducting any new or modified activity, any person conducting that activity shall amend the groundwater protection plan, as necessary, to address the new or modified activity.

(3) Review and recertification of groundwater protection plans. Each groundwater protection plan shall be reviewed in its entirety every three (3) years, by the persons responsible for the plan, updated if necessary, and recertified. To the extent possible, the review shall include a reevaluation of the design and operation procedures for the pollution prevention practices previously selected for the plan to ensure that they are effective.

(4) Submission of groundwater plans to cabinet.

(a) Upon written request of the cabinet, any person required to prepare a groundwater protection plan pursuant to this administrative regulation shall submit a copy of the plan to the cabinet within thirty (30) days.

(b) Upon written request of the cabinet, any person who has made a determination pursuant to Section 2(3) of this administrative regulation that a groundwater protection plan is not required for a specific activity shall submit a written demonstration to the cabinet within thirty (30) days.

(5) Submission of additional information to the cabinet. Upon review of a groundwater protection plan which has been submitted to the cabinet, the cabinet may require any person responsible for preparation or implementation of a plan to submit any of the following information that the cabinet deems necessary:

(a) For a site-specific groundwater protection plan, and for a generic groundwater protection plan in effect at a specific location, the location of all buildings, structures, roads, utilities, drainage pathways, and boundaries by using a narrative description or by using a map, diagram, or drawing;

(b) For a generic groundwater protection plan that applies to more than one (1) location, identification of the geographic region to which the generic groundwater protection plan applies, and an explanation as to why that region was selected and why one (1) plan is appropriate for all activities addressed by the plan for all sites within the region;

(c) For a generic groundwater protection plan that applies to more than one (1) location, to the extent possible, a description of the nature and number of activities, and their associated facilities, that are expected to be governed by the generic groundwater protection plan;

(d) Summary of reasonably available hydrogeologic information as follows:

1. Identification of location of sinkholes, sinking streams, springs, streams, lakes, ponds, and ditches;

2. Description of soil survey information;

3. Identification and location of currently usable wells, abandoned wells, and wellhead protection areas;

4. Identification of subsidence areas; and

5. Description of any other relevant hydrogeologic data known to the person preparing or implementing the groundwater protection plan; and

(e) Any other site-specific groundwater or geologic information, which is known and readily available to the person responsible for preparing or implementing the plan but not to the cabinet, that the cabinet deems necessary.

(6) Revisions to plans after cabinet review. If the cabinet reviews a groundwater protection plan and determines that it does not meet the requirements of this administrative regulation, the cabinet shall notify the person responsible for preparing or implementing the plan of the deficiency in the plan. That person shall revise the plan to correct the deficiencies identified by the cabinet and submit the revised plan to the cabinet for further review. Unless an extension of time is granted by the cabinet or the notice of deficiency is withdrawn by the cabinet, the person submitting the revised plan shall have thirty (30) days from issuance of the notice of the deficiencies to submit the revised plan. The cabinet shall review the revised plan and notify the person submitting the revised plan of its final determination.

(7) Public inspection of groundwater protection plans.

(a) Any person who desires to review a groundwater protection plan shall send a written request to the person required to prepare and to implement the groundwater protection plan.

(b) Any person who receives a written request to review the groundwater protection plan shall within ten (10) working days:

1. Send a written response to the person requesting to inspect the groundwater protection plan stating that the groundwater protection plan may be reviewed at:

a. The Division of Water in Frankfort;

b. A regional office of the Division of Water;

c. The facility; or

d. A local public library; or

2. Send a written response to the person requesting to inspect the groundwater protection plan, stating the reason that a groundwater protection plan was not required to be prepared.

(c) Any person who designates a review location for a groundwater protection plan shall send a copy of the groundwater protection plan to the location designated for review within ten (10) working days of receiving a written request to review the plan.

(8) Requirements upon transfer of property. Upon any subsequent transfer of a facility for which a groundwater protection plan has been prepared, the seller shall provide the purchaser with a copy of the most recent groundwater protection plan prepared for the facility pursuant to this administrative regulation.

PHILLIP J. SHEPHERD, Secretary
E. DOUGLAS STEPHAN, Commissioner
APPROVED BY AGENCY: April 15, 1994
FILED WITH LRC: April 15, 1994 at 11 a.m.

PUBLIC HEARING: A public hearing to receive comments on this proposed regulation has been scheduled for May 24, 1994 at 10 a.m. eastern time at the auditorium in the State Office Building, Frankfort, Kentucky. Individuals interested in being heard at this hearing shall notify Jack A. Wilson in writing at the address noted below by May 19, 1994, of their intent to attend. If no notification of intent to attend the hearing is received by that date, the hearing may be canceled. This hearing is open to the public. Any person wishing to be heard will be given an opportunity to comment on the proposed regulation. Persons testifying at the hearing are asked to provide the Natural Resources and Environmental Protection Cabinet with a written copy of their testimony, if available. A transcript of the hearing will not be made unless a written request for a transcript is made at least five (5) days before the hearing. If you do not wish to be heard at the public hearing, you may submit written comments on the proposed regulation. Written comments must be received by Mr. Wilson no later than the close of the hearing on May 24, 1994. The Natural Resources and Environmental Protection Cabinet does not discriminate on the basis of race, color, national origin, sex, religion, age, or disability and provides, on request, reasonable accommodations including auxiliary aids and services necessary to afford an individual with disability an equal opportunity to participate in all services, programs, and activities. Requests for reasonable accommodations for this public hearing, such as an interpreter or alternate forms for printed materials, should be submitted to Mr. Wilson at the address below.

CONTACT PERSON: Jack A. Wilson, Division of Water, Department for Environmental Protection, 14 Reilly Road, Frankfort, Kentucky 40601, (502) 564-3410.

REGULATORY IMPACT ANALYSIS

AGENCY CONTACT: Jack A. Wilson, Director

(1) Type and number of entities affected: This proposed regulation establishes the requirements for developing and implementing groundwater protection plans to prevent pollution of the groundwaters of the Commonwealth. All activities do not have a potential to pollute groundwater. Some activities are expressly exempted. In addition, an entity who would otherwise be required to develop and implement a groundwater protection plan may determine that, based on the factors in Section 2(3), the activity does not have the potential to pollute groundwater and that a groundwater protection plan is not required. Affected by this regulation are those entities that, through their activities, may pollute groundwater and those entities that benefit from prevention of groundwater pollution. Certain entities must determine if their activities and the substances they use may pollute groundwater. If an entity uses a substance that may pollute groundwater, the entity must develop and implement a groundwater protection plan, unless exempted. The exact number of entities required to develop and implement groundwater protection plans cannot be determined. The activities for which groundwater protection plans are required, unless exempted, are identified in Section 2(2)(b) of this proposed regulation. The cabinet has determined that these activities may have the potential to pollute groundwater. Entities who must develop a groundwater protection plan or determine that they are exempted include those conducting mining, manufacturing, oil and gas production, disposal and land application. Entities that store substances that may pollute groundwater may be affected. There are 3693 manufacturers, and 1460 mineral industries. Some of these entities will be required to develop groundwater protection plans, while others will be exempted. The total number of entities required to develop groundwater protection plans cannot be determined. Because of the increased awareness of the causes of groundwater pollution, the liability associated with pollution of groundwater, and the costs incurred for remediation, many individuals and companies have already voluntarily implemented procedures to prevent groundwater pollution. Different methods have been used to prevent those activities from polluting groundwater. Since many activities that may pollute groundwater are not specifically regulated and each person has implemented different policies and procedures, different levels of effort will be needed to comply with this regulation. Some entities will not need to change their practices, procedures, or facilities. Others will need varying levels of change to prevent groundwater pollution.

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

1. First year: The first year costs include costs for development of the groundwater protection plans and implementation of the actions identified in the plans to prevent groundwater pollution. The cost of developing a groundwater protection plan is estimated to be from $100 to $15,000. The exact costs for implementation cannot for all entities be determined in the absence of data on current construction and operating practices. The costs incurred will vary depending on the current and past practices and present policies of each entity. Many individuals and companies have implemented practices and procedures designed to prevent groundwater pollution under existing regulatory programs. Others have, in response to information concerning groundwater remediation costs and liability associated with groundwater pollution, implemented voluntary procedures and practices to prevent groundwater pollution. These practices and procedures are not documented and vary from entity to entity. For each entity costs may be incurred for developing a groundwater pollution plan, installing pollution prevention equipment, developing or altering manufacturing methods to prevent pollution, or developing and implementing training materials to instruct workers in pollution prevention. The following two scenarios provide cost estimates for implementation of specific groundwater protection plans. They provide estimates of "a least" and "a most" expensive cost for implementation of groundwater protection plans for three types of facilities. Example 1 includes gasoline stations engaged in storage of gasoline, diesel fuel, and kerosene in underground or above ground tanks; storage of waste materials such as oil, transmission fluid, and solvents; use of floor drains; and, disposal of wastewater. Tables 1 and 2 provide estimated minimum and maximum costs for implementation of a groundwater protection plan for a gasoline station. The costs for an actual gasoline station may be between these two figures.

Table 1. Estimated Minimum Costs for A Gasoline Station

Activity	Assumptions for Cost Calculations	Estimated Costs
Underground tanks for gasoline and diesel fuel	Current underground storage tank regulations are sufficient.	$0
Above ground tank for kerosene	Kerosene tank inside the building.	$0
Storage of waste	Waste oil, transmission fluid, and solvents are stored inside the building and are hauled from the site to be disposed or to be recycled.	$0
Floor drains	Floor drains are connected to a municipal wastewater treatment system.	$0
Wastewater disposal	Restrooms are connected to a municipal wastewater treatment system.	$0
Total Cost		**$0**

Table 2. Estimated Maximum Cost for Á Gasoline Station

Activity	Assumptions for Cost Calculations	Estimated Costs
Underground tank for gasoline and diesel fuel	Because tanks are directly above a public water supply source and the geologic formations are highly permeable, secondary containment is selected as the appropriate pollution prevention practice. Cost estimate is for three tanks.	$9,300
Above ground tank for kerosene	Kerosene tank is outside and runoff from site goes to sinkhole. A concrete containment structure to collect spills and a roof to prevent collection of rain are selected for pollution prevention.	$1,300
Storage of waste	A concrete containment structure to collect spills and a roof to prevent collection of rain are selected for pollution prevention in an outside storage area.	$1,300
Floor drains	Floor drain is determined to drain to an underground crevice. Package treatment plant installed.	$4,000
Wastewater disposal	Wastewater also goes to package treatment plant.	$0
Total Cost		**$15,900**

Example 2 includes oil and gas production facilities engaged in well drilling, operation of oil wells, and storage in impoundments and tanks. Tables 3 and 4 provide estimated minimum and maximum costs for implementation of a groundwater protection plan for an oil and gas production facility. The costs for an oil and gas production facility may be between these two figures.

Table 3. Estimated Minimum Costs for Oil and Gas Production Facility

Activity	Assumptions for Cost Calculations	Estimated Costs
Operation of producing well	1 well, low production, no brine produced, area not hydrogeologically sensitive. Well casing protects groundwater.	$0
Drilling	Shallow drilling, low pressure, no fluids used in drilling, no fluids other than oil found during drilling, area is not hydrogeologically sensitive.	$0
Total Cost		**$0**

Table 4. Estimated Maximum Costs for Oil and Gas Production Facility

Activity	Assumptions for Cost Calculations	Estimated Costs
Operation of producing well	Numerous wells, high oil/water production ratio, improper well construction, leaking tank batteries and lines, 1 salt water reinjection well.	
	Based on 10 producing wells: Well rehabilitation (material and labor).	
	Injection well construction.	
	Replacement of tank batteries and lines.	$24,750
		$30,000
		$20,000
Drilling	Line pits for drilling fluids.	$960
	Case off fluid producing zones.	$4,750
	Restore dry hole and site restoration.	$5,000
Total Cost		**$85,460**

The 3,693 Kentucky manufacturing facilities are different in size of facility, existing groundwater pollution prevention measures, number of units, and materials used. Manufacturers will exhibit a wide range of costs as a result of this proposed regulation. Therefore, it is inappropriate to reflect costs based on an average or typical facility type. The total costs for each facility will vary significantly with the current practices and the pollution prevention measures selected for each site.

The following example illustrates the lowest expected costs. A small parts assembly industry receives all parts precleaned and ready to assemble. Floor drains and bathrooms are connected to a municipal wastewater treatment plant. There is no painting except for routine building and machinery maintenance painting which takes place in the building. Small, consumer-sized packages of oils, lubricants, and cleaners are used by maintenance personnel. A parts washing station in a maintenance shop is maintained by a solvent recovery service and is a self-contained, recirculating system. No underground or above ground tanks exist.

This facility would meet the criteria for exemption under Section 2(3). A determination of the manufacturing process, the facility design, and a description of maintenance related products, should be sufficient for exemption under Section 2(3). The only costs would be those incurred to make those determinations.

Table 7 gives estimates of unit costs to install different groundwater pollution prevention measures. The combination of those measures used at each site will vary based on site-specific conditions.

Table 7. Estimated Costs for Installation of Measures to Prevent Groundwater Pollution

Measures	Estimated Unit Costs
Containment structure for storage of bulk quantities	$11-$15 per square yard for asphalt; $250 per cubic yard for concrete
Covers for storage areas	$6.50-$7.50 per square foot
Synthetic lagoon liners	$.50-$1.00 per square foot
Clay lagoon liners	$4.00-$10.00 per cubic yard
Leak detection for tanks	$3,000 per tank
Secondary containment for tanks	$200-$8,000 per tank
Spill equipment	$100-$5,000
Training	$15-$20 per hour
Plan development	$100-$10,000
Plug wells or bore holes	$2.50 per cubic yard
Replace damaged well casing or install new casing	$4.25 per foot
Floor drains connection to appropriate systems	$500-$10,000

Mining facilities will exhibit a wide range of costs. As with industry there is no typical facility type. Table 8 gives estimated unit costs to install different groundwater pollution prevention measures. The total costs for each facility will vary significantly with the pollution prevention measures selected for each site.

Table 8. Estimated Costs for Installation of Measures to Prevent Groundwater Pollution

MEASURES	Estimated Unit Costs
Equipment maintenance areas	$11 - $15 per square yard for asphalt; $250 per cubic yard for concrete
Containment structures for materials storage	$11 - $15 per square yard for asphalt; $250 per cubic yard for concrete
Clay liners for slurry impoundments	$5.00 - $10.00 per cubic yard
Secondary containment for tanks	$200 - $4,000 per tank
Replace damaged monitoring well casing	$4.25 per foot
Plug wells or bore holes	$2.50 per cubic yard for concrete; $13.20 per bag bentonite
Training	$15 - $20 per hour
Spill equipment	$100 - $5,000

This proposed regulation pursues a preventative approach to groundwater protection by requiring that groundwater protection plans be developed and implemented by those entities whose activities have the potential to pollute groundwater. If groundwater contamination can be prevented, the future costs of remediation can be avoided.

Entities benefiting from groundwater quality maintenance include the general public, persons using groundwater as an individual drinking water source, public or semipublic water supplies using groundwater, persons using groundwater for irrigation, and industries using groundwater. All of these groups benefit from the ability to use groundwater or surface water under the influence of groundwater without treating the water to remove pollutants.

The most direct beneficiaries of groundwater protection are the 206,523 households in Kentucky using wells for their drinking water supplies and the 490,579 individuals served by public water and semipublic supplies for which groundwater is the source. Because of the rural nature of Kentucky, water wells continue to be an important source of drinking water in many areas. An average of 1,860 private drinking water wells are installed each year. Table 9 lists the number of new private drinking water wells installed in each physiographic region since 1985.

Table 9. Number of New Private Drinking Water Wells Installed Since 1985

Physiographic Regions	**Number of Wells Installed**
Bluegrass	1,138
Mississippian Plateau	2,895
Eastern Coal Field	7,783
Western Coal Field	874
Ohio River Alluvium	761
Total	14,906

Table 10 shows the population using public and semipublic water supplies for which groundwater is the source.

Table 10. Public Water and Semipublic Water Supply Systems Using Groundwater

Physiographic Region	**Total Public Systems**	Total Population Served
Bluegrass	31	48,866
Mississippian Plateau	84	145,490
Eastern Coal Field	246	52,482
Western Coal Field	11	10,543
Ohio River Alluvium	73	131,195

Jackson Purchase	57	102,003
Totals	502	490,579

The 135 industrial facilities that have water withdrawal permits for over 10,000 gallons of groundwater per day would benefit from maintaining groundwater quality. The number of industries with groundwater withdrawals under 10,000 gallons per day is not available, however, these entities would also benefit from maintaining groundwater quality.

In estimating benefits from avoiding groundwater pollution, actual costs of remediation (e.g., site characterization, capital, etc.) can be estimated. More difficulty, however, is encountered in quantifying the intrinsic value individuals place on natural resources.

The Office of Technology Assessment estimates that the cost of cleaning up federal superfund sites ranges from $5 to $10 million. For 13 state uncontrolled sites to be remediated in the next year, the estimated cost of remediation ranges from $20,000 to $1.8 million.

The Kentucky Underground Storage Tank Commission documents that cleanups of releases range from $8,000 to $325,000 per site. However, for underground storage tank sites with documented groundwater contamination, costs are $180,000 and greater.

Resource economists have developed a significant amount of evidence to support the notion that individuals value groundwater as a commodity to be used as drinking water, for agricultural purposes, and for industrial processes. Furthermore, research has shown that individuals value the option of using groundwater in the future (option values). Groundwater has value as a source of clean water for future generations (bequest values) and, there is a benefit associated with knowing the groundwater is uncontaminated (existence values). These are called intrinsic values.

One technique to quantify intrinsic values individuals place on natural resources, the contingent valuation method, measures individuals' values within the context of a hypothetical market. This is done by determining the maximum amount of income a person is willing to pay for an environmental good (i.e., groundwater quality). Several studies have resulted in different amounts individuals are willing to pay.

One study investigated the willingness of individuals to pay for groundwater protection. Six hundred citizens were asked if they would be willing to pay a certain amount for a groundwater protection plan that would diminish, but not eliminate, the risk of groundwater pollution occurring. Three hundred forty-six citizens responded, and their median value for groundwater protection was $40 per household or $100,000 total for the community. This is considered a conservative estimate given that the more conservative median value was used, and nonrespondents were assumed not to value the groundwater.

According to the 1990 Census, 206,523 households use wells in the Commonwealth. If each were confronted with potential groundwater contamination, and each well was tested for one pesticide and nitrate the average cost would be $189 per well. Testing costs would vary from $6.00 to $2,500 based upon suspected pollutants. The number of tests required and the total number of wells tested will also impact the total cost. An effective groundwater pollution prevention program avoids the costs to test wells, to remediate the pollution, or to provide an alternate water source.

Households seeking to avoid the risks associated with contaminated drinking water may either remove the contaminants from the water or obtain alternative drinking water supplies. Remedial alternatives and their approximate costs (excluding maintenance) are as follows:

Activated Carbon filtration:	Faucet-mounted: Under-the-Sink: Whole-house:	$25-$50 $50-$300 $500-$800
Distillation:	Countertop: Automatic:	$300-$350 $600-$800
Ion Exchange:	Whole-house:	$500-$800
Reverse-Osmosis:	Single-tap:	$400-$600
New well:		$3.50-$4.50 per inch diameter per foot of depth, plus casing and pump costs.

These totals do not include maintenance costs. The typical cost for replacement carbon filters alone is roughly $200-$350 annually for a whole-house system.

Methods to manage or remediate polluted public drinking water systems include treatment, purchase of uncontaminated water from other suppliers, installation of new wells, and dilution. Costs for modification of treatment processes to remove pollutants vary greatly, depending on extent of pollutants, number of pollutants, and location. Capital equipment costs for a granular activated carbon (GAC) filtering system are estimated to be $1 million for a 1 million gallons a day (MGD) plant and $25 million for 100 MGD plant. Capital costs for reverse osmosis technology is estimated to be $800,00 for a 1 MGD plant and ion exchange is estimated at less than $160,000 per plant. The treatment selected will depend on the contaminant.

Costs incurred by a community in a nearby state were documented during a six-month period in which the citizens were being connected to a public water supply system due to groundwater contamination from perchloroethylene (PCE), a typical groundwater pollutant.

During the six-month period, persons were surveyed regarding their changes in behavior to avoid drinking contaminated water. Over one thousand people responded to the survey. These changes included buying bottled water, hauling water from alternate sources, boiling water, purchasing substitute foods and beverages, and buying home water treatment devices.

The total costs of alternatives were computed per household and annualized. A low cost estimate per household was $252 annually for the households that took steps to avoid exposure to the contaminated

water. A high cost estimate per household was $383 annually based on the cheapest practice required to eliminate the contamination; the purchase, installation, and maintenance of a GAC filtration system.

Data exist on remediation costs for two Kentucky public water supply systems using groundwater as a source. One system serving a population of 17,074 was contaminated with gasoline. The cost to install an air stripper was $173,649. The costs to supply bottled water and perform analysis to characterize the pollution were $51,350. Another public system supplied by wells and serving a population of 4,745 was contaminated with trichloroethylene. The continuing annual cost to supply activated carbon for the filter system for one year is $74,324.

Estimates for the costs associated with connecting to a public system will vary depending on distances to water mains and housing density. Also, these estimates do not include the monthly water bills residents must pay after connection. Before being connected, drinking water costs were, essentially, zero. Costs to install water lines to households from existing water treatment plants in Kentucky range from $2,000 to $9,000 per household. If a water treatment plant must be constructed, the cost per household will be significantly higher.

The potential exists for a loss of revenue to municipalities dependent on tourism if groundwater contamination should occur. The case of Hidden River Cave illustrates this loss of revenue. In 1943, Hidden River Cave, a major tourist attraction for Horse Cave, Kentucky was closed due to groundwater contamination of the underground waterway that passed through the cave. The cave was closed for 50 years and is just now re-opening.

Recently, over $10 million has been spent on constructing sewer line and treatment facilities in the communities surrounding the cave. The American Cave Conservation Association estimates that the lost revenue could easily have been over $100 million during the 50-year closure of the site. If the revenue at hotels and restaurants were included, the figure would be significantly higher.

Furthermore, the biotic life in the caves has been endangered due to long-term groundwater contamination. Endangered species unique to the caves include blind fish, Kentucky cave shrimp, and freshwater mussels. The river is showing signs of revitalization as some biotic life is returning since the construction of sewer lines and treatment facilities.

In addition to the dollar cost of averting groundwater contamination, there are significant human health effects to consider. Chronic illnesses can result from the long-term ingestion of unsafe drinking water. Increased fear and anxiety can result in a community if individuals perceive the levels of contamination to be serious enough to cause adverse health impacts.

Drinking contaminated water has the potential to cause illness, especially in small children, pregnant women, and the elderly. Nitrates and nitrites which may be present in groundwater as a result of faulty septic systems or application of lawn care products can lead to methemoglobinemia or "blue baby" disease.

Contamination from septic tank systems may also lead to the presence of microorganisms which can cause intestinal waterborne diseases such as salmonellosis, shigellosis, cholera, infectious hepatitis, amebiasis, and giardiasis.

2. Continuing costs or savings: The continuing costs include the costs to update the groundwater protection plan every three years and to implement activities in the plans. If identified in the implementation schedule, the construction of practices requiring large capital investments may increase costs over several years until all provisions of the groundwater protection plan are implemented. The continued savings to entities which develop and implement groundwater protection plans include the avoided costs for site characterization, remedial action plan development, and implementation of corrective action measures to correct groundwater pollution. Entities which continue to use groundwater for drinking water sources, recreational purposes, industrial use, and irrigation benefit from a cost savings. Additional cost savings are incurred by entities which use surface water impacted by groundwater. These entities realize a cost savings in avoiding the costs to clean up groundwater or surface water.

3. Additional factors increasing or decreasing costs: There are no additional factors increasing or decreasing costs.

(b) Reporting and paperwork requirements: Each groundwater protection plan must be maintained for six years. This proposed regulation requires that a copy of an entity's groundwater protection plan be submitted to the cabinet upon request. The cabinet will review approximately 40 plans each year. All generic groundwater protection plans must be submitted to the cabinet. A copy of the groundwater protection plan must be provided to the purchasers of a facility for which a groundwater protection plan is required and copies must be provided for review by the public at specified locations upon request.

(2) Effects on the promulgating administrative body: The cabinet will be required to develop two generic groundwater protection plans and to review any other generic groundwater protection plans developed by entities other than the cabinet. With current staff, the cabinet can also review a maximum of 40 site-specific groundwater protection plans per year. Additional 15 plans could be reviewed per year with the addition of another position costing $43,000 per year including fringe and overhead.

(a) Direct and indirect costs or savings:

1. First year: The cabinet will incur costs to develop two generic groundwater protection plans and to review other generic plans submitted to the cabinet. The costs to develop the generic groundwater protection plans include personnel time to research and develop the plan, travel costs to visit sites within Kentucky, and administrative costs to produce and distribute the plan. It will require one person year to develop two generic groundwater protection plans. Cost to review 15 groundwater protection plans per year is estimated at one person year or $48,000 including fringe and overhead.

2. Continuing costs or savings: The cabinet will eventually experience a decrease in cost since review of groundwater remediation plans will be reduced. However, review of groundwater protection plans will be a new and continued cost.

3. Additional factors increasing or decreasing costs: There are no additional costs.

(b) Reporting and paperwork requirements: The cabinet must review and provide comments up both generic and site-specific groundwater protection plans. Correspondence must be written to request that groundwater protection plans be submitted to the cabinet and to provide comments on plan reviews and approvals.

(3) Assessment of anticipated effects on state and local revenues: There are no anticipated effects on state or local revenues.

(4) Assessment of alternative methods: Reasons why alternatives were rejected: This proposed regulation was developed with a consensus group of persons representing the public and the regulated community working with the cabinet. The consensus group agreed that groundwater regulations should be proactive rather that reactive. Proactive groundwater regulations should focus on the prevention of pollution of groundwater rather than on the remediation of groundwater that is already polluted. Reasons for the proactive approach are that groundwater remediation costs are much greater than pollution prevention costs, groundwater pollution may not be able to be remediated, several existing programs manage groundwater pollution remediation, and existing regulatory programs do not comprehensively prevent groundwater pollution.

(5) Identify any statute, administrative regulation or government policy which may be in conflict, overlapping, or duplication: This regulation does not conflict, overlap, or duplicate any statute, administrative regulation or government policy. If entities are affected by another statute or regulation with requirements for groundwater protection, those requirements maybe incorporated into the groundwater protection plan.

(a) Necessity of proposed regulation if in conflict. There are no conflicts, overlaps, or duplications.

(b) If in conflict, was effort made to harmonize the proposed

administrative regulation with conflicting provisions? There are no conflicts, overlaps, or duplications.

(6) Any additional information or comments: There are no additional comments or information.

Tiering: Was tiering applied? Yes. Tiering was applied since the regulation allows a demonstration that some activities do not require the development of a groundwater protection plan. Also, entities select only those preventative measures which are applicable to that entity.

FEDERAL MANDATE ANALYSIS COMPARISON

1. Federal statute or regulation constituting the federal mandate. This regulation is in response to KRS Chapter 224. There is no federal mandate. However the U.S. Environmental Protection Agency is providing funding for states to develop and implement comprehensive state groundwater protection programs with pollution prevention as the primary objective.

2. State compliance standards. There is no federal mandate.

3. Minimum or uniform standards contained in the federal mandate. There is no federal mandate.

4. Will this administrative regulation impose stricter requirements, or additional or different responsibilities or requirements than those required by the federal mandate?

There is no federal mandate.

5. Justification for the imposition of the stricter standard, or additional or different responsibilities or requirements. There is no federal mandate.

FISCAL NOTE ON LOCAL GOVERNMENT

1. Does this administrative regulation relate to any aspect of a local government, including any service provided by that local government? Yes. Local governments that engage in activities listed in Section 2(2) and not excluded under Section 2(3) or (4) of the regulation must develop groundwater protection plans.

2. State what unit, part or division of local government this administrative regulation will affect. Any portion of local, city and county government which engages in activities listed in Section 2(2) and not excluded by Section 2(3) or (4) of the proposed regulation will be affected.

3. State the aspect or service of local government to which this administrative regulation relates. The proposed regulation requires the development of groundwater protection plans for the following examples of activities under the jurisdiction of local governments: Application of fertilizers or pesticides for public right-of-way maintenance or institutional lawn care. Storage in bulk quantities or in drums of recycling materials, road aggregates, paint, automotive fluids, or chemicals used for water or wastewater treatment. Storage and related handling of road oils or de-icing materials used on roads, parks and runways. The transfer in bulk quantities of various materials such as road aggregates, paint, automotive fluids, or chemical used for water or wastewater treatment. Secondary containment for tanks. Spill equipment. Plugging of wells or boreholes. Floor drains. Impoundments of sludge in lagoons.

4. Estimate the effect of this administrative regulation on the expenditures and revenues of a local government for the first full year the regulation is to be in effect. If specific dollar estimates cannot be determined, provide a brief narrative to explain the fiscal impact of the administrative regulation. County, city, or other local governments are not expected to receive any new revenues as a result of this new regulation. First year expenditures for county, city, or other local governments will vary from entity to entity, depending upon the services each entity provides and the current level of groundwater protection associated with each service. The 120 county governments and numerous city governments will be required to develop groundwater protection plans for the services which impact groundwater, and then implement the plans to prevent groundwater pollution. For example, the 120 county governments and at least 120 city governments which provide some form of highway maintenance and repair will develop and implement groundwater protection plans for the storage and application of their fertilizers, herbicide, or de-icing materials and bulk quantities of pollutants or other materials. Also, of the 859 water treatment plants and 250 wastewater treatment plants in Kentucky, most are owned by local governments and involve the storage of bulk quantities of pollutants. Those local governments will develop and implement groundwater protection plans for those services.

Revenues (+/-): None

Expenditures (+/-): Plan preparations are estimated to be from $1,000 to $10,000 for each local governmental unit, depending on the complexity of the services each provides. Examples of costs that may be incurred to implement the groundwater protection measures are given below. The cost is incurred only if that service applies to the particular governmental unit.

Table 1. Estimated Costs for Installation of Measures to Prevent Groundwater Pollution

Measures	Estimated Unit Costs
Containment structure for storage of bulk quantities	$11-15 per square yard for asphalt; $250 per cubic yard for concrete
Covers for storage areas	$6.50-7.50 per square foot
Synthetic lagoon liners	$.50-$1.00 per square foot
Clay lagoon liners	$4.00-$10.00 per cubic yard
Leak detection for tanks	$3,000 per tank
Secondary containment for tanks	$200-$4,000 per tank
Spill equipment	$100-$5,000
Training	$15-$20 per hour
Plan development	$100-$10,000
Plug wells or boreholes	$2.50 per cubic yard
Replace damaged well casing or install new casing	$4.25 per foot

Measures	Estimated Unit Costs
Floor drains connection to appropriate systems	$500-$10,000
If requested, cost to send copy of plan to Cabinet.	$10.00

Other explanation: None

PETROLEUM STORAGE TANK
ENVIRONMENTAL ASSURANCE FUND COMMISSION

415 KAR 1:114. Contractor certification.

RELATES TO: KRS 224.60-110, 224.60-130
STATUTORY AUTHORITY: KRS 224.60-130
NECESSITY AND FUNCTION: KRS 224.60-130 requires the Petroleum Storage Tank Environmental Assurance Fund Commission to establish criteria to be met by persons who contract to perform corrective action to be eligible for reimbursement from the fund. This regulation sets forth the criteria for obtaining certification from the commission to be eligible to contract to perform corrective action for a release from an underground petroleum storage tank, and to be eligible to receive reimbursement or payment from the fund. This administrative regulation is necessary to set minimum standards for determining technical competency and proficiency in the performance of corrective action and general knowledge of cleanup standards required to obtain closure from the Underground Storage Tank Branch, health and safety standards, and Petroleum Storage Tank Environmental Assurance Fund regulations.

Section 1. Definitions. Except as defined in this section, the terms in this regulation shall have the same definition as in KRS 224.60-115 or 415 KAR 1:050.

(1) "Certified contractor" means an individual certified by the commission as qualified to engage in the performance or supervision of corrective action at a facility in the event of a release from a petroleum storage tank system.

(2) "Company" means a person, other than an individual, engaged in the business of performing corrective action for a release from a petroleum storage tank system and who employs one (1) or more certified contractors.

(3) "Interim contractor" means an individual who is not a certified contractor and is identified by a company to replace a certified contractor in accordance with Section 8 of this administrative regulation.

(4) "Participation in" means direct and substantial involvement in each aspect of corrective action, including site characterization, preparation of site investigation reports, preparation of proposed corrective action plans, and implementation of corrective action plans approved by the cabinet.

(5) "Supervise" means being physically on site and having the authority and responsibility for the performance of corrective action at a facility in the event of a release from petroleum storage tank system, and having the ability to exercise independent judgement and direct the activities of employees and subcontractors in the performance of corrective action to achieve compliance with the administrative regulations of the cabinet.

(6) "Cabinet" as used in this administrative regulation means the Cabinet for Natural Resources and Environmental Protection unless specified otherwise.

Section 2. Applicability. (1) Beginning September 1, 1994, costs for actions performed by a person who contracts to perform corrective action for a release from a petroleum storage tank system shall be eligible for reimbursement or payment from the fund if the corrective action is:

(a) Performed or supervised by an individual who is certified by the commission; and

(b) Performed in compliance with 401 KAR Chapter 42.

(c) This requirement shall apply only to applications for assistance agreements made after September 1, 1994.

(2) Certified contractors shall perform or supervise corrective action, such as, site checks, site investigations, and preparation of corrective action plans, in accordance with the administrative regulations of the cabinet.

(3) To be eligible for reimbursement from the fund, the person who contracts to perform corrective action shall designate the certified contractor responsible for supervision of the corrective action prior to incurring costs by giving written notice to the owner or operator of the facility and the commission. If the certified contractor changes, a new notice shall be given.

(4) A person or company who installs, repairs, closes, or removes an underground storage tank, not involving the performance of corrective action, shall not be subject to this administrative regulation.

Section 3. Application Requirements. (1) An applicant for certified contractor shall:

(a) Submit an application to the commission on the Certified Contractor Application form; and

(b) Submit verification of experience by participation in the performance of corrective action at facilities where a release occurred from a petroleum storage tank system; and

(c) Complete the examination requirements of this administrative regulation.

(2) An application to take the certified contractor examination shall be denied by the commission if the applicant:

(a) Fails to provide the information required by the application form; or

(b) Fails to comply with the experience requirements of this administrative regulation; or

(c) Fails to successfully pass the examination required by this administrative regulation; or

(d) Makes a misrepresentation or submits false information in the application.

(3) An applicant, that has been assigned a testing date and time, shall request a change in their testing schedule in writing to the commission. If the request for a rescheduled testing date falls into another testing quarter, the applicant must reapply to the commission.

(4) An applicant requesting to resit the certified contractor examination shall reapply to the commission.

Section 4. Experience Requirements. (1) An applicant shall demonstrate participation in, as defined in Section 1(4) of this administrative regulation, the performance of corrective action at a minimum of six (6) petroleum storage tank facilities within three (3) years immediately prior to making application.

(2) Technical training approved by the commission shall reduce the experience requirement of participation in the performance of corrective action to a minimum of four (4) facilities.

(3) A professional engineer registration in Kentucky shall reduce

the experience requirements of participation in the performance of corrective action to a minimum of two (2) facilities.

(4) A certified professional geologist registration in Kentucky shall reduce the experience requirements of participation in the performance of corrective action to a minimum of two (2) facilities.

Section 5. Examination Requirements. An applicant for certified contractor shall take and pass a written examination administered by the commission in compliance with this section.

(1) The examination for certification shall be a written multiple choice examination covering all aspects of:

(a) Corrective action for a release from a petroleum storage tank system - the examination shall test the applicant's knowledge of codes, standards, laws, regulations, current technology, and industry recommended practices with respect to performing corrective action where a release has occurred from a petroleum storage tank system; and

(b) Applicable occupational health and safety and public health and safety requirements - the examination shall test the applicant's knowledge of codes, standards, laws, regulations, current technology, and industry recommended practices with respect to applicable occupational health and safety and public health and safety requirements; and

(c) Knowledge of the reporting requirements, documentation requirements and procedures of the regulatory agency (Underground Storage Tank Branch) and the Petroleum Storage Tank Environmental Assurance Fund Commission - the examination shall test the applicant's knowledge of codes, laws and regulations with respect to these two (2) governmental agencies.

(2) A minimum score of seventy-five (75) percent on the examination shall be considered passing.

(3) Examinations shall be given quarterly through December 31, 1995, and semiannually thereafter.

(4) An application to take the examination shall be filed with the commission at least ten (10) working days in advance of the testing date to take the examination.

(5) All examinations shall be graded and the applicants shall be notified within fifteen (15) working days. Examination papers shall not be returned to or reviewed by the applicant, however, the applicant may review their test response sheet by appointment.

(6) The commission shall furnish the applicant with instructions for taking the examination upon receipt of a completed application. Instruction sheets shall refer the applicant to appropriate laws, regulations and industry publications.

Section 6. Certification and Renewal Procedures. (1) The commission shall issue a certificate to each individual who successfully complies with this administrative regulation. The certificate shall be renewed annually.

(2) An application for renewal shall be submitted to the commission on the Certified Contractor Application for Renewal form.

(3) The renewal of a certificate shall be denied by the commission if an applicant:

(a) Fails to provide the information required by the Certified Contractor Application for Renewal form; or

(b) Makes a misrepresentation or submits false information in the application for renewal; or

(c) Failed to supervise a corrective action during the year prior to renewal; or

(d) Fails to maintain a professional registration.

(4) An applicant denied the opportunity to take the certification test or denied the renewal of their contractor certification may appeal the determination by requesting a hearing pursuant to 415 KAR 1:120.

(5) The commission may require that a certified contractor take and pass a written examination to renew a certification if there has been a significant change in the laws, codes or industry recommended practices with respect to performing corrective action and/or procedures, reporting requirements and document requirements to be submitted to the Underground Storage Tank Branch or the Petroleum Storage Tank Environmental Assurance Fund Commission since the date of original certification.

(a) The commission may waive this requirement for professional engineers and certified professional geologists registered in Kentucky if the applicant has submitted proof of successful completion of pertinent training.

(b) The determination to waive this requirement rests solely in the commission.

Section 7. Revocation or Suspension of Certification. A certificate issued pursuant to this administrative regulation may be suspended or revoked by the commission if the certified contractor:

(1) Negligently, incompetently, recklessly or intentionally violated any provision of this regulation or any required federal, state or local regulation, code or standard relating to corrective action; or

(2) Recklessly or intentionally caused or permitted a person under the contractor's supervision to perform corrective action in violation of standards of the State Fire Marshall or the cabinet; or

(3) Obtained the certification through fraud or misrepresentation; or

(4) Fails to perform a corrective action in a manner consistent with generally acceptable professional standards.

(5) A person whose certificate is suspended or revoked may appeal the determination by requesting a hearing pursuant to 415 KAR 1:120.

Section 8. Interim Contractor. (1) A company engaged in the performance of corrective action at a facility shall immediately notify the commission in writing of the extended absence of a certified contractor due to an emergency or unanticipated circumstances. The notice shall provide the commission with the following information:

(a) Name and qualifications of the individual replacing the certified contractor; and

(b) The length of time for which the company seeks to have the interim contractor fulfill the obligations of the certified contractor.

(2) The commission shall evaluate the qualifications of the designated interim contractor and shall notify the company of the commission's determination in writing within fifteen (15) days of receipt of the company's notice. The determination shall:

(a) Approve or deny the company's request for designation of the interim contractor;

(b) Specify conditions as appropriate to the facility and the interim contractor's qualifications.

Section 9. (1) The following forms are incorporated by reference:

(a) "Certified Contractor Application Form (March, 1994)"; and

(b) "Certified Contractor Application for Renewal Form (March, 1994)".

(2) These forms may be obtained, inspected and copied at the Petroleum Storage Tank Environmental Assurance Fund Commission, 911 Leawood Drive, Frankfort, Kentucky 40601, (502) 564-5981, 8 a.m. to 4:30 p.m. eastern time, Monday through Friday.

Section 10. Applicants certified under the provisions of 415 KAR 1:115, effective March 1, 1994, shall not be deprived of their certification granted pursuant to the test results from the February 16-17, 1994 certification examinations if the recipient of the certification attends the seminars conducted by the Underground Storage Tank Branch addressing the changes in cleanup standards and closure procedures. The holder of the certification shall submit written proof of seminar attendance, verified by the Underground Storage Tank Branch, to the commission.

Section 11. The provisions of this administrative regulation shall

be enforced beginning September 1, 1994.

Section 12. 415 KAR 1:115 is repealed.

JACK HALL, Executive Director
APPROVED BY AGENCY: March 25, 1994
FILED WITH LRC: April 8, 1994 at 11 a.m.

PUBLIC HEARING: A public hearing on this administrative regulation will be held on May 24, 1994, at 1 p.m. in the offices of the Petroleum Storage Tank Environmental Assurance Fund Commission, 911 Leawood Drive, Frankfort, Kentucky. Individuals interested in being heard at this hearing shall notify this committee in writing by May 19, 1994, of their intent to attend. If no notification of intent to attend the hearing is received by that date, the hearing may be cancelled. This hearing is open to the public. Any person who wishes to be heard will be given an opportunity to comment on the proposed administrative regulation. If you do not wish to be heard at the public hearing, you may submit written comments on the proposed administrative regulation on or before the date of the hearing. Send written notification of intent to be heard at the public hearing or written comments on the proposed administrative regulation to the contact person: Stephen W. Atwood, Petroleum Storage Tank Environmental Assurance Fund Commission, 911 Leawood Drive, Frankfort, Kentucky 40601, (502) 564-5981.

REGULATORY IMPACT ANALYSIS

AGENCY CONTACT: Stephen Atwood

(1) Type and number of entities affected: This proposed regulation will affect approximately 150 contractors in the Commonwealth of Kentucky who perform corrective action due to releases from petroleum storage tanks.

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

1. First year: There will be an indirect cost due to the need to have persons certified by the commission to supervise corrective action. There will be an indirect cost due to the time necessary to fill out the necessary application for certification.

2. Continuing costs or savings: There will be a continuing cost due to the need to apply annually for renewal of the certification.

3. Additional factors increasing or decreasing costs: (Note any effects upon competition): There are no additional factors increasing or decreasing costs.

(b) Reporting and paper requirements: Individuals will be required to complete and file the application for certification and the application for renewal.

(2) Effects on the promulgating administrative body:

(a) Direct and indirect costs or savings:

1. First year: The commission will experience direct costs due to the need to prepare and administer the test for certification of contractors; receive, review and maintain applications for certification; and to identify the proper materials for the certification process.

2. Continuing costs or savings: The commission anticipates continuing costs due to the need to upgrade the test on a periodic basis, to identify new materials concerning performance of corrective action, and to process applications for renewal.

3. Additional factors increasing or decreasing costs: There are no additional factors increasing or decreasing costs. The commission believes that it has adequate staff at this time to implement and administer this program.

(b) Reporting and paperwork requirements: The commission will be required to collect, review, maintain, and process applications for certification and applications for renewal. The commission will provide applicants with information with which they must be familiar to obtain certification.

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

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

(a) The commission is granted the statutory authority to establish requirements that must be met by contract to receive reimbursement from the fund. Based upon its experience in administration of the program since 1990, the commission believes that a certain minimum level of technical proficiency and competence must be established by persons responsible for the performance of corrective action. This proficiency and competency should ultimately result in a lowered cost of corrective action.

Alterative: 1. Less stringent: The less stringent provision would be to not to require a certification program. This has been rejected on the basis that experience has indicated that a certain minimum level of technical proficiency and competency is required.

2. More stringent: A more stringent alternative has not been identified. This regulation will establish minimum standards of technical proficiency and competency.

3. Present proposal: The proposed regulation establishes minimum requirements for technical proficiency and competency. It will require that the commission identify those standards with which a person performing corrective action must be familiar.

(5) Identify any statute, administrative regulation or government policy which may be in conflict, overlapping or duplication: This regulation will overlap and supplement 815 KAR 30:060, Underground Petroleum Storage Tank Installer/Remover Certification Regulation of the State Fire Marshall.

(a) Necessity of proposed regulation if in conflict: There is no conflict. 815 KAR 30:060 applies only to the installation and removal of underground storage tanks. This regulation will not duplicate or conflict with those requirements. This regulation is more comprehensive in that it requires a knowledge of all actions necessary to properly perform corrective action due to a release from a petroleum storage tank.

(b) If in conflict, was report made to harmonize the proposed regulation with conflicting provisions: There is no conflict.

(6) Any additional information or comments: There is no additional information.

Tiering: Was tiering applied: No. This regulation applies to all individuals and companies contracting to perform corrective action for which reimbursement or payment will be sought from the fund.

FISCAL NOTE ON LOCAL GOVERNMENT

1. Does this administrative regulation relate to any aspect of a local government, including any service provided by that local government? No

2. State whether this administrative regulation will affect the local government or only a part or division of the local government. This regulation will require a local government or a division of local government to use a certified contractor in the performance of corrective action if reimbursement will be sought from the fund.

3. State the aspect or service of local government to which this administrative regulation relates. None

4. How does this administrative regulation affect the local government or any service it provides? See response to #2.

TRANSPORTATION CABINET

600 KAR 1:101. Procurement of professional engineering and related services.

RELATES TO: KRS 45A.800 through 45A.835, 23 USC, 23 CFR 172, 48 CFR 1, 49 CFR 18

STATUTORY AUTHORITY: KRS 13A.100(1), 45A.800 through 45A.835, 23 USC, 23 CFR 172, 48 CFR 1, 49 CFR 18

NECESSITY AND FUNCTION: This administrative regulation adopts the procedures to be followed by the Transportation Cabinet

when contracting for professional engineering or related services. It has a special emphasis on the procurement of engineering services since KRS Chapter 45A requires the Transportation Cabinet to follow a specific procurement procedure when securing engineering services. For consistency the Transportation Cabinet is also applying those procedures to the procurement of engineering related services.

Section 1. Definitions. (1) "Award" means the presentation of an agreement or contract to a professional.

(2) "Cabinet" means the Kentucky Transportation Cabinet.

(3) "Change order" means as defined in KRS 45A.030(2).

(4) "Competitive negotiation" means as described in KRS 45A.085.

(5) "Contract" means as defined in KRS 45A.030(5).

(6) "Contract modification" means as defined in KRS 45A.030(6).

(7) "Cost per unit of work" means a price based on units when the extent of work cannot be defined but a cost of the work per unit can be determined in advance with reasonable accuracy.

(8) "Cost plus a fixed fee" means a price based on the actual allowable cost of the work plus any preestablished fixed amount for operating margin.

(9) "Direct salary" means the salary of persons directly involved with and chargeable to a specific project, e.g., engineering or draftsman time spent on a project.

(10) "Firm" means a company or individual providing professional engineering or related services under contract to the cabinet as the prime firm in accordance with KRS Chapter 45A.

(11) "Lump sum" means a fixed price, including cost and operating margin, agreed upon between a firm and cabinet for a group of tasks without breakdown of individual values, i.e., a lot price.

(12) "Modification" means a formal revision to the terms of a contract.

(13) "Noncompetitive negotiation" means as described in KRS 45A.095.

(14) "Overhead costs" means the indirect costs, including salaries and other costs, not chargeable to any specific project. These costs normally support the different projects in which a firm is involved, e.g., accounting, general maintenance and repair, building rent, utilities, furniture, etc.

(15) "Proof of necessity" means the justification to employ consulting engineers, architects, appraisers, attorneys, consultants and others.

(16) "Prequalification" means the evaluation of professionals in which the cabinet considers such factors as financial capability, reputation, and management, in order to develop a list of professionals qualified to contract with the cabinet for professional engineering or related services.

(17) "Prequalification category" means a type of project for which professional engineering or related services are contracted.

(18) "Professional engineer" means an individual or firm licensed to practice engineering in the Commonwealth of Kentucky under KRS Chapter 322.

(19) "Professional engineering or related services" means specialized engineering or related professional services performed by individuals or firms of recognized technical competence, education or experience that are involved in the planning, design, construction, maintenance or operation of Kentucky's transportation systems.

(20) "Professional services" means specialized services performed by individuals or firms of recognized technical competence.

(21) "Project" means an undertaking by the Transportation Cabinet as defined in KRS 45A.800(4).

(22) "Project supervisor" means the director of the user division or person designated by the user division director to oversee the performance of a firm to perform contracted services on a project.

(23) "Proposal" means an offer made by a firm to the cabinet as a basis for negotiations for entering into a contract.

(24) "Salary additives" means employer paid fringe benefits including employer portion of FICA, hospitalization, group life insurance, unemployment contributions to the state and other similar benefits.

(25) "Scope of work" means all services and actions required of the firm by the contract.

(26) "Services" means as defined in KRS 45A.030(19).

(27) "Subcontractor" means a second firm contracted to a prime firm for the performance of work contracted by the cabinet to the prime firm.

(28) "Termination clause" means a contract clause which allows the cabinet to terminate, at its own discretion, the performance of work and to make settlement of the firm's claims.

(29) "User division" means as defined in KRS 45A.800(6).

(30) "Work unit" means an item on a list of tasks which are required to be accomplished by the firm in order to satisfactorily complete the scope of work.

Section 2. Transportation Cabinet Employee Ethics and Responsibilities. All cabinet personnel engaged in the procurement of engineering or related services shall comply with the following:

(1) Consider the interests of the Commonwealth of Kentucky and the cabinet first when contracting for professional services;

(2) Request and accept assistance from other cabinet and state personnel as required without allowing it to impair the dignity and responsibility of the employee's position;

(3) Seek to obtain the maximum value for each dollar spent for professional services;

(4) Strive for honesty and truth in contracting;

(5) Denounce all forms of bribery or favors;

(6) Invite all firms to submit their qualifications for consideration by the cabinet;

(7) Assist other cabinet personnel in the contracting for professional services as necessary; and

(8) Comply with both the letter and the spirit of KRS Chapter 11A, KRS 45A.340, and to the cabinet's Official Order regarding Conflict of Interest.

Section 3. Federal Regulatory Requirements. (1) If a highway project is funded in part by federal-aid funds, the cabinet shall be regulated by Title 23 of the United States Code and by the Code of Federal Regulations 23 CFR 172 and 49 CFR 18.

(2) The cabinet shall submit justification and receive approval from the FHWA before using the noncompetitive negotiated method of contracting when federal-aid highway funds are used in the contract. A contract in which federal-aid highway funds may be awarded by noncompetitive negotiation shall be limited to the following:

(a) The service is available only from a single source;

(b) There is an emergency which will not permit the time necessary to conduct competitive negotiations; or

(c) After solicitation of a number of sources, competition is determined to be inadequate.

Section 4. Prequalification for Professional Engineering or Related Services. (1) To be considered for a contract to provide engineering related services with the cabinet, a firm shall meet the cabinet's prequalification requirements in the same manner as a firm providing engineering services pursuant to KRS 45A.825.

(2) A firm desiring consideration for prequalification shall complete each qualification questionnaire pertaining to the categories for which prequalification is desired. These forms include the following which are incorporated by reference as a part of this administrative regulation:

(a) Consulting Engineer and Related Services Prequalification Application, TC 40-1, effective May, 1992;

(b) Prequalification Requirements for Geotechnical Drilling Services, TC 64-540, effective May, 1992;

(c) Prequalification Requirements for Geotechnical Engineering Services, TC 64-541, effective May, 1992; and

(d) Prequalification Requirements for Geotechnical Laboratory Services, TC 64-542, effective May, 1992.

(3) The completed prequalification form shall be submitted to the Division of Specialized Programs, 7th Floor, State Office Building, 501 High Street, Frankfort, KY 40622.

(4) Each firm's qualifications for a requested prequalification category shall be reviewed by the offices or divisions within the cabinet with expertise in that requested prequalification category.

(5) The criteria for prequalification to be used by the user divisions and offices are listed in the appendix to the Consulting Engineer and Related Services Prequalification Application as adopted August 11, 1993 which is incorporated by reference as a part of this administrative regulation.

(6) The head of the user division or office shall notify the Division of Specialized Programs of its evaluation results.

(7)(a) The Division of Specialized Programs shall notify each firm of all evaluation results involving that firm.

(b) If a firm is disapproved for any requested prequalification category or service, the firm shall also be notified of the appeals procedure set forth in Section 5 of this administrative regulation.

(8)(a) A prequalified firm shall annually submit qualification and performance data on or prior to its anniversary dates of prequalification.

(b) The annual application shall include eleven (11) completed sets of the appropriate qualification forms and eleven (11) copies of the firm's current marketing brochure.

(c) Failure to submit the completed forms in a timely manner shall cause the removal of the firm's prequalification status.

(9) A prequalified firm shall notify the Division of Specialized Programs of any major changes either increasing or decreasing the firm's professional or financial qualifications, capabilities, personnel, address, firm name change, or other of the major qualification criteria.

(10) The user division or office shall review the updated information received from the firm and shall reclassify the firm as appropriate with respect to types of work and capacity of the firm.

(11)(a) If a prequalified firm fails to notify the Division of Specialized Programs of a change of address, it shall be removed from the list of prequalified firms until it notifies the division of its new address.

(b) Removal from the list of prequalified firms pursuant to this subsection, shall not be a basis for appeal under the provisions of Section 5 of this administrative regulation.

Section 5. Appeal Procedure for Firms Not Qualified. (1) A firm may appeal any disapproval relating to its request for approval of a prequalification category pursuant to Section 4 of this administrative regulation.

(2) The cabinet shall establish a consultant prequalification committee to evaluate the statements of qualifications of firms which appeal a disapproval rating.

(3) The members of the consultant prequalification committee shall be the following:

(a) Director, Division of Specialized Programs, chairperson;

(b) Executive Director, Office of Aeronautics;

(c) Director, Division of Traffic;

(d) Director, Division of Design;

(e) Director, Division of Bridges;

(f) Director, Division of Materials;

(g) Director, Division of Planning;

(h) Director, Division of Environmental Analysis;

(i) Director, Division of Maintenance;

(j) Director, Division of Construction; and

(k) Director, Division of Mass Transportation.

(4) An appeal shall be made in writing to the chairman of the consultant prequalification committee within thirty (30) days of notification of the action of the committee.

(5) The basis of the appeal and the relief sought shall be stated in the written communication to the chairman.

(6)(a) Within sixty (60) days from receipt of an appeal, the committee members or their designees shall review the appeal and shall make a decision regarding the appeal.

(b) If the firm agrees, the committee may delay its decision for an additional sixty (60) days while the committee meets with the firm to discuss the appeal.

(7) The committee shall notify the State Highway Engineer and the firm of its decision.

(8) If the firm's appeal is denied by the committee, the firm may appeal the decision to the State Highway Engineer within thirty (30) days of written notice of denial.

(9) The State Highway Engineer shall notify the firm of his decision within thirty (30) days. The decision of the State Highway Engineer shall be final.

Section 6. Conditional Prequalification. (1) The user division or office or consultant prequalification committee may grant conditional prequalification to a firm if the firm:

(a) Has no direct highway or transportation experience but has identified personnel which have technical training or education and other types of experience which may allow the firm to perform the required services; or

(b) Performed poorly on past projects for the cabinet or has been removed from the list of prequalified firms for performance-related reasons and has restructured itself to address the problems.

(2) After the firm has performed services for the cabinet in the category of work for which it was conditionally prequalified, it may request a prequalification determination from the committee in accordance with Section 4 of this administrative regulation.

(3) Denial of conditional prequalification of a firm to perform services for the cabinet shall not be appealed.

Section 7. Procurement Bulletin and Advertisement for Selection of Professional Firms for Engineering of Related Services. (1)(a) The user division or office shall recommend the evaluation factors and relative weightings to the Transportation Cabinet Secretary. Unless unique or particularly complex circumstances exist, the evaluation factors shall be selected from the list set forth below. The Transportation Cabinet Secretary shall approve the evaluation factors and relative weighting placed on each of the factors that appear in a procurement bulletin for selection of professional firms for engineering or related services.

1. Relative experience of professional personnel assigned to project team:

a. With transportation projects for the Kentucky Transportation Cabinet; or

b. With transportation projects for federal, local or other state governmental agencies;

2. Capacity to comply with project schedule;

3. Past record of performance on project of similar type and complexity;

4. Project approach and proposed procedures to accomplish the services for the project;

5. Location where the work will be performed;

6. Special or unique expertise;

7. Special or unique equipment; and

8. Familiarity with geographic areas and resources.

(b) The weighting of each factor shall be published in the announcement for the specific project.

(2)(a) A procurement bulletin prepared by the cabinet shall include the following:

1. A request for proposal for each project anticipated to be contracted during a specified period of time which includes the following:

a. The general scope of the project;

b. A request for expression of general interest;

c. A request for a statement of technical qualification; and

d. Any requirements for Disadvantaged Business Enterprise (DBE) utilization;

2. A list of the firms prequalified in each category as of the date of the bulletin;

3. A list of the firms prequalified in each category and certified as a disadvantaged business enterprise in accordance with 600 KAR 4:010 as of the date of the bulletin.

(b) A copy of the procurement bulletin shall be mailed to each firm prequalified in any category to perform engineering or related services for the cabinet.

(c) If deemed appropriate by the State Highway Engineer, the procurement bulletin may indicate the maximum fee for a particular proposed project or require the initial solicitation of a complete work price and qualification proposal.

(d) A procurement bulletin for statewide engineering or related services may specify that more than one (1) firm may be selected to provide the services requested in the bulletin.

(3) Each time a procurement bulletin is published, the cabinet shall place an advertisement of the cabinet's need for engineering or related services and availability of the procurement bulletin in at least two (2) newspapers of general, multicounty circulation and one (1) newspaper which has minorities as its targeted readership.

(4)(a) A prequalified firm responding to a procurement bulletin for engineering or related services shall submit to the Division of Specialized Programs the following:

1. The specified number of copies of a completed Response to Announcement for Engineering or Related Services, form TC 40-15 revised June, 1993. Form TC 40-15 is incorporated by reference as a part of this administrative regulation;

2. A letter of transmittal which summarizes the scope of services;

3. Item numbers from the Six (6) Year Plan, when appropriate, placed on all correspondence and any forms;

(b) A prequalified firm responding to a procurement bulletin for construction-related engineering services shall submit to the Division of Specialized Programs in addition to the items in subsection (4)(a) of this section the Supplemental Information in Response to Announcement for Construction Services, form TC 40-7 revised June, 1992. Form TC 40-7 is incorporated by reference as a part of this administrative regulation.

(c) A prequalified firm which proposes to employ a subcontractor when responding to a procurement bulletin shall submit to the Division of Specialized Programs in addition to the other items required by this subsection the Subconsultant Qualifications for Response to Advertisement for Engineering and Related Services, form TC 40-15-SUB revised June, 1993. Form TC 40-15-SUB is incorporated by reference as a part of this administrative regulation.

(d) A firm not responding with the correct number of copies or providing incomplete information on the forms shall not be considered for selection.

(5) In addition to complying with subsection (3) of this section, a firm which has not been prequalified shall submit the number of copies specified in the procurement bulletin of the forms required for prequalification in Section 4 of this administrative regulation and a like number of the firm's marketing brochures at least one (1) week prior to the deadline.

(6)(a) The Director, Division of Specialized Programs, shall certify the list of firms that responded to the procurement bulletin in a timely manner to the appropriate professional engineering services selection committee.

(b) Responses received after the deadline shall be returned to the firm and shall not be listed for consideration to perform the project.

(c) The list of responses to the procurement bulletin shall be confidential until the contract is negotiated and executed and the selected firm receives a notice of approval for payment from the Division of Specialized Programs as set forth in Section 15 of this administrative regulation.

Section 8. Establishing a Professional Engineering Services Selection Committee. (1) A professional engineering services selection committee shall be selected as set forth in KRS 45A.810(5) and (6).

(2)(a) The Transportation Cabinet Secretary shall annually request voluntary applications from the professional engineering staff in the cabinet for availability to serve in the pool of six (6) professional engineers required by KRS 45A.810(5)(a).

(b) The Transportation Cabinet Secretary, or his designee, shall review all applications and submit a list of ten (10) applications from which the secretary shall select six (6) to serve in the pool for a period of one (1) year.

(c) Only persons who are merit employees of the cabinet and registered professional engineers of the Commonwealth shall be appointed to the pool.

(d) A person serving on the professional engineering services selection committee from this pool shall not be eligible to also serve on the same selection committee as a representative of a user division as specified KRS 45A.810(5)(b).

(3)(a) The director of the user division that shall be responsible for monitoring the professional services shall appoint two (2) professional engineers from either the user division or the same functional area from the highway district offices where the project is located.

(b) If the user division does not have two (2) professional engineering merit employees or if the services in the announcement are for nonengineering but related services, the director shall appoint two (2) merit employees who have familiarity and experience related to the services that are being contracted.

(c) If the director is a merit employee, the director may appoint himself to the committee.

(d) If there are two (2) user divisions with approximately equal or separate responsibilities for the project, upon approval of the Director of the Division of Specialized Programs, each co-user division shall appoint one (1) member to the selection committee.

(e) If the cabinet is procuring professional engineering or related services in conjunction with another agency or governmental entity or state, that unit outside the cabinet may be designated as a co-user division and be eligible to appoint one (1) member of the selection committee.

(4) An employee of the cabinet shall not be required to involuntarily serve as a member of a professional engineering services selection committee.

(5) Each member of a professional engineering services selection committee shall execute a Certificate of Understanding of Restrictions for Members of Professional Engineering Services Selection Committee, form TC 40-9 effective July, 1992. This form is incorporated by reference as a part of this administrative regulation.

(6)(a) If the individual, randomly selected to serve on a selection committee in accordance with KRS 45A.810(5)(c) is an employee of a consulting firm, that consulting firm shall not be considered for any projects which are reviewed by that selection committee.

(b) If a firm submitted a response under this circumstance, the firm's response for that project shall be returned by the selection committee with a letter of explanation.

(7) After issuing written approval to contract for a firm to perform professional engineering or related services, the secretary of the cabinet, or his designee, shall establish a professional engineering services selection committee for each project to be advertised.

(8) The Division of Specialized Programs shall provide each professional engineering services selection committee with the necessary administrative and technical support and office supplies.

(9)(a) Each member of a professional engineering services selection committees shall comply with the Executive Branch Code of Ethics established in KRS Chapter 11A.

(b) Each member of a selection committee shall scrupulously

comply with both the letter and the spirit of the cabinet's Official Order Number 94057 regarding Conflict of Interest which was issued on March 9, 1992. This official order is incorporated by reference as a part of this administrative regulation.

Section 9. Operation of a Professional Engineering Services Selection Committee. (1)(a) The initial meeting of a professional engineering services selection committee shall be called by the Division of Specialized Programs.

(b) A quorum for the initial meeting shall be three (3) of the six (6) members.

(2)(a) Meetings of a professional engineering services selection committee may be called by the chairperson at a mutually convenient time during normal working hours with at least one (1) week's notice.

(b) Special meetings may also be called upon consensus of four (4) of the voting members of the selection committee.

(c) A motion or decision of the selection committee shall require a simply majority affirmative of all voting members present for passage.

(d) A quorum for all but the initial meeting shall be constituted by four (4) of the five (5) voting members present.

(e) Voting by proxy shall not be allowed.

(3)(a) The professional engineering services selection committee shall give fair and impartial consideration to all responses certified in accordance with KRS 45A.825(6).

(b) The selection committee shall utilize the evaluation factors and weights indicated in the announcement for each project to screen all certified firm responses.

(c) Prior to the meeting of the selection committee to determine and rank the three (3) most qualified firms, each voting selection committee member shall review all certified responses and preliminarily evaluate and numerically rate each firm using the weighted evaluation factors that appeared in the procurement bulletin.

(4) At the meeting of the selection committee, each member's ratings shall be used to select the most qualified firms according to that member's ratings.

(5) The entire selection committee shall discuss all of the firms which have been rated by any member as one (1) of the three (3) most qualified of the firms certified to the selection committee for evaluation.

(6) Based on a consensus of the selection committee any of the firms discussed in subsection (4) of this section may be eliminated from further consideration for this project.

(7)(a) Each member of the selection committee shall individually evaluate and rate and by secret ballot rank each of the firms remaining for consideration based on the published evaluation factors and weights.

(b)1. Based on all ratings performed in subsection (7)(a) of this section, the three (3) most qualified firms shall be established by the selection committee.

2. In case of a tie rating for one (1) of the three (3) most qualified positions the selection committee shall rediscuss then reevaluate the firms which had the tied ratings until the tie is broken.

(8) The selection committee shall rediscuss the three (3) firms established as the most qualified.

(9)(a) The selection committee shall by secret ballot rank the three (3) firms.

(b) In case of a tie for one (1) of the three (3) rankings, the selection committee shall rediscuss and revote between the tied firms.

(10) If the selection committee elects, it may interview any of the responding firms to aid in its determination of the best qualified firm.

(11) For selection committee reviews involving statewide services advertised in accordance with Section 7(2)(d) of this administrative regulation, the committee shall rank the same number of firms as specified in the procurement bulletin, but at least three (3) firms.

(12) The evaluations and ratings of the individual selection committee members shall be considered preliminary and confidential working documents and shall not be available to the public.

(13)(a) The chairman of the professional engineering services selection committee shall notify the Director of the Division of Specialized Programs of the firms determined by the committee to be the three (3) best qualified and the order of their ranking.

(b) The Division of Specialized Programs shall send the letters required in KRS 45A.825(7)(c).

(c) The Division of Specialized Programs shall immediately notify by letter the top-ranked firm of its selection for the advertised project.

Section 10. Prenegotiation Procedures. (1) The selected firm shall meet with cabinet representatives in accordance with the schedule identified in the procurement bulletin to discuss in detail the scope of services to be provided by the firm for the project.

(2) After this meeting, the firm shall submit the following to the cabinet:

(a) For roadway design, work units which qualifies the tasks to be performed to achieve the roadway design services that appeared in the advertisement or procurement bulletin.

1. The cabinet has the following options regarding the submittal:

a. Concur;

b. Modify and return the modification to the firm; or

c. Reject and ask the firm to evaluate and resubmit the work units.

2. After an agreement on the work units between the cabinet and the firm, each shall independently develop labor rates to be applied to the work units to determine manhours for each task.

(b) For structure work, work units include a description of the structure to be designed including but not limited to type, length, span arrangement, curves, skew, pilings based on preliminary geotechnical information and any other pertinent considerations.

1. The cabinet has the following options regarding the submittal:

a. Concur;

b. Modify and return the modification to the firm; or

c. Reject and ask the firm to evaluate and resubmit the work units.

2. After an agreement on the work units between the cabinet and the firm, each shall independently develop labor rates to be applied to the work units to determine manhours for each task.

(c) For environmental assessments, a copy of the work units and corresponding manhours to achieve each task including all subconsultants.

(d) For geotechnical assessments a copy of the work units which qualifies the tasks to be performed to achieve the geotechnical services that appear in the announcement.

1. The cabinet has the following options regarding the submittal:

a. Concur;

b. Modify and return the modification to the firm; or

c. Reject and ask the firm to evaluate and resubmit the work units.

2. After an agreement on the work units between the cabinet and the firm, each shall independently develop labor rates to be applied to the work units to determine manhours for each task.

(e) For bridge maintenance inspection a copy of work units and proposed equipment usage to achieve the inspection services that appeared in the announcement.

1. The cabinet has the following options regarding the submittal:

a. Concur;

b. Modify and return the modification to the firm; or

c. Reject and ask the firm to evaluate and resubmit the work units.

2. After an agreement on the work units between the cabinet and the firm, each shall independently develop labor rates to be applied to the work units to determine manhours for each task.

(f) For planning studies, work units which qualifies the tasks to be performed to achieve the planning study services that appeared in the announcement.

1. The cabinet has the following options regarding the submittal:

a. Concur;

b. Modify and return the modification to the firm; or

c. Reject and ask the firm to evaluate and resubmit the work units.

2. After an agreement on the work units between the cabinet and the firm, each shall independently develop labor rates to be applied to the work units to determine manhours for each task.

(3) The firm shall submit to the Division of Specialized Programs a fair and reasonable fee proposal which shall be prepared using the following:

(a) Personnel classifications and average wage rates for each classification as they appear in the audit and adjusted for work in the future years;

(b) Distribution of work by the personnel classifications;

(c) Overhead rates as determined by an audit;

(d) Subcontractors and fee proposals for each;

(e) Direct expenses not included in the overhead and subject to the limitations of Section 11(3)(c) and (d) of this administrative regulation; and

(f) Manhours to achieve the agreed upon task to achieve the scope of services that appear in the advertisement or procurement bulletin.

(3) After the Division of Specialized Programs requests a proposal and fee estimate from the firm, the user division shall:

(a) Prepare an estimate of resources required to complete the project;

(b) Discuss the project with other divisions and request resource estimates from them as necessary; and

(c) Coordinate all of the resource estimates from other divisions to be used by the Division of Specialized Programs in negotiation of the contract.

Section 11. Financial Records of Professional Firms. (1) A professional firm which has been prequalified shall allow the cabinet access to all financial information necessary to determine the firm's direct wage rates, indirect cost rates, overhead and direct project charges which are not included in overhead rates.

(2) These firms shall maintain all financial records including payroll time records for all employees including the firm's principals in accordance with 48 CFR 1 Part 31.

(3)(a) The maximum direct salary for a principal or partner of a professional firm shall be $75,000 per year (thirty-six (36) dollars and six (6) cents per hour);

(b) In the calculation of indirect costs for overhead, the maximum salary for a principal or partner of a professional firm for administrative purposes shall be $100,000 per year;

(c) The maximum allowable overhead rate shall be 150 percent;

(d) Travel expenses for firm employees or survey crews shall be limited to those incurred from an office in Kentucky;

(e) Direct expenses not included in overhead shall have the following limits:

1. Passenger car - twenty-five (25) cents per mile;

2. Truck or four (4) - wheel drive vehicle - thirty-five (35) cents per mile;

3. Lodging:

a. Professional staff - fifty-five (55) dollars per night per person; and

b. Survey field personnel - seventy (70) dollars per night for two (2) persons in one (1) room;

4. Meals:

a. Breakfast - five (5) dollars per day per person;

b. Lunch - five (5) dollars per day per person; or

c. Dinner - ten (10) dollars per day per person.

5. Personal computer time - fifteen (15) dollars per hour;

6. Photocopying - ten (10) cents per page;

7. Blueprints - actual cost incurred not to exceed one (1) dollar per sheet, but excluding labor costs if subcontracted;

8. Mylar - actual cost incurred not to exceed four (4) dollars per sheet, but excluding labor costs if subcontracted;

9. Printing of reports - estimated cost from the printer; and

10. Travel time for survey crew - travel time to and from a job site in hours multiplied by the survey crew wage rate multiplied by one and three-tenths (1.3) for salary additives.

(f) To compute the average hourly pay rate for any job classification at the firm, the number of available annual working hours per year shall be 2,080.

(4) This information shall be reviewed annually and at the discretion of the cabinet.

(5) If the cabinet has not audited the firm in the previous twelve (12) months, the last available audit may be used for determination of the fee specified in the contract with the understanding that a contract modification shall be processed if an audit by the cabinet reveals substantial differences in overhead rates, wage rates or direct project expenses.

(6) If the firm has a current audit of sufficient detail from a federal, state or local governmental agency, the negotiation unit may use the overhead rates, wage rates and direct project expenses from that audit in negotiating a fee with the understanding that a contract modification shall be processed if an audit by the cabinet reveals substantial differences in overhead rates, wage rates or direct project expenses.

(7) Quarterly, the Division of Specialized Programs shall select a minimum of one (1) and a maximum of three (3) lump sum contracts that have been completed during the previous three (3) months and shall request an audit from the Department of Fiscal Management.

Section 12. Methods of Contracting with Professional Firms. (1) The following methods of contracting with professional firms shall be acceptable:

(a) Lump sum;

(b) Cost plus a fixed fee;

(c) Specific rates of compensation; or

(d) Cost per unit of work.

(2)(a) When the cabinet chooses the lump sum method of contracting, the firm shall present a statement to the Division of Specialized Programs showing the probable cost for the elements of work and the expected operating margin.

(b) This statement shall include a supported breakdown of the direct and indirect costs and subcontractor costs which the firm expects to incur.

(c) The method of dividing the project into work units and the calculation of related time units shall be devised so that the estimate can be easily reviewed.

(d) The Division of Specialized Programs and the user division shall verify the following supporting documentation before recommending the contract for approval:

1. Reasonableness of the amount proposed and consideration of the degrees of risk and responsibility to be assumed by the professional firm;

2. The extent, scope, complexity, character and duration of the required services;

3. Professional and financial investments to be required of the firm;

4. The firm's normally expected return for such services;

5. Conditions under which the professional firm is expected to perform;

6. The cabinet's estimate of the appropriate amount for the services required; and

7. The cabinet's findings on the basis of experience and knowledge.

(3)(a) When the cabinet chooses the cost plus a fixed fee method of contracting, an upper limit of payment of actual cost shall be established which cannot be exceeded without obtaining cabinet

approval.

(b) During negotiations, the Division of Specialized Programs or other negotiation unit shall be responsible for establishing the upper limit along with the fixed fee to be paid to the professional firm for the services required.

(c) The Division of Specialized Programs or other negotiation unit shall establish the fixed fee and upper limit based on past experience gained from negotiations of similar projects, judgment regarding scheduling and complexity of work and the user division's estimates.

(4)(a) When the cabinet chooses the specific rate of compensation method of contracting, the Division of Specialized Programs or other negotiation unit shall document the basis on which the amount specified as the upper limit or upset limit was established.

(b) The agreement shall contain provisions which permit adjustment to this upper limit when the firm establishes, and the user division agrees, that there has been or is to be a significant change in the:

1. Scope, complexity or character of the services to be performed;

2. Conditions under which the work is required to be performed; or

3. Duration of the work if the change from the time period specified in the agreement for completion of the work warrants such adjustment.

(c) In the case of statewide agreements under which there is to be subsequent individual authorizations, the establishment of a maximum amount shall not be required. A maximum amount, however, shall be established for each of the individual authorizations.

(5)(a) When the cabinet is using the cost per unit of work method of compensation, the professional firm shall be paid on the basis of units completed.

(b) This method of contracting is appropriate when the extent of the work cannot be definitely defined but when cost of the work per unit may be determined in advance with reasonable accuracy.

(c) A proposal using this method of contracting shall be supported in the same manner as that indicated for the lump sum method used for professional firms.

(6)(a) For an individual acting as a professional firm, the specific rates of compensation shall include the direct salary costs, salary additives, indirect costs and the net fee. The agreement of supporting data shall specifically identify these costs.

(b) Other direct costs may be included as an element of a specific rate or as independent cost items.

Section 13. Contract Negotiations. (1)(a) The Division of Specialized Programs shall be the designated negotiating agent for the Department of Highways in the cabinet.

(b) If professional engineering or related services are requested by user divisions within the cabinet but not in the Department of Highways, that user division shall be responsible for negotiating the fee.

(2)(a) The Division of Specialized Programs or other designated negotiation unit shall receive the proposal and fee estimate from the professional firm. The proposal submitted by the firm shall include a breakdown of the estimated fee for performing the work including the following:

1. Direct salaries;

2. Overhead;

3. Payroll additives;

4. Other direct costs including cost of materials which are not included in the overhead;

5. Subcontractor costs;

6. Operating margin; and

7. Use of DBE firms.

(b) The Division of Specialized Programs or other designated negotiation unit shall analyze the proposal and may confer with others regarding the proposal as necessary. The proposal shall be used as a basis for further negotiation of the professional services agreement.

(c) Unreasonable or deliberately inflated proposals shall be rejected and may be cause for terminating negotiations in accordance with KRS 45A.825(9).

(3) If the contract which is being negotiated uses a method of compensation other than lump sum, the professional firm shall use an accounting system which segregates and accumulates reasonable, allocable and allowable costs to be charged to a contract for an audit by the Department of Fiscal Management.

(4)(a) If a firm intends to utilize the services of a subcontractor to perform any part of the work, at the time of negotiations the firm shall submit a fee proposal for the amount of work to be subcontracted.

(b) The fee proposal shall be based on the audited overhead and wage rates for the subcontractor.

(c) A subcontractor shall be prequalified with the cabinet to perform the services to be subcontracted to it if the services are required to be prequalified.

(d) Prior approval from the Division of Specialized Programs or other negotiation unit shall be necessary.

(e) If a firm desires to utilize a subcontract to perform part of the work after a contract has been approved and notice has been given to begin work, the procedures set forth in Section 17 of this administrative regulation shall be followed.

(5) A firm which is awarded a contract for professional engineering or related services with the cabinet shall perform at least fifty (50) percent of the dollar value of the work for the project unless otherwise approved by the Director of the Division of Specialized Programs.

(6)(a) The operating margin allowed a professional engineering or related services firm shall be allowed only on the negotiated direct labor and overhead costs regardless of the type of contract and shall not exceed the following:

1. Lump sum contract:

a. Fifteen (15) percent of the total direct labor cost plus overhead costs plus all direct expenses not included in the overhead for a contract, including all contract modifications, less than $2,000,000; or

b. Ten (10) percent of the total direct labor cost plus overhead costs plus all direct expenses not included in the overhead for a contract, including all contract modifications, equal to or in excess of $2,000,000; or

2. Unit price contract - fifteen (15) percent of the estimated unit cost at the time of execution of the contract.

(b) A cost plus fixed fee contract shall have a lump sum fee equal to ten (10) percent of the estimated cost at the time of the execution of the agreement.

(7) The Division of Specialized Programs or other negotiation unit shall compare the firm's established fee with the cabinet's estimate to determine both the reasonableness of the fee and areas of substantial differences which may require further negotiation.

(8) The Division of Specialized Programs or other negotiation unit shall negotiate with the professional firm to establish a reasonable fee and basis of payment, including incremental payments for completed work where appropriate, for the services to be performed under the contract.

(9)(a) The firm shall keep written documentation of each negotiations meeting and shall submit to the Division of Specialized Programs or other negotiation unit the following:

1. Minutes of negotiations;

2. As-negotiated fee;

3. As-negotiated manhours;

4. Classification percentage distribution; and

5. Direct cost breakdowns.

(b) The public shall not be denied access to the items set forth in paragraph (a) of this subsection.

(10) After the Division of Specialized Programs or other negotiation unit has negotiated a contract, the head of the unit shall send letters to the two (2) other finalists informing them of the firm which successfully negotiated a contract and the procedure that shall be followed in awarding the contract.

Section 14. Contract Preparation and Execution. (1) The Division of Specialized Programs or other negotiation unit shall prepare an agreement or contract to cover the services to be provided, method and amount of payment, the time of completion and necessary special provisions.

(a) The agreement shall also include the General Provisions Attachment as revised June, 1993 unless the project is for a consultant structure inspection. The General Provisions Attachment is incorporated by reference as a part of this administrative regulation.

(b) If the project is for a consultant structure inspection, the agreement shall also include the Division of Maintenance, Consultant Structure Inspection Provisions as revised in May 1993. The Division of Maintenance, Consultant Structure Inspection Provisions are incorporated by reference as a part of this administrative regulation.

(2) The contract and negotiation minutes shall be sent to the firm for the signature of an authorized representative. All original documents shall be returned to the Division of Specialized Programs or other negotiation unit.

(3) The contract shall be reviewed and approved by the secretary of the cabinet.

(4) When the project is subject to approval from the FHWA and after the contract has received final approval from the cabinet, the Division of Specialized Programs shall send to the FHWA the following requesting their approval:

(a) A copy of the contract;

(b) The negotiated fee and manhours;

(c) The firm's fee and manhour proposal;

(d) The cabinet's manhour estimate;

(e) The minutes of the negotiation;

(f) The minutes of the predesign conference;

(g) A copy of the advertisement and announcement;

(h) The list of firms that responded to the announcement in a timely manner;

(i) The written approval from the secretary of the cabinet to engage a professional firm;

(j) The minutes of the professional engineering services selection committee; and

(k) The memorandum from the chairman of the selection committee stating the ranking of the three (3) best-qualified firms by the professional engineering services selection committee; and

(l) The audit report of overhead and wage rates which was used to establish the fee.

(6) If FHWA does not approve the contract, the secretary of the cabinet, after discussion with the State Highway Engineer and staff, may decide to modify the contract, redefine the project, terminate the project or ask for reconsideration by the FHWA.

Section 15. Notice to Proceed and Payments. (1) Before a notice of approval for payment can be issued, funds shall be encumbered by the cabinet.

(2) When the Division of Specialized Programs or other negotiation unit receives a copy of the transmittal sheet indicating that the LRC Personal Service Contract Review Subcommittee has received the contract and project information for review, a notice to proceed shall be sent to the firm indicating that it may commence work but it shall not bill for services until specifically authorized to do so.

(3) When the LRC Personal Service Contract Review Subcommittee issues a notification of acceptance on a contract, the Division of Specialized Programs or other negotiation unit shall issue a letter to the firm informing it that it may bill the cabinet for charges incurred while working on the project.

(4)(a) If the LRC Personal Service Contract Review Subcommittee objects to the contract and the cabinet determines that the contract is to be cancelled, the Division of Specialized Programs or other negotiation unit shall notify the firm of the cancellation and shall take necessary steps to close the contract.

(b) If the cabinet determines that the contract is to be modified to comply with the concerns of the LRC Personal Service Contract Review Subcommittee, the Division of Specialized Programs or other negotiation unit shall notify the firm of the necessary modifications and shall follow the contract modification and change order procedures specified in Section 16 of this administrative regulation.

(c) If the cabinet determines that the contract is to be executed as submitted to the LRC Personal Service Contract Review Subcommittee, the Division of Specialized Programs or other negotiation unit shall issue a letter to the firm informing it that it may bill the cabinet for charges incurred while working on the project.

Section 16. Contract Administration. All work performed under a professional services contract shall be subject to general supervision, direction, review and approval by the cabinet.

(1)(a) A project supervisor shall be assigned to the project by the director or office head of the user division.

(b) The division director or office head may serve as the project supervisor.

(c) The project supervisor shall be responsible for coordinating all cabinet activities with the firm and for providing necessary supervision through the duration of the contract. This coordination shall include the following:

1. Scheduling, monitoring and controlling the firm's activities; 2. Reporting the status of these activities to the appropriate authority;

3. Periodically reviewing the work to determine if the work:

a. Is acceptable;

b. Is in accordance with the agreement for the particular project; and

c. Scope has changed to the point that it may require a supplemental agreement and increased or decreased compensation.

(2)(a) During the project, the firm may subcontract with other firms to perform specialized services in a manner similar to Section 13(4) of this administrative regulation. The subcontractor shall be prequalified by the cabinet if the services that are subcontracted are required to be prequalified.

(b) If the services to be performed by the subcontractor are subject to prequalification by the cabinet and were not previously identified in the original negotiation or subsequent change orders, the firm shall submit a request for a fee adjustment for the manhours to be performed by the subcontractor.

(c) If the subcontractor services are not subject to prequalification procedures and exceed $25,000, they shall be reviewed by the Department of Fiscal Management for reasonableness of cost. For subcontracts equal to or less than $25,000, the Director of the Division of Specialized Programs or other negotiation unit upon recommendation of the negotiator, may accept the rates and costs if they are reasonable and in line with past costs incurred for similar work.

Section 17. Contract Modifications. (1) When it is determined by either the firm or the cabinet that one (1) or more of the following conditions are acceptable and necessary, a contract modification for a fee or schedule adjustment may be requested:

(a) Change in termini or section;

(b) Addition of major phases of work to the negotiated scope of work;

(c) Modification of previously approved work resulting from factors beyond the control of the professional firm;

(d) Modification of a major item, if in the original contract, the item is designated as a basis of the original negotiations and the conditions for a change order consideration are identified in the original contract;

(e) Delay by the cabinet as outlined in each contract; or

(f) Use of a subcontractor for services previously identified to be done by the firm or other subcontractor; or

(g) Availability of current audit established in accordance with Section 11 of this administrative regulation.

(2) The request for a contract modification may be originated by the Division of Specialized Programs, user division, highway district office or the firm.

(3) When the director or office head of the user division determines the change is appropriate, the user division shall advise the firm in writing of the contemplated change in the scope, complexity, extent, character or duration of the original agreement. When additional or reduced compensation is justified, the user division shall request a revised proposal from the firm.

(4) The contract modification shall be negotiated using the procedures set forth in Section 13 of this administrative regulation.

(5) The Division of Specialized Programs or other negotiation unit shall send the Change Order form TC 61-5 as revised August, 1986 or the Change Order form, TC 63-53 revised August, 1986, to the firm for its approval. These forms are incorporated by reference as a part of this administrative regulation.

(6) After approval by the cabinet, the Change Order, LRC's Proof of Necessity form and other supporting documentation shall be submitted to the LRC Personal Service Contract Review Subcommittee.

(7) For projects requiring FHWA oversight, the approved Change Order shall be sent to the Federal Highway Administration for approval.

(8) Funds shall be encumbered by the cabinet sufficient to pay for the approved Change Order.

Section 18. Completion of Contract. (1) Upon completion of the contract, the cabinet shall review the work performed to determine that it meets the terms and conditions of the contract and shall evaluate the firm for future reference.

(2) The project supervisor or the director of the user division shall review the work performed by the firm, including any progress and final reports, to determine that all terms and conditions of the contract have been met before processing the final voucher for payment or releasing the firm.

(3) Before approving the final invoice for payment, the director of the user division or the project supervisor shall evaluate the firm and prepare written documentation of the firm's performance on the project.

(4) The user division shall send the firm written documentation of the firm's performance for the project. Copies of the documentation shall be placed in the contract file maintained by the Division of Specialized Programs and in the firm's experience record file.

(5)(a) The firm may appeal in writing a below average rating to the user division director within thirty (30) days of written documentation of the firm's performance for the project.

(b) The appeal shall specifically set forth the reasons why the firm believes the below average rating is in error.

(c) The user division director shall notify the firm within thirty (30) days from the firm's appeal of the director's decision of whether or not to revise the performance rating.

(d) The firm may appeal in writing the user division director's decision to the chairman of the consultant prequalification committee within thirty (30) days.

(e) The consultant prequalification committee shall review all documentation relating to the firm's performance for the project. The committee may discuss the performance rating with the project supervisor or the firm.

(f) The committee shall notify the firm and the user division of its decision within ninety (90) days from the firm's appeal.

(g) If the firm's appeal is denied by the consultant prequalification committee, it may appeal the decision to the State Highway Engineer within thirty (30) days of written notice of denial of its appeal by the consultant prequalification committee.

(h) The State Highway Engineer shall notify the firm of his decision within thirty (30) days.

(i) The decision of the State Highway Engineer shall be final.

(j) If the performance evaluation documentation is revised, the initial documentation shall be removed from all files and replaced with the revised performance document.

(6) The Director of the Division of Specialized Programs or head of other negotiation unit shall request the Department of Fiscal Management to perform a final audit if appropriate. The audit shall determine the total allowable contract costs and the total dollars to be paid to the firm. All contracts utilizing a cost plus fixed rate method of payment shall be audited.

(7) The user division shall forward the Federal Highway Administration a copy of all progress and final reports for federal-aid projects if required or requested by the FHWA.

Section 19. Cancellation of Contract. (1) Each professional service contract shall include a provision for the termination of the agreement and shall allow for the cancellation of the contract by the cabinet with proper notice to the firm.

(2) When the cabinet decides to cancel a professional services contract, the Division of Specialized Programs or other negotiation unit shall notify the firm of the cancellation and of the reasons for the cancellation.

(3) The cabinet shall be liable only for payment of services up to the date of cancellation of the contract as specified by the terms of the contract.

Section 20. Payments to Firms. Before payment of a partial or final request for payment, the cabinet shall review the work of the firm, including any progress or final reports, to ensure that the work for which the payment is to be made has been completed and that the terms and conditions of agreement have been satisfactorily followed.

(1) During the course of the project, progress billings shall be submitted by the firm as agreed upon in the contract. The firm shall submit an Engineer's Pay Estimate, TC 61-408 revised March, 1988 with a progress report as an invoice to the chief district engineer or director of the user division. This form is incorporated by reference as a part of this administrative regulation.

(2) The chief district engineer or director of the user division or his designee shall review the estimate, verify that the work has been completed as described in the document, and sign the engineer's pay estimate.

(3) Final invoices and requests for payment shall be authorized only after all work has been reviewed and accepted or approved, including any final reports prepared by the firm. All terms and conditions of the contract shall be satisfactorily met and the final audit shall be performed prior to processing the final payment.

Section 21. Material Incorporated by Reference. All material incorporated by reference as a part of this administrative regulation may be obtained, viewed or copied at the Division of Specialized Programs, 7th Floor State Office Building, 501 High Street, Frankfort, KY 40622. Its telephone number is (502)564-4555. Its office hours are 8 a.m. to 4:30 p.m. eastern time on weekdays.

J.M. YOWELL, P.E., State Highway Engineer
JERRY D. ANGLIN, Deputy Secretary and Commissioner
BOB BODNER, Executive Director
DON C. KELLY, P.E., Secretary

APPROVED BY AGENCY: April 4, 1994

FILED WITH LRC: April 11, 1994 at 2 p.m.

PUBLIC HEARING: A public comment hearing on this administrative regulation will be held on May 24, 1994 at 2 p.m. local prevailing time in the Transportation Cabinet, Room 1003 on the Tenth Floor, 501 High Street, Frankfort, Kentucky 40622. Any person who intends to attend this meeting must in writing by May 19, 1994 so notify this agency. If no notification of intent to attend the hearing is received by this date, the hearing may be cancelled. This hearing is open to the

public. Any person who attends will be given the opportunity to comment on the administrative regulation. A transcript of the public comment hearing will not be made unless a written request for a transcript is made and then only at the requestor's expense. If you have a disability for which the Transportation Cabinet needs to provide accommodations, please notify us of your requirements by May 19, 1994. This request does not have to be in writing. If you do not wish to attend the public hearing, you may submit written comments on the administrative regulation. If the hearing is held, written comments will be accepted until the close of the hearing. If the hearing is cancelled, written comments will only be accepted until May 24, 1994. Send written notification of intent to attend the public comment hearing or written comments on the administrative regulation to: Sandra G. Pullen, Staff Assistant, Transportation Cabinet, 1003 State Office Building, 501 High Street, Frankfort, Kentucky 40622, (502) 564-4890.

REGULATORY IMPACT ANALYSIS

AGENCY CONTACT: Sandra G. Pullen

(1) Type and number of entities affected: There are 250 firms prequalified to perform professional engineering or related services each year. These are the same firms which provide proposals on projects and ultimately negotiate contracts.

(a) Direct and indirect costs or savings to those affected: There is an expense to each firm which averages $300 to prepare and submit the required prequalification forms each year. In addition, a complete proposal for a particular project will also cost each firm making a proposal to the Transportation Cabinet approximately $500 per proposal.

1. First year: With 250 firms prequalified each year the cost of prequalification to the industry is approximately $75,000. Approximately 20 separate firms submit proposals on each project advertised by the Transportation Cabinet. With about 60 projects each year, there is a cost to the industry of about $600,000 to prepare the proposals.

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

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

(b) Reporting and paperwork requirements: While the administrative regulation specifies the specific forms which the firms are required to use to apply for prequalification or to submit a proposal, the process is mandated by KRS Chapter 45A.

(2) Effects on the promulgating administrative body: The Transportation Cabinet is required to review the 250 applications for prequalification and 1,200 proposals on projects each year. Not only is the entire staff of the Contract Negotiating Branch of Division of Specialized Programs constantly involved in this process, but also the user divisions are required to involve significant amounts of man-hours in the reviews and evaluations. Approximately 100 change orders are issued on these contracts each year. It is almost as time-consuming to negotiate a change order as the original contract.

(a) Direct and indirect costs or savings: The annual budget for the Contract Negotiating Branch of the Division of Specialized Programs is $300,000. At least double that cost is incurred collectively by the user divisions each year.

1. First year: The total cost to the Transportation Cabinet is approximately $900,000.

2. Continuing costs or savings: Same each year.

3. Additional factors increasing or decreasing costs: Without a process like this, the public could not be assure of getting the best possible product. Therefore, there is an ultimate savings to the Commonwealth.

(b) Reporting or paperwork requirements: Review and evaluation of any applications for prequalification received and the evaluation of all proposals submitted on projects.

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

(4) Assessment of alternative methods; reasons why alternatives were rejected: Rather than specifically placing long and complicated advertisements in a newspaper for each project proposal requested, the Transportation Cabinet has elected to issue a procurement bulletin approximately four times each year. This bulletin will provide all of the information that would appear in an advertisement plus other information that is beneficial to firms when preparing proposals. The cabinet will mail these bulletins to every prequalified firm as well as placing newspaper advertisements regarding the availability of the bulletin. This procedure was adopted at the request of the professional engineering community in Kentucky. This procedure will save approximately $80,000 per year. The alternative of allowing a firm which has a contract with the Transportation Cabinet to charge all travel costs even when the firm received the job based on the strength of the qualification of their personnel in or near a Kentucky office was rejected. Too often a firm receives a contract and repeatedly transports expensive, out-of-state personnel to Kentucky to perform the work. Therefore, the limit on travel expenses was included in the administrative regulation. The alternative of giving extra weight to Kentucky-based firms in evaluating a proposal was rejected. There is no authority in KRS Chapter 45A to give this extra weight and the cabinet felt without this specific authority there would quickly be an upheld challenge.

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

(a) Necessity of proposed administrative 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? Yes. There are different requirements for the prequalification categories. In addition subcontractors do not have to submit as much information to the Transportation Cabinet as does the firm executing the main contract.

FEDERAL MANDATE ANALYSIS COMPARISON

1. Federal statute or regulation constituting the federal mandate. 23 USC, 23 CFR 172, 48 CFR 1, and 49 CFR 18.

2. State compliance standards. The state has mandated that both the Transportation Cabinet and its contractors comply with the federal requirements when federal highway funds are used in funding the project.

3. Minimum or uniform standards contained in the federal mandate. The federal mandates specify the accounting procedures the firms must use, the auditing procedures, and the contracting procedures to be followed when federal funds are used.

4. Will this administrative regulation impose stricter requirements, or additional or different responsibilities or requirements, than those required by the federal mandate? The accounting procedures are extended to all prequalified firms regardless of the source of funding for the project.

5. Justification for the imposition of the stricter standard, or additional or different responsibilities or requirements. A prequalified firm may be selected for a federally-funded project at any time. Therefore, even if it has only previously been selected for state-funded projects, it has to maintain its financial records in accordance with the federal mandate.

TRANSPORTATION CABINET
Department of Vehicle Regulation
Division of Driver Licensing

601 KAR 13:011. Medical Review Board; basis for examination, evaluation, tests.

RELATES TO: KRS 186.570

STATUTORY AUTHORITY: KRS 186.400, 1994 GA Senate Bill 205, House Bill 417

NECESSITY AND FUNCTION: The Medical Review Board has existed by virtue of administrative regulations since June, 1964. The 1994 General Assembly passed two (2) bills, SB 205 and HB 417, mandating the establishment of the Medical Review Board. Statutory authority was necessary because the Administrative Regulations Review Subcommittee determined in late 1993 that the Transportation Cabinet does not have the specific authority necessary to promulgate an administrative regulation relating to the Medical Review Board and, therefore, 601 KAR 13:010 expired on April 15, 1994. Because of a slight conflict between SB 205 and HB 417, until LRC's Statutes Reviser determines what has truly been enacted, the Transportation Cabinet is repromulgating the expired regulation. As soon as the new statutory language is established, this new administrative regulation will be amended. In the meantime, persons who come to the Transportation Cabinet's attention because of a physical or mental disability which may affect their driving ability will continue to be evaluated as in the past. The results of a physical examination are reviewed by the members of the board. Based on their professional experience, the members recommend either total denial of a license or a limited one (e.g., daylight hours, left and right rearview mirrors, another examination in three (3) months, etc.), or they determine that the person's disability suffered should not affect the person's driving ability. This negates the capriciousness which could exist in the great discretion granted the department by the legislature in KRS 186.570 prior to its 1994 amendment. However, the recommendation of the board is for suspension or an extremely limited license, the subject is entitled to a hearing on the matter (since the Supreme Court's BELL v. BURSON decision) and this regulation sets out the procedure for same.

Section 1. There is hereby created a Medical Review Board to determine whether any applicant for or any holder of a valid Kentucky operator's license has physical or mental infirmities which affect or limit the driving ability or make it unsafe for said person to operate a motor vehicle upon the public highways. The board shall consist of the Commissioner of the Department of Vehicle Regulation of the Transportation Cabinet or his representative, not less than three (3) physicians licensed to practice medicine in the Commonwealth of Kentucky, and anyone else deemed necessary to properly review a case brought before the board. The physicians on the board shall be appointed by the Commissioner of the Department of Vehicle Regulation. The Commissioner of the Department of Vehicle Regulation or his representative shall prescribe the time and place for the board to meet. Any proceeding conducted by the board shall be construed to be a meeting within the meaning of this section when three (3) physician members are present and participating. Members of the board who participate in a meeting shall be reimbursed for necessary expenses incurred in attending such meeting.

Section 2. (1) When the Commissioner of the Department of Vehicle Regulation or his representative receives notice that one (1) or more of the conditions listed in Section 4 of this regulation exists in a person and that such physical or mental infirmities may render it unsafe for him to operate a motor vehicle upon the public highways, the commissioner shall refuse to issue an operator's license to said person or he shall suspend the existing driving privilege of said person unless the person submits to an examination by a qualified physician within forty-five (45) days of notification of the commissioner's intentions.

(2) If the Medical Review Board deems that an examination by a qualified physician is necessary, the required medical examination shall be conducted at the person's own expense by any licensed physician of his choice. The examining physician shall report within forty-five (45) days the results of his examination directly to the Medical Review Board on a form furnished by the Department of Vehicle Regulation.

(3) As soon as possible after receipt of the completed form, the Medical Review Board shall evaluate it and may make recommendations to the Department of Vehicle Regulation for further examination or testing or on restriction of the person's driving privilege. When the board recommends further examination or investigative testing, the Commissioner of the Department of Vehicle Regulation or his representative shall notify the person of the date by which he shall comply in order to retain or obtain his driving privilege.

Section 3. When the Medical Review Board, pursuant to Section 2(3) of this regulation, recommends total suspension of a person's driving privilege or any limitations thereon, the Commissioner of the Department of Vehicle Regulation or his representative shall notify the person at the last known address of said person that this action will be taken unless a written request for a hearing before the board is received within twenty (20) days following delivery of the notice. The hearing shall be scheduled as early as practicable at a time and place designated by the commissioner or his representative and notice of same shall be mailed to the person involved no later than ten (10) days prior to the hearing date. The commissioner or his representative shall preside at the hearing before the Medical Review Board and at least three (3) physician members shall be present. The presiding officer may administer oaths and may issue subpoenas for the attendance of witnesses and the production of relevant books and papers. The scope of the hearing shall be limited to the presentation of the evidence upon which the Medical Review Board made their recommendation and any medical evidence the petitioner wishes to present in explanation or refutation of this evidence. Evidence may be presented in the form of depositions. All testimony at the hearing shall be recorded and together with any depositions or exhibits introduced at the hearing shall form the complete record. Within ten (10) working days after the hearing, the commissioner shall issued a decision and this shall be promptly forwarded to the petitioner.

Section 4. The Commissioner of the Department of Vehicle Regulation or his representative shall promptly notify the person involved to submit to the physical examination set out in Section 2 of this regulation when one (1) or more of the following conditions exist:

(1) Driver has indicated that he "blacked out," lost consciousness or suffered a seizure prior to a reportable motor vehicle accident;

(2) Driver has been named in an affidavit by at least two (2) citizens as being incapable of properly operating a motor vehicle due to physical or mental infirmities;

(3) Driver has been reported by a physician as being incapable of driving safely due to physical or mental condition or due to medication prescribed for an extended time;

(4) Driver has been reported by a law enforcement officer after being observed driving or behaving in an erratic or dangerous manner which indicates a possibility of physical or mental infirmity;

(5) Applicant for operator's license or for renewal of same has obvious physical or mental impairment;

(6) Driver's official record kept by the Department of Vehicle Regulation indicates a possibility of physical or mental impairment;

(7) Driver has reported that he/she has suffered an epileptic seizure or any type of syncopal episode;

(8) Driver has been reported by a commonwealth attorney, county attorney, county clerk, circuit clerk, sheriff, or judge as being incapable of driving due to a physical or mental impairment.

NORRIS BECKLEY, Commissioner
DON C. KELLY, P.E., Secretary
APPROVED BY AGENCY: April 7, 1994
FILED WITH LRC: April 11, 1994 at 2 p.m.

PUBLIC HEARING: A public comment hearing on this administrative regulation will be held on May 24, 1994 at 10 a.m. local prevailing time in the Transportation Cabinet, Room 1003 on the Tenth Floor, 501 High Street, Frankfort, Kentucky 40622. Any person who intends to attend this meeting must in writing by May 19, 1994 so notify this agency. If no notification of intent to attend the hearing is received by this date, the hearing may be cancelled. This hearing is open to the public. Any person who attends will be given the opportunity to comment on the administrative regulation. A transcript of the public comment hearing will not be made unless a written request for a transcript is made and then only at the requestor's expense. If you have a disability for which the Transportation Cabinet needs to provide accommodations, please notify us of your requirements by May 19, 1994. This request does not have to be in writing. If you do not wish to attend the public hearing, you may submit written comments on the administrative regulation. If the hearing is held, written comments will be accepted until the close of the hearing. If the hearing is cancelled, written comments will only be accepted until May 24, 1994. Send written notification of intent to attend the public comment hearing or written comments on the administrative regulation to: Sandra G. Pullen, Staff Assistant, Transportation Cabinet, 1003 State Office Building, 501 High Street, Frankfort, Kentucky 40622, (502) 564-4890.

REGULATORY IMPACT ANALYSIS

AGENCY CONTACT: Sandra G. Pullen

(1) Type and number of entities affected: 900 new cases are presented to the Medical Review Board annually. 60 of these have an administrative hearing before the board. 600 of these had their driving privilege withdrawn. This 600 number includes the persons who in essence did not contest the idea of surrendering their driver's license. Most of these just sent in their license without even returning the medical forms. Over 5,000 cases are reviewed annually.

(a) Direct and indirect costs or savings to those affected: Each new case will be asked to have a medical examination which costs between $50 and $200. Most will not actually have the medical exam. They are aware they should not be driving or have just been using the driver's license for identification purposes.

1. First year: $200,000.

2. Continuing cost or savings: $200,000 each year.

3. Additional factors increasing or decreasing costs: (note any effects upon competition): It is difficult to measure the cost which will be incurred by persons who no longer will be allowed to operate a motor vehicle. On the other hand, it is even more difficult to quantify the savings to life, property, insurance costs, and social services by removing an unsafe driver from the highway - before he has a major accident. The cost to the individual who loses his driving privilege will be greater than the savings he realizes. However, to the public taken collectively, the individual person will have a savings.

(b) Reporting and paperwork requirements: The result of approximately 200 physical examinations must be documented by the physician and the forms sent to the Medical Review Board for the persons newly reported each year.

(2) Effects on the promulgating administrative body:

(a) Direct and indirect costs or savings: It costs $75,000 annually to operate the Medical Review Board including its administrative costs and staff.

1. First year: $75,000

2. Continuing costs or savings: $75,000

3. Additional factors increasing or decreasing costs:

(b) Reporting or paperwork requirements: A formal report must be prepared on each of the hearings held. In addition, several personal letters must be sent to each person with a disability brought under the purview of the Medical Review Board.

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

(4) Assessment of alternative methods; reasons why alternatives were rejected: The Transportation Cabinet considered allowing 601 KAR 13:010 to expire and to promulgate the needed new administrative regulation after the July 15, 1994 legislation effective date. However, it was decided that rather than allow a person who is very unsafe to continue operating on the highways because of no authority for the Medical Review Board, 601 KAR 13:010 would be repromulgated as is and replaced as soon as possible.

(5) Identify any statute, administrative regulation or governmental policy which may be in conflict, overlapping or duplication: As stated above, the provisions of HB 417 and SB 205 passed by the 1994 General Assembly are in conflict with each other. Until the Statutes Reviser determines what is actually effective, the administrative regulation slightly conflicts with KRS 186.570. The Transportation Cabinet anticipates being able to correct this problem at the public comment hearing.

(a) Necessity of proposed administrative regulation if in conflict: See above.

(b) If in conflict, was effort made to harmonize the proposed administrative regulation with conflicting provisions: See above.

(6) Any additional information or comments: Age discrimination shall not be tolerated by the Medical Review Board. The board members recognize that passing a certain birthday does not automatically mean a person can no longer safely operate a motor vehicle. All that will be considered by the members of the Medical Review Board is the physical or mental disability which might adversely affect the person's driving ability.

Tiering: Was tiering applied? Yes. The administrative regulation provides a tiering of the reporting of the cases to the Medical Review Board.

TRANSPORTATION CABINET
Motor Vehicle Commission

605 KAR 1:200. Manufacture and sale of motor homes.

RELATES TO: KRS Chapter 190

STATUTORY AUTHORITY: KRS 190.015, 190.020, 190.030(1), 190.058(9), 190.073

NECESSITY AND FUNCTION: KRS 190.030 authorizes the Motor Vehicle Commission to provide by administrative regulation for other licensee activities and an appropriate fee. KRS 190.058 authorizes the Motor Vehicle Commission to establish the qualifications of manufacturers and dealers. KRS 190.073 authorizes the Motor Vehicle Commission to promulgate appropriate and reasonable administrative regulations for the purpose of carrying out the provisions of KRS Chapter 190. The function of this administrative regulation is to provide a means for motor home manufacturers to qualify for a license in order to enter into franchise agreements authorizing Kentucky dealers to sell new motor homes as new motor vehicles and to otherwise conduct necessary business functions in accordance with applicable state laws and administrative regulations.

Section 1. Definitions. (1) "Motor home" means a new vehicular unit designed to provide temporary living quarters built into an integral part of or permanently attached to a motor vehicle chassis. The vehicle must contain permanently installed independent life-support systems, other than low-voltage, which meet the American National Standards Institute (ANSI) Standard A119.2, Standards for Recreational Vehicles, effective February 12, 1993 contained in a publication titled "ANSI A119.2, NFPA 501C, RECREATIONAL VEHICLES, 1993 EDITION" published by the National Fire Protection Association

on January 22, 1993, or updated editions thereof, said publication being adopted by reference herein, and provide at least four (4) of the following facilities:

(a) Cooking with on-board power source;

(b) Gas or electric refrigerator;

(c) Toilet with exterior evacuation;

(d) Heating with on-board power source and/or air conditioning separate from the vehicle engine;

(e) A potable water supply system including a faucet, sink and a water tank with an exterior service connection;

(f) Separate 110-125 volt electric power supply. All documents incorporated by reference herein are on file for public inspection and copying at the office of the Motor Vehicle Commission, 114 West Clinton Street, Frankfort, Kentucky 40601, during normal business hours.

(2) "Permanently installed" means built into or attached as an integral part of a motor vehicle chassis and designed not to be removed, except for repair or replacement. A system which is readily removable or held in place by clamps or tie-downs is not permanently installed.

(3) "Motor home manufacturer" means a person other than the manufacturer of the chassis of a motor vehicle who, prior to the retail sale of the motor vehicle, performs modifications on the chassis that result in the finished product being classified as a motor home.

Section 2. The license fee for a calendar year or any part of a calendar year for a motor home manufacturer shall be $100.

Section 3. Motor homes shall be advertised, displayed or sold as new motor vehicles pursuant to a franchise or sales and service agreement with a licensed motor home manufacturer, and only under the name of the motor home manufacturer and not under the name of the motor home's chassis manufacturer.

RAYMOND COTTRELL, SR., Chairman

APPROVED BY AGENCY: April 15, 1994

FILED WITH LRC: April 15, 1994 at 10 a.m.

PUBLIC HEARING: A public hearing on this proposed amended administrative regulation shall be held at 10 a.m. on Wednesday, May 25, 1994, at the office of the Kentucky Motor Vehicle Commission, 114 West Clinton Street, Frankfort, Kentucky 40601. Individuals interested in attending this hearing shall notify this agency in writing by May 20, 1994, five days prior to the hearing, of their intent to attend. If no notification of intent to attend the hearing is received by that date, the hearing may be cancelled. This hearing is open to the public. Any person who attends will be given an opportunity to comment on the proposed new administrative regulation. A transcript of the public hearing will not be made unless a written request for a transcript is made. If you do not wish to attend the public hearing, you may submit written comments on the proposed new administrative regulation. Send written notification of intent to attend the public hearing or written comments on the proposed new administrative regulation to: David Garnett, Executive Director, Kentucky Motor Vehicle Commission, 114 West Clinton Street, Frankfort, Kentucky 40601, 502-564-3750.

REGULATORY IMPACT ANALYSIS

Agency Contact: David Garnett

(1) Type and number of entities affected: The proposed regulation affects approximately twenty to thirty motor home manufacturers located around the United States and approximately five to ten motor home dealers located in Kentucky.

(a) Direct and indirect costs or savings to those affected: The costs to those affected are $100 for a motor home manufacturer license and $100 for a Kentucky motor home dealer, to receive their respective licenses. There is a savings or a benefit to both the motor home manufacturers and Kentucky motor home dealers resulting from the ability of the Kentucky dealers to legally advertise, display and sell motor homes as new motor vehicles which they are not currently entitled to do. In addition, Kentucky motor home dealers who operate pursuant to franchises awarded by motor home manufacturers licensed under this proposed regulation will be afforded the protection of Kentucky "dealer's rights act" (KRS 190.042 through 190.075).

1. First year: The first year costs to motor home manufacturers are their administrative costs to obtain, fill out and submit a two-page application for a motor home manufacturer license and the cost of the license itself, $100 per calendar year. The first year costs to Kentucky motor home dealers are those minimal costs associated with submitting proof of the existence of a franchise with a motor home manufacturer licensed under this proposed regulation as part of an application for a motor vehicle dealer license and tendering the fee of $100 for the new motor vehicle dealer license.

2. Continuing costs or savings: Once an application for either a motor home manufacturer or a Kentucky new motor (home) vehicle dealer is approved, the license can be renewed from year to year upon the submission of a one-page license renewal application form and payment of the $100 yearly license fee.

3. Additional factors increasing or decreasing costs (note any effects upon competition): There are no additional factors increasing or decreasing costs entailed in this proposed regulation. The effect upon competition is negligible due to the fact that new motor home sales represent such a small and very specialized part of the vehicle sales industry. New motor homes are specialized and generally expensive items, appealing to a very small part of the general Kentucky consuming public. New motor vehicle dealers target their sales efforts to a completely different segment of the community than new motor home dealers.

(b) Reporting and paperwork requirements: A motor home manufacturer would be required to submit a two-page application as well as a schedule, required by KRS 190.0462, specifying the compensation to be paid to franchise dealers for parts, work and service in connection with warranty service and repairs, in order to initially qualify for the license provided under this proposed regulation. Thereafter, a licensed manufacturer would be required to submit a one-page application for license renewal for succeeding calendar years. A dealer who holds a franchise with a motor home dealer, if not already licensed as a dealer, would be required to submit a nine-page application for initial consideration; once the dealer license is issued, it can be renewed, absent other factors, by filing a one-page renewal application each succeeding year.

(2) Effects on the promulgating administrative body:

(a) Direct and indirect costs or savings: The promulgating body will receive an estimated $3,000 to $4,000 per year in additional license fees. There will be very little in the way of costs as all of the motor home manufacturers are located out-of-state and will not be subject to facility inspections by agency staff, and most, if not all, of the motor home dealers already hold a motor vehicle dealer license and are already subject to agency regulatory actions.

1. First year: No direct or indirect first year costs or savings to the promulgating body are anticipated other than those specified in (2)(a) above.

2. Continuing costs or savings: No direct or indirect continuing costs or savings to the promulgating body are anticipated other than those specified in (2)(a) above.

3. Additional factors increasing or decreasing costs: There are no additional factors increasing or decreasing costs entailed in this proposed regulation.

(b) Reporting and paperwork requirements: The reporting or paperwork requirements affecting the promulgating administrative body resulting from the proposed regulation are those involved in the license application and renewal procedures. Since the number of additional licensees licensed under the proposed regulation is anticipated to be no more than twenty in number, these are anticipat-

ed to be minimal in their effect on the promulgating body.

(3) Assessment of anticipated effect on state and local revenues: State (agency) revenues will increase by the amount received from motor home manufacturers who qualify for a Kentucky motor home manufacturer license, and from the license fees received from Kentucky dealers who wish to sell those motor homes as new motor vehicles. No effects on local revenues are anticipated.

(4) Assessment of alternative methods; reasons why alternatives were rejected: Current law allows the licensing as a manufacturer only an entity which actually manufactures motor vehicles. Makers of motor homes are not considered to be "manufacturers" because their business lies in taking a vehicle or vehicle chassis already manufactured by another company and either altering the body and installing certain fixtures or replacing the body with their own product. KRS 190.010(1). Another statute prohibits the sale of a vehicle as a new vehicle unless the seller is operating pursuant to a valid franchise or sales and service agreement with a licensed manufacturer. KRS 190.040(1)(q). Since motor home makers cannot be licensed as manufacturers, Kentucky motor home dealers who hold franchise agreements for the sale of those motor homes have been restricted to advertising, displaying and selling those vehicles as "used" or "current year models", or using some term other than "new". These strictures appear to be due to a dated statutory scheme which did not sufficiently anticipate current market realities. The proposed regulation is intended to address current marketplace needs.

(5) Identify any statute, administrative regulation or government policy which may be in conflict, overlapping or duplication: The proposed regulation does not conflict with or duplicate any statute, existing regulation or government policy.

(a) Necessity of proposed regulation if in conflict: There is no conflict.

(b) If in conflict, was effort made to harmonize the proposed administrative regulation with conflicting provisions: There is no conflict.

(6) Any additional information or comments: None

TIERING: Was tiering applied? Yes. Section 3 of the proposed regulation affects only those vehicles which are advertised, displayed or sold as new motor homes, restricting those activities to the use of the name of the motor home manufacturer. A motor home dealer cannot advertise, display or sell a new motor home under the motor home chassis manufacturer's name unless he holds a separate franchise for the sale of the chassis manufacturer's new motor vehicles. A significant portion of motor home chassis are manufactured by easily recognized manufacturers, e.g., Ford, General Motors, Chrysler, etc. The promulgating agency licenses approximately 400 new motor vehicle dealers who sell new motor vehicles for one of these manufacturers. The tiering was applied in order to provide for a situation similar to the following hypothetical case: a motor home dealer franchised for the sale of Home & Park Motorhomes locates next door to a dealer who is franchised for the sale of new Dodge vehicles. Home & Park Motorhomes will take a Dodge Ram chassis and turn it into a motor home. The motor home dealer will not be able to advertise, display or sell his product as a new Dodge vehicle (unless he also has a franchise for the sale of new Dodge products) but will be required to advertise, display and sell the motor home as a new Home & Park Motorhome vehicle. Section 3 is intended to prevent competition in violation of state law for the same lines or makes of new motor vehicles.

PUBLIC PROTECTION AND REGULATION CABINET
Department of Housing, Buildings and Construction
Commission on Fire Protection Personnel Standards and Education
State Fire Marshal's Office

815 KAR 45:025. Commission meetings and proceedings.

RELATES TO: KRS 95A.040, 95A.050(1), HB 62
STATUTORY AUTHORITY: KRS 95A.050(1), (3)
NECESSITY AND FUNCTION: This administrative regulation sets forth definitions as well as rules and procedures governing the manner and form of meetings and proceedings initiated and conducted by the Commission on Fire Protection Personnel Standards and Education.

Section 1. Definitions. (1) "Commission" means the Commission on Fire Protection Personnel Standards and Education.

(2) "Commissioner" means the Commissioner of the Department of Housing, Buildings and Construction.

(3) "Department" means the Department of Housing, Buildings and Construction.

(4) "Division" means the Division of Fire Prevention, State Fire Marshal's Office.

(5) "Fire department" means and includes a fire department organized under KRS Chapter 75, a fire protection district, a volunteer fire department, or a municipal, county or urban-government fire department.

(6) "Fire protection personnel" means an employee or member of a "fire department" whether paid or unpaid, who is engaged in any of the following:

(a) Fire prevention;

(b) Inspecting buildings for compliance with building, fire, energy and life-safety codes and compliance with the Architectural Barriers Act;

(c) Fire suppression;

(d) Fire and arson investigation;

(e) Fire-related emergency medical and rescue work;

(f) Other allied fields recognized and approved by the commission.

(7) "Fire protection instructor" or "fire service training officer" means any person certified, pursuant to KRS 95A.040(2)(b) as qualified to instruct fire protection personnel.

Section 2. (1) Voting on reports, recommendations, and contracts. In order for any of the following decisions or actions to be made, a majority of the commission members shall have cast affirmative votes.

(a) Recommending administrative regulations to the commissioner pursuant to KRS 95A.050(3) to establish procedures for certification that training and education programs meet minimum standards pursuant to KRS 95A.040(2)(a);

(b) Entering into contracts with other agencies or persons pursuant to KRS 95A.040(2);

(c) Recommending to the commissioner administrative regulations prescribing the qualifications and certification procedures for fire protection instructors pursuant to KRS 95A.040(2)(b); or

(d) Making studies, recommendations and reports to the governor or legislature pursuant to KRS 95A.040(1).

(2) Public meetings. It shall be the policy of the commission that all its proceedings shall be open to the public and to the press and other news media representatives, unless forbidden by law. This policy shall also apply to the proceedings of any subcommittee of the commission.

(3) Parliamentary rules. The commission shall adopt appropriate rules for the orderly conduct of commission or subcommittee meetings.

(4) Complaints; advisory opinions. At any regular meeting, the

commission may receive complaints, render decisions, deliver advisory opinions, or authorize or request studies and reports by personnel in the State Fire Marshal's Office for any of the purposes set forth in KRS 95A.040, 95A.050, and any administrative regulation adopted thereunder.

(5) Subcommittees. The commission may establish and govern the subcommittees of its members as it may deem advisable or desirable for the orderly conduct of its business.

Section 3. Administrative Support for Commission. (1) Staff services. Personnel of the division shall provide administrative and technical services to the commission as the commissioner deems necessary or desirable, upon the request of the commission.

(2) Training services. The commission may contract with the Department for Adult and Technical Education to develop curricula and training delivery plans, in conjunction with that department's advisory committee, for the entire range of local fire department duties, technology and activities. In addition, the Department for Adult and Technical Education may furnish school facilities in and among the vocational and technical schools under its jurisdiction for this training. The Department for Adult and Technical Education may be awarded a sum from the commission's budgeted funds in order to pay the salary of a clerk to assist the Department for Adult and Technical Education with maintenance of records and files and the performance of other clerical tasks associated with training of fire protection personnel and instructors and the certification of fire protection personnel, instructors and training programs.

(3) Codes enforcement. The commission may contract with the division to provide training to fire protection personnel in building, fire and life-safety codes enforcement, energy code enforcement, Architectural Barriers Act enforcement, and the legal and administrative aspects of fire safety and building inspections.

Section 4. Coordination Among Agencies. Upon approval by the commission, the Department for Adult and Technical Education may provide on-job field training and classroom training of instructors and fire protection personnel and may be reimbursed by the commission for such functions as may be permitted by law. Jefferson Community College, Northern Kentucky University, Eastern Kentucky University, and any other qualified person or agency, may provide faculty or educational services, lodging, meals or other administrative support for the training of instructors and fire protection personnel, and may be reimbursed in accordance with a contract entered into by the commissioner pursuant to KRS 95A.050(2) and in furtherance of any purpose assigned by the law to the commissioner, the department, or the commission relating to the training or provision of technical assistance to fire protection personnel.

GERALD STEWART, Chairman
EDWARD J. HOLMES, Secretary

APPROVED BY AGENCY: April 1, 1994

FILED WITH LRC: April 14, 1994 at 10 a.m.

PUBLIC HEARING: A public hearing on this administrative regulation shall be held on Tuesday, May 24, 1994 at 10 a.m., in the office of the Department of Housing, Buildings and Construction, 1047 U.S. 1047 South, Frankfort, Kentucky. Individuals interested in being heard at this hearing shall notify this agency in writing by May 19, 1994, (five days prior to the hearing) of their intent to attend. If no notification of intent to attend the hearing is received by that date, the hearing may be cancelled. This hearing is open to the public. Any person who wishes to be heard will be given an opportunity to comment on the proposed administrative regulation. A transcript of the public hearing will not be made unless a written request for a transcript is made in which case the person requesting the transcript shall have the responsibility of paying for same. If you do not wish to be heard at the public hearing, you may submit written comments on the proposed administrative regulation. Send written notification of intent to be heard at the public hearing or written comments on the proposed administrative regulation by the above date to: Judith G. Walden, Office of General Counsel, Department of Housing, Buildings and Construction, The 127 Building, 1047 U.S. 127 South, Frankfort, Kentucky 40601.

REGULATORY IMPACT ANALYSIS

Contact Person: Wayne Jordan

(1) Type and number of entities affected: There are 850 paid and volunteer fire departments in Kentucky. This administrative regulation will relate to those firefighters but will not affect them.

(a) Direct and indirect costs or savings to those affected: There will be neither cost nor savings associated with this regulation.

1. First year:

2. Continuing costs or savings:

3. Additional factors increasing or decreasing costs: (Note any affects upon competition)

(b) Reporting and paperwork requirements: This regulation will create no reports nor paperwork for the firefighters.

(2) Effects on the promulgating administrative body: This regulation will create no additional responsibilities for this agency.

(a) Direct and indirect costs or savings: As listed below:

1. First year: Actual expenses of commission members to attend meetings.

2. Continuing costs or savings: Same expenses for commission members.

3. Additional factors increasing or decreasing costs: Change in allowable expenses would increase costs.

(b) Reporting and paperwork requirements: Travel vouchers of commission members and minutes of meetings.

(3) Assessment of anticipated effect on state and local revenue:

(4) Assessment of alternative methods; reasons why alternatives were rejected: No alternatives were available to the commission meetings.

(5) Identify any statute, rule, regulation or governmental policy which may be in conflict, overlapping or duplication: None which Fire Commission is aware of.

(a) Necessity or proposed regulation if in conflict:

(b) if in conflict, was effort made to harmonize the proposed regulation with conflicting provisions:

(6) Any additional information or comments:

TIERING: Was tiering applied? No. Tiering was not required because this administrative regulation merely provides general information and procedures for the activities of the commission.

ADMINISTRATIVE REGULATION REVIEW SUBCOMMITTEE
Minutes of the April 15, 1994 Meeting

The April meeting of the Administrative Regulation Review Subcommittee was held on Friday, April 15, 1994 1 p.m. in Room 129 of the Capitol Annex. Chairman Tom Kerr called the meeting to order, and the secretary called the roll. The minutes of the March 7, 1994 meeting were approved.

Present were:

Members: Representative Tom Kerr, Chairman; Senators Tom Smith, Nick Kafoglis, Gene Huff; Representatives Jim Bruce, Woody Allen and James Yates.

Guests: Michael O'Connor, Earl Mackey, Legislative Ethics Commission; Bill Pettus, Board of Podiatry and Board of Embalmers and Funeral Directors; Pat Haight, Division of Waste Management; Jack Damron, Louis Smith, Brenda Priestley, Department of Corrections; Lyle C. Craycroft, Barry House, Transportation Cabinet; Linda Pittenger, Cindy Owen, Kevin Noland, Department of Education; Bill Ralston, Erin Foley, Kembra Taylor, Labor Cabinet; Mike Fulkerson, Brent Caldwell, Kentucky Racing Commission; Judy Walden, Housing, Buildings and Construction; Mark Birdwhistell, Ked Fitzpatrick, Masten Childers, Larry Taylor, John A. Volpe, Bill Phiffer, Karen Doyle, Cabinet for Human Resources; Cindy Rausch; Janice Way, St. Luke Hospital; Tod Griffin, Kentucky Retail Federation; Sara S. Nicholson, Nancy Galvagni, Kentucky Hospital Association.

LRC Staff: Greg Karambellas, O. Joseph Hood, Tom Troth, Patrice Carroll, Susan Wunderlich, Peggy Jones, Donna Valencia, Susan Eastman, Don Hines.

The Subcommittee determined that the following administrative regulation did not comply with statutory requirements:

Department of Education: Bureau for Learning Results Services: Learning Results Services

703 KAR 4:070. Statewide assessment and accountability program; code of ethics. Kevin Noland appeared before the Subcommittee representing the Cabinet. Cindy Rausch, a parent from Prospect, Kentucky, spoke in opposition to the administrative regulation as proposed. Ms. Rausch requested that language be inserted into the "Code of Ethics" acknowledging and making it very clear to the local districts that parents have the right to not allow their individual child to participate in the KIRIS assessment. Mr. Noland responded that this concern was not directly dealt with in this administrative regulation and should be addressed in another administrative regulation. After some general discussion about the assessment and accountability program, Representative Yates moved that a letter be attached to this administrative regulation because it did not conform to legislative intent. The motion was seconded and passed.

The Subcommittee determined that the following administrative regulations, as amended, complied with statutory requirements:

Legislative Ethics Commission

2 KAR 2:030. Rules of procedure. Section 4 was amended to increase the time in which a respondent is required to file an answer to a formal complaint after notification from 20 to 30 days.

Department of Corrections: Office of the Secretary

501 KAR 6:030. Kentucky State Reformatory. The incorporation by reference, policy number KSR 08-00-08, of this administrative regulation was amended to add a statutory citation specifying that in the event of the death of an inmate, the person or institution possessing a dead body shall report it pursuant to KRS 72.020.

501 KAR 6:060. Northpoint Training Center. The incorporation by reference, policy number NTC 02-07-02, (Chapel fund), of this administrative regulation was amended as follows: (1) two statutory citations were added to the statutory reference section, KRS 44.050 and 44.060; and (2) language was added on page 2, J. to clarify that "any interest earned on monies other than operating funds, shall accrue in the established Chapel Fund to benefit the inmates".

Department of Education: Office of Chief State School Officer

701 KAR 5:110. Use of local monies to reduce unmet technology need. Kevin Noland appeared before the Subcommittee representing the Cabinet. This administrative regulation was amended to incorporate by reference the KETS Master Plan for Education Technology.

Department of Housing, Buildings and Construction: Boilers and Pressure Vessels

815 KAR 15:010. Definitions. This administrative regulation was amended to provide a cross reference to Section 1(1) of 815 KAR 15:025 in Section 1(5) of this administrative regulation.

815 KAR 15:025. New installations, general design, construction and inspection criteria for boilers, pressure vessels and pressure piping. This administrative regulation was amended to delete the word "adopted" and to insert the word "incorporated" in the incorporation by reference statement in Section 1(1) and Section 1(3)(a).

815 KAR 15:026. Existing boilers and pressure vessels; testing, repairs, inspection and safety factors. This administrative regulation was amended to delete the "/" between "boiler" and "pressure" and insert the word "or" in lieu thereof in Sections 2(1), 2(5), 4(2) and 5(1).

815 KAR 15:040. Power boiler and pressure vessel supplemental requirements. This administrative regulation was amended to: (1) delete "KRS Chapter 13A" in the STATUTORY AUTHORITY section and insert "KRS 236.030" in lieu thereof; and (2) provide a cross reference to Section 1(1) of KRS 815 KAR 15:025 in Section 1(1).

815 KAR 15:051. Heating boiler supplemental requirements steam heating, hot water heating and hot water supply boilers. This administrative regulation was amended to: (1) delete "KRS Chapter 13A" in the STATUTORY AUTHORITY section and insert "KRS 236.030" in lieu thereof; and (2) provide a cross reference to Section 1(1) of KRS 815 KAR 15:025 in Section 1(1).

815 KAR 15:060. Nuclear vessel requirements. This administrative regulation was amended to delete the reference to "KRS Chapter 13A" in the STATUTORY AUTHORITY section.

The Subcommittee determined that the following administrative regulations complied with statutory requirements:

Legislative Ethics Commission

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

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

Board of Embalmers and Funeral Directors

201 KAR 15:040. Examination.

Board of Examiners and Registration of Architects

201 KAR 19:085. Fees.

Board of Podiatry

During the discussion on these administrative regulations, Senator Huff requested Subcommittee staff to provide the Subcommittee with information relating to agencies that levy fees, balances of restricted accounts, and an analysis of the amount of an agency's appropriation

stemming from fees. Subcommittee staff stated that other LRC staff were compiling a list of fee increases in legislation enacted during the 1994 Regular Session; they will check with budget review staff, and attempt to provide the information requested.

201 KAR 25:011. Approved schools; examination application; fees.

201 KAR 25:012. Licensing examinations; fees.

201 KAR 25:021. Annual renewal notice of licenses, fees.

201 KAR 25:023. Repeal of 201 KAR 25:022 and 201 KAR 25:071.

201 KAR 25:051. Procedure for complaints and hearings involving licensees.

201 KAR 25:061. Reciprocity.

Department of Corrections: Office of the Secretary

501 KAR 6:020. Corrections policies and procedures.

Transportation Cabinet: Property Acquisition and Uniform Relocation

600 KAR 3:020. Grave relocation.

Department of Vehicle Regulation: Motor Vehicle Tax

603 KAR 9:010. Railroad crossing alteration and closure procedure.

Labor Cabinet: Occupational Safety and Health

803 KAR 2:300. Adoption of 29 CFR Part 1910.1-.6.
803 KAR 2:301. Adoption of 29 CFR Part 1910.7-.19.
803 KAR 2:304. Adoption of 29 CFR Part 1910.35-.40.
803 KAR 2:306. Adoption of 29 CFR Part 1910.94-.100.
803 KAR 2:307. Adoption of 29 CFR Part 1910.101-.120.
803 KAR 2:308. Adoption of 29 CFR Part 1910.132-.140.
803 KAR 2:309. Adoption of 29 CFR Part 1910.141-.149.
803 KAR 2:311. Adoption of 29 CFR Part 1910.155-.165.b.
803 KAR 2:312. Adoption of 29 CFR Part 1910.166-.171.
803 KAR 2:313. Adoption of 29 CFR Part 1910.176-.190.
803 KAR 2:317. Adoption of 29 CFR Part 1910.261-.275.
803 KAR 2:319. Adoption of 29 CFR Part 1910.401-.441.
803 KAR 2:320. Adoption of 29 CFR Part 1910.1000-1910.1500.
803 KAR 2:402. Adoption of 29 CFR Part 1926.20-.32.
803 KAR 2:403. Adoption of 29 CFR Part 1926.50-.59.
803 KAR 2:404. Adoption of 29 CFR Part 1926.110-.107.
803 KAR 2:405. Adoption of 29 CFR Part 1926.150-.155.
803 KAR 2:406. Adoption of 29 CFR Part 1926.200-.203.
803 KAR 2:407. Adoption of 29 CFR Part 1926.250-.252.
803 KAR 2:408. Adoption of 29 CFR Part 1926.300-1926.305.
803 KAR 2:409. Adoption of 29 CFR Part 1926.350-.354.
803 KAR 2:410. Adoption of 29 CFR Part 1926.400-.449.
803 KAR 2:411. Adoption of 29 CFR Part 1926.450-1926.452.
803 KAR 2:413. Adoption of 29 CFR Part 1926.550-.556.
803 KAR 2:414. Adoption of 29 CFR Part 1926.600-.606.
803 KAR 2:418. Adoption of 29 CFR Part 1926.800-.804.
803 KAR 2:420. Adoption of 29 CFR Part 1926.900-.914.
803 KAR 2:423. Adoption of 29 CFR Part 1926.1050-.1060.
803 KAR 2:424. Adoption of 29 CFR Part 1926.1071-.1092.
803 KAR 2:425. Adoption of 29 CFR Part 1926.1100-.1148.

803 KAR 2:500. Adoption of 29 CFR Part 1915, 1917, 1918 and 1919, Maritime employment.

Department of Housing, Buildings and Construction: Boilers and Pressure Vessels

815 KAR 15:027. Certificates and fees for boiler and pressure vessel inspection.

815 KAR 15:080. Fees for licensing new boiler and pressure vessel contractors.

815 KAR 15:081. Repeal of 815 KAR 15:020; 815 KAR 15:030 and 815 KAR 15:070.

Cabinet for Human Resources: Department for Health Services: Radiology

902 KAR 100:021. Disposal of radioactive material.

Department for Employment Services: Unemployment Insurance

903 KAR 5:250. Recoupment and recovery.

The Subcommittee had no objections to emergency administrative regulations which had been filed.

The following administrative regulations were deferred to the May meeting, unless otherwise noted, upon request by the Subcommittee and agreed to by the promulgating agency:

Department of State: Registry of Election Finance: Practice and Procedure

32 KAR 2:170. In-kind contributions.

32 KAR 2:180. Extension of credit to candidates, campaign committees, or political issues committee.

32 KAR 2:190. Committee affiliation.

32 KAR 2:200. Allowable campaign expenditures.

Cabinet for Human Resources: Department for Medicaid Services: Medicaid Services (Deferred to June)

907 KAR 1:013. Payments for hospital inpatient services. This administrative regulation was amended to provide that psychiatric hospitals be included in the (1) full Medicaid reimbursement schedules, rather than the minimal $10 per day Medicaid rate; and, (2) $200, 000 reimbursement for small hospitals.

Ms. Nancy Galvagni, Vice-President/Health Care Standards, of the Kentucky Hospital Association (KHA) requested that this administrative regulation be found deficient because: (1) it is essentially identical to the administrative regulation on Medicaid payment and indigent care issued by the Department of Medicaid in July, 1993, and withdrawn in November, 1993, because it failed to meet legislative intent; (2) each hospital's yearly increase in Medicaid costs will be uniformly capped at a specified percentage of growth, without any exception or hearing process to allow for higher growth rates; (3) House Bill 1 requires Medicaid to pay all hospitals for indigent care that is documented and reported to CHR "based upon compensation for services at the facility's Medicaid rate"; (4) while the law contains no provision to base payment on the profitability of a hospital, it will pay the Medicaid rate only to hospitals that lost money in 1992; (5) those hospitals that make any profit at all, 40% of all hospitals, will be paid only $10 per day; (6) regardless of their profitability or actual indigent care provided, it provides and arbitrary payment of only $10 per day to psychiatric hospitals; (7) although a hospital is mandated to provide both inpatient and outpatient indigent care, if it makes any profit it will be reimbursed only for inpatient care ; (8) unprofitable hospitals are to receive an add-on to their inpatient payment to cover outpatient care; (9) because outpatient and emergency room visits far outnumber the frequency of inpatient admissions, tying payment to inpatient admissions will grossly underpay hospitals for the actual amount of outpatient and emergency room care rendered to indigents; and (10) will force contrary to the intent of House Bill 1, the majority of hospitals will be forced to incur substantial financial losses because of the: (a) requirement to provide inpatient and unlimited outpatient and emergency room indigent care; (b) restriction of payment to $10 per day and nothing for outpatient care; and (c) prohibition against collecting from patients.

Mr. Childers, Commissioner of Medicaid responded that: (1) this administrative regulation: (a) is substantially different from the administrative regulation filed in July, 1993; and (b) mandates a $200,000 payment to rural hospitals having less than 100 beds; (2) KHA does not like this administrative regulation because it no longer provides a windfall to the larger hospitals, and attempts to provide some equity for the smaller hospital; (3) cabinet personnel have shared drafts of this administrative regulation with the KHA and other

interested groups and believed that most objections had been resolved; (4) cabinet personnel want to work with interested parties to attempt to work out a compromise; and (5) this administrative regulation is an essential stop gap measure if the cabinet is to cut the cost of Medicaid as required by statute.

Senator Kafoglis stated that: (1) House Bill 250 mandates payment for care at the Medicaid rate; (2) this administrative regulation does not follow the dictates of House Bill 250 or of House Bill 1; and (3) it seems foolish to move forward with this administrative regulation when: (a) it clearly violates legislative intent; and (b) will be obsolete when House Bill 250 goes into effect.

Mr. Childers responded that this administrative regulation: (1) is needed until House Bill 250 becomes effective; (2) will be amended to conform with the mandate of House Bill 250.

Senator Smith stated that: (1) he disagrees with the philosophy of the administrative regulation because it penalizes those hospitals that make a profit; (2) hospitals should learn not to rely on the government for their livelihood; and (3) if there is going to be program of Medicaid reimbursement, the reimbursement rates should be equitable to all hospitals and not just to nonprofitable hospitals.

Cabinet personnel agreed to amend this administrative regulation to: (1) delete psychiatric hospitals from the minimal $10 per day Medicaid reimbursement rate; and (2) include them in the; (a) full Medicaid reimbursement rate schedules; and, (b) $200,000 reimbursement for small hospitals. A motion was approved by the Subcommittee to amend the administrative regulation to that effect.

The Subcommittee requested that this administrative regulation be deferred until the June, 1994 meeting in order to permit Cabinet personnel, KHA representatives and Subcommittee staff to meet and attempt to resolve the issues raised by this administrative regulation.

OTHER BUSINESS:

Kentucky Racing Commission: Thoroughbred Racing

810 KAR 1:031. Application for new facilities. Representative Yates stated that this administrative regulation did not comply with: (1) KRS 230.320, because this administrative regulation restricts the right to appeal a denial, revocation, or suspension of a license to any court of competent jurisdiction; (2) 13A.220, because it did not comply with format requirements; and (3) 13A.222(4), because it was not written in plain, unambiguous words easily understood by laymen, and was ambiguous and indefinite.

Representative Yates stated that: (1) the March 15, 1994, letter from the Office of the Attorney General to the Commission was not binding on the Subcommittee; (2) the letter appeared to misinterpret applicable statutes; and (3) KRS 230.330 permits an alternative appeal to the Franklin Circuit Court for "any order", and does not designate which court has "competent jurisdiction" to hear an appeal.

The Subcommittee approved a motion finding this administrative regulation deficient for the reasons specified by Representative Yates.

Natural Resources and Environmental Protection Cabinet

Regulations dealing with archaeological surveys of landfills (401 KAR 4:220, 47:170, and 410 KAR 1:010) Upon request by Senator Smith, these administrative regulations were deferred until the May meeting.

The Subcommittee adjourned at 2:10 p.m. until May 2, 1994 at 10 a.m. in Room 131 of the Capitol Annex.

AMENDMENTS & OTHER RELEVANT MATERIAL PERTAINING TO ADMINISTRATIVE REGULATIONS REVIEWED AT THIS MEETING ARE ATTACHED TO THE APPROPRIATE ADMINISTRATIVE REGULATIONS. ADMINISTRATIVE REGULATIONS AND ATTACHMENTS THERETO ARE SUBMITTED WITH THIS REPORT TO BE REFERRED TO THE APPROPRIATE JURISDICTIONAL COMMITTEE.

OTHER COMMITTEE REPORTS

COMPILER'S NOTE: In accordance with KRS 13A.290(9), the following reports were forwarded to the Legislative Research Commission by the appropriate jurisdictional committees and are hereby printed in the Administrative Register. The administrative regulations listed in each report became effective upon adjournment of the committee meeting at which they were considered.

HOUSE AND SENATE BUSINESS ORGANIZATIONS AND PROFESSIONS COMMITTEE
Meetings of March 8, 1994, and March 22, 1994

The House and Senate Business Organizations and Professions Committees have considered 810 KAR 1:031 and report the following action.

On March 8, 1994, the House Business Organizations and Professions Committee found the regulation deficient on the grounds that the regulation did not comply with the requirements of KRS Chapter 13A, and that venue for judicial review of appeals, as contained in Section 12 of the proposed amendments, did not conform to statutory authority.

On March 22, 1994, the Senate Business Organizations and Professions Committee approved the regulation with the proposed amendments.

SENATE EDUCATION COMMITTEE
Meeting of March 22, 1994

The Senate Education Committee met Tuesday, March 22, 1994, and had no objections to the following administrative regulations:

Kentucky Teachers' Retirement System
102 KAR 1:035 - Employment by Retired Members
Department of Education
702 KAR 5:150 - Transportation of Preschool Children
703 KAR 4:080 - Statewide Assessment and Accountability Program; Relating Accountability Index to School Classification
707 KAR 1:170 - Identification of Children and Youth with Disabilities
707 KAR 1:180 - Due Process Procedures
707 KAR 1:190 - Evaluation
707 KAR 1:200 - Eligibility of Children and Youth with Disabilities
Education Professional Standards Board
704 KAR 20:065 - Standard High School Certificate
704 KAR 20:085 - Standard Elementary Certificate
704 KAR 20:150 - Standard Certificate for School Media Librarian
704 KAR 20:270 - Standard Certificate for Teachers of Exceptional Children
704 KAR 20:350 - Standard Certificate for Teaching in the Middle Grades 5-8
704 KAR 20:360 - Standard Certificate for Teaching in the Early Elementary Grades K-4
704 KAR 20:370 - Standard Certificate for Teaching Music Grades K-12

HOUSE EDUCATION COMMITTEE
Meeting of March 23, 1994

The House Education Committee met Wednesday, March 23, 1994, and had no objections to the following administrative regulations:

Kentucky Teachers' Retirement System
102 KAR 1:035 - Employment by Retired Members
Department of Education
702 KAR 5:150 - Transportation of Preschool Children
703 KAR 4:080 - Statewide Assessment and Accountability Program; Relating Accountability Index to School Classification
707 KAR 1:170 - Identification of Children and Youth with Disabilities
707 KAR 1:180 - Due Process Procedures
707 KAR 1:190 - Evaluation
707 KAR 1:200 - Eligibility of Children and Youth with Disabilities
Education Professional Standards Board
704 KAR 20:065 - Standard High School Certificate
704 KAR 20:085 - Standard Elementary Certificate
704 KAR 20:150 - Standard Certificate for School Media Librarian
704 KAR 20:270 - Standard Certificate for Teachers of Exceptional Children
704 KAR 20:350 - Standard Certificate for Teaching in the Middle Grades 5-8
704 KAR 20:360 - Standard Certificate for Teaching in the Early Elementary Grades K-4
704 KAR 20:370 - Standard Certificate for Teaching Music Grades K-12

SENATE COMMITTEE ON HEALTH AND WELFARE
HOUSE COMMITTEE ON HEALTH AND WELFARE
Meetings of March 22 and March 23, 1994

Both the House (on Tuesday, March 22) and Senate (on Wednesday, March 23) Standing Committees on Health and Welfare convened separately to consider the listed in the attachment administrative regulations found deficient for technical reasons during the interim quadrennial review process. Each committee approved a motion that subsequent amendments to the deficient regulations corrected the deficiencies; therefore the regulations will not expire on adjournment of the 1994 Regular Session of the General Assembly. The list of the regulations found to be corrected is attached.

In addition, staff has determined the regulations withdrawn by the Cabinet for Human Resources from consideration during the quadrennial review process were subsequently amended and therefore, as provided in KRS Chapter 13A, will not expire on adjournment.

REGULATIONS PREVIOUSLY FOUND DEFICIENT FOR TECHNICAL REASONS BY THE 1993 INTERIM JOINT COMMITTEE ON HEALTH AND WELFARE

Title 900 Cabinet for Human Resources
Chapter 1 - Administration
900 KAR 1:015 Laetrile manufacturing standards
Chapter 2 - Long-Term Care
900 KAR 2:030 Quality of care rating system for long-term care
900 KAR 2:040 Citations and violations criteria and specific acts
Chapter 3 - Personnel Policies
900 KAR 3:010 CHR personnel policies (repealed by 900 KAR 3:011)

Title 901 Office of Administrative Services
Chapter 5 - Vital Statistics
901 KAR 5:020 Delayed birth registration
901 KAR 5:031 REPEALED by 901 KAR 5:032
901 KAR 5:070 Certificate of birth amended
901 KAR 5:080 Delayed registration of deaths
901 KAR 5:090 Burial, transportation and disinterment of dead bodies
Title 902 Department For Health Services
Chapter 47 Hazardous Substances
902 KAR 47:030 Exemptions
Title 904 Department For Social Insurance
Chapter 2 Public Assistance
904 KAR 2:020 Child support
904 KAR 2:022 REPEALED by 904 KAR 2:420
904 KAR 2:046 Adverse action; conditions
904 KAR 2:060 Delegation of power for oaths and affirmations
TITLE 905 DEPARTMENT FOR SOCIAL SERVICES
Chapter 1 Child Welfare
030 Selection and approval of adoptive parents
050 Approval of subsidy
140 Foster care, adoption assistance
150 "Baby Doe" regulation
180 DSS policy and procedures manual
210 Alternative to detention; court resource homes
230 Emergency protective services
300 Standards for child-caring facilities
310 Standards for child-placing agencies
320 Fair hearing
330 Child protective services
Chapter 3 Block Grants
020 Technical eligibility
030 Matching requirements
040 Allocation formula
Chapter 5 Spouse Abuse Shelters and Crisis Centers
040 Standards for spouse abuse shelters
050 Funding requirements for spouse abuse shelters
Chapter 6 Community Action Agencies
010 Standards
040 Termination of funding and hearing procedures
Title 908 Dept for Mental Health/Mental Retardation
Chapter 2 Mental Health
908 KAR 2:010 Local board authority
908 KAR 2:020 Personnel rules of local board
908 KAR 2:030 Board structure and operation; eligibility for state grants
908 KAR 2:050 Formula for allocation of funds

REGULATIONS THE QUADRENNIAL REVIEW SUBCOMMITTEE DID NOT CONSIDER BECAUSE THEY WERE WITHDRAWN FROM CONSIDERATION BY CHR WITH THE STIPULATION THAT THE REGULATIONS WERE TO BE FILED WITH LRC BY JANUARY 15, 1994 AMENDED THROUGH THE REGULAR PROCESS.

Title 902 Department for Health Services
Chapter 10 Sanitation
902 KAR 10:020 Frozen food locker plants
902 KAR 10:050 Refuse bin
902 KAR 10:070 On-site sewage disposal manuals (Repealed By 902 KAR 10:071)
Chapter 11 Medical Laboratories
902 KAR 11:010 Application for licensure; fee
902 KAR 11:020 Reports and standards of health and safety
902 KAR 11:030 Personnel standards
902 KAR 11:040 Specialty test procedures
902 KAR 11:045 Test and specimen records
902 KAR 11:050 Equipment, method, and samples
Chapter 45 Food and Cosmetics
902 KAR 45:020 Shellfish
902 KAR 45:030 Bakery products
902 KAR 45:040 Carbonated beverages
902 KAR 45:050 Food packaging and labeling
902 KAR 45:060 Cosmetic packaging and labeling
Chapter 47 Hazardous Substances
902 KAR 47:010 Definitions
902 KAR 47:020 Labeling and identification standards
902 KAR 47:040 Cellulose insulation
Chapter 50 Milk and Milk Products
902 KAR 50:040 Hauler requirements
902 KAR 50:080 Open dating requirements
902 KAR 50:120 Unpasteurized goat milk
Chapter 55 Controlled Substances
902 KAR 55:065 Return of prescription drugs prohibited, exceptions
902 KAR 55:070 Storage of controlled substances in an emerg. med. kit in long-term care facilities
Title 904 Department For Social Insurance
Chapter 2 Public Assistance
904 KAR 2:140 Supplementary policies for programs administered by DSI (Repealed By 904 KAR 2:141)
904 KAR 2:170 Incorporation by reference of materials relating to the Child Support Program
(Repealed by 904 KAR 2:171)
Title 908 Dept for Mental Health/Mental Retardation
Chapter 2 Mental Health
908 KAR 2:060 MH/MR manual for plan and budget instructions, billing instructions, and reimbursement guidelines

HOUSE COMMITTEE ON APPROPRIATIONS AND REVENUE
Meeting of March 22, 1994

The House Committee on Appropriations and Revenue met Tuesday, March 22, 1994, and reviewed four Cabinet for Human Resources, Department for Medicaid Services administrative regulations. The committee took the following action:

The committee determined the following administrative regulations comply with the provisions of KRS Chapter 13A: 907 KAR 1:470 & E, relating to durable medical equipment services, and 907 KAR 1:472 & E, relating to payments for durable medical equipment. The committee took no action on 907 KAR 1:027, relating to payments for dental services, and 907 KAR 1:040, relating to payments for vision care services. **COMPILER'S NOTE:** The Senate Committee on Appropriations and Revenue did not meet on these administrative regulations; therefore, these administrative regulations became effective on the 30th day following referral by LRC to the appropriate second committees for review.

CUMULATIVE SUPPLEMENT

Locator Index - Effective Dates K2

The Locator Index lists all regulations published in VOLUME 20 of the Administrative Register from July, 1993 through June, 1994. It also lists the page number on which each regulation is published, the effective date of the regulation after it has completed the review process, and other action which may affect the regulation. NOTE: The regulations listed under VOLUME 19 are those regulations that were originally published in the Volume 19 (last year's) issues of the Administrative Register but had not yet gone into effect when the 1993 bound Volumes were published.

KRS Index K18

The KRS Index is a cross-reference of statutes to which regulations relate. These statute numbers are derived from the RELATES TO line of each regulation submitted for publication in VOLUME 20 of the Administrative Register.

Subject Index K33

The Subject Index is a general index of regulations published in VOLUME 20 of the Administrative Register, and is mainly broken down by agency.

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302 KAR 20:040E	2596	4-30-93
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302 KAR 20:055E	2600	4-30-93
Expires		9-29-93
302 KAR 20:065E	2602	4-30-93
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302 KAR 20:070E	2604	4-30-93
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704 KAR 7:120	2539	(See Volume 20)
704 KAR 20:120		
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707 KAR 1:061	2540	(See Volume 20)
707 KAR 1:160	2541	(See Volume 20)
707 KAR 1:170	2543	(See Volume 20)
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707 KAR 1:210	2558	(See Volume 20)
707 KAR 1:220	2561	(See Volume 20)
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707 KAR 1:250	2572	(See Volume 20)
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803 KAR 2:310		
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805 KAR 7:030		
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902 KAR 8:050	2761	(See Volume 20)
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902 KAR 8:080	2768	(See Volume 20)
902 KAR 8:090	2770	(See Volume 20)
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902 KAR 8:120	2774	(See Volume 20)
902 KAR 8:130	2777	9-3-93
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902 KAR 20:004	659	
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908 KAR 2:070	2779	(See Volume 20)

*Statement of Consideration Not Filed by Deadline; Regulation Expired (KRS 13A.280(2))

VOLUME 20

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2 KAR 2:010E	483	8-12-93
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2 KAR 2:020E	1756	12-6-93
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2 KAR 2:030E	1756	12-6-93
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9 KAR 1:040E	736	9-9-93
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11 KAR 3:001E	915	10-4-93
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31 KAR 5:020E	736	9-15-93
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32 KAR 2:160E	1550	10-22-93
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101 KAR 2:100E	483	8-3-93
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101 KAR 3:010E	488	8-3-93
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601 KAR 1:101E	1562	10-22-93
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601 KAR 2:010E	1563	10-22-93
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902 KAR 8:140E	23	5-19-93
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902 KAR 13:090E	1760	12-2-93
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902 KAR 20:004E	24	5-18-93
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902 KAR 100:100E	2601	1-26-94
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905 KAR 1:010E	929	9-23-93
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907 KAR 1:044E	504	7-28-93
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907 KAR 1:045E	505	7-28-93
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907 KAR 1:470E	2610	1-27-94
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907 KAR 1:472E	2611	1-27-94
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907 KAR 1:536E	296	7-7-93
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908 KAR 2:060E	506	7-28-93
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201 KAR 26:230		
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201 KAR 27:005		
Amended	1038	1-10-94
201 KAR 27:007	1429	1-10-94
201 KAR 27:010		
Amended	1039	
As Amended	1785	1-10-94
201 KAR 27:013	1439	
As Amended	1787	1-10-94
201 KAR 27:015		
Amended	1041	
As Amended	1789	1-10-94
201 KAR 27:016		
Repealed	1432	1-10-94
201 KAR 27:017		
Repealed	1432	1-10-94
201 KAR 27:018		
Repealed	1432	1-10-94
201 KAR 27:019		
Repealed	1432	1-10-94
201 KAR 27:020		
Amended	1042	
As Amended	1790	1-10-94
201 KAR 27:025		
Repealed	1432	1-10-94
201 KAR 27:030		
Amended	1043	
As Amended	1790	1-10-94
201 KAR 27:035		
Amended	1045	1-10-94
201 KAR 27:040		
Amended	1045	
As Amended	1791	1-10-94
201 KAR 27:044		
Repealed	1432	1-10-94
201 KAR 27:045		
Amended	1046	1-10-94
201 KAR 27:050		
Amended	1047	
As Amended	1791	1-10-94
201 KAR 27:055		
Amended	1048	1-10-94
201 KAR 27:060		
Amended	1048	1-10-94
201 KAR 27:065		
Repealed	1432	1-10-94
201 KAR 27:070		
Amended	1049	1-10-94
201 KAR 27:080		
Repealed	1432	1-10-94
201 KAR 27:081	1432	1-10-94
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Amended	1050	
Amended	1852	2-10-94
201 KAR 28:020		
Amended	1052	2-10-94
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Amended	1053	
Amended	1853	2-10-94
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Amended	1055	2-10-94
201 KAR 28:070		
Amended	1056	
Amended	1854	2-10-94
201 KAR 28:090		
Amended	1057	
Amended	1855	2-10-94
201 KAR 28:110		
Amended	1058	2-10-94
201 KAR 28:120		
Amended	1059	
Amended	1856	2-10-94
201 KAR 28:130		
Amended	1060	
Amended	1856	2-10-94
201 KAR 28:140		
Amended	1062	
Amended	1857	
As Amended	2325	2-10-94
201 KAR 28:150		
Amended	1063	
Amended	1859	2-10-94
201 KAR 28:160		
Amended	1066	
Amended	1860	
As Amended	2327	2-10-94
201 KAR 30:010		
Amended	2048	3-1-94
201 KAR 30:030		
Amended	2049	3-1-94
201 KAR 30:040		
Amended	2050	3-1-94
201 KAR 30:050		
Amended	2051	3-1-94
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As Amended	1792	1-10-94
301 KAR 1:085		
Amended	592	10-27-93
301 KAR 1:200		
Amended	594	
As Amended	946	10-27-93
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301 KAR 2:044		
Amended	596	10-27-93
301 KAR 2:049	2922	
301 KAR 2:081	2926	
301 KAR 2:140		
Amended	834	
As Amended	1581	11-29-93
301 KAR 2:171		
Amended	599	
As Amended	948	10-27-93
Amended	2992	
301 KAR 2:220		
Amended	1670	2-10-94
301 KAR 2:251	2928	
301 KAR 2:260	679	10-27-93
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Amended	604	
As Amended	952	10-27-93
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Amended	2998	
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Amended	3002	
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Amended	2053	
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Amended	3010	
401 KAR 8:020		
Amended	2058	
Died		2-9-94
Amended	3015	
401 KAR 8:040		
Amended	2062	
Died		2-9-94
Amended	3019	
401 KAR 8:060		
Amended	2064	
Died		2-9-94
Amended	3021	
401 KAR 8:070		
Amended	2068	
Died		2-9-94
Amended	3025	
401 KAR 8:100		
Amended	2080	
Died		2-9-94
Amended	3037	
401 KAR 8:150		
Amended	2083	
Died		2-9-94
Amended	3041	
401 KAR 8:200		
Amended	2087	
Died		2-9-94
Amended	3045	
401 KAR 8:250		
Amended	2093	
Died		2-9-94
Amended	3051	
401 KAR 8:300		
Amended	2100	
Died		2-9-94
Amended	3057	
401 KAR 8:400		
Amended	2113	
Died		2-9-94
Amended	3071	
401 KAR 8:420		
Amended	2119	
Died		2-9-94
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Died	2-9-94	
Amended	3085	
401 KAR 8:500		
Amended	2130	
Died		2-9-94
Amended	3088	
401 KAR 8:600		
Amended	2133	
Died		2-9-94
Amended	3091	
401 KAR 30:010		
Amended	1068	2-10-94
401 KAR 31:010		
Amended	1080	
Amended	1862	2-10-94
401 KAR 31:020		
Amended	1092	2-10-94
401 KAR 31:030		
Amended	1094	2-10-94
401 KAR 31:040		
Amended	1096	
Amended	1874	2-10-94
401 KAR 31:060		
Amended	1110	
Amended	1887	2-10-94
401 KAR 31:120		
Amended	1113	2-10-94
401 KAR 31:160		
Amended	1122	2-10-94
401 KAR 31:170		
Amended	1125	2-10-94
401 KAR 32:010		
Amended	1133	2-10-94
401 KAR 32:020		
Amended	1135	2-10-94
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Amended	1137	
Amended	1889	2-10-94
401 KAR 32:050		
Amended	1139	
Amended	1890	2-10-94
401 KAR 34:020		
Amended	1142	
Amended	1893	2-10-94
401 KAR 34:050		
Amended	1146	2-10-94
401 KAR 34:070		
Amended	1148	
Amended	1896	2-10-94
401 KAR 34:080		
Amended	1154	2-10-94
401 KAR 34:090		
Amended	1157	
Amended	1901	3-14-94
401 KAR 34:100		
Amended	1164	
Amended	1907	3-14-94
401 KAR 34:120		
Amended	1172	
Amended	1914	2-10-94
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Repealed	1154	2-10-94
401 KAR 34:144		
Repealed	1154	2-10-94
401 KAR 34:148		
Repealed	1154	2-10-94
401 KAR 34:152		
Repealed	1154	2-10-94
401 KAR 34:156		
Repealed	1154	2-10-94
401 KAR 34:159		
Repealed	1154	2-10-94
401 KAR 34:162		
Repealed	1154	2-10-94
401 KAR 34:165		
Repealed	1154	2-10-94
401 KAR 34:168		
Repealed	1154	2-10-94
401 KAR 34:172		
Repealed	1154	2-10-94
401 KAR 34:176		
Repealed	1154	2-10-94
401 KAR 34:190		
Amended	1176	
Amended	1918	2-10-94
401 KAR 34:200		
Amended	1182	
Amended	1923	2-10-94
401 KAR 34:210		
Amended	1187	
Amended	1927	2-10-94
401 KAR 34:220		
Amended	1191	
Amended	1930	2-10-94
401 KAR 34:230		
Amended	1196	
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Amended	1200	
Amended	1938	2-10-94
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Amended	1940	2-10-94
401 KAR 34:280	1441	
Amended	1947	2-10-94
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Amended	1203	2-10-94
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Amended	1205	
Amended	1955	2-10-94
401 KAR 35:050		
Amended	1209	2-10-94
401 KAR 35:060		
Amended	1212	
Amended	1957	2-10-94
401 KAR 35:070		
Amended	1215	
Amended	1960	2-10-94
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Amended	1225	
Amended	1966	3-14-94

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401 KAR 35:120		
Amended	1238	
Amended	1978	2-10-94
401 KAR 35:190		
Amended	1242	
Amended	1981	2-10-94
401 KAR 35:200		
Amended	1249	
Amended	1987	2-10-94
401 KAR 35:210		
Amended	1252	2-10-94
401 KAR 35:220		
Amended	1254	
Amended	1989	2-10-94
401 KAR 35:230		
Amended	1257	
Amended	1992	2-10-94
401 KAR 35:240		
Amended	1261	
Amended	1995	2-10-94
401 KAR 35:250		
Amended	1262	2-10-94
401 KAR 35:275	1451	
Amended	1996	2-10-94
401 KAR 35:280	1457	2-10-94
401 KAR 35:285	1463	
Amended	2001	2-10-94
401 KAR 36:020	1466	2-10-94
401 KAR 36:025	1487	2-10-94
401 KAR 36:030		
Amended	1264	2-10-94
401 KAR 36:040		
Repealed	1466	2-10-94
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Amended	1266	
Amended	2004	2-10-94
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Amended	1269	
Amended	2006	2-10-94
401 KAR 37:030		
Amended	1278	2-10-94
401 KAR 37:040		
Amended	1283	2-10-94
401 KAR 37:050		
Amended	1339	2-10-94
401 KAR 38:010		
Amended	1341	2-10-94
401 KAR 38:020		
Amended	1343	
Amended	2014	2-10-94
401 KAR 38:040		
Amended	1346	
Amended	2016	2-10-94
401 KAR 38:050		
Amended	1351	
Amended	2020	2-10-94
401 KAR 38:060		
Amended	1355	
Amended	2023	2-10-94
401 KAR 38:090		
Amended	1361	
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401 KAR 38:170		
Amended	1365	
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401 KAR 38:180		
Amended	1367	
Amended	2033	2-10-94
401 KAR 38:210		
Amended	1368	
Amended	2034	2-10-94
401 KAR 38:240	1499	2-10-94
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Amended	2035	2-10-94
401 KAR 38:270	1505	
Amended	2036	2-10-94
401 KAR 42:060		
Amended	2663	
Amended	2988	
401 KAR 42:070		
Amended	2665	
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Amended	2989	
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401 KAR 50:035		
Amended	607	
Amended	982	
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401 KAR 50:038	695	
Amended	998	
As Amended	1599	11-29-93
401 KAR 57:041	164	
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401 KAR 57:061	698	
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401 KAR 58:001	166	
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401 KAR 58:020	168	
Amended	522	
Withdrawn		9-29-93
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Repealed	190	9-22-93
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Repealed	192	9-22-93
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Repealed	193	9-22-93
401 KAR 59:052		
Repealed	195	9-22-93
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Repealed	197	9-22-93
401 KAR 59:061		
Repealed	198	9-22-93
401 KAR 59:066		
Repealed	200	9-22-93
401 KAR 59:068		
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Repealed	208	9-22-93
401 KAR 59:150		
Repealed	210	9-22-93
401 KAR 59:166		
Repealed	211	9-22-93
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Repealed	213	9-22-93
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Repealed	220	9-22-93
401 KAR 59:251		
Repealed	216	9-22-93
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Repealed	218	9-22-93
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401 KAR 59:455	192	9-22-93
401 KAR 59:465	193	9-22-93
401 KAR 59:485	195	9-22-93
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401 KAR 59:585	216	9-22-93
401 KAR 59:590	218	9-22-93
401 KAR 59:595	220	9-22-93
401 KAR 63:036	221	
Amended	540	
Withdrawn		9-29-93
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Amended	817	
As Amended	952	
As Amended	1603	11-29-93
402 KAR 2:030	702	
Amended	1004	
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Amended	1006	
As Amended	1612	
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Amended	1009	
As Amended	1615	12-17-93
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Amended	1619	
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As Amended	1794	12-17-93
420 KAR 1:030	879	12-17-93
420 KAR 1:040	881	
Amended	1621	12-17-93
420 KAR 1:050	883	
Amended	1622	12-17-93
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As Amended	2624	3-14-94
501 KAR 3:120		
Amended	2136	
As Amended	2625	3-14-94
501 KAR 6:020		
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Amended	390	10-13-93
Amended	1370	1-10-94
Amended	2138	4-11-94
Amended	2667	
Amended	3093	
501 KAR 6:030		
Amended	141	9-3-93
Amended	392	10-13-93
Amended	624	11-8-93
Amended	837	12-6-93
Amended	1372	1-10-94
Amended	1676	2-10-94
Amended	2358	4-11-94
Amended	2669	
Amended	2886	
Amended	3095	
501 KAR 6:040		
Amended	839	12-6-93
Amended	1677	2-10-94
Amended	2888	
501 KAR 6:050		
Amended	626	11-8-93
Amended	1374	1-10-94
Amended	2140	3-14-94
Amended	2360	
Amended	3097	
501 KAR 6:060		
Amended	394	10-13-93
Amended	627	11-8-93
Amended	1375	1-10-94
Amended	1679	2-10-94
Amended	2671	4-11-94
Amended	3098	
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Amended	3099	
501 KAR 6:080		
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Amended	2889	
501 KAR 6:140		
Amended	144	9-3-93
Amended	2890	
Amended	3103	
501 KAR 6:150		
Amended	395	10-13-93
600 KAR 1:100	227	
Amended	545	10-5-93
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Amended	397	
As Amended	745	10-5-93
600 KAR 3:020		
Amended	2672	
600 KAR 4:010		
Amended	2892	
600 KAR 4:020		
Amended	2896	
601 KAR 1:005		
Amended	840	11-16-93
601 KAR 1:025		
Amended	1680	
As Amended	2329	2-10-94
601 KAR 1:040		
Amended	1381	2-10-94
601 KAR 1:100		
Repealed	2330	2-10-94
601 KAR 1:101	1506	
As Amended	2330	2-10-94
601 KAR 2:010		
Amended	1384	2-10-94
601 KAR 9:010		
Amended	629	11-8-93
601 KAR 9:012		
Amended	414	10-5-93
601 KAR 9:015		
Amended	415	10-5-93
601 KAR 9:020		
Amended	416	10-5-93
601 KAR 9:040		
Amended	1386	2-10-94
601 KAR 9:060		
Amended	417	10-5-93
601 KAR 9:065		
Amended	417	10-5-93
601 KAR 9:085		
Amended	418	
As Amended	761	10-5-93
601 KAR 9:095		
Amended	419	10-5-93
601 KAR 9:150	2929	
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601 KAR 11:030		
Amended	2142	
As Amended	2775	4-11-94
601 KAR 11:040		
Amended	145	9-3-93
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601 KAR 13:031	885	11-16-93
601 KAR 13:050		
Repealed	885	11-16-93
601 KAR 14:020	1508	
Amended	2037	2-10-94
602 KAR 50:010		
Amended	148	9-3-93
602 KAR 50:020		
Expired		4-15-94
603 KAR 3:060		
Repealed	962	10-5-93
603 KAR 3:080	236	
As Amended	962	10-5-93
603 KAR 4:035		
Amended	3104	
603 KAR 5:230		
Amended	313	9-3-93
603 KAR 9:010		
Amended	2673	
605 KAR 1:200	3153	
701 KAR 5:050		
Amended	1683	3-9-94
701 KAR 5:110	886	
As Amended	2973	
702 KAR 3:130		
Amended	1684	2-2-94
702 KAR 3:190		
Amended	150	9-2-93
702 KAR 3:201		
Repealed	241	9-2-93
702 KAR 3:265	2933	
702 KAR 4:010		
Repealed	2626	3-9-94
702 KAR 4:020		
Repealed	2626	3-9-94
702 KAR 4:030		
Repealed	2626	3-9-94
702 KAR 4:040		
Repealed	2626	3-9-94
702 KAR 4:160	1732	
As Amended	2626	3-9-94
702 KAR 5:150		
Amended	2361	3-23-94
702 KAR 7:065		
Amended	2900	
703 KAR 3:060	465	
As Amended	966	11-4-93
703 KAR 3:205	241	9-2-93
703 KAR 4:070	2456	
Amended	2865	
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704 KAR 3:285		
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Amended	2350	3-9-94

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704 KAR 3:450		
Expired		4-15-94
704 KAR 7:056		
Expired		4-15-94
704 KAR 7:090		
Amended	420	
As Amended	762	10-7-93
704 KAR 7:110		
Expired		4-15-94
704 KAR 7:120		
Amended	98	
As Amended	764	10-7-93
704 KAR 20:005		
Amended	630	11-4-93
704 KAR 20:065		
Amended	2362	3-23-94
704 KAR 20:085		
Amended	2363	3-23-94
704 KAR 20:120		
Amended	423	
As Amended	765	10-7-93
704 KAR 20:150		
Amended	2364	3-23-94
704 KAR 20:245		
Amended	2901	
704 KAR 20:250		
Amended	2902	
704 KAR 20:251	1738	2-2-94
704 KAR 20:270		
Amended	2365	3-23-94
704 KAR 20:350		
Amended	2366	3-23-94
704 KAR 20:360		
Amended	2367	3-23-94
704 KAR 20:370		
Amended	2367	3-23-94
704 KAR 20:380		
Amended	2903	
704 KAR 20:390		
Amended	2904	
704 KAR 20:400		
Amended	2906	
704 KAR 20:410		
Amended	2907	
704 KAR 20:420		
Amended	2908	
704 KAR 20:470		
Amended	631	
Withdrawn		10-6-93
704 KAR 20:585		
Amended	633	11-4-93
704 KAR 20:620	711	
Amended	1010	
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