

KENTUCKY DIVISION OF WATER

ADMINISTRATIVE REGULATIONS

(Informational Copy)

401 KAR CHAPTER 5 Wastewater Regulations



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TITLE 401, KENTUCKY ADMINISTRATIVE REGULATIONS

CHAPTER 5

WATER QUALITY

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401 KAR 5:002. Definitions for 401 KAR Chapter 5.

RELATES TO: KRS 224.01-010, 224.01-070, 224.01-400, 224.70-100, 224.70-120, 224.99-010, 40 C.F.R. Parts 35, 116, 130, 131, 136, 401-471, 15 U.S.C. 2601 et seq., 33 U.S.C. 1251 et seq., 42 U.S.C. 6901 et seq., 7401 et seq., 9601, 11023

STATUTORY AUTHORITY: KRS 224.10-100, 224.16-050, 224.16-060, 224.70-110, 40 C.F.R. Parts 116, 130, 131, 136, 401-471, 15 U.S.C. 2601 et seq., 33 U.S.C. 1251 et seq.

NECESSITY, FUNCTION, AND CONFORMITY: KRS 224.10-100 authorizes the Natural Resources and Environmental Protection Cabinet to promulgate administrative regulations for the prevention, abatement, and control of all water pollution. This administrative regulation and 401 KAR 5:026, 401 KAR 5:029, 401 KAR 5:030, and 401 KAR 5:031 establish procedures to protect the surface waters of the commonwealth, and thus protect water resources. 401 KAR Chapter 5 establishes administrative regulations for the issuance of permits to construct, modify, and operate facilities which discharge pollutants to waters of the commonwealth. This administrative regulation establishes definitions for terms and acronyms, abbreviations, and symbols used in 401 KAR Chapter 5, relating to the issuance of those permits. If applicable, these definitions are the same as definitions used for the federal National Pollutant Discharge Elimination System program in 40 C.F.R. Parts 116, 136, 401 - 471, and the planning requirements in 40 C.F.R. Part 130. There are no definitions that are more stringent than federal requirements.

Section 1. Definitions. (1) "Act" means the Federal Water Pollution Control Act, also known as the Clean Water Act, as amended, 33 U.S.C. 1251, et seq.

(2) "Activity" means, for purposes of 401 KAR 5:050 to 401 KAR 5:080 and if used in conjunction with facility, any KPDES point source, or any other activity, including land or appurtenances thereto, that is subject to regulation under the KPDES program.

(3) "Acute-chronic ratio" means the ratio of the acute toxicity, expressed as an LC₅₀, of an effluent or a toxic substance, to its chronic toxicity. It is used as a factor to estimate chronic toxicity from acute toxicity data.

(4) "Acute criteria" means the highest instream concentration of a toxic substance or an effluent to which an organism can be exposed for a brief period of time without causing an unacceptable harmful effect.

(5) "Acute toxicity" means lethality or other harmful effect sustained by either an indigenous aquatic organism or a representative indicator organism used in a toxicity test, due to a short-term exposure, of ninety-six (96) hours or less, to a specific toxic substance or mixture of toxic substances.

(6) "Acute toxicity unit" means the reciprocal of the effluent dilution that causes the acute effect, or LC₅₀, by the end of the acute exposure period.

(7) "Administrator" means the administrator of the United States Environmental Protection Agency, or the administrator's authorized representative.

(8) "Adversely affect" or "adversely change" means, for purposes of 401 KAR 5:026 through 401 KAR 5:031, to alter or change the community structure or function, to reduce the number or proportion of sensitive species, or to increase the number or proportion of pollution tolerant aquatic species so that aquatic life use support or aquatic habitat is impaired.

(9) "Agricultural wastes handling system" means a no-discharge structure or equipment that conveys, stores, or treats manure from an animal feeding operation prior to land application.

(10) "Alternative effluent limitations" means all effluent limitations or standards of performance for the control of the thermal component of any discharge which are established under 401 KAR 5:055.

(11) "Animal feeding operation" means, for purposes of 401 KAR 5:005 and 401 KAR 5:050 to 401 KAR 5:080, a lot or facility, other than an aquatic animal production facility, where the following conditions are met:

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

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

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

(12) "Animal unit" means, for purposes of 401 KAR 5:005 and 401 KAR 5:050 to 401 KAR 5:080, the unit of measurement for any animal feeding operation, calculated according to the following equation:

$$\text{Animal Unit} = (N_1 \times 1.0) + (N_2 \times 1.4) + (N_3 \times 0.4) + (N_4 \times 0.1) + (N_5 \times 2.0)$$

Where:

N_1 = Number of slaughter and feeder cattle;

N_2 = Number of mature dairy cattle;

N_3 = Number of swine weighing over twenty-five (25) kg;

N_4 = Number of sheep; and

N_5 = Number of horses.

(13) "Applicable standards and limitations" means all standards and limitations to which a discharge or a related activity is subject under KRS Chapter 224, and administrative regulations promulgated pursuant thereto, including effluent limitations, water quality standards, standards of performance, and toxic effluent standards.

(14) "Application" means the document submitted by an applicant to the cabinet which provides information used by the cabinet in the issuance of a permit or approval. The application may have several different forms, depending on the type of permit which is requested. The specific forms are required in the applicable administrative regulation.

(15) "Approved POTW pretreatment program", "POTW pretreatment program", "pretreatment program", or "program" means a program administered by a POTW that meets the criteria established in 401 KAR 5:057 and which has been approved by the cabinet.

(16) "Aquaculture project" means a defined managed water area which uses discharges of pollutants into that designated area for the maintenance or production of harvestable freshwater plants and animals.

(17) "Area of review" means a fixed radius around a facility of not less than one-fourth (1/4) mile.

(18) "Arithmetic mean for seven (7) consecutive days" means the average of a minimum of two (2) samples taken on separate days in a seven (7) day period.

(19) "Arithmetic mean for thirty (30) consecutive days" means the average of a minimum of three (3) samples collected in separate calendar weeks during a period of thirty (30) consecutive days with a minimum of twenty (20) days occurring between the first and last sample days.

(20) "Association of Boards of Certification" or "ABC" means that organization which serves as an information center for certification activities, recommends minimum standards and guidelines for classification of water supply and wastewater systems, and assists authorities in establishing new certification programs and upgrading existing programs.

(21) "Available" means located within the planning area and:

(a) Located within one and zero-tenths (1.0) mile of a regional facility for WWTPs with an average daily design capacity larger than 1,000 gpd. The distance shall be measured along the most feasible route of connection to a point where the downstream sewer has capacity to carry the additional flow; or

(b) For new construction if the distance is one and zero-tenths (1.0) mile or more, where it is cost-effective to connect as determined by a twenty (20) year present worth cost analysis.

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

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

(24) "Balanced indigenous community" means a biotic community typically characterized by diversity, the capacity to sustain itself through cyclic seasonal changes, presence of necessary

food chain species, and a lack of domination by pollution tolerant species. The community may include historically nonnative species introduced in connection with a program of wildlife management and species whose presence or abundance results from substantial, irreversible environmental modification. Normally, however, such a community does not include species whose presence or abundance is attributable to the introduction of pollutants that will be eliminated by compliance of all sources with 401 KAR 5:065, and may not include species whose presence or abundance is attributable to alternative effluent limitations imposed pursuant to 401 KAR 5:055.

(25) "Barrel" means forty-two (42) U.S. gallons.

(26) "BAT" means best available technology economically achievable.

(27) "BCT" means best conventional pollutant control technology.

(28) "Best management practices" or "BMPs" means, for purposes other than agriculture operations, schedules of activities, prohibitions of practices, maintenance procedures, and other management practices to prevent or reduce the pollution of waters of the commonwealth. BMPs also include treatment requirements, operating procedures, practices to control site run-off, pollution of surface water and groundwater from nonpoint sources, spillage or leaks, sludge or waste disposal, or drainage from raw material storage.

(29) "Biochemical oxygen demand", "BOD", or "BOD₅" means the amount of oxygen required to stabilize biodegradable organic matter under aerobic conditions within a five (5) day period. Other time periods may be measured, and if so, are indicated where the term is used.

(30) "BMPs" means best management practices.

(31) "Board" means the Kentucky Board of Certification of Wastewater System Operators, as established by KRS 224.73-110.

(32) "BOD" or "BOD₅" means biochemical oxygen demand.

(33) "BPT" means best practicable technology currently available.

(34) "Building drain" means that part of the lowest piping of the drainage system which receives the discharge from plumbing fixtures and other interior drainage pipes and conveys its discharge to the building sewer which begins two (2) feet outside the building wall.

(35) "Building sewer" means that part of the drainage system which extends from the end of the building drain, beginning two (2) feet outside the building wall, and conveys its discharge to a downstream manhole, sewer line, pump station, or sewage disposal system.

(36) "Bypass" means the intentional diversion of sewage or waste-streams from a portion of a facility or industrial user's treatment facility.

(37) "C" means degrees Celsius.

(38) "CAH" means cold water aquatic habitat.

(39) "Carbonaceous biochemical oxygen demand" or "CBOD" means BOD, not including the nitrogenous oxygen demand of the wastewater.

(40) "Cation exchange capacity" or "CEC" means the measure of the ability of a soil to retain cations in a form available for uptake by plants. CEC is expressed in milliequivalents per 100 grams of soil.

(41) "CBOD" means carbonaceous biochemical oxygen demand.

(42) "CEC" means cation exchange capacity.

(43) "CERCLA" means the Comprehensive Environmental Response, Compensation, and Liability Act, as amended at 42 U.S.C. 9601 et seq.

(44) "Certificate" means the certificate of competency issued by the secretary or the secretary's designated agent stating that the operator has met the requirements for the specified operator classification as set by 401 KAR 5:010.

(45) "Certified operator" means a wastewater operator employed at a wastewater system who has primary responsibility for the system or a portion thereof which may affect the performance of the system and who holds a certificate of competency meeting the requirements of 401 KAR 5:010.

(46) "cfm" means cubic feet per minute.

(47) "C.F.R." means Code of Federal Regulations.

(48) "Chronic criteria" means the highest instream concentration of a toxic substance or an effluent to which organisms can be exposed indefinitely without causing an unacceptable harmful effect.

(49) "Chronic toxicity" means lethality, reduced growth or reproduction or other harmful effect sustained by either indigenous aquatic organisms or representative indicator organisms used in toxicity tests due to long-term exposures, relative to the life span of the organisms or a significant portion of their life span, to toxic substances or mixtures of toxic substances.

(50) "Chronic toxicity unit" means the reciprocal of the effluent dilution that causes twenty-five (25) percent inhibition of growth or reproduction to the test organisms by the end of the chronic exposure period.

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

(52) "Coal remining operation" means a surface coal mining operation which begins after July 11, 1990, at a site on which a coal mining operation was conducted before August 3, 1977. It also means a surface coal mining operation existing on July 11, 1990, which receives a permit revision from the Department for Surface Mining Reclamation and Enforcement (DSMRE) in accordance with 405 KAR 8:010, Section 20 for a site on which a coal mining operation was conducted before August 3, 1977.

(53) "COD" means chemical oxygen demand.

(54) "Cold water aquatic habitat" or "CAH" means surface waters and associated substrate that will support indigenous aquatic life or self-sustaining or reproducing trout populations on a year-round basis.

(55) "Combined sewer" or "combined sewer line" means a sewer or sewer line designed to carry storm water runoff as well as sanitary wastewater.

(56) "Combined sewer overflow" or "CSO" means the flow from a combined sewer in excess of the interceptor or regulator capacity that is discharged into a receiving water without going to a POTW.

(57) "Composite sample" means:

(a) Not less than four (4) effluent portions collected at regular intervals over a period of eight (8) hours and combined in proportion to flow;

(b) Not less than four (4) combined equal volume effluent portions collected over a period of eight (8) hours at intervals proportional to flow;

(c) An effluent portion collected continuously over a period of twenty-four (24) hours at a rate proportional to the flow; or

(d) An effluent portion consisting of a minimum of four (4) combined equal volume grab samples taken approximately two (2) hours apart.

(58) "Concentrated animal feeding operation" means, for purposes of 401 KAR 5:005 and 401 KAR 5:050 to 401 KAR 5:080, an animal feeding operation where:

(a) More than the following numbers of indicated animals are confined:

1. 1,000 slaughter and feeder cattle;

2. 700 mature dairy cattle, whether milked or dry cows;

3. 2,500 swine each weighing over twenty-five (25) kilograms (approximately fifty-five (55) pounds);

4. 500 horses;

5. 10,000 sheep or lambs;

6. 55,000 turkeys;

7. 100,000 laying hens or broilers if the facility has continuous overflow watering;

8. 30,000 laying hens or broilers if the facility has a liquid manure system;

9. 5,000 ducks; or

10. 1,000 animal units; or

(b)1. More than the following number and types of animals are confined:

a. 300 slaughter or feeder cattle;

b. 200 mature dairy cattle, whether milked or dry cows;

c. 750 swine each weighing over twenty-five (25) kilograms (approximately fifty-five (55) pounds);

d. 150 horses;

e. 3,000 sheep or lambs;

f. 16,500 turkeys;

g. 30,000 laying hens or broilers if the facility has continuous overflow watering;

- h. 9,000 laying hens or broilers if the facility has a liquid manure system;
 - i. 1,500 ducks; or
 - j. 300 animal units; and
2. Either pollutants are discharged into navigable waters through a manmade ditch, flushing system or other similar manmade device; or pollutants are discharged directly into waters of the commonwealth which originate outside of and pass over, across, or through the facility or otherwise come into direct contact with the animals confined in the operation.
- (c) If an animal feeding operation discharges only during a twenty-five (25) year, twenty-four (24) hour storm event or greater, the animal feeding operation shall not be considered to be a concentrated animal feeding operation.
- (59) "Concentrated aquatic animal production facility" means a hatchery, fish farm, or other facility which meets the criteria in 401 KAR 5:060 or which the cabinet designates under 401 KAR 5:060.
- (60) "Consolidation sewer" means a conduit, without direct sanitary connections, which intercepts and transports combined sewer storm overflows to a treatment facility or a single combined sewer overflow point.
- (61) "Continuous discharge" means a discharge which occurs without interruption throughout the operating hours of the facility, except for infrequent shutdowns for maintenance, process changes, or other similar activities.
- (62) "Control authority" means the POTW if the POTW has an approved pretreatment program or the cabinet if the POTW does not have an approved pretreatment program.
- (63) "Conventional domestic water supply treatment" means or includes coagulation, sedimentation, filtration, and chlorination.
- (64) "Conventional pollutant" means biochemical oxygen demand (BOD), chemical oxygen demand (COD), total organic carbon (TOC), total suspended solids (TSS), ammonia (as N), bromide, chlorine (total residual), color, fecal coliform, fluoride, nitrate, kjeldahl nitrogen, oil and grease, and phosphorus.
- (65) "Copermittee" means a permittee to a KPDES permit that is only responsible for the permit conditions relating to the discharge for which it is the operator.
- (66) "Criteria" means specific concentrations or ranges of values, or narrative statements of water constituents which represent a quality of water expected to result in an aquatic ecosystem protective of designated uses of surface waters. Criteria are derived to protect legitimate uses such as aquatic life, domestic water supply, and recreation and to protect human health.
- (67) "CSO" means combined sewer overflow.
- (68) "CWA" means the Clean Water Act, as amended.
- (69) "Daily discharge" means the discharge of a pollutant measured during a calendar day or any twenty-four (24) hour period that reasonably represents the calendar day for purposes of sampling. For pollutants with limitations expressed in units of mass, the daily discharge is calculated as the total mass of the pollutant discharged over the day. For pollutants with limitations expressed in other units of measurement, the daily discharge is calculated as the average measurement of the pollutant over the day.
- (70) "Date of program approval" means September 30, 1983, the effective date of the administrator's approval of Kentucky's KPDES regulatory program under CWA Section 402, 33 U.S.C. Section 1342.
- (71) "Day" means a twenty-four (24) hour period.
- (72) "Designated project area" means the portions of the waters of the commonwealth within which the permittee or permit applicant plans to confine the cultivated species, using a method or plan of operation, including, but not limited to, physical confinement, which, on the basis of reliable scientific evidence, is expected to ensure that specific individual organisms comprising an aquaculture crop will enjoy increased growth attributable to the discharge of pollutants, and be harvested within a defined geographic area.
- (73) "Direct discharge" means the discharge of a pollutant into waters of the commonwealth if the discharge is not included under the definition of indirect discharger, but does not include a discharge of animal waste onto land by land application if the discharge does not reach the waters of the commonwealth.

(74) "Disappearing stream" means an intermittent or perennial surface stream that terminates and drains underground through caves, fractures, or swallets in the stream bed.

(75) "Discharge" or "discharge of a pollutant" means any addition of any pollutant or combination of pollutants to waters of the commonwealth from any point source. This definition includes, but is not limited to, additions of pollutants into waters of the commonwealth from surface run-off which is collected or channeled by human effort; discharges through pipes, sewers or other conveyances whether publicly or privately owned which do not lead to a treatment works; and discharges through pipes, sewers, or other conveyances leading into privately owned treatment works.

(76) "Discharge monitoring report" or "DMR" means the report including any subsequent additions, revisions, or modifications, for the reporting of self-monitoring results by KPDES permittees.

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

(78) "Division" means the Kentucky Division of Water, within the Department for Environmental Protection, Natural Resources and Environmental Protection Cabinet.

(79) "DMR" means discharge monitoring report.

(80) "Domestic" means relating to household wastes or other similar wastes. It is used to distinguish municipal, household, or commercial water or wastewater services from industrial water or wastewater services.

(81) "Domestic sewage" means sewage devoid of industrial or other wastes and which is typical of waste received from residential facilities. It may include wastes from commercial developments, schools, restaurants, and other similar developments.

(82) "Domestic water supply" or "DWS" means surface waters that with conventional treatment are suitable for human consumption through a public water system as defined in 401 KAR 8:010, culinary purposes, or for use in any food or beverage processing industry; and meet state and federal regulations under the Safe Drinking Water Act, as amended, 42 U.S.C. 300f - 300j.

(83) "Draft permit" means a document prepared under 401 KAR 5:075 indicating the cabinet's preliminary decision to issue or deny, modify, revoke and reissue, revoke, or reissue a permit. It includes a notice of intent to revoke a permit and a notice of intent to deny a permit as provided in 401 KAR 5:075. It does not include a proposed permit; a denial of a request for modification, revocation, and reissuance; or a denial of a request for revocation.

(84) "Drilling pit" means an earthen excavation for the collection of fluids associated with the drilling, construction, completion, acidizing, or fracturing of an oil or gas well.

(85) "Dry gas well" means a gas well producing one (1) barrel or less of produced water at maximum production conditions during a given twenty-four (24) hour period.

(86) "DWS" means domestic water supply.

(87) "Effluent ditch" means that portion of a treatment system which is a discrete, person-made conveyance, either totally owned, leased or under valid easement by the discharger, which transports a discharge to surface waters of the commonwealth.

(88) "Effluent lagoon" means a treatment lagoon.

(89) "Effluent limitation" is defined at KRS 224.01-010(12).

(90) "Effluent limitations guideline" means a federal regulation published by the administrator under CWA Section 304(b), 33 U.S.C. Section 1314(b) to adopt or revise technology-based effluent limitations.

(91) "Engineer" is defined by KRS 322.010(2).

(92) "Enhanced recovery well" means a well used for the injection of fluids to improve or maintain reservoir productivity.

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

(94) "Epilimnion" means the thermally homogeneous water layer overlying the metalimnion of a thermally stratified lake or reservoir.

(95) "E. coli" or "Escherichia coli" means an aerobic and facultative anaerobic gram negative, nonspore forming, rod shaped bacterium that can grow at forty-four and five tenths (44.5)

degrees Celsius, that is ortho-nitrophenyl-B-D-galactopyranoside (ONPG) positive, and Methylumbelliferyl glucuronide (MUG) positive. It is a member of the indigenous fecal flora of warm-blooded animals.

(96) "Establishment" means a manufacturing or industrial works or facility in the operation of which sewage, industrial wastes, or other wastes are generated or stored including but not limited to an industrial plant, mill, factory, tannery, paper or pulp mill, mine or mineral processing or producing facility, quarry, or oil refinery.

(97) "Eutrophication" means the enrichment of a surface water by the discharge or addition of a nutrient.

(98) "Exceptional water" means a surface water categorized as exceptional by the cabinet pursuant to 401 KAR 5:030.

(99) "Excessive infiltration" means a high groundwater period induced peak infiltration rate which results in operational problems and permit violations at the WWTP or results in recurring overflows from the sewer system or the WWTP. It does not include overflows which result from blockages, power failures or other temporary mechanical failures, or flood waters entering the sewer system directly. For combined sewer systems, infiltration shall not be considered to be excessive if an overflow occurs at a KPDES permitted overflow point that is in compliance with its permit requirements.

(100) "Excessive inflow" means a rainfall induced peak inflow rate which results in operational problems and permit violations at the WWTP or results in recurring overflows from the sewer system or the WWTP. For combined sewer systems, inflow shall not be considered to be excessive if an overflow occurs at a KPDES permitted overflow point that is in compliance with its permit requirements. It does not include overflows which result from blockages, power failures or other temporary mechanical failures, or flood waters entering the sewer system directly.

(101) "Existing source" means, for purposes of 401 KAR 5:080, any source which is not a new source or a new discharger.

(102) "Existing use" means a legitimate use being attained in or on a surface water of the commonwealth on or after November 28, 1975, irrespective of its use designation.

(103) "Expanded discharge" means an increase in pollutant loading of twenty (20) percent or greater.

(104) " F" means degrees Fahrenheit.

(105) "Facility" means:

(a) For purposes of 401 KAR 5:005 or 401 KAR 5:006, a sewage system as defined in KRS 224.01-010 except for septic tanks, pretreatment facilities regulated by an approved pretreatment program or intermunicipal agreement, and disposal wells as used in 401 KAR 5:090;

(b) For purposes of 401 KAR 5:050 to 401 KAR 5:080 and if used in conjunction with activity, any KPDES point source, or any other facility, including land or appurtenances thereto, that is subject to regulation under the KPDES program; or

(c) For purposes of 401 KAR 5:090, any well, tank, pit, structure, appurtenance or improvement used in the exploration, drilling, or production of oil or gas or used for treating, storing, or disposing of produced water.

(106) "Facilities or equipment" means buildings, structures, process or production equipment, or machinery which form a permanent part of the new source and which will be used in its operation, if these facilities or equipment are of such value as to represent a substantial commitment to construct. It excludes facilities or equipment used in connection with feasibility, engineering, and design studies regarding the source or water pollution treatment for the source.

(107) "Fecal coliform" means the portion of the coliform group of bacteria which are present in the intestinal tract or the feces of warm-blooded animals. It generally includes organisms which are capable of producing gas from lactose broth in a suitable culture medium within twenty-four (24) hours at forty-four and five-tenths (44.5) degrees plus or minus two-tenths (0.2) degrees C.

(108) "Filter strip" means a strip or area of vegetation for removing sediment, organic material, and other pollutants from runoff and wastewater.

(109) "Flood relief sewer" means a conduit, without direct sanitary connections, that is used to transport sewage when a flood control structure or overflow detention basin is in operation.

(110) "Force main" means a conduit used to transport sewage from a pump discharge to a sewer line, pump station, or WWTP.

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(111) "Gas" means, for purposes of 401 KAR 5:090, all natural gas, including casinghead gas, and all other hydrocarbons not defined as oil.

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

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

(114) "GPD" or "gpd" means gallons per day.

(115) "Grab sample" means:

(a) For purposes of 401 KAR 5:045, a single instantaneous portion of the effluent; or

(b) For purposes of 401 KAR 5:050 to 401 KAR 5:080, a single effluent portion which is not a twenty-four (24) hour composite sample.

(116) "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, and solution conduits.

(117) "Harmonic mean flow" means the reciprocal of the mean of the reciprocal daily flow values.

(118) "Hazardous substance" means, for purposes of 401 KAR 5:050 to 401 KAR 5:080, any pollutant designated under 40 C.F.R. Part 116.

(119) "High quality water" means a surface water categorized as high quality by the cabinet pursuant to 401 KAR 5:030.

(120) "Holding pit" means an earthen excavated depression which receives and stores produced water at a facility.

(121) "Hydraulic gradient" means the vertical distance measured from the surface of the lagoon, one (1) foot below the spillway, to the bottom of the liner, divided by the thickness of the liner.

(122) "Hypolimnion" means the lower cold region of a thermally stratified lake or reservoir that extends below the metalimnion to the bottom.

(123) "IC₂₅" means an inhibition concentration of twenty-five (25) percent.

(124) "Illicit discharge" means any discharge to a municipal separate storm sewer that is not composed entirely of storm water except discharges pursuant to a KPDES permit, other than the KPDES permit for discharges from the municipal separate storm sewer, and discharges resulting from fire fighting activities.

(125) "Impact" means, for the purpose of 401 KAR 5:026 through 401 KAR 5:031, a change in the chemical, physical, or biological quality or condition of a surface water.

(126) "Impairment" means, for the purpose of 401 KAR 5:026 through 401 KAR 5:031, a detrimental impact to a surface water that prevents attainment of a designated use.

(127) "Inactive mining operations" means mining sites that are not being actively mined, but which have an identifiable owner or operator. Inactive mining operations do not include sites where mining claims are being maintained prior to disturbances associated with the extraction, beneficiation, or processing of mined materials, nor sites where minimal activities are undertaken for the sole purpose of maintaining a mining claim.

(128) "Incorporated place" means a city, town, township, or village that is created under the Kentucky Revised Statutes.

(129) "Indigenous aquatic life" means naturally occurring aquatic organisms including but not limited to bacteria, fungi, algae, aquatic insects, other aquatic invertebrates, reptiles, amphibians, and fishes. Under some natural conditions one (1) or more of the above groups may be absent from a surface water.

(130) "Indirect discharge" or "discharge" means, for purposes of 401 KAR 5:057, the introduction of pollutants into a POTW from a nondomestic industrial source regulated by the program.

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

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

(133) "Industrial wastes" means any liquid or other waste resulting from a process of industry, manufacture, trade, or business; or from the depletion of a natural resource.

(134) "Industrial wastewater treatment plant" or "IWWTP" means a privately owned WWTP with more than ninety (90) percent of the influent flow from sources of industrial waste.

(135) "Infiltration" means water other than wastewater that enters a sewer system from the ground through means such as defective pipes, pipe joints, connections, or manholes.

(136) "Inflow" means water other than wastewater that enters a sewer system from means such as roof leaders, yard drains, area drains, drains from springs or swampy areas, openings in manhole covers, cross connections with storm sewers, catch basins, cooling towers, storm waters, source runoff, street wash waters, drainage, or any other source which directs rainwater into the sewer system.

(137) "Inhibition concentration of twenty-five (25) percent" or "IC₂₅" means the concentration that is determined by a linear interpolation method for estimating the concentration at which a twenty-five (25) percent reduction is shown in reproduction or growth in test organisms, and which statistically approximates the concentration at which no unacceptable chronic effect is observed.

(138) "Injection" means a type of land application in which the waste is placed directly beneath the land surface.

(139) "Intended use plan" means that document developed by the cabinet annually or biennially, as necessary, which contains a project priority list that prioritizes the cabinet's projects qualifying for federally assisted wastewater revolving fund monies pursuant to KRS Chapter 224A.

(140) "Interference" means a discharge which, alone or in conjunction with discharges from other sources:

(a) Inhibits or disrupts the POTW, its treatment processes or operations, or its sludge processes, use, or disposal; and

(b) Is a cause of a violation of a requirement of the POTW's KPDES permit, including an increase in the magnitude or duration of a violation, or of the prevention of sewage sludge use or disposal in compliance with the following statutory provisions and administrative regulations or permits issued thereunder or under more stringent local administrative regulations: Section 405 of the Clean Water Act, as amended, the Solid Waste Disposal Act as amended (SWDA), including RCRA, and including any administrative regulations contained in a sludge management plan prepared pursuant to Subtitle D of the SWDA as amended, the Clean Air Act as amended, and the Toxic Substances Control Act as amended.

(141) "Intermediate facility" means a WWTP with an average daily design capacity of 10,000 to 49,999 gallons per day (GPD) or sewer lines of 2,500 feet to 5,000 feet in length including appurtenances.

(142) "Intermediate nonpublicly-owned treatment works" means a facility which has a design flow rate of between 10,000 gpd and 49,999 gpd of wastewater containing only conventional pollutants and which is not a POTW.

(143) "Intermediate WWTP" means:

(a) WWTP with an average daily design capacity of 10,000 to 49,999 gpd; or

(b) For coal washing facilities, a WWTP which serves a permanent coal processing facility that processes less than or equal to 500 tons per hour of raw coal.

(144) "Intermittent water" means a stream that flows only at certain times of the year.

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

(146) "IWWTP" means an industrial WWTP.

(147) "KAR" means Kentucky Administrative Regulations.

(148) "Karst" means the type of geologic terrain underlain by carbonate rocks where significant solution of rock has occurred due to flowing groundwater.

(149) "Karst feature" means a naturally occurring feature formed by the dissolution of carbonate rock including but not limited to a sinkhole drain, karst window, swallet, spring, sinking stream, or cave.

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(150) "Kentucky Intermunicipal Operational Permit" or "KIMOP" means a permit issued pursuant to 401 KAR 5:005 for operating a publicly-owned sewer system which has more than 5,000 linear feet of sewer line which discharges to a sewer system, or a WWTP which is owned by another person.

(151) "Kentucky No Discharge Operational Permit" or "KNDOP" means a permit issued pursuant to 401 KAR 5:005 for operating a WWTP which does not have a discharge to a stream, including agricultural waste handling systems and spray irrigation systems.

(152) "Kentucky Pollutant Discharge Elimination System" or "KPDES" means the Kentucky program for issuing, modifying, revoking and reissuing, revoking, monitoring and enforcing permits to discharge, and imposing and enforcing pretreatment requirements.

(153) "kg" means kilograms.

(154) "KPDES" means the Kentucky Pollutant Discharge Elimination System.

(155) "KPDES permit" means a Kentucky Pollutant Discharge Elimination System permit issued to a facility, including a POTW, or activity pursuant to KRS Chapter 224 for the purpose of operating the facility or activity.

(156) "KRS" means Kentucky Revised Statutes.

(157) "Land application" means the uniform placement of animal waste on or in the soil by spraying or spreading on the surface, incorporation into the soil, or injection directly beneath the surface.

(158) "Land treatment" or "land disposal" means the application or incorporation of a pollutant onto or into the soil.

(159) "Large facility" means a WWTP with an average daily design capacity of 50,000 GPD or more, or sewer lines of more than 5,000 feet in length including appurtenances.

(160) "Large municipal separate storm sewer system" means all municipal separate storm sewers that are either:

(a) Located in an incorporated place with a population of 250,000 or more as determined by the 1990 Decennial Census by the Bureau of the Census; or

(b) Owned or operated by a municipality other than that described in paragraph (a) of this subsection, and that are designated by the cabinet as part of the large or medium municipal separate storm sewer system due to the interrelationship between the discharges of the designated storm sewer and the discharges from municipal separate storm sewers described under paragraph (a) of this subsection. In making this determination the cabinet may consider the following factors:

1. Physical interconnections between the municipal separate storm sewers;
2. The location of discharges from the designated municipal separate storm sewer relative to discharges from municipal separate storm sewers described in paragraph (a) of this subsection;
3. The quantity and nature of pollutants discharged to waters of the commonwealth;
4. The nature of the receiving waters; and
5. Other relevant factors; or

(c) The cabinet may, upon petition, designate as a large municipal separate storm sewer system, those municipal separate storm sewers located within the boundaries of a region defined by a storm water management regional authority based on a jurisdictional, watershed, or other appropriate basis that includes one (1) or more of the systems described in paragraph (a) or (b) of this subsection.

(161) "Large nonpublicly-owned treatment works" means a facility which has a design flow rate of greater than or equal to 50,000 gpd of wastewater containing only conventional pollutants and which is not a POTW.

(162) "Large WWTP" means:

(a) A WWTP with an average daily design capacity of 50,000 GPD or more; or

(b) For coal washing facilities, a WWTP which serves a permanent coal processing facility that processes more than 500 tons per hour of raw coal.

(163) "LC₁" means that concentration of a toxic substance or mixture of toxic substances that is lethal, or immobilizing if appropriate, to one (1) percent of the organisms tested in a toxicity test during a specified exposure period.

(164) "LC₅₀" means that concentration of a toxic substance or mixture of toxic substances that is lethal, or immobilizing if appropriate, to fifty (50) percent of the species tested in a toxicity test during a specified exposure period.

(165) "Log sorting and log storage facilities" means, for purposes of 401 KAR 5:050 to 401 KAR 5:080, facilities whose discharges result from the holding of unprocessed wood, for example, logs or roundwood with bark or after removal of bark held in self-contained bodies of water or stored on land where water is applied intentionally on the logs.

(166) "Long-term CSO control plan" means a control plan which complies with the "Combined Sewer Overflow Control Policy" issued by the U.S. EPA in the "Federal Register" on April 19, 1994 (59 FR 18688), incorporated by reference in Section 3 of this administrative regulation.

(167) "Maintain" means, for purposes of 401 KAR 5:026 through 401 KAR 5:031, to preserve or keep in present condition by not allowing an adverse permanent or long-term change to water quality or to a population of an aquatic organism or its habitat.

(168) "Maintenance replacement" means replacement of:

(a) Existing component parts with component parts that have similar characteristics and capacity; or

(b) A section of sewer or force main with the same size, alignment, and slope;

(c) The term does not include replacement of an entire WWTP with a new WWTP.

(169) "Major facility" means any KPDES facility or activity classified as such by the cabinet in cooperation with the regional administrator. Designation as a major industry as used in KRS 224.70-120, does not indicate automatic classification as a major facility.

(170) "Major industry" means an industry that generates and discharges process-related wastewater while engaged in commercial activities including resource recovery, manufacturing, products distribution, and wholesale and retail trade. Each industry has a design flow rate of greater than or equal to 50,000 gpd of process wastewater containing conventional, nonconventional, or thermal pollutants. A major industry designation is not a criteria for classification as a major facility.

(171) "Major municipal separate storm sewer outfall" or "major outfall" means:

(a) A municipal separate storm sewer outfall that discharges from a single pipe with an inside diameter of thirty-six (36) inches or more or its equivalent of a discharge from a single conveyance other than a circular pipe which is associated with a drainage area of more than fifty (50) acres; or

(b) For municipal separate storm sewers that receive storm water from lands zoned for industrial activity based on comprehensive zoning plans or the equivalent, an outfall that discharges from a single pipe with an inside diameter of twelve (12) inches or more or from its equivalent of a discharge from other than a circular pipe associated with a drainage area of two (2) acres or more.

(172) "Major outfall" means a major municipal separate storm sewer outfall.

(173) "Manmade" means constructed by humans.

(174) "Maximum allowable industrial loading" means the total mass of a pollutant that all industrial users of a POTW, or subgroup of a industrial users identified by the POTW, may discharge pursuant to limits developed under 401 KAR 5:057, Section 3(3).

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

(176) "Measurement" means the ability of the analytical method or protocol to quantify as well as identify the presence of the substance in question.

(177) "Medium municipal separate storm sewer system" means all municipal separate storm sewers that are either:

(a) Located in an incorporated place with a population of 100,000 or more but less than 250,000, as determined by the 1990 Decennial Census by the Bureau of the Census; or

(b) Owned or operated by a municipality other than that described in paragraph (a) of this subsection, and that are designated by the cabinet as part of the large or medium municipal separate storm sewer system due to the interrelationship between the discharges of the designated storm sewer and the discharges from municipal separate storm sewers described under paragraph (a) of this subsection. In making this determination the cabinet may consider the following factors:

1. Physical interconnections between the municipal separate storm sewers;

2. The location of discharges from the designated municipal separate storm sewer relative to discharges from municipal separate storm sewers described in paragraph (a) of this subsection;
3. The quantity and nature of pollutants discharged to waters of the commonwealth;
4. The nature of the receiving waters; and
5. Other relevant factors; or

(c) The cabinet, may, upon petition, designate as a medium municipal separate storm sewer system, municipal separate storm sewers located within the boundaries of a region defined by a storm water management regional authority based on a jurisdictional, watershed, or other appropriate basis that includes one (1) or more of the systems described in paragraph (a) or (b) of this subsection.

(178) "Metalimnion" means the region of the thermocline.

(179) " g/l" means micrograms per liter, same as ppb, assuming unit density.

(180) "mgd" or "MGD" means million gallons per day.

(181) "mg/l" means milligrams per liter, same as ppm, assuming unit density.

(182) "Milligrams per liter" or "mg/l" means the milligrams of substance per liter of solution, and is equivalent to parts per million in water, assuming unit density.

(183) "Minimum design volume" means the treatment volume in the lagoon necessary to maintain an anaerobic condition in the lagoon.

(184) "Minor industry" means an industry that generates and discharges process-related wastewater while engaged in commercial activities including, but not limited to, resource recovery, manufacturing, products distribution, and wholesale and retail trade. Each industry has a design flow rate of less than 50,000 gpd of process wastewater containing conventional, nonconventional, or thermal pollutants. If a facility discharges process-related wastewater and does not qualify under this definition, then the facility shall be considered to be a major industry.

(185) "Minor modification to a WWTP" means, for purposes of construction approvals required by 401 KAR 5:005, a modification which does not change the WWTP average daily design hydraulic or organic treatment capacity of the WWTP or discharge location.

(186) "Mixing zone" means a domain of a water body contiguous to a treated or untreated wastewater discharge with quality characteristics different from those of the receiving water. The discharge is in transit and progressively diluted from the source to the receiving system. The mixing zone is the domain where wastewater and receiving water mix.

(187) "MS4" means a municipal separate storm sewer system.

(188) "Municipal separate storm sewer system" means all separate storm sewers that are defined as "large" or "medium" or "small" municipal separate storm sewer systems pursuant to subsections (160), (177), and (286) of this section, or designated under 401 KAR 5:060, Section 12(1)(a)5, consisting of a conveyance or system of conveyances, including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, manmade channels, or storm drains:

(a) Owned or operated by a state, city, town, county, district, association, or other public body created by or pursuant to law, having jurisdiction over disposal of sewage, industrial wastes, storm water, or other wastes, including special districts under state law such as a sewer district, flood control district, or drainage district, or similar entity, or a designated and approved management agency under Section 208 of the CWA, 33 U.S.C. 128, that discharges to waters of the commonwealth;

(b) Designed or used for collecting or conveying storm water;

(c) Which is not a combined sewer; and

(d) Which is not part of a POTW.

(189) "Municipality" means a city, district, or other public body created by or under the Kentucky Revised Statutes and having jurisdiction over disposal of sewage, industrial wastes, or other wastes, or a designated and approved management agency under CWA Section 208, 33 U.S.C. 1288.

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

(191) "National pretreatment standard", "pretreatment standard", or "standard" means a federal regulation containing pollutant discharge limits promulgated by the U.S. EPA in

accordance with Section 307(b) and (c) of the Act, which applies to industrial users. This term includes prohibitive discharge limits established pursuant to 401 KAR 5:057.

(192) "Natural Resources Conservation Service" or "NRCS" means the organization created pursuant to 7 U.S.C. 6962 in the United States Department of Agriculture. The NRCS was formerly called the Soil Conservation Service.

(193) "Natural temperature" means, for purposes of 401 KAR 5:026 through 401 KAR 5:031, the temperature that would exist in waters of the commonwealth without the change of enthalpy of artificial origin, as contrasted with that caused by climatic change or naturally occurring variable temperature associated with riparian vegetation and seasonal changes.

(194) "Natural water quality" means, for purposes of 401 KAR 5:026 through 401 KAR 5:031, those naturally occurring physical, chemical, and biological properties of waters.

(195) "Net discharge" means, for purposes of 401 KAR 5:026 through 401 KAR 5:031, the amount of substance released to a surface water by excluding the influent value from the effluent value if both the intake and discharge are from and to the same or similar body of water.

(196) "New discharger" means, for purposes of 401 KAR 5:050 to 401 KAR 5:080, any building, structure, facility or installation:

- (a)1. From which there is or may be a discharge of pollutants;
2. That did not commence the discharge of pollutants at a particular site prior to August 13, 1979;
3. Which has never received a finally effective NPDES or KPDES permit for discharges at that site; and
4. Which is not a new source.

(b) This definition includes an indirect discharger which commences discharging into the waters of the commonwealth after August 13, 1979. It also includes any existing mobile point source that begins discharging at a site for which it does not have a permit.

(197) "New source" means:

(a) For purposes of 401 KAR 5:050 to 401 KAR 5:080, any building, structure, facility, or installation from which there is or may be a direct or indirect discharge of pollutants, the construction of which commenced:

1. After promulgation of EPA's standards of performance or pretreatment standards which are applicable to the source; or
2. After proposal of EPA's standards of performance or pretreatment standards which are applicable to the source, but only if the federal standards are promulgated within 120 days of their proposal; or

(b)1. For purposes of 401 KAR 5:057, a building, structure, facility, or installation from which there is or may be a discharge of pollutants, the construction of which commenced after the publication of proposed pretreatment standards which will be applicable to the source if the standards are thereafter promulgated if:

- a. The building, structure, facility or installation is constructed at a site at which no other source is located;
- b. The building, structure, facility or installation totally replaces the process of production equipment that causes the discharge of pollutants at an existing source; or
- c. The production or wastewater generating processes of the building, structure, facility, or installation are substantially independent of an existing source at the same site. In determining if these are substantially independent, factors such as the extent to which the new facility is integrated with the existing plant, and the extent to which the new facility is engaged in the same general type of activity as the existing source shall be considered.

2. Construction on a site at which an existing source is located results in a modification rather than a new source if the construction does not create a new building, structure, facility, or installation meeting the criteria of subparagraph 1b or c of this paragraph but otherwise alters, replaces, or adds to existing process or production equipment.

3. Construction of a new source has commenced if the owner or operator has:

- a. Begun, or caused to begin as part of a continuous on-site construction program:
 - (i) A placement, assembly, or installation of facilities or equipment;

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(ii) Significant site preparation work including clearing, excavation, or removal of existing buildings, structures, or facilities which is necessary for the placement, assembly, or installation of new source facilities or equipment; or

b. Entered into a binding contractual obligation for the purchase of facilities or equipment which are intended to be used in its operation within a reasonable time. Options to purchase or contracts which may be terminated or modified without substantial loss, and contracts for feasibility, engineering, and design studies do not constitute a contractual obligation under this clause.

(198) "Nonconventional pollutant" means a pollutant not considered to be a conventional pollutant, including priority pollutants identified in 401 KAR 5:060.

(199) "Nonpoint" means any source of pollutants not defined by a point source, as used in this chapter.

(200) "Nonprocess industry" means an industry that generates and discharges only nonprocess wastewater while engaged in commercial activities including manufacturing, resource recovery, products distribution, and wholesale and retail trade. Each industry discharges nonprocess wastewater, for example, noncontact cooling or stockpile run-off, and discharges wastewater that neither contains nor is likely to contain toxic pollutants in concentrations equal to or greater than the ninety-six (96) hour lethal concentration for fifty (50) percent mortality (96 LC₅₀) for a representative indigenous aquatic organism. If any of the above conditions is not met, then the discharge is considered to be from a minor industry.

(201) "NPDES" is defined in KRS 224.01-010.

(202) "NRCS" means the Natural Resources Conservation Service.

(203) "Nutrient management plan" means the plan for an individual operation developed for the purpose of recycling nutrients from animal waste onto cropland or pasture in a manner that does not cause environmental harm.

(204) "Oil" means, for purposes of 401 KAR 5:090, natural crude oil or petroleum and other hydrocarbons, regardless of specific gravity, which are produced at the well in liquid form and which are not the result of condensation of gas after it leaves the underground reservoir.

(205) "O&M" means operation and maintenance.

(206) "Operate" means, for purposes of 401 KAR 5:090, any act relating to the construction, operation, or maintenance of any facility.

(207) "Operator" means:

(a) Any person involved in the operation of a facility or activity;

(b) For purposes of 401 KAR 5:010, any person involved in the operation of a wastewater system; or

(c) For purposes of 401 KAR 5:090, any person who operates a facility.

(208) "Other wastes" means sawdust, bark or other wood debris, garbage, refuse, ashes, offal, tar, oil, chemicals, acid drainage, wastes from agricultural enterprises, and other foreign substances not included within the definitions of industrial wastes and sewage which may cause or contribute to the pollution of any waters of the commonwealth.

(209) "Outfall" means a point source at the point where a municipal separate storm sewer discharges to waters of the commonwealth, but does not include open conveyances connecting two (2) municipal separate storm sewers, or pipes, tunnels, or other conveyances which connect segments of the same stream or other waters of the commonwealth and are used to convey waters of the commonwealth.

(210) "Outstanding national resource water" means a surface water categorized by the cabinet as an outstanding national resource water pursuant to 401 KAR 5:030.

(211) "Outstanding state resource water" means a surface water designated by the cabinet as an outstanding state resource water pursuant to 401 KAR 5:031.

(212) "Overburden" means any material of any nature, consolidated or unconsolidated, that overlies a mineral deposit, excluding topsoil or similar naturally-occurring surface materials that are not disturbed by mining operations.

(213) "Overflow" means:

(a) Any intentional or unintentional diversion of flow from a facility; or

(b) For purposes of 401 KAR 5:057, the intentional or unintentional diversion of flow from the POTW before the POTW treatment plant.

(214) "Owner" means any person who possesses any interest in:

- (a) The right to develop, operate, or produce oil or gas; or
- (b) Any facility or activity.

(215) "Package WWTP" means a factory-built WWTP which is transported to and assembled or set in place at the site.

(216) "Pass through" means a discharge which exits the POTW into waters of the commonwealth in quantities or concentrations which, alone or in conjunction with discharges from other sources, is a cause of violation of a requirement of the POTW's KPDES permit, including an increase in the magnitude or duration of a violation.

(217) "pCi/l" means picocuries per liter.

(218) "PCR" means primary contact recreation.

(219) "Permit" means:

(a) For purposes of 401 KAR 5:005 or 401 KAR 5:006, a document issued by the cabinet which authorizes the permittee to construct, modify, or operate a facility;

(b) For purposes of 401 KAR 5:050 to 401 KAR 5:080, a KPDES permit.

(220) "Plan of study" means a report that contains the following information required for a regional facility plan by 401 KAR 5:006, Section 4: planning area maps; a discussion of the need for sewer service in the area; population projections; and an estimation of the twenty (20) year cost by category.

(221) "Planning area" means the geographic area proposed to be served by a regional planning agency in a projected twenty (20) year period.

(222) "Point source" means any discernible, confined, and discrete conveyance, including but not limited to any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, or concentrated animal feeding operation, from which pollutants are or may be discharged. The term does not include agricultural storm water run-off or return flows from irrigated agriculture.

(223) "POTW" means publicly-owned treatment works as defined in KRS 224.01-010.

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

(225) "ppb" means parts per billion; assuming unit density, same as g/l.

(226) "ppm" means parts per million; assuming unit density, same as mg/l.

(227) "Preexisting discharge" means any discharge that is occurring when applying for a KPDES permit under 401 KAR 5:029 or 401 KAR 5:040.

(228) "Pretreatment" means the reduction of the amount of pollutants, the elimination of pollutants, or the alteration of the nature of pollutant properties in wastewater prior to or in lieu of discharging or otherwise introducing the pollutants into a POTW. The reduction or alteration may be obtained by physical, chemical, or biological processes, process changes or by other means, except as prohibited by 401 KAR 5:057. Appropriate pretreatment technology includes control equipment, such as equalization tanks or facilities, for protection against surges or slug loadings that may interfere with or otherwise be incompatible with the POTW. However, if wastewater from a regulated process is mixed in an equalization facility with unregulated wastewater or with wastewater from another regulated process, the effluent from the equalization facility shall meet an adjusted pretreatment limit, calculated in accordance with 401 KAR 5:057.

(229) "Pretreatment requirement" means a substantive or procedural requirement related to pretreatment, other than a pretreatment standard, imposed on an industrial user.

(230) "Pretreatment standard" means a national pretreatment standard.

(231) "Primary contact recreation water" means those waters suitable for full body contact recreation during the recreation season of May 1 through October 31.

(232) "Primary industry category" means any industry category listed as being a primary industry in 401 KAR 5:060.

(233) "Primary responsibility" means having the authority to conduct the procedures and practices necessary to ensure that the wastewater system or any portion thereof is operated in accordance with accepted practices, laws, and administrative regulations of the commonwealth, or to supervise others in conducting these practices.

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

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

(236) "Produced water" means all water, pollutants, and combinations thereof resulting, obtained, or produced from the exploration, drilling, or production of oil or gas.

(237) "Productive aquatic community" means an assemblage of indigenous aquatic life capable of reproduction and growth.

(238) "Professional engineer" or "engineer" is defined by KRS 322.010(2).

(239) "Project priority list" means the list developed by the cabinet pursuant to KRS Chapter 224A which includes a priority ranking of applicants for the construction of wastewater treatment works under 33 U.S.C. 1313(e)(3)(H).

(240) "Propagation" means the continuance of a species by successful spawning, hatching, and development or natural generation in the natural environment, as opposed to the maintenance of the species by artificial culture and stocking.

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

(242) "Public water system" shall have the meaning given it in 401 KAR 8:010.

(243) "RCRA" means the Resource Conservation Recovery Act as amended (42 U.S.C. 6901 et seq.).

(244) "Reclamation area" means the surface area of a coal mine which has been returned to required contour and on which revegetation (seeding or planting) work has commenced.

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

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

(247) "Regional facility" means a facility designated by a regional facility plan or water quality management plan to provide wastewater collection, transportation, or treatment services for a specific area. This facility shall be owned by a city, county, or other public body that was created by KRS Chapter 67, 67A, 74, 76, 96, 108, or 220.

(248) "Regional facility plan" means a type of water quality management plan addressing point sources of pollution for the purpose of areawide waste treatment management planning prepared by the designated regional planning agency pursuant to Sections 201, 205, and 208 of the CWA to control point sources of pollution within a planning area.

(249) "Regional planning agency" means a governmental agency, such as a city, county, or other public body created by KRS Chapter 67, 67A, 74, 76, 96, 108, or 220, that has been designated pursuant to 33 U.S.C. 1288 of the CWA and 40 C.F.R. Part 130 to provide planning for the treatment of wastewater and for controls and recommendations relating to wastewater for a particular area. Those existing agencies that have developed plans pursuant to Sections 201, 205, 208, and 303(e) of the CWA shall be considered the regional planning agency for the area.

(250) "Regional sewage collection system" means a sewage collection system designated by a regional planning agency which is owned by a city, county, or other public body that was created by KRS Chapter 67, 67A, 74, 76, 96, 108, or 220.

(251) "Register" means to file forms with the division which contain information as to oil and gas well geographic location, production, produced water production, methods used for treating, storing, or disposing of produced water, and other information determined to be necessary by the division.

(252) "Remined area" means only that area of any coal remining operation on which a coal mining operation was conducted before August 3, 1977.

(253) "Removal" means, for purposes of 401 KAR 5:057, a reduction in the amount of a pollutant in the POTW's effluent or alteration of the nature of a pollutant during treatment at the POTW. The reduction or alteration may be obtained by physical, chemical, or biological means

and may be the result of specifically designed POTW capabilities or may be incidental to the operation of the treatment system. Removal shall not mean dilution of a pollutant in the POTW.

(254) "Representative important species" means species which are representative, in terms of their biological needs, of a balanced, indigenous community of shellfish, fish, and wildlife in the body of water into which a discharge of heat is made.

(255) "Representative indicator organism" means an aquatic organism designated for use in toxicity testing because of its relative sensitivity to toxicants and its widespread distribution in the aquatic environment.

(256) "Requester" means any industrial user or a POTW or other interested person seeking a variance from the limits specified in a categorical pretreatment standard.

(257) "Residual solids" means the accumulated solid waste in the lower portion of a lagoon that contains greater than two and zero-tenths (2.0) percent total solids by dry weight analysis.

(258) "Rock crushing and gravel washing facilities" means facilities which process crushed and broken stone, gravel, and riprap.

(259) "Run-off coefficient" means the fraction of total rainfall that will appear at a conveyance as run-off.

(260) "SARA" means the Superfund Amendments and Reauthorization Act, as amended.

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

(262) "SCR" means secondary contact recreation.

(263) "Secondary contact recreation waters" means those waters that are suitable for partial body contact recreation, with minimal threat to public health due to water quality.

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

(265) "Secondary treatment" means that degree of treatment which results in an effluent quality which meets the minimum requirements of 401 KAR 5:045.

(266) "Service area" means that geographic area currently being served by a regional facility.

(267) "Seven-Q-ten" or "7Q₁₀" means that minimum average flow which occurs for seven (7) consecutive days with a recurrence interval of ten (10) years.

(268) "Severe property damage" means substantial physical damage to property, damage to the treatment facilities which causes them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass. Severe property damage shall not mean economic loss caused by delays in production.

(269) "Sewage" means the water-carried human or animal wastes from residences, buildings, or other places together with industrial wastes or underground, surface, storm or other water, as may be present.

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

(271) "Sewer line" means those devices used for collecting, transporting, pumping, or disposing of sewage, but not a building sewer which serves an individual building. A sewer line begins at the junction of two (2) building sewers which serve different buildings. Sewer lines include gravity sewer lines, pump stations, and force mains.

(272) "Sewer line extension" means a proposed construction project which extends a sewer system; it includes gravity sewer lines, pump stations, and force mains.

(273) "Sewer system" means the network of sewer lines, pump stations, and force mains that discharge to a common WWTP.

(274) "SIC" means standard industrial classification.

(275) "Significant industrial user" means:

(a) Except as provided in paragraph (b) of this subsection:

1. Industrial users subject to categorical pretreatment standards promulgated by EPA and codified in 40 C.F.R. Chapter I, Subchapter N (Parts 401 through 471); and

2. Any other industrial user that:

a. Discharges an average of 25,000 gallons per day or more of process wastewater to the POTW, excluding sanitary, noncontact cooling and boiler blowdown wastewater;

b. Contributes a process wastestream which makes up five (5) percent or more of the average dry weather hydraulic or organic capacity of the POTW treatment plant; or

c. Is designated as such by the control authority on the basis that the industrial user has a reasonable potential for adversely affecting the POTW's operation or for violating a pretreatment standard or requirement.

(b) Upon a finding that an industrial user meeting the criteria for a significant industrial user has no reasonable potential for adversely affecting the POTW's operation or for violating a pretreatment standard or requirement, the control authority may, on its own initiative or in response to a petition received from an industrial user or a POTW, and in accordance with 401 KAR 5:057, determine that the industrial user is not a significant industrial user.

(276) "Significant materials" means, but is not limited to, and for purposes of 401 KAR 5:050 to 401 KAR 5:080: raw materials; fuels; materials such as solvents, detergents, and plastic pellets; finished materials such as metallic products; raw materials used in food processing or production; hazardous substances designated under Section 101(14) of CERCLA, 42 U.S.C. 9601; any chemical the facility is required to report pursuant to Section 313 of Title III of SARA; fertilizers, 42 U.S.C. 11023; pesticides; and waste products such as ashes, slag, and sludge that have the potential to be released with storm water discharges.

(277) "Silvicultural point source" means, for purposes of 401 KAR 5:050 to 401 KAR 5:080, any discernible, confined, and discrete conveyance related to rock crushing, gravel washing, log sorting, or log storage facilities which are operated in connection with silvicultural activities and from which pollutants are discharged into waters of the commonwealth. The term does not include nonpoint source silvicultural activities such as nursery operations, site preparation, reforestation and subsequent cultural treatment, thinning, prescribed burning, pest and fire control, harvesting operations, surface drainage, or road construction and maintenance from which there is natural run-off.

(278) "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.

(279) "Site" means, for purposes of 401 KAR 5:050 to 401 KAR 5:080, the land or water area where any facility or activity is physically located or conducted, including adjacent land used in connection with the facility or activity.

(280) "SIU" means significant industrial user.

(281) "Sludge requirements" means the following statutory provisions and administrative regulations or permits issued thereunder, or under more stringent local administrative regulations: Section 405 of the Clean Water Act, 33 U.S.C. 1345, as amended; the Solid Waste Disposal Act (SWDA), as amended, including Title II, more commonly referred to as the Resource Conservation Recovery Act (RCRA), 42 U.S.C. 6901 et seq. and administrative regulations contained in any sludge management plan prepared pursuant to Subtitle D of SWDA, as amended; the Clean Air Act, 42 U.S.C. 7401 et seq., as amended; and the Toxic Substances Control Act, 15 U.S.C. 2601 et seq., as amended.

(282) "SMCRA" means the Surface Mining Control and Reclamation Act, as amended, 33 U.S.C. 1201 et seq.

(283) "Small facility" means a WWTP with an average daily design capacity less than 10,000 GPD or sewer lines of less than 2,500 feet in length including appurtenances.

(284) "Small MS4" means a small municipal separate storm sewer system.

(285) "Small municipal separate storm sewer system" means all municipal separate storm sewers that are:

(a) Not defined as "large" or "medium" municipal separate storm sewer systems pursuant to subsection (160) or (177) of this section, or designated in 401 KAR 5:060, Section 12(1)(a)5.

(b) This term includes systems similar to separate storm sewer systems in municipalities, such as systems at military bases, large hospital or prison complexes, and highways or other thoroughfares. The term does not include separate storm sewers in very discrete areas, such as individual buildings.

(286) "Small nonpublicly-owned treatment works" means a facility which has a design flow rate of less than 10,000 gpd of wastewater containing only conventional pollutants and which is not a POTW.

(287) "Small WWTP" means:

- (a) A WWTP with an average daily design capacity of less than 10,000 gpd; or
- (b) For coal washing facilities, a WWTP which serves a portable coal processing facility.

(288) "Source" means any building, structure, facility, or installation from which there is or may be a discharge of pollutants.

(289) "SPCC" means spill prevention control and countermeasure.

(290) "Standard" means:

(a) For purposes of 401 KAR 5:026, 401 KAR 5:029, 401 KAR 5:030 or 401 KAR 5:031, a water quality standard; or

(b) For purposes of 401 KAR 5:057, a pretreatment standard.

(291) "Storm water" means storm water run-off, snow melt run-off, and surface run-off and drainage.

(292) "Storm water discharge associated with industrial activity" means the discharge from any conveyance that is used for collecting and conveying storm water and that is directly related to manufacturing, processing, or raw material storage areas at an industrial plant. The term does not include discharges from facilities or activities excluded from the KPDES program under 401 KAR 5:055. For the categories of industries identified in this subsection, the term includes, but is not limited to, storm water discharges from industrial plant yards; immediate access roads and rail lines used or traveled by carriers of raw materials, manufactured products, waste material, or byproducts used or created by the facility; material handling sites; refuse sites; sites used for the application or disposal of process waste waters; sites used for the storage and maintenance of material handling equipment; sites used for residual treatment, storage, or disposal; shipping and receiving areas; manufacturing buildings; storage areas including tank farms for raw materials, and intermediate and final products; and areas where industrial activity has taken place in the past and significant materials remain and are exposed to storm water. For the purposes of this definition, material handling activities include storage, loading and unloading, transportation, or conveyance of any raw material, intermediate product, final product, by product or waste product. The term excludes areas located on plant lands separate from the plant's industrial activities, such as office buildings and accompanying parking lots as long as the drainage from the excluded areas is not mixed with storm water drained from the above described areas. Industrial facilities including industrial facilities that are federally, state, or municipally owned or operated that meet the description of the facilities listed in paragraphs (a) through (k) of this subsection, include those facilities designated under the provisions of 401 KAR 5:060, Section 12(1)(a)5. The following categories of facilities are considered to be engaging in an industrial activity for purposes of this definition:

(a) Facilities subject to storm water effluent limitations guidelines, new source performance standards, or toxic pollutant effluent standards under 401 KAR 5:065, Section 4, except facilities with toxic pollutant effluent standards which are exempted under paragraph (k) of this subsection;

(b) Facilities classified as Standard Industrial Classifications 24 except 2434; 26 except 265 and 267; 28 except 283; 29; 311; 32 except 323; 33; 3441; and 373;

(c) Facilities classified as Standard Industrial Classifications 10 through 14 (mineral industry) including active or inactive mining operations, except for areas of coal mining operations that are no longer reclamation areas because the performance bond issued to the facility by the appropriate SMCRA authority has been released, or except for areas of noncoal mining operations which have been released from applicable state or federal reclamation requirements after December 17, 1990, and oil and gas exploration production, processing, or treatment operations, or transmission facilities that discharge storm water contaminated by contact with or that has come into contact with, any overburden, raw material, intermediate products, finished products, by-products, or waste products located on the site of these operations;

(d) Hazardous waste treatment, storage, or disposal facilities, including those that are operating under interim status or a permit under Subtitle C of RCRA;

(e) Landfills, land application sites, and open dumps that receive or have received any industrial wastes, that is waste that is received from any of the facilities described under this subsection, including those that are subject to regulation under Subtitle D of RCRA;

(f) Facilities involved in the recycling of materials, including metal scrapyards, battery reclaimers, salvage yards, and automobile junkyards, including but limited to those classified as Standard Industrial Classification 5015 and 5093;

(g) Steam electric power generating facilities, including coal handling sites;

(h) Transportation facilities classified as Standard Industrial Classifications 40, 41, 42 except 4221-4225, 43, 44, 45, and 5171 which have vehicle maintenance shops, equipment cleaning operations, or airport deicing operations. Only those portions of the facility that are either involved in vehicle maintenance, including vehicle rehabilitation, mechanical repairs, painting, fueling, and lubrication, equipment cleaning operations, airport deicing operations, or which are otherwise identified under paragraphs (a) to (g) and (i) to (k) of this subsection are associated with industrial activity;

(i) Treatment works treating domestic sewage or any other sewage sludge or wastewater treatment device or system, used in the storage, treatment, recycling, and reclamation of municipal or domestic sewage, including lands dedicated to the disposal of sewage sludge that are located within the confines of the facility, with a design flow of one and zero-tenths (1.0) mgd or more, or required to have an approved pretreatment program under 401 KAR 5:057. Not included are farm lands, domestic gardens or lands used for sludge management where sludge is beneficially reused and which are not physically located in the confines of the facility, or areas that are in compliance with Section 405 of the CWA, 33 U.S.C. 1345;

(j) Construction activity including clearing, grading and excavation, except operations that result in the disturbance of less than five (5) acres of total land area. Construction activity also includes the disturbance of less than five (5) acres of total land area that is a part of a larger common plan of development or sale if the larger common plan will ultimately disturb five (5) acres or more;

(k) Facilities under Standard Industrial Classifications 20, 21, 22, 23, 2434, 25, 265, 267, 27, 283, 285, 30, 31 except 311, 323, 34 except 3441, 35, 36, 37 except 373, 38, 39, and 4221-25.

(293) "Storm water discharge associated with small construction activity" means the discharge of storm water from:

(a) Construction activities including clearing, grading, and excavating that result in land disturbance of equal to or greater than one (1) acre and less than five (5) acres. Small construction activity also includes the disturbance of less than one (1) acre of total land area that is part of a larger common plan of development or sale if the larger common plan will ultimately disturb equal to or greater than one (1) and less than five (5) acres. Small construction activity does not include routine maintenance that is performed to maintain the original line and grade, hydraulic capacity, or original purpose of the facility. The cabinet may waive the otherwise applicable requirements in a general permit for a storm water discharge from construction activities that disturb less than five (5) acres where:

1. The value of the rainfall erosivity factor ("R" in the Revised Universal Soil Loss Equation) is less than five (5) during the period of construction activity. The rainfall erosivity factor is determined in accordance with Chapter 2 of Agriculture Handbook Number 703, Predicting Soil Erosion by Water: A Guide to Conservation Planning With the Revised Universal Soil Loss Equation (RUSLE), pages 21-64, dated January 1997 incorporated by reference in Section 3 of this administrative regulation. The Director of the Federal Register approves this incorporation by reference in accordance with 5 U.S.C. 552(a) and 1 C.F.R. part 51. Copies may be obtained from EPA's Water Resource Center, Mail Code RC4100, 401 M St. SW, Washington, DC 20460. A copy is also available for inspection at the U.S. EPA Water Docket, 401 M Street SW, Washington, DC 20460, or the Office of the Federal Register, 800 N. Capitol Street N.W. Suite 700, Washington, DC. An operator shall certify to the cabinet that the construction activity will take place during a period when the value of the rainfall erosivity factor is less than five (5); or

2. Storm water controls are not needed based on a "total maximum daily load" (TMDL) approved or established by EPA that addresses the pollutants of concern or, for nonimpaired waters that do not require TMDLs, an equivalent analysis that determines allocations for small construction sites for the pollutant(s) of concern or that determines that these allocations are not

needed to protect water quality based on consideration of existing in-stream concentrations, expected growth in pollutant contributions from all sources, and a margin of safety. For the purpose of this subparagraph, the pollutant(s) of concern include sediment or a parameter that addresses sediment (such as total suspended solids, turbidity or siltation) and any other pollutant that has been identified as a cause of impairment of any water body that will receive a discharge from the construction activity. The operator shall certify to the cabinet that the construction activity will take place, and storm water discharges will occur, within the drainage area addressed by the TMDL or equivalent analysis.

(b) Any other construction activity designated by the cabinet or the EPA Regional Administrator, based on the potential for contribution to a violation of a water quality standard or for significant contribution of pollutants to waters of the commonwealth.

(294) "Stripper well" means any oil well producing ten (10) barrels or less per day of oil.

(295) "Submission" means, for purposes of 401 KAR 5:057:

(a) A request by a POTW to the cabinet for approval of a pretreatment program; and

(b) A request by a POTW to the cabinet for authority to revise the discharge limits in categorical pretreatment standards to reflect POTW pollutant removals.

(296) "Supernatant" means the water that accumulates in the upper portion of a lagoon and contains no greater than two and zero-tenths (2.0) percent total solids by dry weight analysis.

(297) "Surface mining operation" means only those facilities required to have a permit by 405 KAR Chapters 7 through 26.

(298) "Surface waters" means those waters having well-defined banks and beds, either constantly or intermittently flowing; lakes and impounded waters; marshes and wetlands; and any subterranean waters flowing in well-defined channels and having a demonstrable hydrologic connection with the surface. Effluent ditches and lagoons used for waste treatment which are situated on property owned, leased, or under valid easement by a permitted discharger are not considered to be surface waters of the commonwealth.

(299) "SWDA" means the Solid Waste Disposal Act, as amended, 42 U.S.C. 6901 et seq.

(300) "Tank battery" means an installation where oil is collected from wellheads and is separated from produced water.

(301) "TDS" means total dissolved solids.

(302) "Thermocline" means the plane in a thermally stratified body of water in which the maximum rate of decrease in temperature occurs with respect to depth.

(303) "TMDL" means total maximum daily load.

(304) "Total dissolved solids" or "TDS" means the total dissolved solids (filterable residue) as determined by use of the method specified in 40 C.F.R. Part 136.

(305) "Total maximum daily load" means a calculation of the maximum amount of a pollutant that a waterbody can receive and still meet water quality standards, and an allocation of that amount to the pollutant's sources.

(306) "Total suspended solids" or "TSS" means the total suspended solids (nonfilterable residue) as determined by use of the method specified in 40 C.F.R. Part 136.

(307) "Toxic pollutant" means, for purposes of 401 KAR 5:050 to 401 KAR 5:080, any pollutant listed as being toxic in 401 KAR 5:080.

(308) "Toxic substance" means a substance that is bioaccumulative, synergistic, antagonistic, teratogenic, mutagenic, or carcinogenic and causes death, disease, a behavioral abnormality, a physiological malfunction, or a physical deformity in an organism or its offspring or interferes with normal propagation.

(309) "Treatment lagoon" or "effluent lagoon" means, as used in 401 KAR 5:029 and as applied to facilities subject to 401 KAR 5:090, a secondary recovery or water-flood impoundment on which on-site construction commenced before May 19, 1980; owned or operated by a person eligible to receive a KPDES permit for a discharge from that impoundment, if used for the purpose of diluting produced water, and if the owner or operator received approval from the cabinet of its request for designation as such on or before September 4, 1986.

(310) "Treatment works treating domestic sewage" means a POTW or any other sewage sludge or wastewater treatment devices or systems, regardless of ownership, including federal facilities, used in the storage, treatment, recycling, and reclamation of municipal or domestic sewage, including land dedicated for the disposal of sewage sludge.

(311) "TSS" means total suspended solids.

(312) "Twenty-five (25) year, twenty-four (24) hour rainfall event" means a twenty-four (24) hour rainfall event with a probable recurrence interval of once in twenty-five (25) years, as determined by "Rainfall Frequency Values for Kentucky, Engineering Memorandum No. 2, April 30, 1971, Revised July 1, 1979".

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

(314) "Uncontrolled sanitary landfill" means a landfill or open dump, whether in operation or closed, that does not meet the requirements for run-on or run-off controls established pursuant to subtitle D of the Solid Waste Disposal Act, 42 U.S.C. 6901 et seq.

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

(316) "Upset" means an exceptional incident in which there is unintentional and temporary noncompliance with categorical pretreatment standards or technology-based effluent limitations because of factors beyond the reasonable control of the industrial user or permittee. An upset shall not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.

(317) "U.S.C." means United States Code.

(318) "U.S. EPA" means the United States Environmental Protection Agency.

(319) "USGS" means the United States Geological Survey.

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

(321) "WAH" means warm water aquatic habitat.

(322) "Warm water aquatic habitat" or "WAH" means any surface water and associated substrate capable of supporting indigenous warm water aquatic life.

(323) "Wastewater system" means a sewage system as defined in KRS 224.01-010.

(324) "Wastewater treatment plant" or "WWTP" means a facility used for the treatment and disposal of sewage.

(325) "Water quality management plan" or "WQM plan" means:

(a) A plan consisting of initial plans produced in accordance with Sections 208 and 303(e) of the CWA, 33 U.S.C. 1288 and 1313 and certified and approved updates to those plans; or

(b) A state or areawide waste treatment management plan developed and updated in accordance with Sections 201, 205(j), 208, and 303(e) of the CWA, 33 U.S.C. 1281, 1285j, 1288, and 1313e and 40 C.F.R. Part 130.

(326) "Water quality standard" means an administrative regulation promulgated by the cabinet establishing the designated use of a surface water and the water quality criteria necessary to maintain and protect that designated use.

(327) "Well" or "water well" means:

(a) For purposes of 401 KAR 5:005, any excavation or opening in the surface of the earth that is drilled, cored, bored, washed, driven, jetted, or otherwise constructed if 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 household purposes, animal consumption, food manufacture, use of geothermal resources for domestic heating purposes, and industrial, irrigation, and dewatering purposes;

(b) For purposes of 401 KAR 5:050 to 401 KAR 5:080, a bored, drilled, or driven shaft, or a dug hole, whose depth is greater than the largest surface dimension; or

(c) For purposes of 401 KAR 5:090, a borehole drilled, or proposed to be drilled for the purpose of producing gas or oil or one (1) through which gas or oil is being produced, or a borehole drilled or proposed to be drilled for the purpose of injecting any water, gas, produced water, or other fluid therein or one (1) into which any water, gas, produced water, or other fluid is being injected.

(328) "Wellhead protection area" means:

(a) 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

(b) An area defined as a wellhead protection area in a county water supply plan.

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

(330) "Wetlands" means land that has a predominance of hydric soils and that is inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances does support, a prevalence of hydrophytic vegetation typically adapted for life in saturated soil conditions.

(331) "Whole effluent toxicity" means the aggregate toxic effect of an effluent measured directly by a toxicity test.

(332) "WWTP" means wastewater treatment plant.

(333) "Zone" means a subsurface layer or stratum capable of producing or receiving fluids.

(334) "Zone of initial dilution" means the limited area permitted by the cabinet surrounding or downstream from a discharge location where rapid, first-stage mixing occurs. The zone of initial dilution is the domain where wastewater and receiving water initially mix.

(335) "Zone of saturation" means the zone in which all the subsurface voids in the rock or soil are filled with water.

(336) "100-year, twenty-four (24) hour rainfall event" means a twenty-four (24) hour rainfall event with a probable recurrence interval of once in 100 years, as determined by "Rainfall Frequency Values for Kentucky, Engineering Memorandum No. 2, April 30, 1971, Revised July 1, 1979", incorporated by reference in Section 3 of this administrative regulation.

Section 2. Federal Regulations Adopted Without Change. The following federal regulations govern the subject matter of this administrative regulation and are hereby adopted without change. The federal regulations are available for inspection and copying, subject to applicable copyright law, during normal business hours of 8 a.m. to 4:30 p.m., eastern time, excluding state holidays, at the Division of Water, 14 Reilly Road, Frankfort, Kentucky, or may be purchased from the U.S. Superintendent of Documents, Washington, D.C.

(1) 40 C.F.R. Part 116, "Designation of Hazardous Substances", July 1, 2001, U.S. Environmental Protection Agency, U.S. Government Printing Office, Superintendent of Documents, Mail Stop: SSOP, Washington, DC 20402-9328;

(2) 40 C.F.R. Part 136, "Guidelines Establishing Test Procedures for the Analysis of Pollutants", July 1, 2002, U.S. Environmental Protection Agency, U.S. Government Printing Office, Superintendent of Documents, Mail Stop: SSOP, Washington, DC 20402-9328;

(3) 40 C.F.R. Chapter I, Subchapter N, Parts 401 through 471, "Effluent Guidelines and Standards", July 2001, U.S. Environmental Protection Agency, U.S. Government Printing Office, Superintendent of Documents, Mail Stop: SSOP, Washington, DC 20402-9328; and

(4) 40 C.F.R. Part 130, "Water Quality Planning and Management," July 2001, U.S. Environmental Protection Agency, U.S. Government Printing Office, Superintendent of Documents, Mail Stop: SSOP, Washington, DC 20402-9328.

Section 3. Incorporation by Reference. (1) The following material is incorporated by reference:

(a) "Rainfall Frequency Values for Kentucky, Engineering Memorandum No. 2, April 30, 1971; Revised June 1, 1979"; Commonwealth of Kentucky, Department for Natural Resources and Environmental Protection, Bureau of Natural Resources, Division of Water Resources;

(b) "Combined Sewer Overflow Control Policy", 59 Fed. Reg. 18688, April 19, 1994; and

(c) "Agriculture Handbook Number 703, Predicting Soil Erosion by Water: A Guide to Conservation Planning with the Revised Universal Soil Loss Equation (RUSLE)", Page 21-64, January 1997, U.S. Department of Agriculture.

(2) This material may be inspected, copied, or obtained, subject to applicable copyright law, at the Kentucky Division of Water, 14 Reilly Road, Frankfort, Kentucky, Monday through Friday, 8 a.m. to 4:30 p.m. (25 Ky.R. 690; eff. 11-18-98; Am. 26 Ky.R. 118; 792; 1119; eff. 12-8-99; 29 Ky.R. 1018;1533; eff. 12-18-2002; 30 Ky.R. 997; eff. 9-8-04.)

permits to construct, modify, or operate a facility – 5:005

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401 KAR 5:005. Permits to construct, modify, or operate a facility.

RELATES TO: KRS 224.10-100, 224.16-050, 224.16-060, 224.70-100, 224.70-110

STATUTORY AUTHORITY: KRS 224.01-110, 224.10-100, 224.16-050, 224.16-060, 224.70-100, 224.70-110

NECESSITY, FUNCTION, AND CONFORMITY: KRS 224.10-100 requires the Natural Resources and Environmental Protection Cabinet to develop and conduct a comprehensive program for the management of water resources and to provide for the prevention, abatement, and control of water pollution. This administrative regulation establishes administrative procedures for the issuance of permits for the construction, modification, and operation of facilities authorized under KRS Chapter 224 and establishes conditions for construction of facilities under this chapter. The administrative regulation also establishes a schedule of fees to recover the costs of issuance for certain classes of permits. There is no federal law or regulation relating to construction requirements for wastewater treatment plants or the operational requirements for no discharge operations, therefore this administrative regulation is not more stringent than the federal requirements. The operational permit requirements are contained in the KPDES administrative regulations in 401 KAR 5:050 through 5:080 which are the same as the federal requirements.

Section 1. Applicability. (1) This administrative regulation shall apply to owners and operators of facilities subject to the administrative regulations of this chapter.

(2) A person shall not construct, modify, or operate a facility without having received a permit from the cabinet. A construction or modification permit shall not be required for maintenance replacement for components of an existing facility or for changes which do not affect the treatment processes of the facility, but shall be required for replacement of an entire wastewater treatment plant (WWTP). The operational permit provisions of Section 27 this administrative regulation shall be satisfied by those facilities which have a valid KPDES permit issued pursuant to 401 KAR 5:050 to 401 KAR 5:080.

(3)(a) The following requirements shall apply to agricultural wastes handling systems, as defined by 401 KAR 5:002:

1. Agricultural wastes handling systems which convey, store, or treat manure from concentrated animal feeding operations as defined by 401 KAR 5:002 shall:

- a. Obtain a permit to construct or modify the facility, complying with only Sections 2, 24, and 29(1)(h) and (i) of this administrative regulation; and
- b. Obtain a KPDES permit and comply with 401 KAR 5:026 through 5:080.

2. All other agricultural wastes handling systems shall obtain permits to construct, modify, or operate the facility pursuant to this administrative regulation complying with only Sections 2, 24, 25, 27, and 29(1)(h) and (i) of this administrative regulation. A KPDES permit shall not be required for these facilities.

(b) The following shall apply to industrial wastewater treatment plants (IWWTPs) as defined by 401 KAR 5:002:

1. IWWTPs with closed loop systems shall obtain a KNDOP complying with only Sections 2, 25, 27, and 29(1)(e) through (g) of this administrative regulation and any other applicable standard or requirements of 401 KAR Chapter 5. A KPDES permit shall not be required for these facilities.

2. IWWTPs with a discharge to the waters of the Commonwealth shall not be required to obtain a permit to construct or modify the facility. These facilities shall, however:

- a. Comply with the "Five Mile Limit Policy" incorporated by reference in Section 29 of this administrative regulation;
- b. Obtain a KPDES permit to discharge into the waters of the Commonwealth; and
- c. Comply with all other requirements of 401 KAR Chapter 5.

3. Sewer lines which convey wastewater to IWWTPs shall not be required to obtain a construction permit.

permits to construct, modify, or operate a facility – 5:005

(c) The following requirements shall apply to WWTPs which collect, convey, or treat only storm water:

1. WWTPs which collect, convey, or treat only storm water and discharge into the waters of the Commonwealth shall not be required to obtain a permit to construct or modify the facility pursuant to this administrative regulation. These facilities shall, however, comply with 401 KAR 5:026 through 5:080. 401 KAR 5:060 further specifies when these facilities are required to obtain a KPDES permit.

2. WWTPs which collect, convey, or treat only storm water and do not discharge into the waters of the Commonwealth shall obtain an operational permit under this administrative regulation, complying with only Sections 2, 25, 27, and 29(1)(e) through (g) of this administrative regulation. A KPDES permit shall not be required for these facilities.

Section 2. Application Submittal. **(1)** An application to construct, modify, or operate a facility, or renew the operational permit for a facility shall be submitted on the following applicable forms, incorporated by reference in Section 29 of this administrative regulation, and shall include the applicable supporting information required by Section 3 of this administrative regulation, applicable fees required by Section 5 of this administrative regulation, and plans and specifications for the proposed construction or modification required by Section 6 of this administrative regulation.

(a) For construction of sewer line extensions, the applicant shall submit a completed Construction Permit Application for Sewer Line Extension, Form S-1, and a fee in accordance with Section 5 of this administrative regulation.

(b) For construction projects for WWTPs or WWTPs with sewer lines with a direct discharge, the applicant shall submit or shall have submitted the completed KPDES applications required by 401 KAR 5:060 and a completed Construction Permit Application for Wastewater Treatment Plant, Form W-1. The applicant shall also submit a construction permit fee in accordance with Section 5 of this administrative regulation and a KPDES permit fee in accordance with KRS 224.70-120.

(c) For WWTP construction projects without a discharge other than agricultural waste handling systems, the applicant shall submit a completed Construction Permit Application for Wastewater Treatment Plant, Form W-1, a completed Kentucky No Discharge Operational Permit Application, Form ND, and a construction permit fee in accordance with Section 5 of this administrative regulation.

(d) For operational permits or renewals of Kentucky No Discharge Operational Permits (KNDOPs) other than agricultural waste handling systems, the applicant shall submit a completed Kentucky No Discharge Operational Permit Application, Form ND.

(e) For construction, renewal, modification, or operation of agricultural wastes handling systems, the applicant shall submit a completed Kentucky No Discharge Operational Permit Application for Agricultural Wastes Handling Systems, Short Form B. For construction approvals, applicants shall also submit a completed Site Survey Request.

(f) For construction of minor modifications to a WWTP, the applicant shall submit a completed Construction Permit Application for Wastewater Treatment Plant and a fee in accordance with Section 5 of this administrative regulation.

(g) For WWTP construction projects with a discharge for an individual residence, the applicant shall submit a completed Construction Permit Application for Wastewater Treatment Plant, fee in accordance with Section 5 of this administrative regulation, and the completed KPDES applications required by 401 KAR 5:060.

(h) For operational permits or renewals of operational permits for publicly owned sewer systems which have at least 5,000 linear feet of sewer line and which discharge to a sewer system or a WWTP which is owned by another person, the applicant shall submit a completed Kentucky Inter-Municipal Operational Permit Application.

(2) Signatures.

(a) Applications and all reports required by the permits shall be signed by the responsible corporate officer or the person having primary responsibility for the overall operation of the facility. For a municipality, state, federal or other public agency, the signee shall be a principal executive officer or ranking elected official or the designee. An application or report may be signed by a duly

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authorized representative, if the authorization has been made in writing by the responsible person.

(b) **Certification.** Any person signing a document under paragraph (a) of this subsection shall make the following certification: "I certify under penalty of law that this document and all attachments were prepared under my direction or supervision. The information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for known violations."

Section 3. Application; Supporting Information. The following items shall be submitted as a part of the application or with the application required by Section 2 of this administrative regulation, any applicable fee required by Section 5 of this administrative regulation, and the plans and specifications for the construction project required by Section 6 of this administrative regulation:

(1) The applicant shall identify who will inspect and certify that the facility under construction conforms with the plans and specifications approved by the cabinet in accordance with this administrative regulation. Facilities designed by an engineer shall be inspected and certified by an engineer.

(2) The applicant shall provide an estimate for the cost of the facility.

(3) The applicant shall provide a USGS 7.5 minute topographic map with the proposed project identified.

(4) The applicant shall provide an estimate, and the basis for the estimate, for the average daily flow added by the proposed project.

(5) **Closure plan.**

(a) If an existing facility or a portion of a facility will be taken out of service, the applicant shall submit a closure plan discussing the following items:

1. How the facility will be constructed and the sewage will be diverted to the new construction without a bypass to a stream. If a bypass is unavoidable during construction, the applicant shall submit:

- a. An explanation of why construction cannot occur without the bypass;
 - b. An estimate of the shortest duration for the construction to be completed;
 - c. A description of all equipment, material, labor, and any other item necessary to complete the construction; and
 - d. An estimate of when the necessary items for the construction will be on-site;
2. How the contents of the facility will be removed and properly disposed;
3. How the abandoned facility will be removed or filled and covered; and
4. How the abandoned sewers will be plugged and manholes filled and covered.

(b) If an existing WWTP discharge is eliminated, the owner of the WWTP shall submit a completed No Discharge Certification, incorporated by reference in Section 29 of this administrative regulation, within thirty (30) days after the elimination of the discharge.

(6) Preliminary submittal. Applicants for WWTP construction permits may submit the following information prior to formal submittal of the construction application, to allow the applicant to receive a preliminary determination on the suitability of the proposed discharge location and preliminary effluent limits used in the design of the facility. If the information in this subsection is not submitted prior to the formal submittal, the information shall be submitted with the construction application. The preliminary determination shall be valid for up to one (1) year after issuance of the preliminary determination or until the issuance of the KPDES permit, whichever occurs first. The preliminary determination may be changed as a result of information presented during the public notice phase of the KPDES permitting procedure. The preliminary effluent limits are contingent upon the validity, accuracy, and completeness of the following information submitted by the applicant:

(a) A reproducible copy of a USGS 7.5 minute topographic map with the projected service area outlined, the proposed WWTP location, and the discharge point identified on the map;

(b) If a regional facility plan or water quality management plan is being or has been developed, a letter from the regional planning agency stating whether the applicant's project is

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compatible with the plan. The cabinet shall then make a final determination on the compatibility of the project with the plan;

(c) For a new or an expansion of an existing regional facility pursuant to 401 KAR 5:006, a regional facility plan or water quality management plan. The planning requirements of "Recommended Standards for Wastewater Facilities" ("Ten States' Standards"), incorporated by reference in Section 29 of this administrative regulation, shall be satisfied by the cabinet's approval of a regional facility plan or a water quality management plan; and

(d) For WWTP projects, a demonstration that the users of the proposed WWTP cannot be served by an existing regional facility. The applicant shall demonstrate that a connection to a regional facility is not available. The applicant shall provide a detailed evaluation of alternatives by conducting a twenty (20) year present worth cost analysis. The distance criteria for determining availability shall not apply to WWTPs with an average daily design capacity less than or equal to 1,000 gpd.

(7) For WWTP projects, the applicant shall submit the following design values:

- (a) Average daily flow;
- (b) Peak daily flow;
- (c) Peak hourly flow;
- (d) Influent BOD;
- (e) Influent suspended solids; and
- (f) Ammonium nitrogen (NH₃-N) of the influent.

(8) For WWTP projects, if the discharge point of a proposed WWTP fails to coincide with a stream indicated as a blue line on a USGS 7.5 minute topographic map, the applicant shall demonstrate that the applicant has a recorded deed, recorded other right of ownership, or recorded right of easement to discharge the applicant's effluent across any land owner's property which comes between the point of discharge and a blue line stream.

(9) For WWTP projects, the applicant shall submit a copy of the plat or survey clearly indicating the property boundaries, the position of the proposed facility, and the position of the dwellings within 200 feet of the WWTP.

(10) For WWTP projects, the applicant shall provide a sludge management plan which includes the method of sludge processing and ultimate sludge disposal.

(11) For WWTP projects, the applicant shall indicate that laboratory services shall be provided for self-monitoring and process control to ensure that the WWTP operation complies with the permit.

(12) For WWTP projects, the applicant shall submit:

- (a) A schematic drawing of the WWTP layout and detailed explanation of the proposed facility and its method of operation;
- (b) The WWTP's reliability category and a demonstration of how the WWTP complies with the reliability requirements in Section 13 of this administrative regulation; and
- (c) The design criteria used to size the unit processes.

Section 4. Application; Preliminary Considerations. (1) A permit shall not be granted to any facility which is not compatible, as determined by the cabinet, with a regional facility plan or with a water quality management plan approved by the cabinet or the U.S. EPA.

(2) A WWTP which serves an individual residence may be located within 200 feet of the dwelling that it serves. An open-top WWTP may be located within 200 feet of another dwelling which the WWTP does not serve, only if the WWTP is enclosed within a building which controls odors and dampens noise or the applicant demonstrates an equivalent method for noise and odor control will be provided.

(3) Any discharge point and direct discharges into a wellhead protection area shall comply with Water Policy Memorandum No. 84-02 (Five Mile Limit Policy), incorporated by reference in Section 29 of this administrative regulation.

(4) The initial suitability of any location for a proposed discharge point or spray irrigation field shall be determined by the cabinet after site inspection. In determining the suitability of the location, the cabinet may consider the distance to the nearest dwelling, distance to water intake used for a public water supply, downstream land use, physical characteristics and current use of the stream, physical characteristics of the proposed spray field including karst topography, need

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for easements, location of property boundaries, and other items consistent with this administrative regulation and KRS Chapter 224.

(5) If the discharge from the WWTP enters a sinkhole directly or enters a disappearing stream, the applicant shall submit a proposal for a groundwater tracer study or results from a previously conducted study to the cabinet for approval. The results of the groundwater tracer study shall be submitted to the cabinet for approval. The cabinet will review the results to determine if a discharge is approvable.

(6) The cabinet may condition or deny a permit to construct or expand a facility based on its compatibility with a regional facility plan or the availability of a regional facility. Permits to construct, expand, or operate a sewage system shall require connection to a regional facility when one (1) becomes available and shall not be renewed, reissued, or modified to remove that requirement unless a regional facility is no longer available.

(7) Pursuant to 401 KAR 5:300, the cabinet may coordinate issuance of a construction permit for WWTPs which require a new KPDES permit or modification to a KPDES permit with the issuance of the KPDES permit to ensure that public comments received as a result of the public notice requirements of 401 KAR 5:075 are considered in the issuance of the construction permit. The cabinet may also coordinate issuance of construction approval for the associated sewer lines with the issuance of the construction permit for the WWTP. The cabinet may condition or deny the construction permit based on those public comments.

Section 5. Fees. (1) Except as specified in KRS 224.10-100, 224.16-050, and subsection (5) of this section, the applicant shall submit a construction permit fee as provided in subsection (4) of this section with the construction permit application and any applicable KPDES fee.

(2) If the cabinet denies a construction permit for a WWTP or sewer line, the fee for the construction permit shall be retained by the cabinet, unless the fee is for a WWTP which serves only an individual residence.

(3) The applicant shall make checks or money orders payable to the Kentucky State Treasurer.

(4) **Construction permit fees** shall be as shown on the following schedule, except as provided in subsection (5) of this section.

Facility Category	Construction Permit Fee
Large Facility: WWTP	\$1,800
Intermediate Facility: WWTP	\$900
Small Facility: WWTP	\$450
Minor Modification to a WWTP:	\$200
Small Facility for Nonprofit Organizations pursuant to KRS 224.16-050(5):	\$50
Large Facility: Sewer Lines	\$800
Intermediate Facility: Sewer Lines	\$400
Small Facility: Sewer Lines	\$200

(5) Fees in this section shall not apply to agricultural wastes handling systems or renewals of KINDOP permits.

(6) The WWTP fee shall apply to the WWTP project and any sewers or pump stations located on the plant property. A sewer fee shall apply to all sewers, force mains, and pump stations which are bound together as one (1) set of plans. If a WWTP project includes sewers, force mains, or pump stations located off of the plant property, at least two (2) fees shall be submitted.

(7) To qualify for the reduced fee in subsection (4) of this section, nonprofit organizations shall submit proof that they are qualified under Section 501(c)(3) of the Internal Revenue Code.

Section 6. Plans and Specifications. (1) The applicant shall **submit to the cabinet at least three (3) sets of detailed plans and specifications** for the facility. Plans for gravity sewer lines and force mains shall include a plan view and a profile view. The submittal shall be accompanied by a

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completed permit application on the forms required by Section 2 of this administrative regulation and the applicable items required by this administrative regulation.

(2) The cabinet may request additional information as is necessary to evaluate the facility to ensure compliance with this administrative regulation.

(3) If cabinet approval is obtained, changes shall not be made to the plans and specifications which would alter or affect the location, capacity, type of treatment process, discharge location, or quality of effluent without issuance of a modified permit from the cabinet.

(4) If a proposed facility will become a part of a sewer system served by a regional facility or has a projected average daily design capacity of 10,000 gpd or more, the plans and specifications shall be prepared, stamped, signed, and dated by a professional engineer.

(5) The plans shall be accompanied by engineering calculations necessary for the understanding of the basis and design of the facility.

Section 7. Design Considerations. (1)(a) Facilities, except extended aeration package WWTPs with an average daily design capacity less than 100,000 gpd, shall be designed in accordance with the "Recommended Standards for Wastewater Facilities" of the Great Lakes-Upper Mississippi River Board of State Public Health and Environmental Managers, commonly referred to as "Ten States' Standards", 1990 edition, incorporated by reference in Section 29 of this administrative regulation. Deviations from the "Ten States' Standards" requirements may be approved if the applicant submits a written request for a deviation with the basis for the request. The basis for the deviation request shall be supported by current engineering practice. Some references to current engineering practice may be found in any "Manual of Practice" published by the Water Environment Federation and "Wastewater Engineering Treatment, Disposal, Reuse", Third Edition, by Metcalfe and Eddy, Inc.

(b) Other practices may be required by the cabinet based on the cabinet's best professional judgment that the practices are necessary for the protection of public health and the environment.

(c) Other practices may be approved by the cabinet if sufficient operational experience is available from previous similar installations to indicate no operational problems have occurred and that water quality standards have not been violated.

(2) Extended aeration package WWTPs, with an average daily design capacity less than 100,000 gpd shall comply with Section 10 of this administrative regulation and any other applicable section.

(3) The applicant shall demonstrate to the cabinet that the effluent from a proposed facility will:

(a) Protect those minimum conditions applicable to all waters of the Commonwealth found in 401 KAR 5:031;

(b) Not cause those waters classified by 401 KAR 5:026 or 5:030 to be of lesser quality than the numeric criteria applicable to those waters in 401 KAR 5:031 or the requirements of 401 KAR 5:030; and

(c) Be in accordance with any general or particular facility requirement mandated by 401 KAR Chapter 5.

(4) Each WWTP shall have a flow measuring device at the plant capable of measuring the anticipated flow, including variations, with an accuracy of \pm ten (10) percent. The flow measuring device shall measure all flow discharged by the WWTP including any bypasses. An indicating, recording, and totalizing flow measuring device shall be installed at each large WWTP. Flow measuring devices for new large WWTPs shall meet the requirements of Section 12 of this administrative regulation.

(5) Bypass or overflow structures of any type shall not be constructed in any sewer line or pump station or at any WWTP unless specifically approved by the cabinet in writing.

Section 8. Requirements for Sewer Line Extensions. (1) If the applicant does not own all of the proposed sewer line extension, the applicant shall identify the owner and the portion of the sewer line extension owned by the other person.

(2) The applicant shall submit letters from:

(a) The owner of the sewer line extension stating that the owner will accept operation and maintenance responsibilities for the sewer line extension when it is constructed;

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(b) The owner of the sewer system stating that the owner approves the connection and accepts responsibility for the additional flow; and

(c) The owner of the WWTP stating that the owner approves the connection and accepts responsibility for the additional flow.

(3) The applicant shall demonstrate that the portion of the sewer system used by the connection has adequate capacity to transport the current and anticipated peak flow to the WWTP and that the portion of the sewer system used by the connection is not subject to excessive infiltration or excessive inflow. The cabinet may deny a sewer line extension for that portion of the sewer system if the portion of the system is subject to excessive infiltration or excessive inflow unless a plan for investigation and remediation which addresses these conditions has been approved and is being implemented.

(4) The applicant shall demonstrate that the WWTP which receives the waste has adequate capacity to treat the current and the anticipated flow and is not subject to excessive infiltration or excessive inflow. The cabinet may deny the sewer line extension if the WWTP does not have adequate capacity to treat the flow or is subject to excessive infiltration or excessive inflow unless a plan for investigation and remediation which addresses these conditions has been approved and the plan is being implemented.

(5) The entrance of groundwater into, or loss of waste from, a new gravity sewer line shall be limited to 200 gpd per inch of diameter per mile of the gravity sewer line. This limitation includes manholes, gravity sewer lines, and appurtenances.

(6)(a) The integrity of a new gravity sewer line shall be verified by either the infiltration-exfiltration or low pressure air testing method. An infiltration-exfiltration test shall be performed with a minimum positive head of two (2) feet. A deflection test shall be performed for each new flexible pipe; pipe deflection shall not exceed five (5) percent. Each new manhole shall be tested for watertightness.

(b) The integrity of a new force main shall be verified by leakage tests. The applicant shall describe the proposed testing methods and leakage limits in the specifications submitted with the permit application.

(7) The construction of a new combined sewer shall not be permitted unless it is a consolidation sewer, flood relief sewer, or a replacement of a combined sewer that:

- (a) Conforms with the long-term CSO control plan;
- (b) Enhances water quality; and
- (c) Protects public health and safety.

(8) Gravity sewer lines and force mains shall be designed and constructed to give mean velocities, when flowing full, of not less than two and zero-tenths (2.0) feet per second. The roughness coefficient used in the Manning or Kutter's formula shall be 0.013 or the "C" factor used in the Hazen-Williams Formula shall be 100. If the specifications allow only plastic pipe, a roughness coefficient of 0.011 or a "C" factor of 120 may be used. Roughness coefficients between 0.013 and 0.011 may be considered for other pipe materials if sufficient documentation of experimental testing is approved by the cabinet.

(9) Gravity sewer lines and force mains shall have a minimum of thirty (30) inches of cover or provide comparable protection.

(10) If gravity sewer lines and force mains are to be constructed in fill areas, the fill areas shall be compacted to ninety-five (95) percent density as determined by the Standard Proctor Density test or to a minimum of ninety (90) percent density as determined by the Modified Proctor Density test prior to the installation of the sewer lines.

(11) The minimum size for conventional gravity sewer lines shall be eight (8) inches, except that a six (6) inch sewer line may be approved if no future extension is possible. Alternative type sewer systems may be approved if sufficient operational experience is available from previous similar installations to indicate no operational problems have occurred.

(12) A manhole shall be provided at the junction of two (2) building sewers. This subsection shall not apply to building sewers which serve single-family residences.

(13) The following building sewers shall be exempt from the requirements of this administrative regulation:

- (a) Gravity sewers which:
 1. Have a diameter of less than eight (8) inches and discharge directly to the sewer main;

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2. Serve a single-family residence building or a multifamily residence building with four (4) dwelling units or less; or

3. Serve a single office building or a single mercantile building with an occupant load of less than thirty (30) persons.

(b) Force main sewers, regardless of the location of the pump station which:

1. Have a length of less than 500 feet and discharge directly to a gravity sewer main;

2. Serve a single-family residence building or multifamily residence building with four (4) dwelling units or less; or

3. Serve a single office building or a single mercantile building with an occupant load of less than thirty (30) persons.

(14) Sewer lines shall be located at least fifty (50) feet away from a stream which appears as a blue line on a USGS 7.5 minute topographic map except where the sewer alignment crosses the stream. The distance shall be measured from the top of the stream bank. The cabinet may allow construction within the fifty (50) foot buffer if adequate methods are used to prevent the soil from entering the stream.

(15) Gravity sewer lines and force mains that cross streams shall be constructed by methods which maintain normal stream flow and allow for a dry excavation. Water pumped from the excavation shall be contained and allowed to settle prior to reentering the stream. Excavation equipment and vehicles shall operate outside of the flowing portion of the stream. Spoil material from the sewer line excavation shall not be allowed to enter the flowing portion of the stream.

(16) Pump station wetwells shall be sized such that, based on the average flow, the time to fill the wetwell from the pump-off elevation to the pump-on elevation shall not exceed thirty (30) minutes.

(17) Pump station wetwells shall have a vent.

(18) Pump stations shall provide a minimum of two (2) hours of detention, based on the average design flow, above the high level alarm elevation or provide an alternate source of power with wetwell storage providing sufficient time for the alternative power source to be activated.

(19) Each high point in the force main shall have automatic air release valves.

(20) The applicant shall submit a performance curve for proposed pump stations.

(21) A simplex design shall be used only for pump stations which serve an individual residence or business and a spare pump shall be available for immediate installation.

Section 9. Municipal Water Pollution Prevention Program. This section applies to owners of regional WWTPs, sewer systems served by regional WWTPs, and facilities with KIMOPs.

(1) For each regional WWTP, the cabinet shall review the WWTP's reported monthly flows and organic loads for the most recent twelve (12) months. If the annual average flow or organic load, or for systems with combined sewer lines the lowest monthly flow and associated organic load, exceed the following values, the cabinet shall advise the owner of the WWTP of the need to address the potential overload condition pursuant to subsection (2) of this section:

(a) For a regional WWTP with a design capacity of ten (10) mgd or less, ninety (90) percent of the WWTP's average daily design capacity; or

(b) For a regional WWTP with a design capacity of more than ten (10) mgd, ninety-five (95) percent of the WWTP's average daily design capacity.

(2) The cabinet may deny the approval of any sewer line extension until the owner of the WWTP commits to addressing the potential overload condition identified in subsection (1) of this section. The owner may address the condition by:

(a) Demonstrating, with supporting documentation, that the average daily design capacity of the plant is greater than the permitted amount. The cabinet shall review the request and if justified, shall issue a revised average daily design capacity for the WWTP by issuing a modification to the KPDES permit;

(b) Expanding the WWTP to a size sufficient to handle the anticipated flows and loads; or

(c) Performing other remedial measures which address the condition.

(3) Sewer line extensions which are of sufficient flow or add sufficient load to exceed the remaining design capacity of the WWTP or exacerbate water quality problems may be denied.

(4) The owners of the following facilities shall conduct a study of the sewer system or the affected portion of the sewer system which complies with subsections (5) and (6) of this section:

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(a) Regional WWTPs with reported average flows or organic loads which exceed the percent identified in subsection (1)(a) or (b) of this section, as applicable, and KIMOP facilities which either:

1. Receive more than 275 gallons per capita per day of sewage flow based on the maximum flow received during a twenty-four (24) hour period exclusive of industrial flow; or
2. Receive more than 120 gallons per capita per day of sewage flow based on the annual average of daily flows exclusive of industrial flow.

(b) Regional WWTPs, sewer systems served by a regional WWTP, or facilities with KIMOPs which are subject to excessive infiltration or excessive inflow.

(5) The study shall determine if the infiltration-inflow can be removed in a cost-effective manner by using a twenty (20) year present worth cost analysis and if not, shall identify the modifications to the sewer system, affected portion of the sewer system, or the WWTP that are necessary to transport and treat the infiltration-inflow. A schedule for completion of the necessary modifications shall also be prepared. The study and schedule shall be submitted to the cabinet for review and approval.

(6) For the infiltration-inflow study of the sewer system or the affected portion of the sewer system, the owner shall:

- (a) Use a map of the sewer system or the affected portion of the sewer system to select manholes for the installation of flow monitoring equipment;
- (b) Install equipment to monitor flow at the key manholes, groundwater levels, and rainfall volume and duration for a period of thirty (30) to ninety (90) days;
- (c) Conduct physical surveys, smoke tests, and dye water studies of the affected portion of the sewer system;
- (d) Evaluate the cost-effectiveness of transportation and treatment versus correction of the infiltration-inflow sources by using a twenty (20) year present worth cost analysis;
- (e) If justified, internally inspect the sewer lines in the affected portion of the sewer system to determine the rehabilitation locations and methods;
- (f) Develop plans for rehabilitation of the affected portion of the sewer system or modifications to the affected portion of the facility necessary to transport and treat all flows; and
- (g) Develop a schedule for completion of the rehabilitation or modifications.

(7) The owner of the facility shall complete the necessary rehabilitation or modifications in accordance with the approved schedule. The cabinet may deny further sewer line extensions if the owner is not meeting or is not making acceptable progress toward meeting the approved schedule.

Section 10. Extended Aeration Package WWTP Requirements. This section shall apply to extended aeration package WWTPs intended to treat only domestic sewage but shall not apply to extended aeration package WWTPs which serve an individual residence.

- (1) A bar screen shall be provided for each plant, except those with trash traps.
- (2) The aeration chamber shall have a minimum detention time of twenty-four (24) hours based on the average design flow.
- (3) A minimum of 2,050 cubic feet of air shall be provided per pound of BOD.
- (4) The clarifier shall have a minimum detention time of four (4) hours based on the average design flow, a surface overflow rate of less than 1,000 GPD/ft², and a solids loading of less than thirty-five (35) lb/ft² based on the peak daily design flow rate.
- (5) A positive sludge return shall be provided.
- (6) A source of water shall be provided for cleanup. If a potable source is provided, backflow preventers shall be installed to protect the water supply.
- (7) Fencing with a lockable gate shall be installed around the plant site.
- (8) An all-weather access road to the plant shall be provided.
- (9) A sludge holding system shall be provided for each large WWTP. The sludge holding system shall:
 - (a) Provide two (2) cubic feet of volume per 100 gallons of WWTP design treatment capacity;
 - (b) Provide thirty (30) cubic feet per minute (cfm) of air per 1,000 cubic feet of tank volume;
 - (c) Be designed to prevent overflows; and
 - (d) Transport supernatant to the aeration chamber.

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(10) For large WWTPs, motors and blowers shall be installed sufficient to handle the load if the largest unit is taken out of service.

(11) If food grinders are used, treatment units shall be designed for treating the additional BOD loading; additional treatment processes may be required.

(12) Post aeration, if required by effluent limits, shall be designed to raise the effluent dissolved oxygen from two (2) mg/l to the required effluent concentration. If a diffused air system is used, a minimum blower capacity of 0.154 cubic feet per minute (cfm) per 1,000 gallons of average daily design capacity shall be provided. If a step aeration ladder is used, a minimum drop of nineteen (19) feet shall be provided.

(13) WWTPs with monthly average permit limits for CBOD of twenty (20) mg/l or less shall provide additional treatment units.

(14) WWTPs which serve restaurants or other similar establishments where food is prepared and served shall be designed to treat the additional BOD loading.

(15) Effluent discharge piping for new WWTPs, except regional facilities, shall be designed to transport sewage to facilitate a future connection to a regional facility.

(16) Used package extended aeration WWTPs may be used if the tank is structurally sound and all mechanical equipment has been reconditioned.

Section 11. Disinfection. (1) All WWTPs shall have a disinfection process which meets the following requirements:

(a) An ultraviolet disinfection system designed to treat the anticipated peak hourly flow;

(b) A chlorination system with a flow or demand proportional feed system. The chlorine contact tank shall have a minimum detention time of thirty (30) minutes based on the average flow, or fifteen (15) minutes based on the peak hourly flow, whichever requires the larger tank size. WWTPs shall also have a dechlorination system with a flow or demand proportional feed system if necessary to meet the effluent limits; or

(c) A chlorination system with a manually controlled feed system and a flow equalization basin designed to eliminate the diurnal flow variations. The flow equalization basin shall meet the requirements of Section 17 of this administrative regulation. The chlorine contact tank shall have a minimum detention time of thirty (30) minutes based on the average design flow or fifteen (15) minutes based on peak hourly flow. WWTPs shall also have a dechlorination system if necessary to meet the effluent limits.

(d) Other disinfection processes providing equivalent treatment may be approved by the cabinet.

(2) Tablet type chlorination equipment shall not be used in intermediate or large WWTPs.

Section 12. Requirements for Flow Measuring Devices. This section shall apply to new large WWTPs. Each flow measuring device shall be capable of measuring the anticipated flow, including variations, with an accuracy of \pm ten (10) percent. The flow measuring device shall measure all flow received at the WWTP. An indicating, recording, and totalizing flow measuring device shall be installed at each large WWTP.

(1)(a) If the influent and effluent flow are expected to be significantly different, flow measuring devices shall be provided for both the influent and the effluent flow.

(b) Multiple flow measuring devices shall be provided for the following:

1. WWTPs that store and hydrographically control the release of effluent;
2. WWTPs with flow equalization facilities which are designed to store more than the volume required to dampen the diurnal flow variations;
3. WWTPs with lagoons that have a detention time of greater than twenty-four (24) hours;
4. WWTPs with the capability to bypass a treatment process; and
5. WWTPs with more than one (1) discharge point.

(2) Sharp crested weirs shall be used for measuring effluent flow only and shall have the following characteristics:

(a) The weir shall be installed perpendicular to the axis of flow and there shall be no leakage at the weir edges or bottom;

(b) The weir plate shall be level and adjustable;

(c) The sides of a rectangular contracted weir shall be vertical;

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- (d) The angles of V-notch weirs shall be cut precisely;
 - (e) The thickness of the weir crest shall be less than one-tenth (0.1) of an inch;
 - (f) The distance from the weir crest to the bottom of the approach channel shall be more than one (1) foot or two (2) times the maximum weir head, whichever is greater;
 - (g) For weirs other than suppressed, rectangular weirs, the distance from the sides of the weir to the sides of the approach channel shall be more than (1) foot or two (2) times the maximum weir head, whichever is greater;
 - (h) Air shall circulate freely under, and on both sides of, the nappe;
 - (i) The measurement of head on the weir shall be made at least four (4) times the maximum weir head upstream from the weir crest;
 - (j) The cross-sectional area of the approach channel shall be at least eight (8) times the area of the nappe. The approach channel shall be straight and uniform upstream from the weir for a distance of fifteen (15) times the maximum weir head;
 - (k) The minimum acceptable weir head shall be two-tenths (0.2) foot;
 - (l) The maximum downstream pool level shall be at least two-tenths (0.2) foot below the crest elevation;
 - (m) The weir length for a rectangular, suppressed, or cipolletti weir shall be at least three (3) times the maximum weir head; and
 - (n) A reference staff gauge shall be provided.
- (3)** Parshall flumes may be used to measure influent or effluent flows and shall have the following characteristics:
- (a) The approach channel upstream of the flume shall be straight and have a width uniform for the length required by the following:
 - 1. If the flume throat width is less than one-half (1/2) the width of the approach channel, the straight upstream channel length shall be twenty (20) times the throat width;
 - 2. If the flume throat width is equal to or larger than one-half (1/2) the width of the approach channel, the straight upstream length shall be greater than ten (10) times the approach channel width; and
 - 3. If the cross-sectional area of the inlet to the approach channel is smaller than the cross-sectional area of the approach channel, additional straight upstream channel length may be required to dissipate the velocity;
 - (b) The throat section walls shall be vertical;
 - (c) The head measuring point shall be at two-thirds (2/3) the length of the converging sidewall;
 - (d) The flow shall be evenly distributed across the channel, shall be free of turbulence or waves, and shall not be located after transition sections;
 - (e) The longitudinal and lateral axes of the converging crest floor shall be level;
 - (f) Free flow conditions shall be maintained; and
 - (g) A reference staff gauge shall be provided for H_a and H_b to determine if submergence occurs.
- (4)** Other types of flow measuring devices may be approved by the cabinet if the device reasonably and accurately measures the flow.

Section 13. Reliability Categories. The cabinet shall determine the reliability categories of a WWTP based on factors such as the size of the discharge, the size of the receiving stream, and downstream water quality classifications.

- (1)** WWTP reliability categories are divided into three (3) grades:
 - (a) **Grade One** WWTPs shall have **redundancy** in units and alternate power sufficient for the continuous use of all treatment processes and disinfection;
 - (b) **Grade Two** WWTPs shall have redundancy in units and alternate power sufficient for the continuous use of the preliminary, primary, and secondary treatment processes and disinfection; and
 - (c) **Grade Three** WWTPs shall have redundancy in units and alternate power sufficient for the continuous use of the preliminary and primary treatment processes and disinfection.
- (2)** WWTPs which discharge to a waterbody designated in 401 KAR 5:030 as a waterbody whose quality exceeds that necessary to support propagation of fish, shellfish, and wildlife and

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recreation in and on the water shall meet the requirements of a Grade One reliability category if the average daily design capacity is greater than twenty (20) percent of the seven (7) day, ten (10) year (7Q₁₀) low flow of the receiving stream.

(3) WWTPs which discharge into sinkholes or disappearing streams shall meet the requirements of a Grade One reliability category.

(4) WWTPs which discharge within five (5) miles of a public water supply intake or discharge directly into a wellhead protection area shall meet the requirements of a Grade One reliability category.

(5) WWTPs which discharge to a waterbody designated in 401 KAR 5:030 as a waterbody whose quality exceeds that necessary to support propagation of fish, shellfish, and wildlife and recreation in and on the water shall meet the requirements of a Grade Two reliability category if the average daily design capacity is equal to or less than twenty (20) percent of the 7Q₁₀ low flow.

(6) Large WWTPs which discharge within five (5) miles upstream of the head of an embayment when the lake is at normal pool elevation shall meet the requirements of a Grade Two reliability category.

(7) Large WWTPs shall, at a minimum, meet the requirements of a Grade Three reliability category.

(8) WWTPs which are subject to reliability requirements shall:

(a) Provide sufficient units to allow for cleaning and repair without causing a violation of effluent limitations or a bypass from the sewer system or the WWTP. This shall require storage or treatment capability sufficient to contain or treat the volume of the largest tank and the flow received during the time needed to drain, complete cleaning, and accomplish any anticipated repair without causing a permit violation or bypass of any treatment process; and

(b) Provide alternate power from the connection of at least two (2) independent power sources such as substations, an emergency generator, or comparable protection.

Section 14. Requirements for Trash Traps. Trash traps shall not be used on WWTPs with a design capacity of larger than 100,000 gpd. Trash traps shall have an outlet baffle, be accessible to cleaning equipment, have air-tight access openings for cleaning, allow for cleaning in front of baffles, and have a volume required by this section.

(1) For small WWTPs, the trash trap volume shall be fifteen (15) percent of the average daily design flow; and

(2) For intermediate or large WWTPs with a design capacity of 100,000 gpd or less, the trash trap volume shall be as indicated in the following table for the appropriate WWTP capacity. For capacities not included, the volume shall be interpolated.

WWTP Capacity (GPD)	Trash Trap Volume (Gallons)
10000	1500
20000	2400
30000	2900
40000	3200
50000	3430
60000	3600
70000	3740
80000	3840
90000	3920
100000	4000

Section 15. Requirements for Slow Sand Filters. (1) Wastewater loading shall not exceed five (5) GPD per square foot of filter surface area.

(2) Filter areas larger than 900 square feet shall have multiple beds.

(3) The discharge piping on the filter bed shall be located so that the maximum lateral travel over the sand is less than twenty (20) feet.

(4) Each discharge point shall serve a maximum of 300 square feet of filter surface.

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- (5) Each discharge point shall have a splash block with a minimum surface area of nine (9) square feet and a square or circular shape.
- (6) Distribution piping shall be designed to drain properly.
- (7) Underdrains shall be spaced on ten (10) foot centers or less.
- (8) Gravel shall be placed around the underdrains and to a depth of six (6) inches over the top of the underdrains.
- (9) The filter bed shall have at least thirty (30) inches of sand with an effective size between three-tenths (0.3) and five-tenths (0.5) millimeter.
- (10) The dosing chamber shall have a volume sufficient to provide a depth of two (2) inches over the entire filter bed.

Section 16. Requirements for Rapid Sand or Mixed Media Filters. Rapid sand or mixed media filter loadings shall not exceed one (1) gallon per minute per square foot of filter surface area. If flow equalization is provided, the allowable loading may be increased to two (2) gallons per minute per square foot. A backwash system shall be provided.

Section 17. Requirements for Flow Equalization Basins. (1) Flow equalization basins shall have:

- (a) A variable flow weir box set to deliver flow at a treatable rate;
- (b) A minimum of 1.25 cfm of diffused air per 1,000 gallons of flow equalization volume;
- (c) An emergency overflow to an appropriate point in the treatment scheme; and
- (d) Sufficient volume to dampen the diurnal flow variations.

(2) If no site specific information nor similar flow pattern is available, the flow equalization basin volume shall be based on the following formula:

$$V = t - \frac{1}{24} \times Q$$

Where:

V is the required volume for the flow equalization basin;

t is the number of hours flow is generated; and

Q is the volume of flow anticipated to be received at the WWTP during a twenty-four (24) hour period.

(3) Flow equalization basins with earth embankments shall be constructed with a slope no steeper than 1:3 (one to three) unless a steeper slope is supported by geotechnical and slope stability studies.

(4) For flow equalization basins constructed in material other than earth, the applicant shall indicate how the basin will be properly sealed.

Section 18. Requirements for Wastewater Treatment Lagoons. (1) BOD loading shall be less than thirty-five (35) pounds per day per acre of lagoon surface for nonaerated primary lagoon systems, fifty (50) pounds per day per acre of lagoon surface for nonaerated polishing lagoons, and 150 pounds per day per acre of lagoon surface for aerated lagoons.

(2) The lagoon design submittal shall provide details on the aeration system proposed including the type, location, and capacity of the aeration units; the operating depth; the area of the lagoon at the operating depth; permeability and thickness of the lagoon liner; anticipated ultimate wastewater flow; and influent wastewater characteristics. New lagoon systems shall be designed to treat a raw wastewater BOD of at least 240 mg/l. The lagoon design shall be evaluated by the method discussed in "Ten States' Standards", incorporated by reference in Section 29 of this administrative regulation, and the predicted BOD remaining shall be less than the required effluent concentration.

(3) Lagoons shall be at least 200 feet from any present or future residence.

(4) Nonaerated primary lagoons shall have a minimum detention time of ninety (90) days.

(5) The "Ten States' Standards" requirement for vegetation to be established prior to filling the lagoon shall not apply.

(6) The cabinet may approve a lagoon with an embankment slope steeper than 1:3 (one to three) if supported by geotechnical and slope stability studies.

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(7) The applicant shall indicate how basins constructed in material other than earth will be properly sealed.

Section 19. Additional Requirements for WWTPs Which Serve Schools. In addition to the requirements of Sections 10 to 18 of this administrative regulation, the following requirements shall apply to WWTPs which serve schools:

(1) If a flow equalization basin is provided it shall meet the requirements of Section 17 of this administrative regulation.

(2) The aeration tank shall have at least ten (10) gallons of capacity per day per student for elementary and middle schools, or at least twenty (20) gallons of capacity per day per student for high schools.

(3) The secondary clarifier shall be sized to provide a maximum surface loading, at the average design flow, of 300 GPD per square foot of clarifier surface area. If no flow equalization basin is provided, the secondary clarifier shall be sized to provide a maximum surface loading of 100 GPD per square foot at average daily design flow.

Section 20. Additional Requirements for WWTPs Which Serve Multifamily Residential Developments. In addition to the requirements of Sections 10 to 18 of this administrative regulation, the following requirements apply to WWTPs which serve multifamily residential developments. Multifamily residential developments including subdivisions, condominiums, apartments, and mobile home parks shall provide one (1) or more of the following measures for additional reliability:

(1) Blowers and motors shall be installed sufficient to handle the load if the largest unit is not available for service;

(2) An alternate source of power; or

(3) Additional treatment units or processes.

Section 21. Additional Requirements for WWTPs Which Propose Effluent Disposal by **Spray Irrigation**. In addition to the requirements of Sections 10 to 18 of this administrative regulation, the following requirements apply to WWTPs which propose effluent disposal by spray irrigation.

(1) **One (1) acre of spray field shall be provided for each 1,000 GPD of treated wastewater.** Higher application rates may be approved if justified by a detailed design based on site specific information.

(2) The spray field shall have less than a six (6) percent slope, have moderate to high soil permeability, and have sufficient vegetative growth to promote absorption, evaporation, and transpiration.

(3) A WWTP capable of meeting secondary treatment which meets the requirements of 401 KAR 5:045 and disinfection shall be provided prior to irrigation.

(4) A twenty (20) foot buffer zone shall be provided between the outer boundary of the spray field and the property boundary or the applicant shall provide screening to inhibit the transport of aerosols and windborne spray across property boundaries.

(5) A spray irrigation field for an individual residence shall have:

(a) At least three (3) sprinkler heads;

(b) A spray area larger than 0.19 acre; and

(c) A barrier around the spray field.

(d) The spray irrigation field shall be located at least 200 feet from the nearest dwelling.

(e) Effluent from the spray irrigation field shall be contained on the owner's property.

Section 22. Requirements for WWTPs which Serve an Individual Residence. (1) Wastewater plants intended to serve an individual residence and eligible for a general KPDES permit under 401 KAR 5:055 shall have the following treatment processes: extended aeration WWTP, filtration, and disinfection. The WWTP shall be capable of meeting secondary treatment requirements of 401 KAR 5:045 without additional treatment units.

(2) A minimum lot size of one (1) acre shall be provided for WWTPs located within a residential subdivision.

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(3) WWTP serving an individual residence and proposing effluent disposal by spray irrigation shall also comply with Section 21 of this administrative regulation.

Section 23. Additional Requirements for WWTPs which Serve Car Washes or Laundries. In addition to the requirements of Sections 10 to 18 of this administrative regulation, WWTPs which serve commercial or fleet car washes, commercial laundries, or laundries serving commercial or institutional establishments, shall have an average daily flow which is at least five (5) times greater than the anticipated flow of the car wash, commercial laundry, or laundry serving a commercial or institutional establishment.

Section 24. The **Construction Permit.** (1) A permit to construct a facility shall be effective upon issuance unless otherwise conditioned. Construction shall be completed within twelve (12) months unless additional time is requested. If construction is not commenced within the twelve (12) months following a permit's issuance, a new permit shall be obtained before construction may begin. The cabinet may allow a single twelve (12) month extension to begin construction if site conditions have not changed.

(2) The permittee shall submit the certification from the engineer that the facility was constructed in conformity with the plans and specifications approved by the cabinet in accordance with this administrative regulation within thirty (30) days from the completion of construction. The permittee may submit the certification for projects not designed by an engineer. Failure to comply with this subsection may result in the denial of sewer line extensions to the incomplete facility.

(3) The permit is issued to the applicant and the permittee shall remain the responsible party for compliance with all applicable statutes and administrative regulations until a notarized applicable change in ownership certification, incorporated by reference in Section 29 of this administrative regulation, is submitted and the transfer of ownership is acknowledged by the cabinet.

(4) Permit conditions.

(a) Permits may contain special conditions that in the best professional judgment of the cabinet are necessary to comply with KRS Chapter 224 and administrative regulations promulgated pursuant thereto. The conditions shall be in writing and treated as a part of the permit.

(b) The following conditions shall apply to all construction permits:

1. There shall be no deviations from the plans and specifications submitted with the application or the conditions specified in this subsection, unless authorized in writing by the cabinet.

2. The permittee shall ensure that the effluent is of satisfactory quality to prevent violations of the standards in 401 KAR Chapter 5.

3. When the construction of the system is completed, the owner shall submit a written certification to the cabinet that the facility has been constructed and tested in accordance with the approved plans and approval conditions. Failure to certify may result in penalty assessments or future approvals being withheld.

(c) The following conditions shall also apply to construction permits issued to WWTPs which discharge to waters of the Commonwealth:

1. If violations of the standards of 401 KAR Chapter 5 result from the discharge of the treated effluent, the owner shall provide additional treatment or an extension of the effluent line;

2. If a sewer system served by a regional facility becomes available, the WWTP shall be abandoned and the influent flow shall be diverted to the regional facility;

3. Issuance of this permit does not relieve the permittee from the responsibility of obtaining any other permits or licenses required by this cabinet and other state, federal, and local agencies.

(5) The construction permit for agricultural wastes handling systems may be used as an interim operational permit until the operational permit is issued or denied.

(6) The issuance of a permit by the cabinet shall not convey any property rights of any kind or any exclusive privilege.

Section 25. Kentucky No Discharge Operational Permits (KNDOPs). (1) Applicability. These permits are issued to facilities which do not discharge to waters of the Commonwealth, including

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agricultural wastes handling systems and facilities which dispose of their effluent by spray irrigation. If the permit is issued to the applicant, the permittee shall remain the responsible party for compliance with all applicable statutes and administrative regulations until a notarized applicable change in ownership certification, incorporated by reference in Section 29 of this administrative regulation, is submitted and the transfer of ownership is acknowledged by the cabinet.

(2) Permit conditions. Permits may contain special conditions that in the best professional judgment of the cabinet are necessary to comply with KRS Chapter 224 and administrative regulations promulgated pursuant thereto. The conditions shall be in writing and shall be treated as part of the permit. The following conditions shall apply to all KNDOPs.

(a) There shall be no point source discharge of wastewater from the facility.

(b) The permit authorizes operation only of the WWTP described in the permit in the manner and under the conditions described in the permit application and supporting documents as approved by the cabinet in the permit.

(c) The permit shall not be construed as authorizing any operation which is otherwise in contravention of any statute, administrative regulation, ordinance, or order of any governmental unit. The permit shall not be construed to authorize the creation or maintenance of a nuisance.

(d) The permit shall be subject to revocation or modification by the cabinet as set forth in KRS Chapter 224. Commencement of a routine point source discharge shall result in a permit revocation.

(e) Any permit shall be issued under the provisions of KRS Chapter 224 and administrative regulations promulgated pursuant thereto. Issuance of the permit shall not relieve the permittee from the responsibility of obtaining any other permits or licenses required by the cabinet and other state, federal, and local agencies.

(f) If applicable, the waste materials removed from the settling basin shall be disposed of according to the requirements of the Division of Waste Management in 401 KAR Chapters 30 through 49.

(g) Land application which results in runoff to a stream is prohibited.

Section 26. Kentucky Intermunicipal Operational Permits (KIMOPs). These permits are issued to publicly owned sewer systems which discharge to a WWTP or a sewer system which is owned by another person. These permits shall not apply to sewer systems with less than 5,000 linear feet of sewer line. The permit is issued to the applicant and the permittee shall remain the responsible party for compliance with all applicable statutes and administrative regulations until a notarized applicable change in ownership certification, incorporated by reference in Section 29 of this administrative regulation, is submitted and the transfer of ownership is acknowledged by the cabinet. Permits may contain special conditions that in the best professional judgment of the cabinet are necessary to comply with KRS Chapter 224 and administrative regulations promulgated pursuant thereto. The conditions shall be in writing and shall be treated as a part of the permit.

Section 27. Operational Permits. Operational permits required in Sections 25 and 26 of this administrative regulation shall be valid for five (5) years from the date of issuance, and shall be renewed to maintain continuous operation.

(1) The cabinet's permit may specify the type of monitoring or analysis required for a facility and the frequency that the monitoring or analysis shall be performed and reported to the cabinet.

(2) The facility, including backup or auxiliary components, shall be operated and maintained to ensure compliance with permit requirements and this administrative regulation.

(3) The issuance of a permit by the cabinet shall not convey any property rights of any kind or any exclusive privilege.

Section 28. Alternative Requirements. The cabinet may approve alternative requirements to the provisions of Sections 7 to 23 of this administrative regulation based on the cabinet's best professional judgment that the alternative measure provides sufficient treatment. The applicant shall demonstrate that any alternatives requested by the applicant provide sufficient treatment.

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Section 29. Documents Incorporated by Reference. (1) The following material is incorporated by reference:

(a) "Recommended Standards for Wastewater Facilities", "1990 Edition", Great Lakes-Upper Mississippi River Board of State Public Health and Environmental Managers. This document is also known as the "Ten States' Standards";

(b) "Water Policy Memorandum No. 84-02, Five Mile Limit Policy, signed by T. Michael Taimi, August 28, 1984", Facilities Construction Branch;

(c) "Construction Permit Application for Wastewater Treatment Plant, DEP 7071-W (9/96)", Facilities Construction Branch;

(d) "Construction Permit Application for Sewer Line Extension, DEP 7071-S (9/96)", Facilities Construction Branch;

(e) "Change in Ownership Certification for Sewer Line Extensions, DEP 7071-CO (9/96)", Facilities Construction Branch;

(f) "Change in Ownership Certification, DEP 7032-CO (9/96)";

(g) "No Discharge Certification, DEP 7032-NDC (9/96)";

(h) "Kentucky No Discharge Operational Permit Application, DEP 7032-ND (9/96)";

(i) "Kentucky No Discharge Operational Permit Application for Agricultural Wastes Handling Systems, Short Form B, DEP 7032-B-ND (9/96)";

(j) "Site Survey Request, Kentucky No Discharge Operational Permit for Agricultural Wastes Handling System, DEP 7032-Ag-Site (9/96)"; and

(k) "Kentucky Intermunicipal Operational Permit Application, DEP 7103 (9/96)".

(2) This material may be inspected, copied, or obtained, subject to applicable copyright law, at the Division of Water, 14 Reilly Road, Frankfort, Kentucky, Monday through Friday, 8 a.m. to 4:30 p.m. (1 Ky.R. 760; Am. 1381; eff. 7-2-75; 12 Ky R. 504; eff. 12-10-85; 15 Ky.R. 282; 1005; 1257; eff. 10-26-88; 16 Ky.R. 599; 1191; eff. 1-9-90; 23 Ky.R. 1633; 2766; eff. 5-14-97; 30 Ky. R. 1333; 1781; 2135; eff. 4-12-2004.)

planning requirements for regional areas – 5:006

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401 KAR 5:006. Wastewater planning requirements for regional areas.

RELATES TO: KRS 224.10, 224.70, 224.73, 224A.040, 224A.050, 224A.055, 224A.070, 224A.080, 33 U.S.C. 1251 et seq.

STATUTORY AUTHORITY: KRS 224.10-100, 224.16-050, 224.70-100, 224.70-110, 224A.111, 224A.112, 224A.113, 40 C.F.R. 25.4, Parts 35, 130, 33 U.S.C. 1281, 1285, 1288, 1313

NECESSITY, FUNCTION, AND CONFORMITY: KRS 224.10-100 requires the Natural Resources and Environmental Protection Cabinet to develop a comprehensive plan for the management of water resources and to provide for the prevention, abatement, and control of all water pollution. The Clean Water Act, 33 USC 1281 et seq. and more specifically, 33 USC 1313(e), requires the implementation of a continuing planning process by governmental bodies to provide for the control of water pollution. 33 USC 1288 requires the governor of the state to designate a boundary for areas within the state and single representative organizations within the areas to develop a wastewater treatment management plan applicable to all wastewaters generated within an area. 40 CFR Part 130 specifies further detail for compliance with Section 208 of the Clean Water Act, including the requirement that the state establish and maintain a continuing planning process that includes the process for incorporating elements of any applicable areawide wastewater treatment management plans under Section 208, applicable basin plans under Section 209 of the Clean Water Act, and a process for updating and maintaining water quality management plans, including schedules for revision. 40 CFR 130.6(e) also requires the state and areawide agencies to update the plans as needed to reflect changing water quality conditions, results of implementation actions, and new requirements, or to remove conditions in prior conditional or partial plan approvals. This administrative regulation implements the required planning process for point sources of pollution for the Commonwealth of Kentucky in order to conform with federal requirements and provides for the preparation of wastewater treatment management plans by governmental agencies for point sources of pollution.

Section 1. Applicability. This administrative regulation shall govern the regional planning process for the development of water quality management plans to control point sources of pollution in given areas throughout the Commonwealth. This administrative regulation establishes the process by which regional planning agencies and the Commonwealth shall comply with Sections 201, 205, 208, and 303(e) of the Clean Water Act to provide planning for wastewater control in particular areas for point sources of pollution.

Section 2. Requirements. **(1)** No new regional facility shall be constructed, no average daily design capacity of an existing regional facility shall be expanded by more than thirty (30) percent, or no existing regional sewage collection system shall expand its equivalent population served by more than thirty (30) percent of the existing population, without the regional planning agency submitting a regional facility plan and the cabinet approving the plan. All regional facility plans shall be prepared by a registered professional engineer.

(2) A regional planning agency shall submit a regional facility plan or regional facility plan update when the following occurs:

- (a) A new regional facility is proposed to be constructed within the planning area;
- (b) The average daily design capacity of an existing regional facility is proposed to be expanded by more than thirty (30) percent;
- (c) The equivalent population served by an existing regional sewage collection system is proposed to be expanded by more than thirty (30) percent of the existing population served;
- (d) A regional facility or other governmental agency applies for a grant from the U.S. EPA or applies for a loan from the federally assisted wastewater revolving fund pursuant to the requirements of 40 CFR Part 35 and 200 KAR Chapter 17. A plan of study shall be submitted to the cabinet for the project to be eligible to be placed on the project priority list and receive priority points;

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(e) A regional planning agency considers the submission of the plan to be in the best interest of the public and the environment; or

(f) It has been twenty (20) years since the regional planning agency or its successor has submitted a regional facility plan.

Section 3. Regional Planning Agencies. (1) Governmental entities such as cities, counties, and other public bodies that are created by KRS Chapter 67, 67A, 74, 76, 96, 108, or 220 may apply to the cabinet to become a regional planning agency, if they have not already been designated as a regional planning agency, by submitting a regional facility plan. The cabinet may designate the entity as a regional planning agency if it finds that the proposed area is not served by another regional planning agency; the development of this agency would be in the best interest of the public and the environment; or the agency has the legal, institutional, managerial, and financial capability, and specific activities necessary to carry out its responsibilities in accordance with Section 208(c)(2)(A) through (I) of the CWA.

(2) Designation. Regional planning agencies may be designated by the cabinet in accordance with Section 208(a)(2) and (3) of the CWA and this administrative regulation. Designations and de-designations shall be subject to approval by the U.S. EPA in accordance with Section 208(a)(7) of the CWA.

(3) De-designation. The cabinet may modify or withdraw the planning designation of a regional planning agency if:

- (a) The regional planning agency requests the cancellation;
- (b) The regional planning agency fails to meet its planning requirements as specified in grant or loan agreements, contracts, or memoranda of understanding; or
- (c) The regional planning agency no longer has the resources or the commitment to continue water quality planning activities within the designated boundaries.

(4) Impact of de-designation. When a regional planning agency's designation has been withdrawn, the cabinet shall assume direct responsibility for continued water quality planning and oversight of implementation of planning activities within the area.

Section 4. Contents of Plan. The regional facility plan shall include the necessary information to allow for an environmental assessment and to assure that the most cost-effective and environmentally sound means of achieving the established water quality goals can be implemented. These plans shall contain the following information:

(1) Maps showing the planning area. In the determination of a planning area, appropriate attention shall be given to include the entire area where cost savings, regionalization, other management advantages, or environmental gains may result from interconnection of individual sewage facilities or collective management of the systems. At least one (1) original seven and one-half (7 1/2) minute USGS topographic map shall be submitted showing the planning area. Computer generated USGS data compatible with the cabinet's computer system may be substituted for the USGS map.

(2) A description of the existing regional facilities, including physical condition, hydraulic and organic design capacities, characteristics of wastewater, ability to meet permit limits, method of sludge handling and disposal, existing flows including average and peak flows, a waste load allocation for the proposed project, inflow and infiltration problems including location and frequency of bypasses or overflows, combined sewers if any, the collection system including location of pump stations and their capacities, and operation and maintenance problems. The location and identification of any other sewage treatment plants located in, or serving a part of, the planning area shall also be shown.

(3) A description of the planning area characteristics, including the location of wetlands, delineation of the 100 year floodplain area, topography, groundwater, surface streams, geology, soils with specific mention of suitability or unsuitability of soils, and topography for on-site sewage disposal systems.

(4) If there is a proposed project, a discussion of the need for the project including current compliance status, applicable permit limits, and if proposed sewers are involved, documentation as to why on-site systems are not acceptable. Discussions and documentation of any water quality or public health problems in the area shall be included. The applicant shall also describe

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any type of state or federal enforcement actions that may exist against any wastewater treatment plant within the area.

(5) A discussion of the current and projected population in the planning area including existing population in the current service area, twenty (20) year projected population in the current service area, existing population in unsewered parts of the planning area, and twenty (20) year projected population in the unsewered parts of the planning area. Current and projected industrial and commercial users of the system shall be included. When appropriate, those areas of the planning area not currently sewered should be divided into three (3) time frames: present to two (2) years, three (3) to ten (10) years, and eleven (11) to twenty (20) years. The current and projected populations shall be shown for each area on the planning area map. If available, a local planning and zoning land use map shall be included. The basis for the projected population change shall be identified.

(6) A detailed evaluation of alternatives, along with a twenty (20) year present worth cost analysis for each alternative. All wastewater management alternatives considered, including no action, and the basis for the engineering judgement for selection of the alternatives chosen for detailed evaluation, shall be included. Sufficient detail shall be provided to allow for a thorough cost analysis to be conducted. Nonmonetary effectiveness criteria shall be limited to implementability, environmental impact, engineering evaluation, public support, and regionalization. The alternatives shall reflect a comprehensive regional plan for the planning area and shall minimize the number of point source discharges. Intended sources of funding shall be listed along with estimated user fees.

(7) In addition to the cost for the current project being proposed, cost estimates shall be given for the entire twenty (20) year planning period. Cost estimates shall be provided for each time frame identified in subsection (5) of this section and shall be broken down by the following categories: secondary wastewater treatment, advanced wastewater treatment, inflow and infiltration correction, major sewer rehabilitation, new collector sewers, interceptor sewers, combined sewer overflow corrections, and storm water pollution corrections.

(8) Documentation of public participation. A copy of the advertisement for the public hearing required by Section 5 of this administrative regulation and a copy of the minutes of the public hearing and any written comments and responses shall be submitted as part of the regional facility plan. If more than one (1) public hearing was held or if there were public meetings or public notices of the project, copies of all documentation of these events shall be submitted as part of the plan. At the required public hearing, the scope of the project, cost of the project, alternatives considered, and estimated user charges and hook-up fees shall be discussed.

Section 5. Public Notice, Public Comment, and Public Hearing Requirements. (1) Prior to the approval of the regional facility plan or updates to the plan, the regional facility planning agency shall give public notice of its draft plan and shall hold a public hearing on the draft plan. Public notice of the draft plan and the public hearing on the draft plan shall be given pursuant to KRS Chapter 424.

(2) All public notices issued under this administrative regulation shall contain the following information:

- (a) The name and address of the regional planning agency which drafted the plan;
- (b) A brief description of the contents of the draft plan and the area to be served;
- (c) The name, address, and telephone number of persons from whom interested persons may obtain further information including copies of the draft regional facility plan;
- (d) A brief description of the procedures for the public's right to comment required by this administrative regulation;
- (e) A reference to the date of any previous public notices relating to the draft regional facility plan;
- (f) The date, time, and place of the hearing on the draft plan; and
- (g) A brief description of the nature and purpose of the hearing.

(3) The public shall be given an opportunity to comment on the draft plan and the period for comment shall remain open for thirty (30) days from the date of the first publication of the notice of the public hearing or until the termination of the hearing, whichever is later. Commentors may

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request longer comment periods, which may be granted by the regional planning agency, if appropriate.

(4) Any person may submit written or oral statements and data to the regional planning agency concerning the draft regional facility plan. Reasonable limits may be set up on the time limit for oral statements and the submission of statements in writing may be required.

(5) All persons who believe any condition of the draft plan is inappropriate, inaccurate, incomplete, or otherwise not in the best interest of the public and the environment, shall raise all reasonably ascertainable issues and submit all reasonably available arguments and factual background supporting their position, including all supporting materials, by the close of the public comment period.

Section 6. Action on the Plan. (1) An environmental assessment report will be written by the cabinet which summarizes the regional facility plan. The cabinet will submit the assessment report to the State Clearinghouse for review and comments. Mitigative measures may be required to address any negative comments as a result of this review.

(2) If the cabinet finds that the regional facility plan has been properly submitted and is in the best interest of the environment and the public, the cabinet will approve the plan.

Section 7. Consistency with Plans. Construction grant, loan, and permit decisions shall be made in accordance with certified and approved water quality management plans, including regional facility plans, as described in 40 CFR 130.12(a) and (b) and this administrative regulation.

Section 8. Nonpoint Source Controls. Regional planning agencies may implement plans for nonpoint source controls, other than plans for agricultural nonpoint source controls, in their designated areas. Regional planning agencies may develop plans for agricultural nonpoint source controls in their areas, if the plans are developed in coordination with the Agriculture Water Quality Authority, established pursuant to KRS 224.71. These plans may be included in the comprehensive water quality management plan that may include the regional facility plan. (23 Ky.R. 1814; Am. 2780; eff. 5-14-97.)

certification of wastewater system operators – 5:010

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401 KAR 5:010. Certification of wastewater system operators.

RELATES TO: KRS 224.10-110, 224.73-110

STATUTORY AUTHORITY: KRS 224.01-110, 224.10-100, 224.10-110, 224.73-110

NECESSITY, FUNCTION, AND CONFORMITY: The secretary is directed to adopt administrative regulations applicable to certification of wastewater system operators. This administrative regulation establishes standards for classification of wastewater systems; qualifications of applicants; examination procedures; duties of the Kentucky Board of Certification of Wastewater System Operators; provisions relating to the issuance and renewal of certificates; disciplinary actions; a fee schedule and other provisions necessary for certification of operators.

Section 1. Definitions. The following terms shall have the meanings set forth below unless the context clearly indicates otherwise:

(1) "Association of Boards of Certification" or "ABC" means that organization which serves as an information center for certification activities, recommends minimum standards and guidelines for classification of water supply and wastewater systems, and assists authorities in establishing new certification programs and upgrading existing programs.

(2) "Board" means the Kentucky Board of Certification of Wastewater System Operators.

(3) "Cabinet" has the meaning given it in KRS 224.01-010.

(4) "Certificate" means a certificate of competency issued by the secretary or his designated agent stating that the operator has met the requirements for the specified operator classification as set by this administrative regulation.

(5) "Certified operator" means a wastewater operator employed at a wastewater system who has primary responsibility for the system or a portion thereof which may affect the performance of the system and who holds a certificate of competency meeting the requirements of this administrative regulation.

(6) "Division" means the Division of Water.

(7) "Operator" means any person involved in the operation of a wastewater system.

(8) "Primary responsibility" means having the authority to conduct the procedures and practices necessary to insure that the wastewater system or any portion thereof is operated in accordance with accepted practices, laws and administrative regulations of the Commonwealth, or to supervise others in conducting these practices.

(9) "Secretary" has the meaning given it in KRS 224.01-010.

(10) "Wastewater system" means sewage system as defined in KRS 224.01-010.

Section 2. General Provisions. (1) Each wastewater system shall be operated under the supervision of an individual holding a Kentucky operator's certificate for at least the class of system supervised.

(2) If the certified operator is not physically present while a system is operating, the certified operator shall be reasonably available. Availability shall be determined by the board and cabinet.

(3) Facilities whose classification changed from Class I to Class II as a result of revisions to Section 8 of this administrative regulation as in effect on the effective date of this administrative regulation shall employ a certified Class II or higher operator by January 1, 1994.

(4) Certificate display. If a wastewater system office is available at the wastewater treatment plant or within the sewer service area, the operator's certificate shall be prominently displayed on the wall.

(5) Wallet card. Certified operators shall carry the cabinet-issued wallet card showing current certification status while on duty.

Section 3. Duties of the Board. In carrying out its responsibilities and with consideration given to the minimum standards and guidance of the ABC, the board may:

(1) Examine the qualifications of applicants and recommend qualified applicants to the cabinet for certification;

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- (2) Review and approve substitutions for education and experience requirements;
- (3) Review and provide comments to the cabinet on proposed wastewater treatment plant operator certification administrative regulations;
- (4) Review and make recommendations to the cabinet on proposed training courses and seminars designed to provide continuing education to certified operators;
- (5) Review and assist the cabinet in the preparation of examinations;
- (6) Review and provide comments to the cabinet on proposed fees for the training and certification of operators;
- (7) Review the certification administrative regulations of states which are seeking reciprocity with the Commonwealth; and
- (8) Review evidence and advise the cabinet regarding disciplinary actions for certified operators who fail to comply with the applicable laws and administrative regulations.

Section 4. Application and Examinations for Certification. (1) Application. An individual desiring to be certified shall file an application with the cabinet and pay the applicable fee specified in Section 5 of this administrative regulation. Applications shall be made on a form provided by the cabinet and incorporated by reference in Section 11 of this administrative regulation. Applications shall not be filed with the cabinet until the individual has met the qualifications specified in this administrative regulation.

(2) Examinations. The board and the cabinet shall be jointly responsible for preparation of the examinations which shall be used in determining knowledge, ability and judgment of the applicants. The cabinet shall administer written exams unless the cabinet and board grant a waiver to allow an oral exam. Oral exams may be administered to applicants who meet the minimum qualifications of Section 10 of this administrative regulation. The cabinet shall grade the examinations and notify the applicant of the outcome. Applicants shall achieve a score of seventy (70) percent to pass the examination. Examinations shall not be returned to the applicant, but results may be reviewed with a member of the board or cabinet upon written request by the applicant.

(3) Scheduling examinations. Examinations shall be conducted at least semiannually at places and times set forth by the cabinet. The cabinet shall provide advance announcement of these examinations.

(4) Exam content. The cabinet shall prepare examinations to address the basic differences in the duties and responsibilities of certified operators, types of facilities, water quality standards, conditions of receiving waters and other pertinent matters.

(5) Applicants who fail to pass an examination may register to take the examination again on a regularly scheduled examination date.

Section 5. Fees. (1) Fees for certification of operators of wastewater systems shall not exceed the following:

- (a) Examination: thirty-five (35) dollars.
- (b) Renewal of certificate: thirty-five (35) dollars per biennium. Limited certificates: twenty (20) dollars per year.
- (c) Certification by reciprocity: thirty-five (35) dollars.
- (d) Reinstatement of lapsed certificate: not to exceed thirty-five (35) dollars plus renewal fee.

(2) For training sessions conducted by the cabinet: not to exceed five (5) dollars per contact hour.

(3) Fees shall not be returned to applicants who do not pass the examination.

(4) The cabinet shall provide an estimate of program costs for the upcoming renewal period and a draft schedule of reasonable fees for that renewal period to the board for approval prior to the beginning of the new renewal period.

Section 6. Issuance of Certificates. (1) Certification. Upon satisfactory fulfillment of the requirements of this administrative regulation and upon recommendation of the board, the cabinet shall issue a certificate to the applicant designating the classification of the wastewater system for which the operator has demonstrated competency. If information related to the operator's employment or mailing address changes from the application filed for certification, the certified operator shall provide written notification to the division within thirty (30) days. If a certified operator

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becomes permanently incapacitated while employed by a wastewater treatment plant, the employer shall notify the division.

(2) Duration and renewal of certificates.

(a) Certificates for all certified operator classes, except limited, as identified in Section 8 of this administrative regulation, shall be valid for up to two (2) years after each renewal, unless suspended or revoked for cause or replaced by that of a higher classification. **Certificates shall expire on June 30 of odd-numbered years.** Certificates may be renewed without examination, if the certified operator is in good standing, upon completion of the required training hours outlined in subsection (7) of this section and upon submittal of a complete renewal application and applicable renewal fees. Application for certificate renewal shall be made on a form provided by the cabinet and incorporated by reference in Section 11 of this administrative regulation. If the renewal application and fee are not received by the cabinet by June 30, the certificate shall be considered lapsed and shall not be reinstated without completion of the training required in subsection (7) of this section and payment of a reinstatement fee as provided in Section 5 of this administrative regulation. Expired certificates shall continue in force pending administrative processing of a renewal, if the certified operator is in good standing and has complied with the renewal requirements of this subsection by June 30 of the renewal year. Certificates continued under this paragraph shall remain fully effective and enforceable.

(b) Limited certificates shall expire on June 30 of each year. The cabinet may renew the limited certificate upon receipt of the renewal application if the certified operator has complied with all requirements for proper operation of the facility under his supervision, and has submitted a complete renewal application and applicable renewal fees.

(3) Certification for a higher classification. Certified operators who desire to become certified in a higher classification shall satisfactorily complete the minimum requirements of Sections 4 and 10 of this administrative regulation for the higher classification before submitting a new application. Experience earned under a limited certificate shall not count toward fulfillment of the qualifications for other classifications.

(4) Certificates shall be valid only while the holder uses reasonable care, judgment, and application of his knowledge in the performance of his duties. Certificates shall not be valid if obtained through fraud, deceit or the submission of inaccurate data on qualifications.

(5) Termination of a certification. **Certificates shall terminate if not renewed for two (2) consecutive renewal periods.** Limited certificates shall terminate immediately after the expiration date if not renewed. If a certificate terminates, an operator shall apply, pay applicable fees and pass an examination in the classification for which he is qualified to be certified.

(6) Reciprocity. Certificates may be issued in a comparable classification, without examination, to a person who holds a valid certificate in a state, territory, or possession of the United States or a country if the requirements for certification of operators under which the person's certificate was issued are no less stringent than the requirements for certification set forth in KRS Chapter 224 and this administrative regulation and reciprocal privileges are granted to certified operators of the Commonwealth.

(7) **Training requirements.** Certified operators shall accumulate continuing education credits approved by the cabinet or board prior to applying for certificate renewal.

(a) **Class I and II** certified operators shall complete **twelve (12) hours** of training for renewal. **Class III and Class IV** certified operators shall complete **twenty-four (24) hours** of training for each renewal. Training includes, but is not limited to, correspondence courses, short courses, trade association meetings, and on-the-job training courses. However, **at least one-half** (1/2) of the training required for recertification shall be in **process control** and operation or in the basic sciences related to these topics. Training hours accumulated in excess of the minimum number required for renewal may be carried forward for a period of **two (2) years from the date earned**. No training is required for holders of limited certificates.

(b) Certified operators who teach board-approved training courses may receive, upon approval of the board, hour-for-hour credit for actual instruction time.

(c) The criteria for determining whether to approve training, other than the training provided by the cabinet, are:

1. The ability of the course to provide information that will enhance the proper operation and maintenance of wastewater treatment facilities; and

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2. The ability of the instructor to properly present the information.

(d) Alternate training courses may be considered by submittal to the division and review by the board of the following information: the course name; the date, location, and a timed agenda for the course; the credit hours being requested; a summary of the course content of sufficient detail to determine relevance and quality of the course; and the name and credentials of each instructor for the course.

(e) The board may waive any of the requirements of paragraph (a) of this subsection for all or portions of a class of operators as identified in Section 9 of this administrative regulation.

Section 7. Disciplinary Action. A certified operator shall be subject to a disciplinary action identified in this section if the cabinet, in consultation with the board according to this section, determines that the certified operator has practiced fraud or deception in obtaining certification or filing cabinet mandated reports; has not used reasonable care or judgment in the performance of duties; has failed to apply knowledge in the performance of duties; or is incompetent, unable or unwilling to properly perform duties.

(1) Sanctions. The disciplinary action shall be determined by the cabinet in accordance with the review procedures in subsection (2) of this section, and may take the form of the following sanctions depending on the severity, duration, and number of the violations. The sanctions may include, but are not limited to:

- (a) Probation for a specified period of time, not to exceed one (1) year;
- (b) Suspension of the operator's certificate for a specified period of time, not to exceed one (1) year, during which the certificate shall be considered void;
- (c) Temporary or permanent revocation of the operator's certification (temporary revocations shall not be less than one (1) year or more than four (4) years in duration); or
- (d) Civil or criminal penalties against the operator.

(2) Initial review procedures. Written complaints received by the board or cabinet on a certified operator, unless duplicitous or frivolous, shall be reviewed at the next regularly scheduled board meeting. If the charges warrant further investigation, the certified operator may be advised to appear before the board to discuss the charges levied. Upon completion of the review, the board shall make a recommendation to the cabinet regarding the operator's certification status. The board may recommend that no action be taken, that the cabinet impose a sanction identified in subsection (1) of this section, or any other action.

(3) Cabinet action. The cabinet shall review the evidence presented and the board's recommendations. Upon completion of the review, the cabinet will initiate the recommended action or notify the board as to why an alternative action was taken. The certified operator and his employer shall be advised by certified mail of the action, the reasons outlined for the action, and the length of time for which the sanction shall apply. A certified operator whose certificate has been suspended or revoked shall not have primary responsibility for a wastewater system during the period that the disciplinary action remains in effect. If a certification is permanently revoked, the operator shall be ineligible for future certification as a wastewater system operator. Experience gained during a suspension or temporary or permanent revocation shall not be included toward meeting the requirements of Section 10 of this administrative regulation. An action taken by the cabinet pursuant to this section shall not preclude the cabinet from pursuing additional civil or criminal action.

(4) Sanction review and removal. During the operator's probation, suspension, or temporary revocation, the board and cabinet will monitor the operator's work activities. At the end of the sanction period, the board will recommend to the cabinet whether the sanction should be lifted or whether additional action is necessary against the certified operator.

(5) Appeal procedures. An operator who considers himself aggrieved by a disciplinary action may file a petition for hearing with the cabinet pursuant to KRS 224.10-420(2).

Section 8. Classification of Wastewater Systems. Wastewater systems shall be classified in one (1) of five (5) classes. These classifications shall be made according to population served, type of treatment process, character and volume of wastes to be treated, and the use and nature of the waters receiving the system effluent. Classifications I through IV shall be based on the population served or for which the system is designed, except that a system may be classified by the cabinet

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and board in a group lower or higher than indicated if the incorporation into the system of special features of design or characteristics makes the system easier or more difficult to operate than usual, or if conditions of flow or use of the receiving water require an unusually low or high degree of system operation control, or if combinations of these conditions or circumstances exist. In addition, a limited classification is available for operators of wastewater facilities owned by school systems. Classes I through IV are as follows:

- (1) Class I: Systems with a design capacity of less than or equal to 50,000 gallons per day.
- (2) Class II: Systems with a design capacity more than 50,000 gallons per day, but less than or equal to two (2) million gallons per day.
- (3) Class III: Systems with a design capacity more than two (2) million gallons per day, but less than or equal to seven and one-half (7 1/2) million gallons per day.
- (4) Class IV: Systems with a design capacity in excess of seven and one-half (7 1/2) million gallons per day.

Section 9. Classification of Wastewater System Operators. Five (5) classes of certified operators are hereby established and shall range from Class I through Class IV, plus limited. Each operator classification except for limited relates directly to the corresponding classification of wastewater system outlined in Section 8 of this administrative regulation.

Section 10. Certified Operator Qualifications: Experience, Education and Equivalencies. Applicants shall be examined by the cabinet as to education, experience, and knowledge as related to the classification of wastewater systems for which the application applies. Applicants shall pass the required written examination unless granted a waiver to take an oral examination in accordance with Section 4(2) of this administrative regulation.

(1) Classification of wastewater treatment plant operator certificates. Experience and educational requirements for certification of operators shall be as follows:

- (a) Class I:
 1. Completion of high school or general education development (GED) efficiency; and
 2. One (1) year of acceptable operation of a wastewater system.
- (b) Class II:
 1. Completion of high school or GED efficiency; and
 2. Two (2) years of acceptable operation of a wastewater system.
- (c) Class III:
 1. Completion of high school or GED efficiency; and
 2. Three (3) years of acceptable operation of a wastewater system with one (1) year of that experience in a Class II or higher wastewater system.
- (d) Class IV:
 1. A baccalaureate degree in a standard curriculum in engineering, allied sciences or equivalent; and
 2. At least five (5) years of acceptable operation of a wastewater system. Three (3) years of the required experience shall be in a Class III or higher wastewater system with at least two (2) years of primary responsibility for a Class III or higher system.
- (e) Limited: An operator of a wastewater treatment facility for a school shall be entitled to apply for a limited certificate of competency for the particular facility operated. The certification shall only be issued if the operator has demonstrated to the cabinet that he has the knowledge and experience required to properly operate the specific wastewater facility.

(2) Substitutions In evaluating qualifications of operators and experience or educational equivalencies, substitutions may be allowed as follows:

- (a) If applicable, experience may be substituted for a portion of the educational requirements:
 1. Experience, to be acceptable, shall be the result of satisfactory accomplishment of work.
 2. Partial credit may be given for operating experience in maintenance, laboratories or other work of wastewater systems and allied trades.
 3. To establish how much experience will be accepted, the board shall determine whether the work performed required some technical knowledge and if the applicant was primarily responsible for the operation of the system. In wastewater systems where responsibility is divided, supervisors of important divisions may be credited with having primary responsibility.

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4.a. One (1) year of board-approved experience may be considered equivalent to one (1) year of high school. Four (4) years of board-approved experience may be considered equivalent to a high school degree or a GED, subject to the approval of the board. Operators requesting this substitution shall submit a written request to the cabinet and may be requested to appear before the board.

b. Each year of experience in wastewater operations shall be equivalent to one (1) year of college. Four (4) years of experience approved by the board shall be considered equivalent to a baccalaureate degree.

c. Experience applied to educational requirements shall not be applied to the experience requirement.

(b) If applicable, education may be substituted for a portion of experience requirements as specified below:

1. One (1) year of college work (limited to curricula in environmental engineering, environmental technology or related scientific fields) may be considered as equivalent to one (1) year of experience.

2. Education substituted for experience shall not reduce the requirements of actual operating experience to less than six (6) months for Class I, less than one (1) year for Class II, less than two (2) years for Class III, or less than three (3) years for Class IV.

3. Education applied to the experience requirement shall not be applied to the education requirement.

(c) Substitutions for formal education may be as follows: Training credits for board approved operator training schools, seminars and technical courses may be substituted for high school and college requirements upon approval of the board. One (1) year of college work equals thirty (30) semester hours or forty-five (45) quarter hours. Six (6) classroom hours of board approved courses equals one (1) training credit, and forty-five (45) training credits equals eighteen (18) semester hours of college or one (1) year of high school. One (1) continuing education unit (CEU) shall equal ten (10) training credit hours. Training credits substituted for the education requirement shall not be used as continuing education for certificate renewal.

Section 11. Documents Incorporated by Reference for Wastewater System Certified Operators. The following documents are incorporated by reference and are available for public inspection and copying, subject to the copyright laws, between the hours of 8 a.m. and 4:30 p.m., Monday through Friday, at the Division of Water, 14 Reilly Road, Frankfort Office Park, Frankfort, Kentucky 40601:

(1) Drinking Water or Wastewater Operator Certification Application, Kentucky Division of Water, Frankfort, Kentucky, January 1992.

(2) Application for Certificate Renewal, Kentucky Division of Water, Frankfort, Kentucky, January 1992. (6 Ky.R. 329; Am. 560; eff. 5-7-80; 11 Ky.R. 1128; eff. 4-9-85; 14 Ky.R. 1289; eff. 2-8-88; 15 Ky.R. 285; 1007; eff. 10-26-88; 16 Ky.R. 603; 1193; eff. 1-9-90; 19 Ky.R. 415; 717; eff. 8-27-92.)

spills and bypasses to be reported to division – 5:015

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401 KAR 5:015. Spills and bypasses to be reported to division.

RELATES TO: KRS Chapter 224

STATUTORY AUTHORITY: KRS 224.10-100(17)

NECESSITY, FUNCTION, AND CONFORMITY: This administrative regulation requires that spills and bypasses from sewage systems as defined in KRS 224.01-010(15) be reported to the division. Such reports enable the division to determine what action it need initiate to protect public safety and mitigate or reduce the effect of such spill or bypass.

Section 1. Any person having knowledge in advance of the necessity to bypass a sewage system shall notify the Division of Water before such bypass is commenced. Notification shall be given as far in advance as possible.

Section 2. Whenever by reason of emergency or accident a spill or discharge occurs from a sewage system or from a container or pipeline used to transport or store substances which would result in or contribute to the pollution of the waters, the person in charge of such activity shall immediately notify the Division of Water by the most rapid means available.

Section 3. Any person notifying the division pursuant to Sections 1 and 2 of this administrative regulation shall report the point of discharge, the nature of the material discharged, the quantity of the material discharged and an assessment of probable environmental impact.

Section 4. Notification required under Section 1 of this administrative regulation may be made by any mode of communication. Notification required by Section 2 of this administrative regulation shall be made by the most rapid means of communication available. If notification is not initially made in writing, it shall be confirmed by written notification within ten (10) days if requested by the division director or his appointed representative.

Section 5. Persons failing to report as required in Sections 1, 2, 3 and 4 of this administrative regulation are subject to the penalties provided by KRS 224.99-010. (WP-3; 1 Ky.R. 761; Am. 1382; eff. 7-2-75.)

designation of uses of surface water – 5:026

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401 KAR 5:026. Designation of uses of surface waters.

RELATES TO: KRS 146.200-146.360, 146.410-146.535, 146.550-146.570, 146.600-146.619, 146.990, 224.01-010, 224.01-400, 224.16-050, 224.16-070, 224.70-100-224.70-140, 224.71-100-224.71-145, 224.73-100-224.73-120

STATUTORY AUTHORITY: KRS 146.220, 146.241, 146.270, 146.410, 146.450, 146.460, 146.465, 224.10-100, 224.16-050, 224.16-060, 224.70-100, 224.70-110, 40 C.F.R. Part 131, 16 U.S.C. 1271 et seq., 1531 et seq., 33 U.S.C. 1311, 1313, 1314, 1316, 1341

NECESSITY, FUNCTION, AND CONFORMITY: KRS 224.10-100 requires the Natural Resources and Environmental Protection Cabinet to develop and conduct a comprehensive program for the management of water resources and to provide for the prevention, abatement, and control of pollution. This administrative regulation and 401 KAR 5:002, 5:029, 5:030, and 5:031 establish procedures to protect the surface waters of the Commonwealth, and thus protect water resources. This administrative regulation applies the designated uses described in 401 KAR 5:031 to the surface waters of the Commonwealth. This administrative regulation also makes all surface waters subject to the general criteria specified in 401 KAR 5:031, Section 2. Definitions for terms used in this administrative regulation are found in 401 KAR 5:002.

Section 1. Scope of Designation. (1) Surface waters listed in this administrative regulation shall be designated for all legitimate uses contained in KRS 224.70-100(1) except as specified in 401 KAR 5:031, Sections 5 and 8, or until redesignated in accordance with the procedures of this administrative regulation.

(2) Designated uses are:

- (a) Warm water aquatic habitat;
- (b) Cold water aquatic habitat;
- (c) Primary contact recreation;
- (d) Secondary contact recreation;
- (e) Domestic water supply; and
- (f) Outstanding state resource water.

(3) Listed waters shall meet all criteria applicable to their designated uses and those criteria listed in 401 KAR 5:031, Section 2, unless the cabinet grants an exception pursuant to 401 KAR 5:031, Section 10 or 11.

(4) Outstanding state resource waters may have unique water quality characteristics that shall be protected by additional criteria established in 401 KAR 5:031, Section 8.

Section 2. Redesignation of Surface Water Uses. (1) Surface waters may be redesignated only upon affirmative findings by the cabinet pursuant to Sections 3 and 4 of this administrative regulation. Before redesignating a surface water, the cabinet shall provide notice and an opportunity for a public hearing.

(2) In redesignating a surface water, the cabinet shall ensure that its water quality standards provide for the attainment and maintenance of the water quality standards of downstream surface waters.

(3) A designated use shall not be removed for a surface water if that use is an existing use, or if the use may be attained by implementing effluent limitations required under Sections 301(b) and 306 of the Clean Water Act, 33 U.S.C. 1311(b) and 1316, and by implementing cost-effective and reasonable best management practices for nonpoint source control.

(4) If a surface water is designated for a use that is not an existing use, the cabinet shall redesignate the surface water upon demonstration that the designated use is unattainable because:

- (a) Naturally occurring pollutant concentrations prevent the attainment of the use;
- (b) Natural, ephemeral, intermittent or low flow conditions or water levels prevent the attainment of the use, unless these conditions may be compensated for by the discharge of sufficient volume of effluent discharges;

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(c) Human caused conditions or sources of pollution prevent the attainment of the use and cannot be remedied or would cause more environmental damage to correct than to leave in place;

(d) Dams, diversions or other types of hydrologic modifications preclude the attainment of the use, and it is not feasible to restore the surface water to its original condition or to operate such modification in a way that would result in the attainment of the use;

(e) Physical conditions related to the natural features of the surface water, such as the lack of a proper substrate, cover, flow, depth, pools, riffles, and the like, unrelated to water quality, preclude attainment of the aquatic life use; or

(f) Controls more stringent than those required by Sections 301(b) and 306 of the Clean Water Act, 33 U.S.C. 1311(b) and 1316, would result in substantial and widespread economic and social impact as determined by the guidelines in "Interim Economic Guidance for Water Quality Standards Workbook", EPA, March 1995 incorporated by reference in Section 6 of this administrative regulation.

(5) Redesignations shall be consistent with the antidegradation provisions of 401 KAR 5:029 and 401 KAR 5:030.

Section 3. Documentation for Redesignations. **(1)** A person may request redesignation of surface water uses by petition to the cabinet. The petitioner shall provide the cabinet with the documentation required in subsection (3) of this section and shall have the burden of proof that the redesignation is appropriate.

(2) The cabinet may propose redesignations of surface water uses. The cabinet shall provide documentation for those surface waters that it proposes for use redesignation.

(3) Documentation to support the redesignation of a surface water of the Commonwealth shall be:

(a) A United States Geological Survey 7.5 minute topographic map or its equivalent approved by the cabinet showing those surface waters to be redesignated, with a description consisting of a river mile index with existing and proposed discharge points;

(b) Existing uses and water quality data for the surface waters for which the redesignation is proposed. If adequate data are unavailable, additional studies may be required by the cabinet;

(c) Descriptions of general land uses and specific land uses adjacent to the surface waters for which the redesignation is proposed;

(d) The existing and designated uses of the downstream waters into which the surface water under consideration discharges;

(e) General physical characteristics of the surface water including width, depth, bottom composition, and slope;

(f) The frequency of occasions when there is no natural flow in the surface water and the $7Q_{10}$ and harmonic mean flow values for the surface water and adjacent surface waters;

(g) An assessment of the existing and potential aquatic life habitat in the surface waters under consideration and the adjacent upstream surface waters. The existing aquatic life shall be documented and livestock and natural wildlife dependence on the surface water shall be assessed. The occurrence of individuals or populations, indices of diversity and well-being, and abundance of species of any unique native biota shall be documented;

(h) The proposed designated uses for the surface water in question; and

(i) An explanation of the irretrievable person-induced, or natural conditions which preclude attainment of a higher use designation or an assessment of the substantial and widespread social and economic impacts resulting from the imposition of additional controls necessary for existing point sources, beyond the most stringent effluent limitation levels normally required for the sources.

Section 4. Procedures for Redesignation. **(1)** For each of the surface waters for which a redesignation is proposed, the cabinet or petitioner shall prepare a fact sheet containing the following information:

(a) The name and address of the petitioner;

(b) The name and sketch or description of the surface water proposed for specified use redesignations, including the location of existing and proposed dischargers;

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- (c) The proposed use redesignations;
- (d) A brief abstract of the supportive documentation which demonstrates that the redesignation is appropriate;
- (e) The appropriate water quality criteria for the surface water based on the proposed designated use;
- (f) The treatment requirements proposed for discharges to the surface water in question if designated for the proposed use; and
- (g) A "plain English" summary of the implications of the designation for the community and other users or potential users of the surface water in question.

(2) The cabinet shall document the determination to propose or deny redesignation as a result of a petition, and shall provide a copy of the decision to the petitioner and other interested parties.

Section 5. Surface Water Use Designations. (1) Listed in the tables below are the use designations for specific surface waters of the Commonwealth. The county column indicates the county in which the mouth or outlet of the surface water is located. The identifying symbols for use designations are:

WAH	Warm Water Aquatic Habitat
CAH	Cold Water Aquatic Habitat
PCR	Primary Contact Recreation
SCR	Secondary Contact Recreation
DWS	Domestic Water Supply, applicable at existing points of public water supply withdrawal
OSRW	Outstanding State Resource Water

(2) Surface waters not specifically listed in this section are designated for the use of warm water aquatic habitat, primary contact recreation, secondary contact recreation and domestic water supply in accordance with Section 1 of this administrative regulation.

(3) Exceptions to specific criteria in 401 KAR 5:031 that apply to particular surface waters are shown in the tables of surface water use designations in this section. All other criteria in 401 KAR 5:031 applicable to the listed use designations shall apply to these surface waters.

SURFACE WATER USE DESIGNATIONS				
Water Body	Zone	County	Use Designation	Exceptions To Specific Criteria
BIG SANDY RIVER BASIN				
Big Sandy River	River Mile 26.8 to Ohio River	Boyd	WAH, PCR, SCR	
Hood Creek	Source to Wheeler Branch	Lawrence	WAH, PCR, SCR	
Levisa Fork of Big Sandy River	Kentucky-Virginia State Line to River Mile 147.5 (Headwaters of Fishtrap Lake)	Pike	WAH, PCR, SCR, DWS	
Levisa Fork of Big Sandy River	River Mile 126.6 (Fishtrap Lake Dam) to Big Sandy River	Lawrence	WAH, PCR, SCR, DWS	
Paint Creek of Levisa Fork	River Mile 8.3 (Paintsville Lake Dam) to Levisa Fork	Johnson	CAH, PCR, SCR	
Russell Fork of Big Sandy River	Kentucky-Virginia State Line (River Mile 15.9) to Levisa Fork	Pike	WAH, PCR, SCR, DWS	

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Tug Fork of Big Sandy River	Kentucky-Virginia State Line (River Mile 94.0) to Big Sandy River	Lawrence	WAH, PCR, SCR, DWS	
LAKES AND RESERVOIRS				
Dewey	Entire reservoir	Floyd	WAH, PCR, SCR, DWS	
Fishtrap	Entire reservoir	Pike	WAH, PCR, SCR, DWS	
Paintsville	Entire reservoir	Johnson	WAH, CAH, PCR, SCR	
LITTLE SANDY RIVER BASIN				
Big Caney Creek	Source to Grayson Lake	Elliott	CAH, PCR, SCR	
Big Sinking Creek	River Mile 6.0 to Little Sandy River	Carter	WAH, PCR, SCR	
Laurel Creek	Source to Little Sandy River	Elliott	CAH, PCR, SCR	
Little Sandy River	Source to River Mile 71.1 (Headwaters of Grayson Lake)	Elliott	WAH, PCR, SCR, DWS	
Little Sandy River	River Mile 50.0 (Grayson Lake Dam) to Ohio River	Greenup	WAH, PCR, SCR, DWS	
LAKES AND RESERVOIRS				
Grayson	Entire Reservoir	Carter	WAH, PCR, SCR	
Greenbo	Entire Reservoir	Greenup	WAH, CAH, PCR, SCR, DWS	
TYGARTS CREEK BASIN				
Buffalo Creek	Source to Tygarts Creek	Carter	WAH, PCR, SCR	
Little White Oak Creek	Source to Tygarts Creek	Greenup	WAH, PCR, SCR	
Tygarts Creek	Source to Ohio River	Greenup	WAH, PCR, SCR, DWS	
White Oak Creek	Source to Tygarts Creek	Greenup	WAH, PCR, SCR	
LICKING RIVER BASIN				
Burning Fork	Basin	Magoffin	WAH, PCR, SCR	
Craney Creek	Source to North Fork of Licking River	Rowan/Morgan	CAH, PCR, SCR	
Fleming Creek	Source to Licking River	Nicholas	WAH, PCR, SCR	
Licking River	Source to River Mile 218.2 (Headwaters of Cave Run Lake)	Morgan	WAH, PCR, SCR, DWS	
Licking River	River Mile 176.8 (Cave Run Lake Dam) to River Mile 169.6 (U.S. Highway 60 Bridge)	Bath/Rowan	CAH, PCR, SCR, DWS	
Licking River	River Mile 169.6 to River Mile 165.0	Bath/Rowan	WAH, PCR, SCR, DWS	

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Licking River	River Mile 165.0 to River Mile 154.5	Bath/Rowan	WAH, PCR, SCR, OSRW	
Licking River	River Mile 154.5 to River Mile 115.0	Nicholas/Bourbon	WAH, PCR, SCR, DWS	
Licking River	River Mile 115.0 to River Mile 18.9	Kenton/Campbell	WAH, PCR, SCR, DWS, OSRW	
Licking River	River Mile 18.9 to Ohio River	Kenton/Campbell	WAH, PCR, SCR, DWS	
Minor Creek	River Mile 2.0 to Craney Creek	Morgan/Rowan	CAH, PCR, SCR	
North Fork of Licking River	Source to Licking River	Pendleton/Bracken	WAH, PCR, SCR, DWS	
Slabcamp Creek	Basin including Stonecoal Branch	Rowan	CAH, PCR, SCR	
Slate Creek	Source to Licking River	Bath	WAH, PCR, SCR, DWS	
South Fork of Licking River	River Mile 65.1 to Licking River	Pendleton	WAH, PCR, SCR, DWS	
LAKES AND RESERVOIRS				
Cave Run	Entire Reservoir	Rowan/Bath	WAH, PCR, SCR	
KENTUCKY RIVER BASIN				
Bailey Run	Basin	Anderson	WAH, PCR, SCR	
Buck Lick Branch	Basin	Lee	WAH, PCR, SCR	
Cedar Brook	Basin	Anderson	WAH, PCR, SCR	
Chimney Top Creek	Basin	Wolfe	CAH, PCR, SCR	
Clarks Run	Source to Herrington Lake	Boyle	WAH, PCR, SCR	
Dix River	Source to River Mile 33.1 (Headwaters of Herrington Lake)	Boyle/Garrard	WAH, PCR, SCR	
Dix River	Herrington Lake Dam to Kentucky River	Garrard/Mercer	CAH, PCR, SCR	
Dog Fork	Basin	Wolfe	CAH, PCR, SCR	
East Fork of Indian Creek	Source to Indian Creek	Menifee	CAH, PCR, SCR	
Gladie Creek	Basin	Menifee	CAH, PCR, SCR	
Hanging Fork Creek	Source to Dix River	Boyle/Lincoln	WAH, PCR, SCR	
Indian Creek	River Mile 5.2 to River Mile 1.2	Menifee	CAH, PCR, SCR	
Kentucky River	River Mile 254.8 to Ohio River	Carroll	WAH, PCR, SCR, DWS	
Middle Fork of Kentucky River	Source to River Mile 76.6 (Headwaters of Buckhorn Lake)	Leslie	WAH, PCR, SCR	

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Middle Fork of Kentucky River	River Mile 43.2 (Buckhorn Lake Dam) to North Fork of Kentucky River	Lee	WAH, PCR, SCR	
Middle Fork of Red River	Source to River Mile 10.6	Powell	CAH, PCR, SCR	
North Fork of Kentucky River	Source to Kentucky River	Lee	WAH, PCR, SCR, DWS	
Parched Corn Creek	Source to Red River	Wolfe	CAH, PCR, SCR	
Red River	Source to River Mile 68.6	Menifee/Wolfe	WAH, PCR, SCR	
Red River	River Mile 68.6 to River Mile 49.2	Menifee/Wolfe	WAH, PCR, SCR, OSRW	
Red River	River Mile 49.2 to Kentucky River	Clark/Estill	WAH, PCR, SCR, DWS	
Ross Creek	Source to Kentucky River	Lee	WAH, PCR, SCR	
Silver Creek	Source to Kentucky River	Madison	WAH, PCR, SCR	
South Fork of Elkhorn Creek	Source to North Fork of Elkhorn Creek	Franklin	WAH, PCR, SCR	
South Fork of Kentucky River	Source to Kentucky River	Lee	WAH, PCR, SCR, DWS	
Swift Camp Creek	Source to Red River	Wolfe	CAH, PCR, SCR	
Town Branch	Source to South Fork of Elkhorn Creek	Fayette	WAH, PCR, SCR	
War Fork of Station Camp Creek	Source to River Mile 8.5	Jackson	WAH, PCR, SCR	
War Fork of Station Camp Creek	River Mile 8.5 to River Mile 2.0	Jackson	CAH, PCR, SCR	
War Fork of Station Camp Creek	River Mile 2.0 to Station Camp Creek	Jackson	WAH, PCR, SCR	
LAKES AND RESERVOIRS				
Bert Combs	Entire Reservoir	Clay	WAH, CAH, PCR, SCR, DWS	
Buckhorn	Entire Reservoir	Perry	WAH, PCR, SCR, DWS	
Carr Fork	Entire Reservoir	Knott/Perry	WAH, PCR, SCR	
Fishpond	Entire Reservoir	Letcher	WAH, CAH, PCR, SCR	
Herrington	Entire Reservoir	Garrard/Mercer	WAH, PCR, SCR, DWS	
Mill Creek	Entire Reservoir	Wolfe	WAH, CAH, PCR, SCR, DWS	
SALT RIVER BASIN				
Beech Fork of Salt River	Source to Salt River	Hardin/Bullitt	WAH, PCR, SCR, DWS	
Chenoweth Run	Source to Floyds Fork	Jefferson	WAH, PCR, SCR	

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Currys Fork	Confluence of South and North Forks to Floyds Fork	Oldham	WAH, PCR, SCR	
Floyds Fork	Source to Salt River	Bullitt	WAH, PCR, SCR	
Mill Creek	Source to Salt River	Bullitt	WAH, PCR, SCR	
North Fork of Currys Fork	Source to South Fork of Currys Fork	Oldham	WAH, PCR, SCR	
Rolling Fork of Salt River	Source to River Mile 62.5	Larue and Nelson	WAH, PCR, SCR, DWS	
Rolling Fork of Salt River	River Mile 62.5 to River Mile 53.6	Larue and Nelson	WAH, PCR, SCR, OSRW	
Rolling Fork of Salt River	River Mile 53.6 to Salt River	Larue and Nelson	WAH, PCR, SCR	
Rolling Fork of Salt River	Source to Salt River	Bullitt	WAH, PCR, SCR, DWS	
Salt River	Source to River Mile 74.8 (Headwaters of Taylorsville Lake)	Anderson	WAH, PCR, SCR, DWS	
Salt River	River Mile 60.1 (Taylorsville Lake Dam) to Ohio River	Hardin/ Jefferson	WAH, PCR, SCR, DWS	
Unnamed tributary to Mill Creek	Source to Mill Creek at River Mile 11.8	Bullitt	WAH, PCR, SCR	
LAKES AND RESERVOIRS				
Taylorsville	Entire Reservoir	Spencer	WAH, PCR, SCR	
GREEN RIVER BASIN				
Barren River	Source to River Mile 118.5 (Headwaters of Barren River Lake)	Allen	WAH, PCR, SCR	
Barren River	River Mile 79.1 (Barren River Lake Dam) to River Mile 15.0	Warren	WAH, PCR, SCR, DWS	
Barren River	River Mile 15.0 to Green River	Butler/Warren	WAH, PCR, SCR, OSRW	
Beaverdam Creek	Source to Green River	Edmonson	CAH, PCR, SCR	
Big Pitman Creek	Source to Green River	Green	WAH, PCR, SCR	
Black Lick Creek	Source to Clear Fork	Logan	WAH, PCR, SCR, DWS	
Buck Horn Creek	Source to Little Pitman Creek	Taylor	WAH, PCR, SCR	
Buffalo Creek	Source to Green River (in Mammoth Cave National Park)	Edmonson	WAH, PCR, SCR	
Cypress Creek	Source to Pond River	McLean	WAH, PCR, SCR	
Drakes Creek	Confluence of West Fork and Middle Fork to Barren River	Warren	WAH, PCR, SCR	
Gasper River	Source to Barren River	Warren	WAH, PCR, SCR	

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Green River	Source to River Mile 340.1 (Headwaters of Green River Lake)	Adair	WAH, PCR, SCR, DWS	
Green River	River Mile 305.6 (Green River Lake Dam) to River Mile 207.8	Hart	WAH, PCR, SCR, OSRW, DWS	
Green River	River Mile 207.8 to River Mile 181.7	Edmonson	WAH, PCR, SCR, OSRW	
Green River	River Mile 181.7 to River Mile 168.0	Butler/ Warren	WAH, PCR, SCR, DWS	
Green River	River Mile 168.0 to River Mile 148.0	Butler	WAH, PCR, SCR, OSRW	
Green River	River Mile 148.0 to Ohio River	Henderson	WAH, PCR, SCR, DWS	
Lick Creek	Source to West Fork of Drakes Creek	Simpson	CAH, PCR, SCR	
Little Pitman Creek	Source to Big Pitman Creek	Green	WAH, PCR, SCR	
Lynn Camp Creek	Source to Green River	Hart	CAH, PCR, SCR	
Middle Pitman Creek	Source to Big Pitman Creek	Green	WAH, PCR, SCR	
Underground River System	Mammoth Cave National Park	Edmonson/ Hart/Barren	CAH, PCR, SCR, OSRW	
Turnhole Spring	Basin Outside Mammoth Cave National Park Boundary	Edmonson/ Barren	CAH, PCR, SCR, OSRW	
Echo River	Basin Outside Mammoth Cave National Park Boundary	Edmonson	CAH, PCR, SCR, OSRW	
Pike Spring	Basin Outside Mammoth Cave National Park Boundary	Edmonson	CAH, PCR, SCR, OSRW	
Mile 205.7 Spring	Basin Outside Mammoth Cave National Park Boundary	Hart	CAH, PCR, SCR, OSRW	
McCoy Spring	Basin Outside Mammoth Cave National Park Boundary	Hart	CAH, PCR, SCR, OSRW	
Suds Spring	Basin Outside Mammoth Cave National Park Boundary	Hart/Barren	CAH, PCR, SCR, OSRW	
Double Sink Spring	Basin Outside Mammoth Cave National Park Boundary	Edmonson/ Barren	CAH, PCR, SCR, OSRW	
Ganter Spring	Basin Outside Mammoth Cave National Park Boundary	Edmonson	CAH, PCR, SCR, OSRW	
Running Spring	Basin Outside Mammoth Cave National Park Boundary	Edmonson	CAH, PCR, SCR, OSRW	
Mud River	Source to Green River	Butler/ Muhlenberg	WAH, PCR, SCR	
Nolin River	Source to River Mile 64.3 (Headwaters of Nolin Lake)	Hart/Grayson	WAH, PCR, SCR	

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Nolin River	River Mile 7.6 (Nolin Lake Dam) to Green River	Edmonson	CAH, PCR, SCR	
Rough River	Source to River Mile 133.8 (Headwaters of Rough River Lake)	Hardin	WAH, PCR, SCR, DWS	
Rough River	River Mile 89.3 (Rough River Lake Dam) to River Mile 88.5	Ohio/Grayson	CAH, PCR, SCR, DWS	
Rough River	River Mile 72.4 to Green River	McLean/Ohio	WAH, PCR, SCR, DWS	
Rough River	River Mile 88.5 to River Mile 74.2	Ohio/Grayson	WAH, PCR, SCR	
Rough River	River Mile 74.2 to River Mile 73.6	McLean/Ohio	CAH, PCR, SCR	
Rough River	River Mile 73.6 to Green River	Ohio/Grayson	WAH, PCR, SCR, DWS	
Roundstone Creek	Source to Hwy 1140 (River Mile 3.5)	Hart	CAH, PCR, SCR	
Sharp's Branch	Source to West Fork of Drakes Creek	Simpson	WAH, PCR, SCR	
Trammel Fork	River Mile 30.15 (Kentucky/Tennessee State Line) to Hwy 31E (River Mile 23.6)	Allen	CAH, PCR, SCR	
Trammel Fork	River Mile 23.6 to Drakes Creek	Warren	WAH, PCR, SCR	
West Fork of Drakes Creek	Source to Confluence with Middle Fork of Drakes Creek	Warren	WAH, PCR, SCR, DWS	
Wiggington Creek	Source to Gasper River	Logan	WAH, PCR, SCR	
LAKES AND RESERVOIRS				
Barren River	Entire Reservoir	Barren/Allen	WAH, PCR, SCR, DWS	
Green River	Entire Reservoir	Taylor	WAH, PCR, SCR, DWS	
Nolin	Entire Reservoir	Edmonson	WAH, PCR, SCR, DWS	
Rough River	Entire Reservoir	Breckinridge/Grayson	WAH, PCR, SCR, DWS	
LOWER CUMBERLAND RIVER BASIN				
Casey Creek	Source to Little River	Trigg	CAH, PCR, SCR	
Cumberland River	River Mile 30.8 (Lake Barkley Dam) to Ohio River	Livingston	WAH, PCR, SCR, DWS	
Skinframe Creek	Source to Livingston Creek	Lyon	CAH, PCR, SCR	
Sulphur Spring Creek	Source to Red River	Simpson	CAH, PCR, SCR	
West Fork of Red River	River Mile 32.2 to Kentucky/Tennessee State Line (River Mile 14.5)	Christian	CAH, PCR, SCR	

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Whippoorwill Creek	Source to Red River	Logan	WAH, PCR, SCR, OSRW	
LAKES AND RESERVOIRS				
Barkley	Entire Reservoir from Kentucky/Tennessee State Line (River Mile 74.7)	Lyon/Livingston	WAH, PCR, SCR, DWS	
TENNESSEE RIVER BASIN				
Tennessee River	River Mile 22.4 (Kentucky Lake Dam) to River Mile 12.0	Livingston/McCracken	WAH, PCR, SCR, OSRW	
Tennessee River	River Mile 12.0 to Ohio River	Livingston/McCracken	WAH, PCR, SCR, DWS	
LAKES AND RESERVOIRS				
Kentucky	Entire Reservoir from Kentucky/Tennessee State Line (River Mile 62.4)	Livingston/Marshall	WAH, PCR, SCR, DWS	
TRADEWATER RIVER BASIN				
Crab Orchard Creek/Vaughn Ditch	Source to Tradewater River	Webster	WAH, PCR, SCR	
Montgomery Creek	Source to Tradewater River	Caldwell	WAH, PCR, SCR	
Tradewater River	Source to Ohio River	Crittenden/Union	WAH, PCR, SCR	
OHIO RIVER BASIN (Main Stem and Minor Tributaries)				
Doe Run Creek	Source to Hwy 1628 (River Mile 5.15)	Meade	CAH, PCR, SCR	
Ohio River	Big Sandy River (River Mile 317.1) to River Mile 848.0	Union	WAH, PCR, SCR, DWS	
Ohio River	River Mile 848.0 to River Mile 850.0	Union	WAH, PCR, SCR, OSRW	
Ohio River	River Mile 850.0 to River Mile 859.0	Union	WAH, PCR, SCR	
Ohio River	River Mile 859.0 to River Mile 861.0	Union	WAH, PCR, SCR, OSRW	
Ohio River	River Mile 861.0 to River Mile 865.0	Union	WAH, PCR, SCR	
Ohio River	River Mile 865.0 to River Mile 867.0	Union	WAH, PCR, SCR, OSRW	
Ohio River	River Mile 867.0 to River Mile 940.7	McCracken	WAH, PCR, SCR	
Ohio River	River Mile 940.7 to River Mile 943.3	McCracken	WAH, PCR, SCR, DWS, OSRW	
Ohio River	River Mile 943.3 to River Mile 948.2	McCracken	WAH, PCR, SCR, DWS	
Ohio River	River Mile 948.2 to River Mile 949.5	Ballard	WAH, PCR, SCR, DWS, OSRW	
Ohio River	River Mile 949.5 to River Mile 966.3	Ballard	WAH, PCR, SCR, DWS	
Ohio River	River Mile 966.3 to River Mile 969.5	Ballard	WAH, PCR, SCR, DWS, OSRW	

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Ohio River	River Mile 969.5 to Mississippi River	Ballard	WAH, PCR, SCR, DWS	
Ohio River	River Mile 922.0 to River Mile 923.5 (Channel East of Towhead Island)	Livingston	WAH, PCR, SCR, OSRW	
Otter Creek	River Mile 9.7 to Ohio River	Meade	CAH, PCR, SCR	
Paddy's Run	Source to Ohio River	Jefferson	PCR, SCR	401 KAR 5:031, Section 2(1)(d) and (2) do not apply
Sinking Creek	Source to Hwy 259 (River Mile 4.0)	Breckinridge	CAH, PCR, SCR	
White Oak Creek	River Mile 1.08 to Ohio River	Greenup	SCR	401 KAR 5:031, Section 2(1)(d) and (2) do not apply
LAKES AND RESERVOIRS				
Metropolis	Entire Lake	McCracken	WAH, PCR, SCR, OSRW	
Swan	Entire Lake	Ballard	WAH, PCR, SCR, OSRW	
MISSISSIPPI RIVER BASIN (Main Stem and Minor Tributaries)				
Bayou de Chien	Source to River Mile 13.0	Hickman	WAH, PCR, SCR, OSRW	
Cane Creek of Bayou de Chien	Basin	Graves	WAH, PCR, SCR, OSRW	
Jackson Creek	Basin	Graves	WAH, PCR, SCR, OSRW	
Sand Creek	Basin	Graves	WAH, PCR, SCR, OSRW	
South Fork of Bayou de Chien	Basin	Graves	WAH, PCR, SCR, OSRW	
Mississippi River	Confluence with Ohio River to River Mile 947.0	Carlisle	WAH, PCR, SCR	
Mississippi River	River Mile 947.0 to River Mile 945.0	Carlisle	WAH, PCR, SCR, OSRW	
Mississippi River	River Mile 945.0 to River Mile 935.0	Carlisle	WAH, PCR, SCR	
Mississippi River	River Mile 935.0 to River Mile 930.0	Carlisle	WAH, PCR, SCR, OSRW	
Mississippi River	River Mile 930.0 to Kentucky/Tennessee State Line	Fulton	WAH, PCR, SCR	
Murphy's Pond	Entire Pond and Preserve Area	Hickman	WAH, PCR, SCR, OSRW	
UPPER CUMBERLAND RIVER BASIN				
Acorn Fork	Basin above River Mile 1.0	Knox	WAH, PCR, SCR, OSRW	
Adams Branch	Basin	Whitley	WAH, PCR,	

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			SCR, OSRW	
Archers Creek	Basin	Whitley	WAH, PCR, SCR, OSRW	
Bad Branch	Basin	Letcher	CAH, PCR, SCR, OSRW	
Bark Camp Creek	Basin	Whitley	CAH, PCR, SCR	
Beaver Creek	Basin	McCreary	CAH, PCR, SCR, OSRW	
Beaver Creek	Source to Lake Cumberland	Wayne	WAH, PCR, SCR	
Beck's Creek	Basin	Whitley	WAH, PCR, SCR	
Bennetts Fork of Yellow Creek	Basin (Kentucky/Tennessee State Line) above River Mile 5.0	Bell	WAH, PCR, SCR, OSRW	
Bens Fork of Little Clear Creek	Basin	Bell	WAH, PCR, SCR, OSRW	
Big Branch	Basin Above River Mile 0.8	McCreary	WAH, PCR, SCR, OSRW	
Big Lick Branch	Basin	Pulaski	WAH, PCR, SCR, OSRW	
Big South Fork of Cumberland River	River Mile 55.2 to River Mile 45.0	McCreary	WAH, PCR, SCR, OSRW	
Blacksnake Branch	Basin	Bell	WAH, PCR, SCR, OSRW	
Breeden's Creek	Basin	Harlan	WAH, PCR, SCR, OSRW	
Brices Creek	Basin	Knox	WAH, PCR, SCR, OSRW	
Brownies Creek	Basin to River Mile 10.0	Harlan	WAH, PCR, SCR, OSRW	
Buck Creek	River Mile 53.3 to River Mile 10.5	Pulaski	WAH, PCR, SCR, OSRW	
Buck Creek	Basin	Whitley	WAH, PCR, SCR, OSRW	
Bucks Branch	Basin	Whitley	WAH, PCR, SCR, OSRW	
Buffalo Creek	Basin to Kentucky/Tennessee State Line (River Mile 3.2)	Whitley	WAH, PCR, SCR, OSRW	
Bunches Creek	Basin	Whitley	CAH, PCR, SCR, OSRW	
Campbell Branch	Basin	Whitley	WAH, PCR, SCR, OSRW	
Cane Creek	Basin	Laurel	WAH, PCR, SCR	
Caney Creek	Basin	Bell	WAH, PCR, SCR, OSRW	
Cannon Creek	Basin above Cannon Creek Lake	Bell	WAH, PCR, SCR, OSRW	
Clover Bottom Creek	River Mile 1.4 to Horselick Creek	Jackson	CAH, PCR, SCR	

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Cogur Fork	Basin	McCreary	CAH, PCR, SCR	
Coles Branch	Basin	Knox	WAH, PCR, SCR, OSRW	
Colliers Creek	Basin	Bell	WAH, PCR, SCR, OSRW	
Criscillis Branch	Basin	Whitley	WAH, PCR, SCR, OSRW	
Cumberland River	River Mile 694.2 to River Mile 574.6	Whitley	WAH, PCR, SCR, DWS	
Cumberland River	River Mile 574.6 to River Mile 558.5 (Headwaters of Lake Cumberland)	McCreary/ Whitley	WAH, PCR, SCR, OSRW	
Cumberland River	River Mile 460.9 (Lake Cumberland Dam) to Kentucky/Tennessee State Line (River Mile 401.05)	Monroe	CAH, PCR, SCR, DWS	
Davis Branch	Basin	Bell	WAH, PCR, SCR, OSRW	
Difficulty Creek	Basin	McCreary	WAH, PCR, SCR	
Dog Slaughter Creek	Basin	Whitley	CAH, PCR, SCR, OSRW	
Eagle Creek	Basin	McCreary	WAH, PCR, SCR, OSRW	
Four Mile Creek	Basin above River Mile 2.5	Bell	WAH, PCR, SCR, OSRW	
Four Mile Run	Basin above River Mile 1.0	Bell	WAH, PCR, SCR, OSRW	
Fugitt Creek	Basin	Harlan	CAH, PCR, SCR	
Hale Fork	Basin	Knox	WAH, PCR, SCR, OSRW	
Hawk Creek	Basin	Laurel	CAH, PCR, SCR	
Hinkle Branch	Basin	Knox	WAH, PCR, SCR, OSRW	
Honeycutt Branch	Basin	Knox	WAH, PCR, SCR, OSRW	
Horse Lick Creek	River Mile 12.3 to Middle Fork of Rockcastle River	Jackson/ Rockcastle	WAH, PCR, SCR, OSRW	
Hunting Shirt Branch	Basin	Knox	WAH, PCR, SCR, OSRW	
Indian Creek	Source to Barren Fork	McCreary	CAH, PCR, SCR	
Jennys Branch	Basin	McCreary	WAH, PCR, SCR, OSRW	
Kelly Branch	Basin	Harlan	WAH, PCR, SCR	
Kennedy Creek	River Mile 1.0 to Little South Fork of Cumberland River	Wayne	WAH, PCR, SCR, OSRW	
Kilburn Fork of	Basin	McCreary	WAH, PCR,	

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Indian Creek			SCR, OSRW
Laurel Creek of Marsh Creek	River Mile 9.0 to River Mile 3.4	McCreary	CAH, PCR, SCR, OSRW
Laurel Fork	Source to Middle Fork of Rockcastle River	Jackson	WAH, PCR, SCR, OSRW
Laurel Fork of Clear Fork	Basin above River Mile 16.0	Bell	WAH, PCR, SCR, OSRW
Laurel Fork of Clear Fork	River Mile 16.0 to River Mile 4.25 (Kentucky/Tennessee State Line)	Whitley	WAH, PCR, SCR, OSRW
Laurel Fork of Indian Creek	Basin	McCreary	WAH, PCR, SCR, OSRW
Laurel River	Laurel River Lake Dam (River Mile 2.1) to River Mile 0.9	Laurel	CAH, PCR, SCR
Lick Fork	Basin	Bell	WAH, PCR, SCR, OSRW
Little Clear Creek	Basin from Confluence with Fuson Branch	Bell	WAH, PCR, SCR
Little Poplar Creek	Basin above and including East Ridge Branch	Knox	WAH, PCR, SCR, OSRW
Little South Fork of Cumberland River	River Mile 35.6 to River Mile 4.1	Wayne	WAH, PCR, SCR, OSRW
Little Yellow Creek	River Mile 3.2 (Fern Lake Dam) to Yellow Creek	Bell	WAH, PCR, SCR
Long Branch	Basin	Bell	WAH, PCR, SCR, OSRW
Looney Creek	Basin above River Mile 5.3	Harlan	CAH, PCR, SCR
Marsh Creek	Basin above River Mile 24.0	McCreary	WAH, PCR, SCR, OSRW
Marsh Creek	River Mile 24.0 to Confluence with Cumberland River	McCreary	WAH, PCR, SCR, OSRW
Martins Fork	Basin above River Mile 31.3	Harlan	CAH, PCR, SCR
Martin's Fork	River Mile 31.3 to River Mile 27.4	Harlan	CAH, PCR, SCR, OSRW
Meadow Fork	Basin	Letcher	WAH, PCR, SCR, OSRW
Middle Fork of Rockcastle River	River Mile 61.1 to River Mile 53.3	Jackson	WAH, PCR, SCR, OSRW
Mill Branch	Basin	Knox	WAH, PCR, SCR, OSRW
Mill Creek of Straight Creek	Basin	Bell	WAH, PCR, SCR, OSRW
Mill Creek	Basin	McCreary	WAH, PCR, SCR, OSRW
Moores Creek	Basin	Knox	WAH, PCR, SCR, OSRW
Mud Creek	Basin above River Mile 6.5	Whitley	WAH, PCR, SCR, OSRW
Mud Lick	Basin	Knox	WAH, PCR,

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			SCR, OSRW
Ned Branch	Basin	Laurel	WAH, PCR, SCR, OSRW
Patterson Creek	Basin above River Mile 7.4	Whitley	WAH, PCR, SCR, OSRW
Poor Fork of Cumberland River	Basin above River Mile 742.5	Letcher	CAH, PCR, SCR, OSRW
Poor Fork of Cumberland River	River Mile 742.5 to Jefferson National Forest Boundary (River Mile 720.55)	Harlan	WAH, PCR, SCR
Poor Fork of Cumberland River	River Mile 720.55 to Clover Fork of Cumberland River	Harlan	WAH, PCR, SCR, DWS
Razor Fork	Basin	Harlan	WAH, PCR, SCR
Richland Creek	Basin above River Mile 15.7	Knox	WAH, PCR, SCR, OSRW
Roaring Fork	Basin	Knox	WAH, PCR, SCR, OSRW
Rock Creek	Kentucky/Tennessee State Line (River Mile 21.9) to White Oak Creek	McCreary	CAH, PCR, SCR, OSRW
Rock Creek	Basin from confluence with Jellico Creek	McCreary	WAH, PCR, SCR, OSRW
Rockcastle River	River Mile 53.3 to River Mile 8.5	Laurel/Pulaski	WAH, PCR, SCR, OSRW
Ross Branch	Basin	Whitley	WAH, PCR, SCR, OSRW
Roundstone Creek	Source to River Mile 13.5	Rockcastle	WAH, PCR, SCR
Roundstone Creek	River Mile 13.5 to River Mile 4.7	Rockcastle	WAH, PCR, SCR, OSRW
Roundstone Creek	River Mile 4.7 to Rockcastle River	Rockcastle	WAH, PCR, SCR, DWS
Ryans Creek	Basin	Whitley	WAH, PCR, SCR, OSRW
Sanders Creek	Basin	Whitley	WAH, PCR, SCR, OSRW
Shillalah Creek	Source to Cumberland Gap National Historical Park Boundary	Bell	CAH, PCR, SCR
Shut-in Branch	Basin	McCreary	WAH, PCR, SCR, OSRW
Sinking Creek	Source to Rockcastle River	Laurel	WAH, PCR, SCR, OSRW
Sims Fork	Basin	Bell	WAH, PCR, SCR, OSRW
Smith Creek	Basin	Letcher	WAH, PCR, SCR, OSRW
South Fork of Rockcastle River	River Mile 2.1 to Rockcastle River	Rockcastle	WAH, PCR, SCR, OSRW
Stevenson Branch	Basin	Bell	WAH, PCR, SCR, OSRW
Stony Fork of	Basin above River Mile 2.2	Bell	WAH, PCR,

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Bennetts Fork			SCR, OSRW	
Straight Creek	Basin	Harlan	WAH, PCR, SCR	
Sugar Run	Source to Cumberland Gap National Historical Park Boundary	Bell	WAH, PCR, SCR	
Trace Branch	Basin	Knox	WAH, PCR, SCR, OSRW	
Trammel Fork	Basin	McCreary	WAH, PCR, SCR, OSRW	
Troublesome Creek	Basin	McCreary	WAH, PCR, SCR	
Turkey Creek	Basin	Knox	WAH, PCR, SCR, OSRW	
Tyes Fork of Bennetts Fork	Basin	Whitley	WAH, PCR, SCR, OSRW	
Watts Creek	Basin above Camp Blanton Lake	Harlan	WAH, PCR, SCR, OSRW	
White Oak Creek	Basin above River Mile 1.2 (includes Little White Oak Creek)	Laurel	CAH, PCR, SCR	
Wood Creek	River Mile 4.0 (Wood Creek Lake Dam) to Hazel Patch Creek	Laurel	CAH, PCR, SCR	
Yellow Creek	Source to Cumberland River	Bell	WAH, PCR, SCR	
Youngs Creek	Basin	Whitley	WAH, PCR, SCR, OSRW	
LAKES AND RESERVOIRS				
Beulah (=Tyner)	Entire Reservoir	Jackson	WAH, CAH, PCR, SCR, DWS	
Cannon Creek	Entire Reservoir	Bell	WAH, CAH, PCR, SCR, DWS	
Cumberland	Entire Reservoir	Pulaski	WAH, PCR, SCR, DWS	
Dale Hollow	Entire portion of Reservoir within Kentucky	Clinton/ Cumberland	WAH, PCR, SCR, DWS	
Laurel River	Entire Reservoir	Laurel/Whitley	WAH, CAH, PCR, SCR, DWS	
Martins Fork	Entire Reservoir	Harlan	WAH, PCR, SCR	
Wood Creek	Entire Reservoir	Laurel	WAH, CAH, PCR, SCR, DWS	

Section 6. Incorporation by Reference. (1) "Interim Economic Guidance for Water Quality Standards Workbook", EPA, March 1995 Publication EPA-823-B-95-002. U.S. Environmental Protection Agency, Office of Water, Washington, D.C., is incorporated by reference.

(2) This material may be inspected, copied, or obtained, subject to applicable copyright law, at the Kentucky Division of Water, 14 Reilly Road, Frankfort, Kentucky, Monday through Friday, 8 a.m. to 4:30 p.m. (5 Ky.R. 825; Am. 6 Ky.R. 339; eff. 12-5-79; 11 Ky.R. 424; 708; eff. 11-13-84;

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1132; 1372; eff. 4-9-85; 16 Ky.R. 809; 1356; 2655; eff. 5-31-90; 26 Ky.R. 130; 8804; 1131; eff. 12-8-99; 30 Ky.R. 1010; 1791; 31 Ky.R. 547; eff. 9-8-2004.)

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401 KAR 5:029. General provisions.

RELATES TO: KRS 146.200-146.360, 146.410-146.535, 146.550-146.570, 146.600-146.619, 146.990, 224.01-010, 224.01-400, 224.16-050, 224.16-070, 224.70-100-224.70-140, 224.71-100-224.71-145, 224.73-100-224.73-120, 40 C.F.R. Part 136

STATUTORY AUTHORITY: KRS 146.220, 146.241, 146.270, 146.410, 146.450, 146.460, 146.465, 224.10-100, 224.16-050, 224.16-060, 224.70-100, 224.70-110, 40 C.F.R. Part 131, 136, 16 U.S.C. 1531 et seq., 33 U.S.C. 1311, 1312, 1313, 1314, 1316, 1341

NECESSITY, FUNCTION, AND CONFORMITY: KRS 224.10-100 requires the Natural Resources and Environmental Protection Cabinet to develop and conduct a comprehensive program for the management of water resources and to provide for the prevention, abatement, and control of water pollution. This administrative regulation and 401 KAR 5:002, 401 KAR 5:026, 401 KAR 5:030, and 401 KAR 5:031 establish procedures to protect the surface waters of the commonwealth, and thus protect water resources. This administrative regulation establishes: the commonwealth's surface water antidegradation policy, provide for withdrawals of waters not meeting water quality standards, and address sample collection and analytical methodology, mixing zones, and variances for coal remining operations.

Section 1. Antidegradation Policy. (1) The purpose of 401 KAR 5:026 to 401 KAR 5:031 is to safeguard the surface waters of the commonwealth for their designated uses, to prevent the creation of any new pollution of these waters, and to abate any existing pollution.

(2) Where the quality of surface waters exceeds that necessary to support propagation of fish, shellfish, wildlife and recreation in and on the water, that **quality shall be maintained and protected** unless the cabinet finds, after full satisfaction of the intergovernmental coordination and public participation provisions of the cabinet's continuing planning process, that allowing lower water quality is necessary to accommodate important economic or social development in the area in which the waters are located. For point source discharges, water quality shall be maintained and protected in these waters according to the procedures specified in 401 KAR 5:030, Section 1(2)(b) or (3)(b). In allowing degradation or lower water quality, the cabinet shall assure water quality adequate to protect existing uses fully. Further, the cabinet shall assure that there shall be achieved the highest statutory and regulatory requirements for waste treatment by all new and existing point sources and that nonpoint sources of pollutants be controlled by application of all cost effective and reasonable best management practices.

(3) Water quality shall be maintained and protected in a water categorized as an outstanding national resource water according to the procedures specified in 401 KAR 5:030, Section 1(1)(b).

(4) Water quality shall be maintained and protected in those waters designated as outstanding state resource waters according to the procedures specified in 401 KAR 5:031, Section 8.

(5) If potential water quality impairment associated with a thermal discharge is involved, a successful demonstration conducted under Section 316 of the Clean Water Act, 33 U.S.C. 1326, shall be in compliance with this section.

Section 2. Withdrawal of Contaminated Water. Surface waters may, on occasion, not meet the criteria established in 401 KAR 5:031. Withdrawal and subsequent discharge of these waters without alteration of the physical or chemical characteristics into the same or similar surface water shall not be considered a violation of water quality standards. The cabinet shall determine KPDES permit limitations in these situations based on the quality of the raw and receiving waters. The cabinet retains the right to require permit modification under the provisions of 401 KAR 5:035, 401 KAR 5:065, 401 KAR 5:070, 401 KAR 5:075, and 401 KAR 5:080.

Section 3. Sample Collection and Analytical Methodology. All methods of preservation and analysis used to determine conformity or nonconformity with water quality standards shall be

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governed by 40 C.F.R. Part 136, as amended, if applicable. Sample collection and other methods not found in the above reference may be used where appropriate if they:

- (1) Meet commonly accepted quality assurance and quality control principles;
- (2) Are within the accuracy required for determining conformity or nonconformity with water quality standards; and
- (3) Receive prior written approval by the cabinet.

Section 4. Mixing Zones. The following requirements shall apply to a mixing zone:

(1) The cabinet may assign definable geometric limits for mixing zones for a discharge or a pollutant or pollutants within a discharge. Applicable limits shall include the linear distances from the point of discharge, surface area involvement, volume of receiving water, and shall take into account other nearby mixing zones. Dilution provided by assigned mixing zones shall not be allowed until applicable limits are assigned by the cabinet in accordance with this section.

(2) Concentrations of toxic substances that exceed the acute criteria for protection of aquatic life in 401 KAR 5:031 shall not exist within an assigned mixing zone or in the discharge itself unless a zone of initial dilution is assigned. A zone of initial dilution may be assigned pursuant to subsection (3) of this section. Chronic criteria for the protection of aquatic life and criteria for the protection of human health from the consumption of fish tissue shall be met at the edge of the assigned mixing zone.

(3) The following requirements shall apply to a zone of initial dilution:

(a) The cabinet shall require an applicant to provide a technical evaluation for a zone of initial dilution;

(b) Concentrations of toxic substances shall not exceed the acute criteria for the protection of aquatic life at the edge of the assigned zone of initial dilution, except, numeric acute criteria may be exceeded within the zone if the frequency and duration of exposure of aquatic organisms are not sufficient to cause acute toxicity; and

(c) Unless assigned on or before the effective date of this administrative regulation, a zone of initial dilution for a pollutant shall not be allowed in an exceptional water.

(4) Unless assigned on or before the effective date of this administrative regulation, a zone of initial dilution for a pollutant shall be available only to a submerged high-rate multiport outfall structure and shall be limited in size to the most restrictive of the following:

(a) The acute criteria shall be met within ten (10) percent of the distance from the edge of the outfall structure to the edge of the regulatory mixing zone in a spatial direction;

(b) The acute criteria shall be met within a distance of fifty (50) times the square root of the cross-sectional area of a discharge port, in a spatial direction; or

(c) The acute criteria shall be met in a horizontal direction within a distance of five (5) times the natural water depth that prevails under mixing zone design conditions, and exists before the installation of a discharge outlet.

(5) The location of a mixing zone shall not:

(a) Interfere with fish spawning or nursery areas, fish migration routes, public water supply intakes, or bathing areas;

(b) Preclude the free passage of fish or other aquatic life; and

(c) Jeopardize the continued existence of any endangered or threatened aquatic species listed under Section 4 of the Federal Endangered Species Act, 16 U.S.C. 1531 et seq., or result in the destruction or adverse modification of their critical habitat.

(6) Unless assigned on or before the effective date of this administrative regulation, an assigned mixing zone, from the point of discharge in a spatial direction, shall not exceed one-third (1/3) of the width of the receiving stream or one-half (1/2) of the cross-sectional area.

(7) In a lake or a reservoir, unless assigned on or before the effective date of this administrative regulation, an assigned mixing zone, from the point of discharge in any spatial direction, shall not exceed one-tenth (1/10) of the width of the lake, or reservoir at the discharge point.

(8) An assigned mixing zone shall be limited to an area or volume which will not adversely affect the designated uses of the receiving water, and shall not be so large as to adversely affect an established community of aquatic organisms.

(9) For thermal discharges, a successful demonstration conducted under Section 316(a) of the Clean Water Act shall constitute compliance with this section.

(10) Unless assigned by the cabinet on or before the effective date of this administrative regulation, there shall not be mixing zones for bioaccumulative chemicals of concern. Any mixing zone that was assigned by the cabinet for a bioaccumulative chemical of concern shall expire no later than ten (10) years from the effective date of this administrative regulation. A bioaccumulative chemical of concern is one that accumulates in one (1) or more aquatic organisms by a human health bioaccumulation factor of greater than 1000. For the purposes of this administrative regulation, bioaccumulative chemicals of concern shall consist of the following:

- (a) alpha-Hexachlorocyclohexane;
- (b) beta-Hexachlorocyclohexane;
- (c) Chlordane;
- (d) DDD;
- (e) DDE;
- (f) DDT;
- (g) delta-Hexachlorocyclohexane;
- (h) Dieldrin;
- (i) Hexachlorobenzene;
- (j) Hexachlorobutadiene;
- (k) Hexachlorocyclohexane;
- (l) Lindane;
- (m) Mercury;
- (n) Mirex;
- (o) Octachlorostyrene;
- (p) PCBs;
- (q) Pentachlorobenzene;
- (r) Photomirex;
- (s) Toxaphene;
- (t) 1,2,3,4-Tetrachlorobenzene;
- (u) 1,2,4,5-Tetrachlorobenzene; and
- (v) 2,3,7,8-TCDD (Dioxin).

Section 5. Water Quality-based Variance for Coal Remining Operations. (1) Applicability. An applicant for a Kentucky pollutant discharge elimination system (KPDES) permit to discharge pollutants from or affected by a coal remining operation may request a variance from the water quality criteria for pH, iron and manganese set forth in 401 KAR 5:031.

(2) Application requirements.

(a) The applicant shall comply with all KPDES permit application requirements, as set forth in 401 KAR 5:060.

(b) The applicant shall submit documentation from the Department for Surface Mining Reclamation and Enforcement (DSMRE) certifying that the proposed coal remining operation will be located on a remined area.

(c) The applicant shall:

1. Describe the hydrologic balance for the proposed coal remining operation, including:
 - a. Results of a detailed water quality and quantity monitoring program, including seasonal variations, variations in response to precipitation events, and modeled baseline pollution loads using the monitoring program; and
 - b. Monitoring for pH, alkalinity, acidity, total iron, total manganese, sulfates, total suspended solids, and any other water quality parameters requested by the cabinet;
2. Submit the application for a permit from DSMRE;
3. Submit, if not submitted in the application for a permit from DSMRE:
 - a. Plans, cross-sections, and schematic drawings describing the techniques for reducing the discharge of acid-forming materials, iron and manganese;
 - b. A description and an explanation of the range of abatement levels that probably can be achieved, costs, and each step proposed to reduce the discharge of acid-forming materials, iron and manganese;

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c. A description of the spoil handling practices necessary to reduce the discharge of acid-forming materials, iron and manganese; and

d. A detailed topographic map of the proposed coal remining operation, including the locations of the preexisting and proposed discharges; and

4. Continue the water quality and quantity monitoring program described in subparagraph 1 of this paragraph, and submit the results to the cabinet on a periodic basis until the cabinet makes a final permit decision. The cabinet shall evaluate the KPDES monitoring program and the DSMRE monitoring program for each applicant to avoid duplication and inconsistencies.

(d) An applicant with an existing surface coal mining operation seeking a permit revision from DSMRE pursuant to 405 KAR 8:010, Section 20 shall also demonstrate to the satisfaction of the cabinet that:

1. The applicant discovered discharges within the proposed coal remining area after the applicant's DSMRE permit was issued; and

2. The applicant has not caused or contributed to the discharges.

(3) Treatment requirements. If the cabinet issues a KPDES permit to discharge pollutants from or affected by a coal remining operation containing the variance described in subsection (1) of this section, the water quality-based effluent limitations for pH, iron and manganese shall be established on a case-by- case basis. Compliance with those effluent limitations constitutes compliance with those water quality criteria for pH, iron and manganese set forth in 401 KAR 5:031.

(4) Prohibitions. In addition to the prohibitions contained in 401 KAR 5:055, the following prohibitions apply to this section:

(a) A KPDES permit containing the water quality-based variance of subsection (1) of this section shall not be issued unless the coal remining operation has applied for a permit from the Department for Surface Mining Reclamation and Enforcement, as set forth in 405 KAR Chapters 7 through 24, inclusive. The effective date of the KPDES permit shall not be sooner than the effective date of the permit issued by the Department for Surface Mining Reclamation and Enforcement.

(b) A KPDES permit containing the water quality-based variance of subsection (1) of this section shall not be issued for a surface coal mining operation which is not a coal remining operation located on a remined area.

(c) A KPDES permit containing the water quality-based variance of subsection (1) of this section shall not be issued which would allow the discharges of acid-forming materials, iron or manganese to exceed the levels being discharged from the remined area before the coal remining operation begins.

(d) A KPDES permit containing the water quality-based variance of subsection (1) of this section shall not be issued if the applicant fails to demonstrate to the satisfaction of the cabinet that the coal remining operation will result in the potential for improved water quality from the remining operation over that existing prior to the remining operation, and that the information provided in the application is adequate for the cabinet to make an informed final permit decision.

(e) A KPDES permit containing the water quality-based variance of subsection (1) of this section shall not be issued with effluent limitations less stringent than applicable technology-based effluent limitations established in 401 KAR 5:065 or 401 KAR 5:080.

(f) In addition to the prohibitions of paragraphs (a) through (e) of this subsection, a KPDES permit containing the water quality based variance of subsection (1) of this section shall not be issued for an existing surface coal mining operation unless:

1. The applicant receives a permit revision from DSMRE in accordance with 405 KAR 8:010, Section 20;

2. The applicant discovered discharges within the proposed coal remining area after the applicant's DSMRE permit was issued; and

3. The applicant has not caused or contributed to the discharges since August 3, 1977.

Section 6. Federal Regulation Adopted Without Change. (1) The following federal regulation governs the subject matter of this administrative regulation and is adopted without change: 40 C.F.R. Part 136 Guidelines Establishing Test Procedures for the Analysis of Pollutants, July 1,

2002, U.S. Environmental Protection Agency, U.S. Government Printing Office, Superintendent of Documents, Mail Stop: SSOP, Washington, D. C. 20402-9328.

(2) This federal regulation may be inspected, copied, or obtained, subject to applicable copyright law, at the Division of Water, 14 Reilly Road, Frankfort, Kentucky, Monday through Friday, 8 a.m. to 4:30 p.m. (5 Ky.R. 827; Am. 6 Ky.R. 341; eff. 12-5-79; 11 Ky.R. 1141; 1380; eff. 4-9-85; 16 Ky.R. 833; 1367; 2676; eff. 5-31-90; 2257; 2676; eff. 7-11-90; 26 Ky.R. 141; 815; 1141; eff. 12-8-99; 30 Ky.R. 1021; 31 Ky.R. 556; eff. 9-8-2004.)

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401 KAR 5:030. Antidegradation policy implementation methodology.

RELATES TO: KRS 146.200-146.360, 146.410-146.535, 146.550-146.570, 146.600-146.619, 146.990, 224.01-010, 224.01-400, 224.16-050, 224.16-070, 224.70-100-224.70-140, 224.71-100-224.71-145, 224.73-100-224.73-120

STATUTORY AUTHORITY: KRS 146.220, 146.241, 146.270, 146.410, 146.450, 146.460, 146.465, 224.10-100, 224.16-050, 224.16-060, 224.70-100, 224.70-110, 40 C.F.R. Parts 130, 131, 16 U.S.C. 1271 et seq., 1531 et seq., 33 U.S.C. 1311, 1313, 1314, 1315, 1316, 1341, 1342, 1344

NECESSITY, FUNCTION, AND CONFORMITY: KRS 224.10-100 requires the Natural Resources and Environmental Protection Cabinet to develop and conduct a comprehensive program for the management of water resources and to provide for the prevention, abatement, and control of all water pollution. KRS 224.70-100 declares that the policy of the commonwealth is to conserve its waters for legitimate uses and to: safeguard from pollution the uncontaminated waters of the commonwealth, prevent the creation of any new pollution in the waters of the commonwealth, and abate any existing pollution. This administrative regulation and 401 KAR 5:002, 5:026, 5:029, and 5:031 establish procedures to protect the surface waters of the commonwealth, and thus protect water resources. This administrative regulation establishes a methodology to implement the antidegradation policy contained in 401 KAR 5:029 by establishing procedures to control water pollution in waters affected by that policy.

Section 1. Categorization and Implementation. The following procedures shall govern implementation of the antidegradation policy of 401 KAR 5:029, Section 1, for a point source discharge. A flow chart outlining the procedures is incorporated by reference for informational purposes in Section 3 of this administrative regulation. These antidegradation procedures shall not preempt the power or authority of a local government to provide by ordinance for a higher level of protection through antidegradation implementation for a discharger located within that local government's jurisdiction to a surface water of the commonwealth. Surface waters shall be placed into one (1) of four (4) categories listed in this section and each category shall have implementation procedures as follows:

(1) Outstanding national resource water. Surface waters of the commonwealth categorized as outstanding national resource waters are listed in Table 1 of this subsection.

Stream	Segment	River Miles	County
Red River	Upstream to Island off SR 1067 to Downstream Wild River Boundary at SR 746	49.2-68.6	Menifee/Wolfe
Underground River System	Within Mammoth Cave National Park Boundary		Edmonson/Hart/Barren
Big South Fork of Cumberland River	Downstream Wild River Boundary to Tennessee Stateline	45.0-55.2	McCreary

(a) Categorization criteria. A surface water shall be categorized as an outstanding national resource water if the surface water meets, at a minimum, the requirements for an outstanding state resource water as provided in 401 KAR 5:031, Section 8, and if the surface water demonstrates national ecological or recreational significance.

(b) Implementation procedure. Water quality shall be maintained and protected in outstanding national resource water. A new discharger or expanded discharge which may result in permanent or long-term changes in water quality is prohibited. The cabinet may approve temporary or short-term changes in water quality if the changes to the outstanding national resource water have no demonstrable impact on the ability of the water to support the designated uses.

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(2) Exceptional water. Surface waters of the commonwealth categorized as exceptional water are listed in Table 2 of this subsection.

Table 2 SURFACE WATERS CATEGORIZED AS EXCEPTIONAL WATER			
Stream	Segment	River Miles	County
BIG SANDY RIVER BASIN			
Hobbs Fork*	Mouth to Headwaters	0.0-3.8	Martin
Hobbs Fork Unidentified Tributary*	Hobbs Fork to Headwaters	0.0-0.55	Martin
Lower Pigeon Branch*	Left Fork to Headwaters	0.5-1.7	Pike
Russell Fork*	Clinch Field RR Yard off HWY 80 to Virginia Stalene	14.4-16	Pike
Toms Branch*	Mouth to Headwaters	0.0-1.4	Pike
LITTLE SANDY RIVER BASIN			
Arabs Fork*	Clay Fork to Headwaters	0.0-4.7	Carter
Big Caney Creek*	Grayson Lake to Headwaters	0.0-14.9	Elliott
Big Sinking Creek*	SR 986 to Clay Fork and Arab Fork	10.7-15.2	Carter
Meadow Branch*	Mouth to Headwaters	0.0-1.4	Elliott
Middle Fork Little Sandy River*	Mouth to Sheepskin Branch	0.0-3.6	Elliott
Nichols Fork*	Green Branch to Headwaters	0.0-1.9	Elliott
Laurel Creek*	Carter School Rd Bridge to Headwaters	7.6-14.4	Elliott
LICKING RIVER BASIN			
Blackwater Creek*	Eaton Creek to Greasy Fork	3.8-11.4	Morgan
Botts Fork	Mouth to Landuse Change	0.0-2.1	Menifee
Brushy Fork	Cave Run Lake Backwaters to Headwaters	0.6-5.0	Menifee
Brushy Fork*	Mouth to Headwaters	0.0-5.7	Pendleton
Bucket Branch*	Mouth to Headwaters	0.0-1.9	Morgan
Craney Creek	Mouth to Headwaters	0.0-10.0	Rowan
Devils Fork*	Mouth to Headwaters	0.0-7.8	Morgan
Grovers Creek*	Kincaid Lake Backwaters to Unidentified Tributary	0.5-3.4	Pendleton
Licking River	SR 211 to unnamed Rd off Slatey Point Rd	154.5-165.0	Bath/Rowan
North Fork of Licking River*	Cave Run Lake Backwaters to Devils Fork	9.9-14.2	Morgan
Slabcamp Creek	Mouth to Headwaters	0.0-3.4	Rowan
South Fork Grassy Creek*	Mouth to Greasy Creek	0.0-19.6	Pendleton
Welch Fork*	Mouth to First Road Crossing	0.0-1.0	Menifee
West Creek*	Mouth to Headwaters	0.0-9.5	Robertson
KENTUCKY RIVER BASIN			
Big Double Creek*	Mouth to Headwaters	0.0-6.5	Clay
Bill Branch*	Mouth to Right Fork and Left Fork Creek	0.0-2.2	Leslie

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Buffalo Creek*	Mouth to Right Fork and Left Fork	0.0-1.6	Owsley
Cavanaugh Creek*	South Fork of Station Camp Creek to Foxtown Rd	0.0-5.3	Jackson
Cawood Branch*	Mouth to Headwaters	0.0-2.1	Leslie
Cedar Creek Unidentified Tributary*	Mouth to Headwaters	0.0-1.4	Owen
Chester Creek*	Mouth to Headwaters	0.0-2.8	Wolfe
Clear Creek*	Mouth to East Fork Clear Creek	0.0-8.8	Woodford
Clemons Fork*	Mouth to Headwaters	0.0-4.7	Breathitt
Coles Fork*	Mouth to Headwaters	0.0-5.5	Breathitt
Drennon Creek*	Flat Bottom Road Crossing to Town Branch	10.5-11.9	Henry
East Fork of Indian Creek*	West Fork of Indian Creek to Headwaters	0.0-8.5	Menifee
Elisha Creek*	Elisha Creek Rd Crossing to Right Fork and Middle Fork Elisha Creek	0.95-1.7	Leslie
Emily Run	Mouth to Unidentified Tributary	0.0-3.9	Henry
Evans Fork*	Mouth to Headwaters	0.0-2.9	Estill
Falling Rock Branch*	Mouth to Headwaters	0.0-0.6	Breathitt
Gladie Creek*	Mouth to Headwaters	0.0-8.4	Menifee
Glenns Creek Unidentified Tributary	Landuse Change to Headwaters	0.2-1.3	Woodford
Goose Creek	Mouth to Laurel Creek	0.0-9.3	Clay
Griers Creek*	Urban Area to Unidentified Tributary	2.9-3.4	Woodford
Grindstone Creek*	Mouth to Headwaters	0.0-2.2	Franklin
Hardwick Creek	Mouth to Little Hardwick Creek	0.0-3.2	Powell
Hell For Certain	Mouth to Big Fork	0.0-2.1	Leslie
Hines Creek*	Mouth to Hines Creek Road Crossing	0.0-2.4	Madison
Honey Branch	Mouth to Headwaters	0.0-1.4	Leslie
Hopper Cave* Branch	Mouth to Headwaters	0.0-1.6	Jackson
Indian Creek*	Backwater Kentucky River to Headwaters	0.55-4.7	Carroll
Indian Fork*	Mouth to Headwaters	0.0-3.3	Shelby
John Carpenter Fork*	Mouth to Headwaters	0.0-1.5	Breathitt
Left Fork Big Double Creek*	Mouth to Headwaters	0.0-1.5	Clay
Line Fork*	Defeated Creek to Headwaters	11.6-27.5	Letcher
Line Fork Unidentified Tributary* (LCW)	Mouth to Headwaters	0.0-0.55	Letcher
Little Millseat Branch*	Mouth to Headwaters	0.0-1.2	Breathitt
Little Sixmile Creek*	Mouth to Headwaters	0.0-5.2	Henry
Lulbegrud Creek	Mouth to Falls Branch	0.0-7.3	Clark/Powell
Middle Fork of Kentucky River	Mouth to Upper Twin Creek	0.0-12.5	Lee
Middle Fork of Kentucky River	Hyden, Kentucky to Greasy Creek	76.1-84.0	Leslie
Middle Fork of Red River	South Fork Red River to Natural Bridge State Park Lake	1.8-8.3	Powell

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Mill Creek*	Mouth to Headwaters	0.0-8.3	Owen
Millseat Branch*	Mouth to Headwaters	0.0-1.9	Breathitt
Muddy Creek*	Elliston, Kentucky to Viney Creek	13.4-20.2	Madison
Musselman Creek*	Mouth to Headwaters	0.0-8.4	Grant
Red Bird River	Mouth to Big Creek	0.0-15.0	Clay
Right Fork of Buffalo Creek*	Mouth to Headwaters	0.0-11.2	Owsley
Roaring Fork*	Mouth to Headwaters	0.0-0.85	Breathitt
Sand Ripple Creek*	Mouth to Headwaters	0.0-3.9	Henry
Severn Creek*	Mouth to North Fork Severn Creek	0.0-2.8	Owen
Shelly Rock Fork*	Mouth to Headwaters	0.0-0.6	Breathitt
Sixmile Creek*	Little Sixmile to Dam	6.9-14.7	Henry
South Fork of Kentucky River	Mouth to Sexton Creek	0.0-27.7	Owsley
South Fork of Red River	Mouth to Sandlick Fork	0.0-3.9	Powell
South Fork of Station Camp Creek*	Mouth to Rock Lick Creek	0.0-9.6	Jackson
Spruce Branch*	Mouth to Headwaters	0.0-1.1	Leslie
Station Camp Creek*	Landuse Change to South Fork Station Camp Creek	19.0-22.3	Estill
Steer Fork*	Mouth to Headwaters	0.0-2.9	Jackson
Sturgeon Creek*	Duck Fork to Little Sturgeon Creek	1.3-13.7	Lee
Sugar Creek*	Landuse Change to Headwaters	0.8-3.8	Leslie
War Fork*	Mouth to Headwaters	0.0-13.7	Jackson
Wolfpen Creek*	Mouth to Headwaters	0.0-3.2	Menifee
SALT RIVER BASIN			
Brashears Creek	Guist Creek to Bullskin and Clear Creek	13.0-25.5	Shelby
Cedar Creek*	Mouth to Greens Branch	0.0-5.1	Bullitt
Chaplin River*	Thompson Creek to Cornishville, KY	40.1-53.7	Washington
Guist Creek	Mouth to Jephtha Creek	0.0-15.4	Spencer
Harts Run*	Mouth to Headwaters	0.0-2.3	Bullitt
Otter Creek*	Landuse Change to East Fork and Middle Fork Otter Creek	1.7-2.7	Larue
Overalls Creek*	Mouth to Headwaters	0.0-1.3	Bullitt
Salt Lick Creek*	Mouth to Headwaters	0.0-8.4	Marion
Sulphur Creek*	Mouth to Chesse Lick and Brush Creek	0.0-9.7	Anderson
West Fork Otter Creek*	Mouth to Headwaters	0.0-4.7	Larue
Wilson Creek*	Mouth to Headwaters	0.0-17.0	Bullitt
GREEN RIVER BASIN			
Beaverdam Creek*	Mouth to Headwaters	0.0-14.1	Edmonson
Cane Run*	Nolin River Backwaters to	1-6.5	Hart

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	Headwaters		
Caney Fork*	Mouth to Headwaters	0.0-6.6	Barren
Clifty Creek*	Barton Run to Western Kentucky Parkway	7.3-17.2	Grayson
Clifty Creek*	Little Clifty Creek to Sulphur Lick	7.7-13.2	Todd
East Fork Little Barren River*	Red Lick Creek to Flat Creek	19-20.2	Metcalfe
Ellis Fork*	Mouth to Headwaters	0.0-3.2	Adair
Falling Timber Creek*	Landuse Change to Headwaters	7-15.5	Metcalfe
Fiddlers Creek*	Mouth to Headwaters	0.0-5.8	Breckinridge
Forbes Creek*	Mouth to Unidentified Tributary	0.0-3.9	Christian
Gasper River*	Clear Fork to Wiggington Creek	17.0-35.2	Logan
Goose Creek*	Mouth to Little Goose Creek	0.0-8.1	Casey
Green River	Downstream Mammoth Cave National Park Boundary to Lynn Camp Creek	181.7-207.8	Edmonson
Green River Unidentified Tributary*	Landuse Change to Headwaters	0.8-3.2	Adair
Halls Creek*	Unidentified Tributary to Headwaters	9.6-12.1	Ohio
Lick Creek*	Mouth to Headwaters	0.0-9.9	Simpson
Linders Creek*	Mouth to Sutzer Creek	0.0-7.7	Hardin
Little Beaverdam Creek	Mouth to SR 743	0.0-11.3	Warren
Little Short Creek*	Mouth to Headwaters	0.0-3.0	Grayson
Lynn Camp Creek*	Mouth to Lindy Creek	0.0-8.3	Hart
McFarland Creek*	Grays Branch to Unidentified Tributary	1.4-4.8	Christian
Meeting Creek*	Little Meeting Creek to Petty Branch	5.2-13.8	Hardin
Muddy Creek*	Landuse Change to Headwaters	13.0-15.5	Ohio
North Fork Rough River*	Buffalo Creek to Reservoir Dam	23.44-28.1	Breckinridge
Peter Creek*	Caney Fork to Dry Fork	11.6-18.5	Barren
Pond Run*	Landuse Change to Headwaters	1.4-6.8	Breckinridge/Ohio
Rough River*	Linders Creek to Vertrees Creek	136.9-147.8	Hardin
Russell Creek*	Mouth to Columbia WWTP	0.0-40.0	Adair
Russell Creek*	Reynolds Creek to Headwaters	55.9-68.2	Adair
Sixes Creek*	Wild Branch to Headwaters	2.0-7.5	Ohio
Sulphur Branch*	Mouth to Headwaters	0.0-2.0	Edmonson
Trammel Fork*	Mouth to Tennessee Stateline	0.0-30.15	Allen
West Fork Pond River*	Unidentified Tributary to East Branch Pond River	12.7-22.5	Christian
White Oak Creek Unidentified Tributary*	Hovious Rd Crossing to SR 76	0.4-3.0	Adair

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LOWER CUMBERLAND RIVER BASIN			
Crooked Creek*	Lake Barkley Backwaters to Headwaters	4.0-9.4	Trigg
Donaldson Creek*	Craig Branch to Unidentified Tributary	6.9-10.3	Trigg
Elk Creek*	Tennessee Stateline to Dry Branch	7.5-9.8	Logan
Sugar Creek*	Lick Creek to Unidentified Tributary	2.1-6.7	Livingston
West Fork of Red River*	Tennessee Stateline to Montgomery Creek	16.1-26.5	Christian
Whippoorwill Creek*	Mouth to Vicks Branch	0.0-13.0	Logan
TENNESSEE RIVER BASIN			
Blood River*	McCullough Fork to Tennessee Stateline	12.2-15.65	Calloway
Clarks River	Persimmon Slough to Middle Fork Creek	26.6-28.4	Marshall
Grindstone Creek*	Mouth to Headwaters	0.0-2.3	Calloway
Panther Creek*	Mouth to Headwaters	0.0-5.1	Calloway
Panther Creek*	Channelization to Impoundment	1.1-6.0	Graves
Panther Creek Unidentified Tributary*	Mouth to Headwaters	0.0-2.1	Graves
Soldier Creek*	Mouth to South Fork Solider	0.0-5.3	Marshall
Sugar Creek*	Kentucky Lake Backwaters to Buzzard Roost Road	2.1-3.3	Calloway
Sugar Creek*	Mouth to Unnamed Reservoir	0.0-4.0	Graves
Trace Creek*	Mouth to Neeley Branch	0.0-3.0	Graves
West Fork Clarks River*	Soldier Creek to Duncan Creek	19.7-22.7	Graves
Wildcat Creek*	Ralph Wright Road Crossing to Headwaters	3.5-6.7	Calloway
TRADEWATER RIVER BASIN			
East Fork Flynn Fork*	Landuse Change to Headwaters	2.5-4.6	Caldwell
Piney Creek*	Lake Beshear Backwaters to Headwaters	4.5-10.2	Caldwell
Piney Creek Unidentified Tributary*	Mouth to Headwaters	0.0-2.9	Caldwell
Sandlick Creek*	Camp Creek to Headwaters	4.9-9.0	Christian
Sandlick Creek Unidentified Tributary*	Mouth to Headwaters	0.0-1.4	Christian
Tradewater River*	Dripping Springs Branch to Buntin Lake Dam	123.2-131.1	Christian
OHIO RIVER BASIN (Main Stem and Minor Tributaries)			
Big Sugar Creek Unidentified Tributary*	I-71 to Headwaters	1.0-3.6	Gallatin
Corn Creek Unidentified Tributary*	Mouth to Headwaters	0.0-2.0	Trimble
Crooked Creek*	Rush Creek to City Lake Dam	17.5-25.6	Crittenden
Double Lick Creek*	Mouth to Landuse Change	0.0-1.4	Boone
Garrison Creek*	Mouth to Headwaters	0.0-4.1	Boone

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Kinniconick Creek*	McDowell Creek to Headwaters	5.1-50.4	Lewis
Massac Creek Unidentified Tributary*	Mouth to Headwaters	0.0-1.7	McCracken
Middle Fork Massac Creek*	Hines Road to Headwaters	3.15-6.2	McCracken
West Fork Massac Creek*	SR 725 to Little Massac Creek	3.2-5.4	McCracken
Second Creek*	Private Road Crossing to Headwaters	0.5-2.9	Boone
Yellowbank Creek*	Ohio River Backwaters to Headwaters	1.4-11.4	Breckinridge
LAKES AND RESERVOIRS			
Metropolis	Entire Lake		McCracken
Swan	Entire Lake		Ballard
MISSISSIPPI RIVER BASIN (Main Stem and Minor Tributaries)			
Jackson Creek*	Mouth to Headwaters	0.0-2.6	Graves
Obion Creek*	Hurricane Creek to Little Creek	25.2-35.5	Hickman
Terrapin Creek*	Tennessee Stateline to Headwaters	2.8-7	Graves
Murphy's Pond	Entire Pond and Preserve Area		Hickman
UPPER CUMBERLAND RIVER BASIN			
Bad Branch*	Mouth to Headwaters	0.0-3.0	Letcher
Bark Camp Creek*	Mouth to Martins Fork	0.0-3.95	Whitley
Beaver Creek*	Mouth to Freeman Fork and Middle Fork	0.0-6.5	McCreary
Bee Lick Creek	Mouth to Unidentified Tributary	0.0-5.7	Pulaski
Brownies Creek*	Blacksnake Branch to Headwaters	9.0-16.0	Bell
Brush Creek	Wolf Creek to Reemergence of Sinking Creek	1.1-7.6	Rockcastle
Brushy Creek*	Mouth to Headwaters	0.0-16.0	Pulaski
Buck Creek*	Lake Cumberland Backwaters to Headwaters	5.0-62.6	Pulaski
Bunches Creek*	Mouth to Headwater	0.0-3.3	Whitley
Cane Creek*	Mouth to Headwaters	0.0-12.0	Laurel
Clifty Creek	Mouth to Rocky Branch	0.0-2.7	Pulaski
Cogur Fork*	Mouth to Headwaters	0.0-7.9	McCreary
Cumberland River	Wild River Boundaries	558.5-574.6	McCreary/ Whitley
Dog Slaughter Creek*	Mouth to North Fork and South Fork	0.0-1.1	Whitley
Eagle Creek*	Mouth to Headwaters	0.0-6.3	McCreary
Fugitt Creek*	Landuse Change to Headwaters	0.5-4.9	Harlan
Horse Lick Creek*	Mouth to Clover Bottom	0.0-12.3	Jackson
Howards Creek*	Dale Hollow lake Backwaters to Headwaters	0.8-3.4	Clinton

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Indian Creek*	Laurel fork to Barren Fork	2.3-6.7	McCreary
Jackie Branch*	Mouth to Headwaters	0.0-1.7	Whitley
Kilburn Fork	Mouth to Headwaters	0.0-6.3	McCreary
Laurel Creek	Mouth to Laurel Creek Dam	0.0-9.2	McCreary
Laurel Fork*	Tennessee Stateline to Tiny Branch/Pine Creek	4.2-13.0	Whitley
Laurel Fork*	Mouth to Headwaters	0.0-12.2	Jackson
Little South Fork of Cumberland River*	Mouth to Langham Branch	0.0-35.6	Wayne
Marsh Creek*	Laurel Creek to Headwaters	8.6-26.2	McCreary
Martins Fork of Cumberland River	Wild River Boundaries	27.4-31.3	Harlan
McFarland Creek	Little McFarland Creek to Spring Branch	0.8-6.2	Monroe
Meshack Creek	Mouth to Headwaters	0.0-2.8	Monroe
Middle Fork Rockcastle River*	Mouth to Horse Lick Creek	0.0-7.8	Jackson
Mud Camp Creek*	Mouth to Collins Branch	0.0-1.3	Cumberland
Mud Camp Creek*	Unidentified Tributary to Headwaters	3.7-8.4	Monroe/Cumberland
Otter Creek	Lake Cumberland Backwaters to Carpenter Fork	14.5-22.0	Wayne
Poor Fork Cumberland River*	Franks Creek to Headwaters	46.1-51.7	Letcher
Presley House Branch*	Mouth to Headwaters	0.0-1.5	Letcher
Puncheoncamp Branch*	Mouth to Headwaters	0.0-1.9	McCreary
Rock Creek*	White Oak Creek to Tennessee Stateline	4.1-21.9	McCreary
Rock Creek Unidentified Tributary*	Mouth to Headwaters	0.0-1.9	McCreary
Rock Creek Unidentified Tributary*	Mouth to Headwaters	0.0-1.15	McCreary
Rockcastle River	Wild River Boundaries	8.5-24.4	Laurel/Pulaski
Shillalah Creek*	Mouth to Headwaters	0.0-5.5	Bell
Sinking Creek*	Mouth to White Oak Creek	0.0-9.8	Laurel
Sulphur Creek*	Dale Hollow Backwaters to Headwaters	2.0-5.1	Clinton
South Fork of Dog Slaughter Creek*	Mouth to Headwaters	0.0-4.6	Whitley
South Fork Rockcastle River	Mouth to White Oak Creek	0.0-5.6	Laurel
Watts Branch*	Mouth to Headwaters	0.0-2.6	McCreary
Watts Creek*	Lake to Headwaters	2.2-4.3	Harlan

*Waterbodies in the cabinet's reference reach network

(a) Categorization criteria. A surface water shall be categorized as an exceptional water if any of the following criteria are met:

1. Surface water is designated as a Kentucky Wild River and is not categorized as an outstanding national resource water;

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2. Surface water is designated as an outstanding state resource water as set forth in 401 KAR 5:031, Section 8(1)(a)1, 2, and 3 and Section 8(1)(b);

3. Surface water contains either of the following:

a. A fish community that is rated "excellent" by the use of the Index of Biotic Integrity included in "Development and Application of the Kentucky Index of Biotic Integrity (KIBI)", 2003, incorporated by reference in Section 3 of this administrative regulation; or

b. A macroinvertebrate community that is rated "excellent" by the Macroinvertebrate Bioassessment Index included in "The Kentucky Macroinvertebrate Bioassessment Index," 2003, incorporated by reference in Section 3 of this administrative regulation; or

4. Surface water in the cabinet's reference reach network.

(b) Implementation procedure.

1. Dischargers listed in clauses a through e of this subparagraph are subject to control by existing cabinet programs including the Kentucky Pollution Discharge Elimination System program. Subparagraphs 2 through 9 of this paragraph shall not apply to those dischargers identified in clauses a through e of this paragraph, except the cabinet shall assure water quality necessary to fully protect existing uses.

a. "KPDES general permits for" storm water discharge;

b. Coal mining discharge subject to regulation under the Surface Mining Control and Reclamation Act and 33 U.S.C. 1344;

c. Domestic sewage discharge from a single-family residence;

d. Concentrated animal feeding operations; and

e. KPDES permit renewals and modifications that result in less than a twenty (20) percent increase in pollutant loading from the previously permitted pollutant loading.

2. Zones of initial dilution are prohibited in exceptional water unless assigned before the effective date of this administrative regulation.

3. Except as provided in subparagraph 7 of this paragraph, a KPDES permit for a new discharger or expanded discharge into exceptional water shall contain effluent limitations for the entire effluent and shall have an effluent quality of:

a. A chronic whole effluent toxicity limitation shall apply unless an acute whole effluent toxicity limitation is more stringent; and

b. Chloride limitations shall be based on the domestic water supply criterion of 250 mg/l.

4. Except as provided in subparagraph 7 of this paragraph, a KPDES permit for a new domestic sewage discharger or expanded domestic sewage discharge into exceptional water shall contain effluent limitations for the entire effluent and shall have an effluent quality of:

a. No greater than ten (10) mg/l five (5) day carbonaceous biochemical oxygen demand;

b. No greater than two (2) mg/l ammonia-nitrogen;

c. No greater than 0.010 mg/l total residual chlorine;

d. No greater than ten (10) mg/l total suspended solids;

e. No greater than one (1) mg/l total phosphorous;

f. A minimum of seven (7) mg/l dissolved oxygen;

g. An arithmetic mean value for fecal coliform bacteria not to exceed 200 colonies per 100 milliliters during a period of thirty (30) consecutive days or 400 colonies per 100 milliliters during a period of seven (7) consecutive days, or an arithmetic mean for *Escherichia coli* bacteria not to exceed 130 colonies per 100 milliliters during a period of thirty (30) consecutive days or 230 colonies per 100 milliliters during a period of seven (7) consecutive days; and

h. The discharge shall not cause the average instream dissolved oxygen concentration to be less than six and zero-tenths (6.0) mg/l.

5. Except as provided in subparagraph (7) of this paragraph, a KPDES permit for a new nondomestic discharger or an expanded nondomestic discharge into exceptional water shall be restricted to no more than one-half (1/2) of the water quality based limitations that would have been permitted at standard design conditions.

6. If the permit applicant accepts the effluent limitations required by subparagraphs 3, 4, and 5 of this paragraph, the KPDES permit shall be issued with these effluent limitations and additional requirements of the Kentucky Pollution Discharge Elimination System program without further antidegradation review.

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7. If the permit applicant does not accept the effluent limitations required by subparagraphs 3, 4, and 5 of this paragraph, the applicant shall demonstrate to the satisfaction of the cabinet that no technologically or economically feasible alternatives exist and that allowing lower water quality is necessary to accommodate important economic or social development in the area in which the water is located. For purposes of this administrative regulation, the approval of a POTW's regional facility plan pursuant to 401 KRS 5:006 shall demonstrate compliance with the alternatives analysis and socioeconomic demonstration for a regional facility. The alternatives analysis and socioeconomic demonstration shall follow the guidelines in "Interim Economic Guidance for Water Quality Standards Workbook", EPA, March 1995 incorporated by reference in Section 3 of this administrative regulation. The alternatives analysis shall consider the following:

- a. Discharge to other treatment facilities;
- b. Use of other discharge locations;
- c. Water reuse or recycle;
- d. Process and treatment alternatives;
- e. On-site or subsurface disposal; and
- f. Any other examination of alternatives to lowering water quality to which the cabinet and the applicant can agree.

8. A permit applicant who has failed to demonstrate to the satisfaction of the cabinet the necessity for lowering water quality shall meet the effluent limitations required by this paragraph and additional requirements of the Kentucky Pollution Discharge Elimination System program.

9. A permit applicant who demonstrates to the satisfaction of the cabinet the necessity for lowering water quality shall meet the water quality based limitations as outlined in 401 KAR 5:031.

(3) High quality water.

(a) Categorization criteria.

1. A surface water shall be categorized as high quality water if the surface water is not listed as an outstanding national resource water or an exceptional water in Table 1 or 2 of this section and if the surface water does not meet the criteria for impaired water as provided for in subsection 4(a) of this section.

2. A surface water shall be categorized as a high quality water if the surface water is listed as an outstanding state resource water in 401 KAR 5:026 and is not listed as an outstanding national resource water or an exceptional water in Table 1 or 2 of this section.

(b) Implementation procedure. KPDES permit applications for discharges into high quality water received after U.S. EPA approval of this subsection shall comply with this paragraph.

1. Dischargers listed in clauses a through e of this subparagraph are subject to control by existing cabinet programs including the Kentucky Pollution Discharge Elimination System program. Subparagraphs 2 through 6 of this paragraph shall not apply to those dischargers identified in clauses a through e of this paragraph, except the cabinet shall assure water quality necessary to fully protect existing uses.

- a. KPDES general permits for storm water discharge;
- b. Coal mining discharge subject to regulation under the Surface Mining Control and Reclamation Act, 30 U.S.C. 1201 et seq., and 33 U.S.C. 1344;
- c. Domestic sewage discharge from a single-family residence;
- d. Concentrated animal feeding operations; and
- e. KPDES permit renewals and modifications that result in less than a twenty (20) percent increase in pollutant loading from the previously permitted pollutant loading.

2. Except as provided in subparagraph 5 of this paragraph, a KPDES permit for a new domestic sewage discharger or expanded domestic sewage discharge into high quality water shall contain effluent limitations for the entire effluent and shall have an effluent quality of:

- a. No greater than ten (10) mg/l five (5) day carbonaceous biochemical oxygen demand;
- b. No greater than two (2) mg/l ammonia-nitrogen;
- c. No greater than 0.010 mg/l total residual chlorine;
- d. No greater than ten (10) mg/l total suspended solids;
- e. No greater than one (1) mg/l total phosphorous;
- f. A minimum of seven (7) mg/l dissolved oxygen; and

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g. An arithmetic mean value for fecal coliform bacteria not to exceed 200 colonies per 100 milliliters during a period of thirty (30) consecutive days or 400 colonies per 100 milliliters during a period of seven (7) consecutive days, or an arithmetic mean for Escherichia coli bacteria not to exceed 130 colonies per 100 milliliters during a period of thirty (30) consecutive days or 230 colonies per 100 milliliters during a period of seven (7) consecutive days.

3. Except as provided in subparagraph 5 of this paragraph, a KPDES permit for a new nondomestic discharger or an expanded nondomestic discharge into high quality water shall be restricted to no more than one-half (1/2) of the water quality based limitations that would have been permitted at standard design conditions.

4. If the permit applicant accepts the effluent limitations required by subparagraphs 2 and 3 of this paragraph, the KPDES permit shall be issued with these effluent limitations and any additional requirements of the Kentucky Pollution Discharge Elimination System program without further antidegradation review.

5. If the permit applicant does not accept the effluent limitations required by subparagraphs 2 and 3 of this paragraph, the applicant may request water quality based limitations permitted at standard design conditions. In making this request, the applicant shall demonstrate to the satisfaction of the cabinet that no technologically or economically feasible alternatives exist and that allowing lower water quality is necessary to accommodate important economic or social development in the area in which the water is located. For purposes of this administrative regulation, the approval of a POTW's regional facility plan pursuant to 401 KAR 5:006 shall demonstrate compliance with the alternatives analysis and socioeconomic demonstration for a regional facility. The alternatives analysis and socioeconomic demonstration shall consider the following:

- a. Discharge to other treatment facilities;
- b. Use of other discharge locations;
- c. Water reuse or recycle;
- d. Process and treatment alternatives;
- e. On-site or sub-surface disposal;
- f. Any other examination of alternatives to lowering water quality to which the cabinet and the applicant can agree;
- g. The positive or beneficial effect of the facility on an existing environmental or public health problem;
- h. The increase or avoidance of a decrease in employment;
- i. The increase in production level;
- j. The increase in operational efficiency;
- k. Industrial or commercial benefit to the community; and
- l. Any other economic or social benefit to the community.

6. A permit applicant who has failed to demonstrate to the satisfaction of the cabinet the necessity for lowering water quality shall meet the effluent limitations required by this paragraph and additional requirements of the Kentucky Pollution Discharge Elimination System program.

7. A permit applicant who demonstrates to the satisfaction of the cabinet the necessity for lowering water quality shall meet the water quality based limitations as outlined in 401 KAR 5:031.

(4) Impaired water.

(a) Categorization criteria. A surface water categorized as impaired for applicable designated uses shall be a water identified pursuant to 33 U.S.C. 1315. Surface water categorized as impaired shall be assessed by the cabinet as not fully supporting any applicable designated uses. A surface water shall not be categorized as impaired water if the surface water is listed as an outstanding state resource water in 401 KAR 5:026.

(b) Implementation procedure. All existing uses shall be protected and the level of water quality necessary to protect those existing uses shall be assured in impaired water. The process to allow a discharge into an impaired water and to assure protection of the water is regulated by the requirements in the Kentucky Pollution Discharge Elimination System Program.

Section 2. Procedure for Recategorizing Water. This section shall apply to the recategorization of surface water to outstanding national resource water and exceptional water.

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The redesignation of water to outstanding state resource water shall be governed by the procedures in 401 KAR 5:026.

(1) The cabinet may propose to recategorize certain water to outstanding national resource water and exceptional water.

(a) If the cabinet proposes to recategorize these waters, it shall provide notice and an opportunity for public hearing.

(b) The cabinet shall provide the documentation requirements of this section for those surface waters it proposes to recategorize.

(2) A person may request recategorization of a surface water to an outstanding national resource water or exceptional water by filing a petition with the cabinet.

(a) The petition shall include the name and address of the petitioner and the information and documentation necessary to recategorize the particular water as required by subsection (4) of this section;

(b) The petitioner shall have the burden of proof that the recategorization is appropriate.

(c) The cabinet shall provide notice of the petition and an opportunity for a public hearing.

(d) The cabinet shall review the petition, supporting documentation, and any comments received from the public to determine if the proposed water qualifies for recategorization.

(e) The cabinet shall document the determination to grant or deny recategorization as a result of a petition, and shall provide a copy of the decision to the petitioner and other interested parties.

(3) If a water is to be recategorized, the cabinet shall publish notice of the recategorization. Any permit issued after the date of publication shall be issued with limitations based on the new category. When the cabinet reviews its water quality standards pursuant to the provisions of Section 303 of the Clean Water Act, the cabinet shall propose to have all recategorized water promulgated as an amendment to this administrative regulation.

(4) The following information, documentation, and data shall support a petition for recategorization:

(a) A petition for outstanding national resource water shall include:

1. A United States Geological Survey 7.5 minute topographic map or its equivalent as approved by the cabinet showing those surface waters to be recategorized including a description consisting of a river mile index with any existing and proposed discharge points;

2. Existing uses and water quality data for the surface water for which the recategorization is proposed. If adequate data are unavailable, additional studies may be required by the cabinet;

3. Descriptions of general land uses and specific land uses adjacent to the surface water for which the recategorization is proposed;

4. The existing and designated uses of the water upstream and downstream of the proposed recategorized water;

5. General physical characteristics of the surface water including width, depth, bottom composition, and slope;

6. The frequency of occasions when there is no natural flow in the surface water, and the 7Q₁₀ and harmonic mean flow values for the surface water and adjacent surface waters;

7. An assessment of the existing and potential aquatic life habitat in the surface water under consideration and the adjacent upstream surface waters. The existing aquatic life shall be documented including the occurrence of individuals or populations, indices of diversity and well-being, and abundance of species of any unique native biota;

8. A documented rationale as to why the water qualify for the recategorization; and

9. The rationale used to support the national significance of the water.

(b) A petition for exceptional water shall include the following:

1. A United States Geological Survey 7.5 minute topographic map or its equivalent as approved by the cabinet showing the surface water to be recategorized including a description consisting of a river mile index with existing and proposed discharge points;

2. Descriptions of general land uses, including mining, agricultural, recreational, low, medium, and high density residential, commercial, and industrial, and specific land uses adjacent to the surface water for which the recategorization is proposed;

3. The frequency of occasions when there is no natural flow in the surface water, and the 7Q₁₀ and annual mean flow values for the surface water; and

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4. Fish or benthic macroinvertebrate collection data and an Index of Biotic Integrity or Macroinvertebrate Bioassessment Index calculation from a waterbody if criteria specified in Section 1(2)(a)3 of this administrative regulation are utilized.

Section 3. Incorporation by Reference. (1) The following material is incorporated by reference:

(a) "Development and Application of the Kentucky Index of Biotic Integrity (KIBI)", 2003, Kentucky Division of Water, Natural Resources and Environmental Protection Cabinet;

(b) "The Kentucky Macroinvertebrate Bioassessment Index", 2003, Kentucky Division of Water, Natural Resources and Environmental Protection Cabinet;

(c) "Interim Economic Guidance for Water Quality Standards Workbook", EPA, March 1995 Publication EPA-823-B-95-002, U.S. Environmental Protection Agency, Office of Water, Washington, D.C.; and

(d) "401 KAR 5:030 Antidegradation Implementation Procedures Process Flow Chart", May 25, 2004, KPDES Branch, Kentucky Division of Water, Kentucky Department for Environmental Protection.

(2) This material may be inspected, copied, or obtained, subject to applicable copyright law, at the Division of Water, 14 Reilly Road, Frankfort, Kentucky, Monday through Friday, 8 a.m. to 4:30 p.m. (21 Ky.R. 2843; Am. 89; 280; eff. 7-12-95; 26 Ky.R. 145; 819; 1144; eff. 12-8-99; 30 Ky.R. 1024; 1801; 31 Ky.R. 558; eff. 9-8-2004.)

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401 KAR 5:031. Surface water standards.

RELATES TO: KRS 146.200-146.360, 146.410-146.535, 146.550-146.570, 146.600-146.619, 146.990, 224.01-010, 224.01-400, 224.16-050, 224.16-070, 224.70-100-224.70-140, 224.71-100-224.71-145, 224.73-100-224.73-120

STATUTORY AUTHORITY: KRS 146.220, 146.241, 146.270, 146.410, 146.450, 146.460, 146.465, 224.10-100, 224.16-050, 224.16-060, 224.70-100, 224.70-110, 40 C.F.R. Part 131, 16 U.S.C. 1271 et seq., 1531 et seq., 33 U.S.C. 1311, 1313, 1314, 1341

NECESSITY, FUNCTION, AND CONFORMITY: KRS 224.10-100 requires the Natural Resources and Environmental Protection Cabinet to develop and conduct a comprehensive program for the management of water resources and to provide for the prevention, abatement, and control of water pollution. This administrative regulation and 401 KAR 5:002, 5:026, 5:029, and 5:030 establish procedures to protect the surface waters of the commonwealth, and thus protect water resources. This administrative regulation establishes water quality standards which consist of designated legitimate uses of the surface waters of the commonwealth and the associated water quality criteria necessary to protect those uses. These water quality standards are minimum requirements that apply to all surface waters in the commonwealth of Kentucky in order to maintain and protect them for designated uses. These water quality standards are subject to periodic review and revision in accordance with federal and state laws.

Section 1. Nutrient Limits. In lakes and reservoirs and their tributaries, and other surface waters where eutrophication problems may exist, nitrogen, phosphorus, carbon, and contributing trace element discharges shall be limited in accordance with:

- (1) The scope of the problem;
- (2) The geography of the affected area; and
- (3) Relative contributions from existing and proposed sources.

Section 2. Minimum Criteria Applicable to All Surface Waters. (1) The following minimum water quality criteria are applicable to all surface waters including mixing zones, with the exception that toxicity to aquatic life in mixing zones shall be subject to the provisions of 401 KAR 5:029, Section 4. **Surface waters shall not be aesthetically or otherwise degraded by substances that:**

- (a) Settle to form objectionable deposits;
- (b) Float as debris, scum, oil, or other matter to form a nuisance;
- (c) Produce objectionable color, odor, taste, or turbidity;
- (d) Injure, are chronically or acutely toxic to or produce adverse physiological or behavioral responses in humans, animals, fish and other aquatic life;
- (e) Produce undesirable aquatic life or result in the dominance of nuisance species;
- (f) Cause fish flesh tainting. The concentration of all phenolic compounds which cause fish flesh tainting shall not exceed five (5) µg/l as an instream value;
- (g) Cause the following changes in radionuclides:
 1. The gross total alpha particle activity, including radium-226 but excluding radon and uranium, to exceed fifteen (15) pCi/l;
 2. Combined radium-226 and radium-228 to exceed five (5) pCi/l. Specific determinations of radium-226 and radium-228 are not necessary if dissolved gross alpha particle activity does not exceed five (5) pCi/l;
 3. The concentration of total gross beta particle activity to exceed fifty (50) pCi/l;
 4. The concentration of tritium to exceed 20,000 pCi/l;
 5. The concentration of total Strontium-90 to exceed eight (8) pCi/l;
 6. The concentration of uranium to exceed thirty (30) □g/l.

(2) The water quality criteria for the protection of human health related to fish consumption in Table 1 of Section 6 of this administrative regulation are applicable to all surface water at the edge of the assigned mixing zones except for those points where water is withdrawn for domestic water supply use. The criteria are established to protect human health from the consumption of

fish tissue, and shall not be exceeded. For those substances associated with a cancer risk, an acceptable risk level of no more than one (1) additional cancer case in a population of 1,000,000 people, or 1×10^{-6} shall be utilized to establish the allowable concentration.

Section 3. Use Designations and Associated Criteria. (1) Surface waters may be designated as having one (1) or more legitimate uses and associated criteria protective of those uses. Those uses are listed in 401 KAR 5:026. Nothing in this administrative regulation shall be construed to prohibit or impair the legitimate beneficial uses of these waters. The criteria in Sections 2, 4, 6, and 7 of this administrative regulation represent minimum conditions necessary to:

- (a) Protect surface waters for the indicated use; and
- (b) Protect human health from fish consumption.

(2) On occasion, surface water quality may be outside of the limits established to protect designated uses because of natural conditions. If this occurs during periods when stream flows are below the flow that is used by the cabinet to establish effluent limitations for wastewater treatment facilities, a discharger shall not be considered a contributor to instream violations of water quality standards, if treatment results in compliance with permit requirements.

(3) Stream flows for water quality-based permits. The following stream flows shall be utilized if deriving KPDES permit limitations to protect surface waters for the listed uses and purposes:

- (a) Aquatic life protection shall be $7Q_{10}$;
- (b) Water-based recreation protection shall be $7Q_{10}$;
- (c) Domestic water supply protection shall be determined at points of withdrawal as:
 1. The harmonic mean for cancer-linked substances; and
 2. $7Q_{10}$ for noncancer-linked substances;
- (d) Human health protection from fish consumption and for changes in radionuclides shall be the harmonic mean; and
- (e) Protection of aesthetics shall be $7Q_{10}$.

Section 4. Aquatic Life. (1) Warm water aquatic habitat. The following parameters and associated criteria shall apply for the protection of productive warm water aquatic communities, fowl, animal wildlife, arboreous growth, agricultural, and industrial uses:

(a) Natural alkalinity as $CaCO_3$ shall not be reduced by more than twenty-five (25) percent. If natural alkalinity is below twenty (20) mg/l $CaCO_3$, there shall not be a reduction below the natural level. Alkalinity shall not be reduced or increased to a degree which may adversely affect the aquatic community.

(b) pH shall not be less than six and zero-tenths (6.0) nor more than nine and zero-tenths (9.0) and shall not fluctuate more than one and zero-tenths (1.0) pH unit over a period of twenty-four (24) hours.

(c) Flow shall not be altered to a degree which will adversely affect the aquatic community.

(d) Temperature shall not exceed thirty-one and seven-tenths (31.7) degrees Celsius (eighty-nine (89) degrees Fahrenheit).

1. The normal daily and seasonal temperature fluctuations that existed before the addition of heat due to other than natural causes shall be maintained.

2. The cabinet may determine allowable surface water temperatures on a site-specific basis utilizing available data which shall be based on the effects of temperature on the aquatic biota which utilize specific surface waters of the commonwealth and which may be affected by person-induced temperature changes. Effects on downstream uses will also be considered in determining site-specific temperatures. Values in the following table are guidelines for surface water temperature.

Month/Date	Period Average (°F)	Instantaneous Maximum (°F)
January 1-31	45	50
February 1-29	45	50
March 1-15	51	56
March 16-31	54	59
April 1-15	58	64

April 16-30	64	69
May 1-15	68	73
May 16-31	75	80
June 1-15	80	85
June 16-30	83	87
July 1-31	84	89
August 1-31	84	89
September 1-15	84	87
September 16-30	82	86
October 1-15	77	82
October 16-31	72	77
November 1-30	67	72
December 1-31	52	57

3. A successful demonstration concerning thermal discharge limits carried out under Section 316(a) of the Clean Water Act shall constitute compliance with the temperature requirements of this subsection. A successful demonstration assures the protection and propagation of a balanced indigenous population of shellfish, fish and wildlife in or on the water into which the discharge is made.

(e) Dissolved oxygen.

1. Dissolved oxygen shall be maintained at a minimum concentration of five and zero tenths (5.0) mg/l daily average; the instantaneous minimum shall not be less than four and zero-tenths (4.0) mg/l.

2. The dissolved oxygen concentration shall be measured at middepth in waters having a total depth of ten (10) feet or less and at representative depths in other waters.

(f) Total dissolved solids or specific conductance. Total dissolved solids or specific conductance shall not be changed to the extent that the indigenous aquatic community is adversely affected.

(g) Total suspended solids. Total suspended solids shall not be changed to the extent that the indigenous aquatic community is adversely affected.

(h) Settleable solids. The addition of settleable solids that may alter the stream bottom so as to adversely affect productive aquatic communities is prohibited.

(i) Ammonia. The concentration of the un-ionized form shall not be greater than 0.05 mg/l at any time instream after mixing. Un-ionized ammonia shall be determined from values for total ammonia-N, in mg/l, pH and temperature, by means of the following equation:

$$Y = 1.2 (\text{Total ammonia-N}) / (1 + 10^{\text{pK}_a - \text{pH}})$$

$$\text{pK}_a = 0.0902 + (2730 / (273.2 + T_c))$$

Where:

T_c = temperature, degrees Celsius.

Y = un-ionized ammonia (mg/l).

(j) Toxics.

1. The allowable instream concentration of toxic substances, or whole effluents containing toxic substances, which are noncumulative or nonpersistent with a half-life of less than ninety-six (96) hours, shall not exceed:

a. One-tenth (0.1) of the ninety-six (96) hour median lethal concentration (LC₅₀) of representative indigenous or indicator aquatic organisms; or

b. A chronic toxicity unit of 1.00 utilizing the twenty-five (25) percent inhibition concentration, or LC₂₅.

2. The allowable instream concentration of toxic substances, or whole effluents containing toxic substances, which are bioaccumulative or persistent, including pesticides, if not specified elsewhere in this section, shall not exceed:

a. 0.01 of the ninety-six (96) hour median lethal concentration (LC₅₀) of representative indigenous or indicator aquatic organisms; or

b. A chronic toxicity unit of 1.00 utilizing the IC₂₅.

3. In the absence of acute criteria for pollutants listed in Table 1 of Section 6 of this administrative regulation or for other substances known to be toxic but not listed in this administrative regulation, or for whole effluents which are acutely toxic, the allowable instream concentration shall not exceed the LC₁ or one-third (1/3) LC₅₀ concentration derived from toxicity tests on representative indigenous or indicator aquatic organisms or exceed three-tenths (0.3) acute toxicity units.

4. If specific application factors have been determined for a toxic substance or whole effluent such as an acute to chronic ratio or water effect ratio, they may be used instead of the one-tenth (0.1) and 0.01 factors listed in this subsection upon approval by the cabinet.

5. Allowable instream concentrations for specific pollutants for the protection of warm water aquatic habitat are listed in Table 1 of Section 6 of this administrative regulation. These concentrations are based on protecting aquatic life from acute and chronic toxicity and shall not be exceeded.

(k) Total residual chlorine. Instream concentrations for total residual chlorine shall not exceed an acute criteria value of nineteen (19) □g/l or a chronic criteria value of eleven (11) □g/l.

(2) Cold water aquatic habitat. The following parameters and criteria are for the protection of productive cold water aquatic communities and streams that support trout populations, whether self-sustaining or reproducing, on a year-round basis. The criteria adopted for the protection of warm water aquatic life also apply to the protection of cold water habitats with the following additions:

(a) **Dissolved oxygen.**

1. A minimum concentration of six and zero-tenths (6.0) mg/l as a daily average and five and zero-tenths (5.0) mg/l as an instantaneous minimum shall be maintained.

2. In lakes and reservoirs that support trout, the concentration of dissolved oxygen in waters below the epilimnion shall be kept consistent with natural water quality.

(b) Temperature. Water temperature shall not be increased through human activities above the natural seasonal temperatures.

Section 5. Domestic Water Supply Use. Maximum allowable in-stream concentrations for specific substances, to be applicable at the point of withdrawal for use for domestic water supply from surface water sources are specified in Table 1 of Section 6 of this administrative regulation and shall not be exceeded.

Section 6. Pollutants. Allowable instream concentrations of pollutants are listed in Table 1 of this section.

Pollutant	CAS ¹ Number	Water Quality Criteria □g/L ²			
		Human Health:		Warm Water Aquatic Habitat ³ :	
		DWS ⁴	Fish ⁵	Acute	Chronic
Acenaphthene	83329	670	990		
Acrolein	107028	190	290		
Acrylonitrile	107131	0.051	0.25		
Aldrin	309002	0.000049	0.000050	3.0	
alpha-BHC	319846	0.0026	0.0049		
alpha-Endosulfan	959988	62	89	0.22	0.056
Anthracene	120127	8,300	40,000		
Antimony	7440360	5.6	640		
Arsenic	7440382	10.0		340	150

Asbestos	1332214	7 million fibers/L			
Barium	7440393	1,000			
Benzene	71432	2.2	51		
Benzidine	92875	0.000086	0.00020		
Benzo(a)anthracene	56553	0.0038	0.018		
Benzo(a)pyrene	50328	0.0038	0.018		
Benzo(b)fluoranthene	205992	0.0038	0.018		
Benzo(k)fluoranthene	207089	0.0038	0.018		
Beryllium	7440417	4			
Beta-BHC	319857	0.0091	0.017		
Beta-Endosulfan	33213659	62	89	0.22	0.056
bis(chloromethyl)ether	542881	0.00010	0.00029		
bis(2-chloroethyl)ether	111444	0.030	0.53		
bis(2-chloroisopropyl)ether	108601	1,400	65,000		
bis(2-ethylhexyl)phthalate	117817	1.2	2.2		
Bromoform	75252	4.3	140		
Butylbenzyl phthalate	85687	1,500	1,900		
Cadmium	7440439	5		e(1.0166 (ln Hard*)-3.924)	e(0.7409 (ln Hard*)-4.719)
Carbon tetrachloride	56235	0.23	1.6		
Chlordane	57749	0.00080	0.00081	2.4	0.0043
Chloride	16887006	250,000		1,200,000	600,000
Chlorobenzene	108907	680	21,000		
Chlorodibromomethane	124481	0.40	13		
Chloroform	67663	5.7	470		
Chloropyrifos	2921882			0.083	0.041
Chromium	N/A	100			
Chromium (III)	16065831			e(0.8190 (ln Hard*)+3.7256)	e(0.8190 (ln Hard*)+0.6848)
Chromium (VI)	18540299			16	11
Chrysene	218019	0.0038	0.018		
Color	N/A	75 Platinum Cobalt Units			
Copper	7440508	1,300		e(0.9422 (ln Hard*)-1.700)	e(0.8545 (ln Hard*)-1.702)
Cyanide, Free	57125	700	220,000	22	5.2
Demeton	8065483				0.1
Dibenzo(a,h)anthracene	53703	0.0038	0.018		
Dichlorobromomethane	75274	0.55	17		
Dieldrin	60571	0.000052	0.000054	0.24	0.056
Diethyl phthalate	84662	17,000	44,000		
Dimethyl phthalate	131113	270,000	1,100,000		
Di-n-butyl phthalate	84742	2,000	4,500		
Dinitrophenols	25550587	69	5300		

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Endosulfan sulfate	1031078	62	89		
Endrin	72208	0.76	0.81	0.086	0.036
Endrin aldehyde	7421934	0.29	0.30		
Ethylbenzene	100414	3,100	29,000		
Fluoranthene	206440	130	140		
Fluorene	86737	1,100	5,300		
Fluoride	N/A	2,000			
Foaming Agents	N/A	500			
gamma-BHC (Lindane)	58899	0.019	0.063	0.95	
Guthion	86500				0.01
Heptachlor	76448	0.000079	0.000079	0.52	0.0038
Heptachlor epoxide	1024573	0.000039	0.000039	0.52	0.0038
Hexachlorobenzene	118741	0.00028	0.00029		
Hexachlorobutadiene	87683	0.44	18		
Hexachlorocyclo-hexane- Technical	319868	0.0123	0.0414		
Hexachlorocyclopentadiene	77474	240	17,000		
Hexachloroethane	67721	1.4	3.3		
Ideno(1,2,3-cd)pyrene	193395	0.0038	0.018		
Iron ⁶	7439896			4,000	1,000
Isophorone	78591	35.0	960		
Lead	7439921	15		e(1.273 (ln Hard*)- 1.460)	e(1.273 (ln Hard*)- 4.705)
Malathion	121755				0.1
Mercury	7439976	2.0	0.051	1.7	0.91
Methoxychlor	72435	40.0			0.03
Methylbromide	74839	47	1,500		
Methylene Chloride	75092	4.6	590		
Mirex	2385855				0.001
Nickel	7440020	610	4,600	e(0.8460 (ln Hard*)+ 2.255)	e(0.8460 (ln Hard*)+ 0.0584)
Nitrate (as N)	14797558	10,000			
Nitrobenzene	98953	17	690		
Nitrosamines, Other	N/A	0.0008	1.24		
N-Nitrosodibutylamine	924163	0.0063	0.22		
N-Nitrosodiethylamine	55185	0.0008	1.24		
N-Nitrosodimethylamine	62759	0.00069	3.0		
N-Nitrosodi-n-Propylamine	621647	0.0050	0.51		
N-Nitrosodiphenylamine	86306	3.3	6.0		
N-Nitrosopyrrolidine	930552	0.016	34		
Parathion	56382			0.065	0.013
Pentachlorobenzene	608935	1.4	1.5		
Pentachlorophenol	87865	0.27	3.0	e(1.005 (pH)- 4.869)	e(1.005 (pH)- 5.134)
Phthalate esters	N/A				3
Phenol	108952	21,000	1,700,000		
Polychlorinated Biphenyls (PCBs)	N/A	0.000064	0.000064		0.0014

Pyrene	129000	830	4,000		
Selenium	7782492	170	4,200	20	5.0
Silver	7440224			e(1.72 (ln Hard*)-6 .59)	
Sulfate	N/A	250,000			
Hydrogen Sulfide, Undissociated	7783064				2.0
Tetrachloroethylene	127184	0.69	3.3		
Thallium	7440280	1.7	6.3		
Toluene	108883	6,800	200,000		
Total Dissolved Solids	N/A	750,000			
Toxaphene	8001352	0.00028	0.00028	0.73	0.0002
Trichloroethylene	79016	2.5	30		
Vinyl Chloride	75014	2.0	530		
Zinc	7440666	7,400	26,000	e(0.8473 (ln Hard*)+ 0.884)	e(0.8473 (ln Hard*)+ 0.884)
1,1-dichloroethylene	75354	0.057	3.2		
1,1,1-trichloroethane	71556	200			
1,1,2-trichloroethane	79005	0.59	16		
1,1,2,2-tetrachloroethane	79345	0.17	4.0		
1,2-dichlorobenzene	95501	2,700	17,000		
1,2-dichloroethane	107062	0.38	37		
1,2-dichloropropane	78875	0.50	15		
1,2-diphenylhydrazine	122667	0.036	0.20		
1,2-trans-dichloroethylene	156605	700	140,000		
1,2,4-trichlorobenzene	120821	260	940		
1,2,4,5-tetrachlorobenzene	95943	0.97	1.1		
1,3-dichlorobenzene	541731	320	960		
1,3-dichloropropene	542756	10	1,700		
1,4-dichlorobenzene	106467	400	2,600		
2-chloronaphthalene	91587	1,000	1,600		
2-chlorophenol	95578	81	150		
2-methyl-4,6-dinitrophenol	534521	13	280		
2,3,7,8-TCDD (Dioxin)	1746016	5.0 E - 9	5.1 E - 9		
2,4-D	94757	70			
2,4-dichlorophenol	120832	77	290		
2,4-dimethylphenol	105679	380	850		
2,4-dinitrophenol	51285	69	5,300		
2,4-dinitrotoluene	121142	0.11	3.4		
2,4,5-TP (Silvex)	93721	10			
2,4,5-trichlorophenol	95954	1,800	3,600		
2,4,6-trichlorophenol	88062	1.4	2.4		
3,3'-dichlorobenzidine	91941	0.021	0.028		
4,4'-DDD	72548	0.00031	0.00031		
4,4'-DDE	72559	0.00022	0.00022		
4,4'-DDT	50293	0.00022	0.00022	1.1	0.001

¹CAS = Chemical Abstracts Service.

²Water quality criteria in □g/L unless reported in different units.

³Metal concentrations shall be total recoverable metals to be measured in an unfiltered sample, unless it can be demonstrated to the satisfaction of the cabinet that a more appropriate analytical technique is available that provides a measurement of that portion of the metal present which causes toxicity to aquatic life.

⁴DWS = Domestic Water Supply Source.

⁵Fish = Fish Consumption.

⁶The chronic criterion for iron shall not exceed three and five tenths (3.5) mg/l if aquatic life has not been shown to be adversely affected.

*Hard = Hardness as mg/l CaCO₃.

Section 7. Recreational Waters. (1) Primary contact recreation water. The following criteria shall apply to waters designated as primary contact recreation use:

(a) Fecal coliform content or Escherichia coli content shall not exceed 200 colonies per 100 ml or 130 colonies per 100 ml respectively as a geometric mean based on not less than five (5) samples taken during a thirty (30) day period. Content also shall not exceed 400 colonies per 100 ml in twenty (20) percent or more of all samples taken during a thirty (30) day period for fecal coliform or 240 colonies per 100 ml for Escherichia coli. These limits shall be applicable during the recreation season of May 1 through October 31. Fecal coliform criteria listed in subsection (2)(a) of this section shall apply during the remainder of the year.

(b) pH shall be between six and zero-tenths (6.0) to nine and zero-tenths (9.0) and shall not change more than one and zero-tenths (1.0) pH unit within this range over a period of twenty-four (24) hours.

(2) Secondary contact recreation water. The following criteria shall apply to waters designated for secondary contact recreation use during the entire year:

(a) Fecal coliform content shall not exceed 1,000 colonies per 100 ml as a thirty (30) day geometric mean based on not less than five (5) samples; nor exceed 2,000 colonies per 100 ml in twenty (20) percent or more of all samples taken during a thirty (30) day period.

(b) pH shall be between six and zero-tenths (6.0) to nine and zero-tenths (9.0) and shall not change more than one and zero-tenths (1.0) pH unit within this range over a period of twenty-four (24) hours.

Section 8. Outstanding State Resource Waters. This designation category includes certain unique waters of the commonwealth.

(1) Water for inclusion.

(a) Automatic inclusion. The following surface waters shall automatically be included in this category:

1. Waters designated under the Kentucky Wild Rivers Act, KRS 146.200-146.360;
2. Waters designated under the Federal Wild and Scenic Rivers Act, 16 U.S.C. 1271 et seq.;
3. Waters identified under the Kentucky Nature Preserves Act, KRS 146.410-146.530, which are contained within a formally dedicated nature preserve or are published in the registry of natural areas in accordance with 400 KAR 2:080 and concurred upon by the cabinet; and
4. Waters that support federally recognized endangered or threatened species under the Endangered Species Act of 1973, as amended, 16 U.S.C. 1531 et seq.

(b) Permissible consideration. Other surface waters may be included in this category as determined by the cabinet if:

1. The surface waters flow through or are bounded by state or federal forest land, or are of exceptional aesthetic or ecological value or are within the boundaries of national, state, or local government parks, or are a part of a unique geological or historical area recognized by state or federal designation; or

2. The surface water is a component part of an undisturbed or relatively undisturbed watershed that can provide basic scientific data and possess outstanding water quality characteristics; or fulfill two (2) of the following criteria:

a. Support a diverse or unique native aquatic flora or fauna;

b. Possess physical or chemical characteristics that provide an unusual and uncommon aquatic habitat; or

c. Provide a unique aquatic environment within a physiographic region.

(2) Outstanding state resource waters protection. The designation of certain waters as outstanding state resource waters shall fairly and fully reflect those aspects of the waters for which the designation is proposed. The cabinet shall determine water quality criteria for these waters as follows:

(a) At a minimum, the criteria of Section 2 and Table 1 of Section 6 of this administrative regulation and the appropriate criteria associated with the stream use designation assignments in 401 KAR 5:026, shall be applicable to these waters.

(b) If the values identified for an outstanding state resource water are dependent upon or related to instream water quality, the cabinet shall review existing water quality criteria and determine if additional criteria or more stringent criteria are necessary for protection, and evaluate the need for the development of additional data upon which to base the determination. Existing water quality and habitat shall be maintained and protected in those waters designated as outstanding state resource waters that support federally threatened and endangered species of aquatic organisms, unless it can be demonstrated to the satisfaction of the cabinet, that lowering of water quality or a habitat modification will not have a harmful effect on the threatened or endangered species which the water supports.

(c) Adoption of more protective criteria in accordance with this section shall be listed with the respective stream segment in 401 KAR 5:026.

(3) Determination of designation.

(a) Any person may present a proposal to designate certain waters under this section. Documentation requirements in support of an outstanding state resource water proposal shall contain those elements outlined in 401 KAR 5:026, Section 3(3)(a) through (h).

(b) The cabinet shall review the proposal and supporting documentation to determine whether the proposed waters qualify as outstanding state resource waters within the criteria established by this administrative regulation. The cabinet shall document the determination to deny or to propose redesignation, and a copy of the decision shall be served upon the petitioner and other interested parties.

(c) After considering all of the pertinent data, a redesignation, if appropriate, shall be made pursuant to 401 KAR 5:026.

Section 9. Water Quality Criteria for the Main Stem of the Ohio River. The following criteria apply to the main stem of the Ohio River from its juncture with the Big Sandy River at River Mile 317.1 to its confluence with the Mississippi River, and shall not be exceeded. These waters are subject to all applicable provisions of 401 KAR 5:002, 5:026, 5:029, 5:030, and this administrative regulation.

(1) Dissolved oxygen. Concentrations shall average at least five and zero-tenths (5.0) mg/l per calendar day and shall not be less than four and zero-tenths (4.0) mg/l except during the April 15-June 15 spawning season when a minimum of five and one-tenth (5.1) mg/l shall be maintained.

(2) Temperature.

(a) Allowable stream temperatures are:

Month/Date	Period Average (°F)	Instantaneous Maximum (°F)
January 1-31	45	50
February 1-29	45	50
March 1-15	51	56
March 16-31	54	59
April 1-15	58	64
April 16-30	64	69
May 1-15	68	73
May 16-31	75	80
June 1-15	80	85
June 16-30	83	87

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July 1-31	84	89
August 1-31	84	89
September 1-15	84	87
September 16-30	82	86
October 1-15	77	82
October 16-31	72	77
November 1-30	67	72
December 1-31	52	57

(b) A successful demonstration conducted for thermal discharge limitations under Section 316(a) of the Clean Water Act shall constitute compliance with these temperature criteria.

(3) Maximum allowable instream concentrations for specific pollutants for the protection of human health are listed in Table 2 of subsection (4) of this section. They shall be met at the edge of the assigned mixing zone.

(4) To provide for the protection of warm water aquatic life habitats, the criteria in Table 2 of this subsection shall be met at the edge of the assigned mixing zone.

Pollutant	Human Health Criteria in $\mu\text{g/L}^1$	Warm Water Aquatic Habitat Criteria in $\mu\text{g/L}^2$	
		Acute	Chronic
Arsenic	10.0		
Barium	2,000		
Cadmium		e(1.0166 (ln Hard*)-3.924)	e(0.7409 (ln Hard*)-4.719)
Chloride	250,000		
Chromium, hexavalent		16	11
Copper		e(0.9422 (ln Hard*)-1.700)	e(0.8545 (ln Hard*)-1.702)
Cyanide, Free		22	5.2
Fluoride	2,000		
Lead		e(1.273 (ln Hard*)-1.460)	e(1.273 (ln Hard*)-4.705)
Mercury		1.7	0.91
Nickel		e(0.8460 (ln Hard*)+2.255)	e(0.8460 (ln Hard*)+0.0584)
Nitrite + Nitrate Nitrogen	10,000		
Nitrite – Nitrogen	1,000		
Phenolics	5		
Silver	100	e(1.72 (ln Hard*)-6.59)	
Sulfate	250,000		
Zinc		e(0.8473 (ln Hard*)+0.884)	e(0.8473 (ln Hard*)+0.884)

¹Metal concentrations, for the purposes of human health criteria, shall be total recoverable values except hexavalent chromium, which is dissolved.

²Metal concentrations, for the purposes of warm water aquatic habitat criteria, shall be total recoverable metals to be measured in an unfiltered sample, unless it can be demonstrated to the satisfaction of the cabinet that a more appropriate analytical technique is available that provides a measurement of that portion of the metal present which causes toxicity to aquatic life.

*Hard = Hardness as mg/l CaCO₃

(5) The net discharge of aldrin, dieldrin, DDT, including DDD and DDE, endrin, toxaphene, benzidine, and PCBs is prohibited.

Section 10. Exceptions to Criteria for Specific Surface Waters. (1) The cabinet may grant exceptions to the criteria contained in Sections 2, 4, 6, 7, 8, and 9 of this administrative regulation upon demonstration by an applicant that maintenance of applicable water quality criteria is not attainable or scientifically valid but the use designation is still appropriate. This determination shall be made on a case-by-case basis with respect to a specific surface water following an analysis for each area.

(2) The analysis shall show that the water quality criteria cannot be reasonably achieved either on a seasonal or year- round basis due to natural conditions, or site-specific factors differing from the conditions used to derive criteria in Sections 2, 4, 6, 7, 8, and 9 of this administrative regulation. Site-specific criteria shall be developed by the applicant utilizing toxicity tests, indicator organisms, and application factors that are consistent with those outlined in Chapter 3 of "Water Quality Standards Handbook", EPA, 1994, incorporated by reference in Section 12 of this administrative regulation. In addition, an applicant shall supply the documentation listed in 401 KAR 5:026, Section 3.

(3) An exception to criteria listed in Table 1 of Section 6 of this administrative regulation for the protection of human health from the consumption of fish tissue may be granted if it can be demonstrated that natural, ephemeral, intermittent or low flow conditions or water levels preclude the year-round support of a fishery, unless these conditions may be compensated for by the discharge of sufficient volume of effluent discharges.

(4) Before granting an exception to water quality criteria, the cabinet shall ensure that the water quality standards of downstream waters are attained and maintained.

(5) All exceptions to water quality criteria shall be subject to review at least every three (3) years.

(6) Exceptions to water quality criteria shall be adopted as an administrative regulation by listing them with the respective surface water in 401 KAR 5:026.

Section 11. Exceptions to Criteria for Individual Dischargers. (1) An exception to criteria may be granted to an individual discharger based on a demonstration by the discharger, following the guidelines in "Interim Economic Guidance for Water Quality Standards Workbook", EPA March 1995 incorporated by reference in Section 12. of this administrative regulation, that KPDES permit compliance with existing instream criteria shall result in substantial and widespread adverse economic and social impacts.

(2) The demonstration shall include an assessment of alternative pollution control strategies and biological assessments that indicated designated uses are being met.

(3) Before granting an exception, the cabinet shall ensure that the water quality standards of downstream waters are attained and maintained.

(4) All exceptions shall be submitted to the cabinet for review at least every three (3) years. Upon review, the discharger shall demonstrate to the cabinet that a reasonable effort has been made to reduce the pollutants in the discharge to levels that would achieve existing applicable water quality criteria.

(5) The highest level of effluent quality that can be economically and technologically achieved shall be ensured while the exception is in effect.

(6) The Kentucky Pollution Discharge Elimination System permitting program shall be the mechanism for the review and public notification of intentions to grant exceptions to criteria.

Section 12. Incorporation by Reference. (1) The following material is incorporated by reference:

(a) "Water Quality Standards Handbook-Chapter 3", EPA August 1994, Publication EPA-823-B-94-005a, U.S. Environmental Protection Agency, Office of Water, Washington, D.C.

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(b) "Interim Economic Guidance for Water Quality Standards Workbook", EPA March 1995, Publication EPA-823-B-95-002, U.S. Environmental Protection Agency, Office of Water, Washington, D.C.

(2) This material may be inspected, copied, or obtained, subject to applicable copyright law, at the Division of Water, 14 Reilly Road, Frankfort, Kentucky, Monday through Friday, 8 a.m. to 4:30 p.m. (5 Ky.R. 829; Am. 6 Ky.R. 344; eff. 12-5-79; 11 Ky.R. 1144; 1384; eff. 4-9-85; 16 Ky.R. 838; 1370; 2666; eff. 5-31-90; 18 Ky.R. 1388; 2331; eff. 1-27-92; 26 Ky.R. 150; 824; 1148; eff. 12-8-99; 30 Ky.R. 1035; 1813; eff. 9-8-2004.)

treatment requirements: compliance – 5:035

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401 KAR 5:035. Treatment requirements; compliance.

RELATES TO: KRS 224.70-100, 224.70-110

STATUTORY AUTHORITY: KRS 224.10-100(17)

NECESSITY, FUNCTION, AND CONFORMITY: This administrative regulation defines minimum treatment requirements and mandates that all persons discharging pollutants through point sources shall apply these measures, or more stringent as required, to meet water quality standards by certain dates.

Section 1. Applicability. The provisions of this administrative regulation shall apply to all discharges to surface waters of the Commonwealth as defined in 401 KAR 5:029, Section 1(1)(bb).

Section 2. Treatment Requirements. (1) All persons who discharge through a point source shall, as a minimum, apply the secondary treatment, or equivalent, considering such factors as the total cost of the application of such technology in relation to the effluent reduction benefits to be achieved; the age of the equipment and facilities involved; the process employed; the engineering aspects of the application of various types of control techniques; nonwater quality environmental impact; and such other factors as the cabinet considers appropriate to treatment facilities not later than July 1, 1977.

(2) All persons who discharge through a point source shall apply the best available waste control technology, or equivalent, not later than July 1, 1984, or three (3) years following the promulgation of applicable categorical or water quality criteria effluent limitations in the Federal Register. In determining what is best available waste-control technology, the factors in subsection (1) of this section shall be considered. In addition, any operating and maintenance procedures, schedules of activities, prohibitions of activities, and other management practices to control site runoff, spillage, leaks, sludge or waste disposal, or drainage from raw material storage may be imposed in addition to or in the absence of other applicable standards and limitations.

Section 3. The cabinet may deny, revoke, or modify a permit to any applicant where the discharge in the judgment of the cabinet does not conform to the policy of the Commonwealth of Kentucky as set forth in KRS 224.70-100.

Section 4. The provisions of this administrative regulation shall be unseverable with the provisions of 401 KAR 5:026, 401 KAR 5:029, and 401 KAR 5:031. (WP-6-2; 1 Ky.R. 762; eff. 7-2-75; Am. 5 Ky.R. 812; 6 Ky.R. 348; eff. 12-5-79.)

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401 KAR 5:037. Groundwater protection plans.

RELATES TO: KRS 151.110, 151.232, Chapter 224, SB 241

STATUTORY AUTHORITY: KRS 224.01-010, 224.10-100, 224.70-100, 224.70-110

NECESSITY, FUNCTION, AND CONFORMITY: 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

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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 or 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 bulk quantities of pesticides or fertilizers for commercial purposes;
- (b) Storing or related handling of bulk quantities 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 a waste treatment system permitted under the Kentucky Pollutant Discharge Elimination System;
- (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;

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(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 waste treatment system permitted under the Kentucky Pollutant Discharge Elimination System;

(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) Installing and operating sewer lines or water lines approved by the cabinet;

(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 a waste treatment system permitted under the Kentucky Pollutant Discharge Elimination System. If drains are identified which do not discharge to an on-site sewage disposal system, a closed-loop collection or recovery system, or a waste treatment system permitted under the Kentucky Pollutant Discharge Elimination System, 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 waste treatment system permitted under the Kentucky Pollutant Discharge Elimination System. 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 a waste treatment system permitted under the Kentucky Pollutant Discharge Elimination System.

(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.

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(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

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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. (20 Ky.R. 3128; Am. 21 Ky.R. 25; 1030; eff. 8-24-94.)

treatment requirements, coal remining operations – 5:040

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401 KAR 5:040. Treatment requirements, coal remining operations.

RELATES TO: KRS Chapter 224

STATUTORY AUTHORITY: KRS 224.10-100, 224.16-060, 224.70-100, 224.70-110, 33 U.S.C. A sec. 1311

NECESSITY, FUNCTION, AND CONFORMITY: This administrative regulation establishes treatment requirements for coal remining operations seeking Kentucky Pollutant Discharge Elimination System (KPDES) permits. The administrative regulation establishes a method for establishing best available technology economically achievable (BAT), using best professional judgment (BPJ). The method for establishing BAT is identical to that existing in 33 USCA sec. 1331(p), the Rahall Amendment to the Federal Clean Water Act. It will allow the establishment of permit-specific BAT, instead of BAT based on 40 CFR Part 434.

Section 1. Definitions. Unless defined in this section, all terms mean as defined by KRS 224.005; KRS 350.010, 401 KAR 5:029; 401 KAR 5:050, Section 1; and 405 KAR 7:020.

(1) "Coal remining operation" means a surface coal mining operation which begins after the effective date of this administrative regulation at a site on which a coal mining operation was conducted before August 3, 1977. "Coal remining operation" also means an existing surface coal mining operation which receives a permit revision from the Department for Surface Mining Reclamation and Enforcement (DSMRE) in accordance with 405 KAR 8:010, Section 20, for a site on which a coal mining operation was conducted before August 3, 1977.

(2) "Preexisting discharge" means any discharge at the time of applying for a KPDES permit under this administrative regulation.

(3) "Remined area" means only that area of any coal remining operation on which a coal mining operation was conducted before August 3, 1977.

Section 2. Applicability. The provisions of this administrative regulation shall apply to all discharges of pH, iron and manganese from or affected by coal remining operations to waters of the Commonwealth.

Section 3. Treatment Requirements. All persons who discharge pollutants from or affected by coal remining operations to waters of the Commonwealth shall meet the following treatment requirements:

(1) The discharge shall comply with all water quality standards, as set forth in 401 KAR 5:026 through 401 KAR 5:031, inclusive.

(2) The discharge shall comply with all Kentucky Pollutant Discharge Elimination System (KPDES) program requirements, as set forth in 401 KAR 5:050 through 401 KAR 5:085, inclusive.

(3) The discharge shall comply with all permit conditions imposed by the Department for Surface Mining Reclamation and Enforcement (DSMRE), as set forth in 405 KAR Chapters 7 through 24, inclusive.

Section 4. Modified Requirement for KPDES Permits. (1) The director may issue a KPDES permit to an applicant proposing to discharge pollutants from or affected by a coal remining operation which modifies the requirement to apply best available technology economically achievable, as set forth in 401 KAR 5:065, Section 4(2) and 401 KAR 5:080, Section 1(2)(c)1.

(2) The modified requirement of this section will impose best available technology economically achievable on a case-by-case basis, using best professional judgment, as set forth in 401 KAR 5:080, Section 1(2)(c)2.

(3) The modified requirement of this section may apply to the following pollutants:

(a) pH level of any discharge from a remined area existing at the time of KPDES permit application;

(b) Preexisting discharges of iron and manganese from the remined area of the coal remining operation; and

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(c) pH level or level of iron or manganese in any preexisting discharge affected by the coal remining operation.

(4) The director may employ the document entitled "Coal Remining - Best Professional Judgment Analysis: Preexisting Pollutational Discharge Data Input Module, Baseline Statistical Calculation Module, Water Treatment Cost Calculation Module, Surface Mine Materials Handling and Cost Simulator, User Manual" and accompanying software published by the Pennsylvania Department of Environmental Resources, Mining Engineering Section; Pennsylvania State University and Kohlmann Ruggiero Engineers, P.C. (1988).

Section 5. Application Requirements. An applicant for a KPDES permit with the modified requirement of Section 4 of this administrative regulation shall comply with the application requirements of this section.

(1) The applicant shall comply with all KPDES permit application requirements, as set forth in 401 KAR 5:060.

(2) The applicant shall submit documentation from DSMRE that the proposed coal remining operation will be located on a remined area, and shall certify that the proposed coal remining operation will be located on a remined area.

(3) The applicant shall also:

(a) Describe the hydrologic balance for the proposed coal remining operation, including:

1. Results of a detailed water quality and quantity monitoring program, including seasonal variations, variations in response to precipitation events, and modeled baseline pollution loads using the monitoring program; and

2. Monitoring for pH, alkalinity, acidity, total iron, total manganese, sulfates, total suspended solids, and any other water quality parameters requested by the director;

(b) Submit the application for a permit from DSMRE;

(c) Submit, if not submitted in the application for a permit from DSMRE;

1. Plans, cross-sections, and schematic drawings describing the techniques for reducing the discharge of acid-forming materials, iron and manganese;

2. A description and an explanation of the range of abatement levels that probably can be achieved, costs, and each step proposed to reduce the discharge of acid-forming materials, iron and manganese;

3. A description of the spoil handling practices necessary to reduce the discharge of acid-forming materials, iron and manganese;

4. A detailed topographic map of the proposed coal remining operation, including the locations of preexisting and proposed discharges; and

(d) Continue the water quality and quantity monitoring program described in paragraph (a) of this subsection, and submit the results to the director on a periodic basis until the director makes a final permit decision. The cabinet will evaluate the KPDES monitoring program and the DSMRE monitoring program for each applicant to avoid duplication and inconsistencies.

(4) The applicant may submit the information described in the document entitled "Coal Remining - Best Professional Judgment Analysis: Preexisting Pollutational Discharge Data Input Module, Baseline Statistical Calculation Module, Water Treatment Cost Calculation Module, Surface Mine Materials Handling and Cost Simulator, User Manual" and accompanying software published by the Pennsylvania Department of Environmental Resources, Mining Engineering Section; Pennsylvania State University and Kohlmann Ruggiero Engineers, P.C. (1988).

(5) An applicant with an existing surface coal mining operation seeking a permit revision from DSMRE pursuant to 405 KAR 8:010, Section 20, shall also demonstrate to the satisfaction of the director that:

(a) The applicant discovered discharges within the proposed coal remining area after the applicant's DSMRE permit was issued; and

(b) The applicant has not caused or contributed to the discharges.

Section 6. Prohibitions. In addition to the prohibitions contained in 401 KAR 5:055, Section 2, the following prohibitions apply to this administrative regulation:

(1) No KPDES permit containing the modified requirement of Section 4 of this administrative regulation shall be issued unless the coal remining operation has applied for a permit from DSMRE,

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as set forth in 405 KAR Chapters 7 through 24, inclusive. The effective date of the KPDES permit shall be no sooner than the effective date of the permit issued by the Department for Surface Mining Reclamation and Enforcement.

(2) No KPDES permit containing the modified requirement of Section 4 of this administrative regulation shall be issued for a surface coal mining operation which is not a coal remining operation located on a remined area.

(3) No KPDES permit containing the modified requirement of Section 4 of this administrative regulation shall be issued which would allow the discharges of acid-forming materials, iron or manganese to exceed the levels being discharged from the remined area before the coal remining operation begins.

(4) No KPDES permit containing the modified requirement of Section 4 of this administrative regulation shall be issued if the applicant fails to demonstrate to the satisfaction of the director that the coal remining operation will result in the potential for improved water quality from the remining operation over that existing prior to the remining operation, and that the information provided in the application is adequate for the director to make an informed final permit decision.

(5) In addition to the prohibitions of subsections (1) through (4) of this section, no KPDES permit containing the modified requirement of Section 4 of this administrative regulation shall be issued for an existing surface coal mining operation unless:

(a) The applicant receives a permit revision from DSMRE in accordance with 405 KAR 8:010, Section 20;

(b) The applicant discovered discharges within the proposed coal remining area after the applicant's DSMRE permit was issued; and

(c) The applicant has not caused or contributed to the discharges since August 3, 1977. (16 Ky.R. 2286; Am. 2680; eff. 7-11-90.)

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401 KAR 5:045. Biochemically degradable wastes; treatment.

RELATES TO: KRS 224.10-100(1), (5), (15), (19), (21), (23), 224.70-100, 224.70-110

STATUTORY AUTHORITY: KRS 224.01-110(6), 224.10-100(17)

NECESSITY, FUNCTION, AND CONFORMITY: This administrative regulation is necessary to implement KRS 224.10-100(1), (5), (15), (19), (21), (23), 224.70-100 and 224.70-110. It requires a minimum of secondary treatment or best conventional pollutant control technology where applicable for all facilities which received biochemically degradable wastes, and additional treatment in certain situations. The administrative regulation requires that such treatment facilities receiving such wastes reapply to the cabinet 150 days prior to the expiration of the current permit for a permit to continue operating.

Section 1. Definitions. The following definitions and conditions apply to terms used in Sections 3 and 4 of this administrative regulation:

- (1) "Grab sample" means a single instantaneous portion of the effluent.
- (2) "Composite sample" means:
 - (a) Not less than four (4) effluent portions collected at regular intervals over a period of eight (8) hours and combined in proportion to flow;
 - (b) Not less than four (4) combined equal volume effluent portions collected over a period of eight (8) hours at intervals proportional to flow;
 - (c) An effluent portion collected continuously over a period of twenty-four (24) hours at a rate proportional to the flow; or
 - (d) An effluent portion consisting of a minimum of four (4) combined equal volume grab samples taken approximately two (2) hours apart.
- (3) "Arithmetic mean for thirty (30) consecutive days" means the average of a minimum of three (3) samples collected in separated calendar weeks during a period of thirty (30) consecutive days with a minimum of twenty (20) days occurring between the first and last sample days.
- (4) "Arithmetic mean for seven (7) consecutive days" means the average of a minimum of two (2) samples taken on separate days in a seven (7) day period.
- (5) the samples for determining a values of biochemical oxygen demand and suspended solids shall be composite samples. The samples for determining the values of fecal coliform bacteria and pH shall be grab samples and taken at the applicable frequency as noted in subsections (3) and (4) of this section.
- (6) "Day" means a twenty-four (24) hour period.
- (7) "Cabinet" means the Natural Resources and Environmental Protection Cabinet.

Section 2. Applicability. All facilities discharging into waters of the Commonwealth which receive an influent which is biochemically degradable shall provide a minimum of secondary treatment to that influent prior to its discharge. if other constituents are present, additional treatment may be required. Those facilities subject to best conventional pollutant control technology treatment requirements pursuant to 401 KAR 5:080, Section 1(2)(a)2b shall be exempt from this administrative regulation.

Section 3. "Secondary treatment" is that degree of treatment which results in an effluent quality which meets the following minimum requirements:

- (1) Biochemical oxygen demand, five (5) days.
 - (a) The arithmetic mean of the values for effluent samples collected during a period of thirty (30) consecutive days shall not exceed thirty (30) milligrams per liter.
 - (b) The arithmetic mean of the values for effluent samples collected during a period of seven (7) consecutive days shall not exceed forty-five (45) milligrams per liter.
- (2) Suspended solids. These requirements shall be achieved except as provided for in subsection (3) of this section.
 - (a) The arithmetic mean of the values for suspended solids in effluent samples collected during a period of thirty (30) consecutive days shall not exceed thirty (30) milligrams per liter.

(b) The arithmetic mean of values for suspended solids in effluent samples collected during a period of seven (7) consecutive days shall not exceed forty-five (45) milligrams per liter.

(3) Suspended solids requirements for waste stabilization ponds which are employed as the sole process for secondary treatment and have a maximum facility design capacity of 2,000,000 gallons per day or less and where operation and maintenance data indicate that the requirements of subsection (2)(a) and (b) of this section cannot be achieved shall be equal to that which is achievable with best waste stabilization pond technology. Best waste stabilization pond technology is defined as the effluent concentration achieved ninety (90) percent of the time within the Commonwealth of Kentucky or appropriate contiguous geographical area by waste stabilization ponds that are achieving the levels of effluent quality established for biochemical oxygen demand in subsection (1) of this section. This suspended solids value will be determined by the cabinet.

Section 4. Additional requirements for all facilities discharging into the waters of the Commonwealth which receive an influent which is biochemically degradable is that degree of treatment which results in an effluent quality which meets the following minimum requirements:

(1) Fecal coliform bacteria.

(a) The geometric mean of the value for fecal coliform bacteria in samples collected during a period of thirty (30) consecutive days shall not exceed 200 colonies per 100 milliliter.

(b) The geometric mean of the values for fecal coliform bacteria in samples collected during a period of seven (7) consecutive days shall not exceed 400 colonies per 100 milliliters.

(c) For operational purposes paragraphs (a) and (b) of this subsection need only be met during the recreational season of May 1 through October 31. In other months the values stipulated in 401 KAR 5:031, Section 7(2)(a), shall be met.

(2) pH. The values for pH shall not be less than six (6) units nor more than nine (9) units.

Section 5. Treatment in excess of that required under Section 2 of this administrative regulation for influents which are biochemically degradable shall be required for a continuous facility discharge where:

(1) The cabinet determines that the receiving waters will not satisfy applicable water quality standards as a result of a facility discharge or discharges from multiple facilities.

(2) The cabinet determines that a facility lacks the sophistication of process to consistently produce the required effluent quality.

Section 6 (1) Any person responsible for an existing facility as described in Section 2 of this administrative regulation which receives biochemically degradable influent shall 150 days prior to the expiration of the current permit make application to the cabinet for a permit to continue to discharge to the waters of the Commonwealth.

(2) If the cabinet determines, from available information or information requested from the applicant, that an existing facility does not or may not produce an effluent with parameter measurements equal to or less than that specified in Sections 3 and 4 of this administrative regulation, it shall require the applicant to submit plans and specifications or other data showing how the facility will be brought into compliance.

(3) If the facility's effluent parameters are equal to or less than that required in Sections 3 and 4 of this administrative regulation, an operating permit shall be issued to the applicant.

(4) If the facility's effluent does not satisfy the requirements of Sections 3 and 4 of this administrative regulation, the cabinet may issue the applicant a permit to upgrade the facility, provided:

(a) No such permit shall be issued unless the cabinet has received and approved a compliance schedule to bring a facility into compliance at the earliest date.

(b) A compliance schedule shall contain a commitment from the applicant to achieve increments of progress to be completed on specified dates.

(c) At a minimum, the increments shall include a date for submitting any additional plans and specifications required for construction, a date for commencement of construction and a date for completion of construction.

(d) Upon request from the cabinet, the applicant shall provide the cabinet with periodic reports regarding progress towards compliance schedule increments.

(5) Failure to meet the dates set forth in a compliance schedule shall constitute a violation of KRS 224.70-110 unless an alternate date has been negotiated by the person responsible for a facility and has been approved in writing by the cabinet. (1 Ky.R. 763; Am. 1383; eff. 7-2-75; 2 Ky.R. 500; eff. 5-12-76; 10 Ky.R. 430; 888; eff. 2-1-84.)

general provisions of KPDES permitting program – 5:050

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401 KAR 5:050. **General provisions of KPDES Permitting Program.**

RELATES TO: KRS 224.01-010, 224.10-110, 224.16-050, 224.70-100, 224.70-110

STATUTORY AUTHORITY: KRS 224.10-100

NECESSITY, FUNCTION, AND CONFORMITY: KRS Chapter 224 authorizes the Natural Resources and Environmental Protection Cabinet to issue, continue in effect, revoke, modify, suspend or deny under such conditions as the cabinet may prescribe, permits to discharge into the waters of the Commonwealth. KRS 224.16-050 empowers the cabinet to issue federal permits pursuant to 33 USC Section 1342(b) of the Federal Water Pollution Control Act (33 USC Section 1251 et seq.). Permits issued pursuant to KRS 224.16-050 shall be referred to as KPDES permits.

Section 1. Compatibility with the CWA. The KPDES administrative regulations promulgated pursuant to KRS Chapter 224 are intended to be compatible with the federal regulations adopted pursuant to CWA.

Section 2. Conflicting Provisions. The provisions of the KPDES administrative regulations are to be construed as being compatible with and complementary to each other. If any of these administrative regulations are found by a court of competent jurisdiction to be contradictory, the more stringent provisions shall apply. (9 Ky.R. 852; Am. 1100; 10 Ky.R. 6; eff. 6-1-83; 11 Ky.R. 737; eff. 1-7-85; 12 Ky.R. 507; eff. 12-10-85; 20 Ky.R. 3228; 21 Ky.R. 362; eff. 8-24-94.)

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

RELATES TO: KRS 224.01-010, 224.01-070, 224.01-400, 224.70-100, 224.70-120, 224.99-010, 33 C.F.R. Part 153, 40 C.F.R. 122.21(n)(2), Part 300, 33 U.S.C. 1251 et seq., 1342

STATUTORY AUTHORITY: KRS 224.10-100, 224.16-050, 224.70-100, 33 C.F.R. Part 153, 40 C.F.R. 122.21(n)(2), Part 300, 33 U.S.C. 1251 et seq., 1342

NECESSITY, FUNCTION, AND CONFORMITY: KRS 224.10-100 provides that the Natural Resources and Environmental Protection Cabinet may require for persons discharging into the waters of the Commonwealth, by administrative regulation, technological levels of treatment and effluent limitations. KRS 224.16-050(1) provides that the cabinet may issue federal permits pursuant to 33 USC Section 1342(b) of the Federal Water Pollution Control Act, 33 USC Section 1251 et seq. subject to the conditions imposed in 33 USC Sections 1342(b) and (d). KRS 224.16-050(1) requires that any exemptions granted in the issuance of these permits shall be pursuant to 33 USC Sections 1311, 1312, and 1326(a). Further, KRS 224.16-050(4) requires that the cabinet shall not impose under any permit issued pursuant to this administrative regulation an effluent limitation, monitoring requirement or other condition which is more stringent than the effluent limitation, monitoring requirement or other condition which would have been applicable under the federal regulation if the permit were issued by the federal government. This administrative regulation contains the scope and applicability of the KPDES program including specific inclusions and exclusions, prohibitions, requirements for general permits, requirements for disposal into wells and into publicly-owned treatment works (POTW) and disposal by land application.

Section 1. Applicability of the KPDES Requirements. The KPDES program shall require a permit to discharge pollutants from a point source into waters of the Commonwealth. Compliance with the KPDES program requirements shall constitute compliance with the operational permit requirements of 401 KAR 5:005 and requirements related to the operational permit. Failure to obtain a KPDES permit shall not relieve a discharger subject to the KPDES program from complying with the applicable performance standards of that program, 401 KAR 5:050 to 5:080, inclusive.

(1) Specific inclusions. The following examples are **specific categories of point sources that require a KPDES permit to discharge**. These terms are further defined in 401 KAR 5:002.

- (a) Concentrated animal feeding operations;
- (b) Concentrated aquatic animal production facilities;
- (c) Discharges into aquaculture projects;
- (d) Discharges from separate storm sewers;
- (e) Silviculture point sources; and
- (f) Permits required on a case-by-case basis.

1. Various sections of 401 KAR 5:060 allow the cabinet to determine, on a case-by-case basis, that certain concentrated animal feeding operations, concentrated aquatic animal production facilities, storm water discharges, and other facilities covered by a general permit, may be required to obtain an individual permit because of their contributions to water pollution.

2. If the cabinet decides that an individual permit is required under this section, except as provided in subparagraph 3 of this paragraph, the cabinet shall notify the discharger in writing of that decision and the reasons for it, and shall send an application form with the notice. The discharger shall apply for a permit under 401 KAR 5:060 within sixty (60) days of notice, unless permission for a later date is granted by the cabinet. The question whether the designation was proper shall remain open for consideration during the public comment period under 401 KAR 5:075 and in any subsequent hearing.

3. Prior to a case-by-case determination that an individual permit is required for a storm water discharge under 401 KAR 5:060, Section 12, the cabinet may require the discharger to submit a permit application or other information regarding the discharge under 401 KAR 5:060, Section 1(6). In requiring the information, the cabinet shall notify the discharger in writing and shall send an application form with the notice. The discharger shall apply for a permit under 401 KAR 5:060,

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Section 12, within sixty (60) days of notice, unless permission for a later date is granted by the cabinet. The question whether the initial designation was proper shall remain open for consideration during the public comment period under 401 KAR 5:075 and in any subsequent hearing pursuant to KRS 224.10-420(2).

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

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

(b) Discharges of dredged or fill material into waters of the Commonwealth which are regulated under CWA Section 404 (33 USC Section 1344).

(c) The introduction of sewage, industrial wastes, or other pollutants into publicly owned treatment works by indirect discharges. Plans or agreements to switch to this method of disposal in the future shall not relieve dischargers of the obligation to have and comply with permits until all discharges of pollutants to waters of the Commonwealth are eliminated.

(d) Discharges in compliance with the instructions of an on-scene coordinator pursuant to 40 CFR Part 300 (The National Oil and Hazardous Substances Pollution Contingency Plan) or 33 CFR Part 153 (Pollution by Oil and Hazardous Substances), discharges in compliance with the state hazardous substance contingency plan issued pursuant to KRS 224.01-400, or discharges authorized by state on-scene coordinators in response to releases of hazardous substances, pollutants and contaminants or petroleum.

(e) Introduction of pollutants from nonpoint source agricultural and silvicultural activities, including storm water run-off from orchards, cultivated crops, pastures, range lands, and forest lands, but not discharges from concentrated animal feeding operations, discharges from concentrated aquatic animal production facilities, discharges to aquaculture projects, and discharges from silvicultural point sources.

(f) Return flows from irrigated agriculture.

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

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

(i) Discharges which are not regulated by the U.S. EPA under CWA Section 402, 33 USC Section 1342.

Section 2. Prohibitions. No permit shall be issued by the cabinet:

(1) If the conditions of the permit do not provide for compliance with the applicable requirements of KRS Chapter 224, or administrative regulations promulgated pursuant thereto;

(2) If the regional administrator has objected to issuance of the permit in writing under the procedures specified in 40 CFR Section 123.44;

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

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

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

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

(7) To a new source or a new discharger, if the discharge from its construction or operation will cause or contribute to the violation of water quality standards. The owner or operator of a new

source or new discharger proposing to discharge into a water segment which does not meet Kentucky water quality standards or is not expected to meet those standards even after the application of the effluent limitations required by the KPDES administrative regulations and for which the cabinet has performed a pollutant load allocation for the pollutants to be discharged, shall demonstrate, before the close of the public comment period, that:

- (a) There are sufficient remaining pollutant load allocations to allow for the discharge; and
- (b) The existing dischargers into that segment are subject to schedules of compliance designed to bring the segment into compliance with Kentucky water quality standards. The cabinet may waive the submission of information by the new source or new discharger required by this subsection if the cabinet determines that the cabinet already has adequate information to evaluate the request. An explanation of the development of limitations to meet the criteria of this paragraph shall be included in the fact sheet to the permit under 401 KAR 5:075, Section 4.

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

(1) Fundamentally different factors. A request for a variance based on the presence of "fundamentally different factors" from those on which the effluent limitations guideline was based shall be filed as follows:

(a) For a request from best practicable control technology currently available (BPT), by the close of the public comment period under 401 KAR 5:075.

(b) For a request from best available technology economically achievable (BAT) or best conventional pollutant control technology (BCT), by no later than:

1. July 3, 1989, for a request based on an effluent limitation guideline promulgated before February 4, 1987, to the extent July 3, 1989 is not later than that provided under previously promulgated administrative regulations; or

2. 180 days after the date on which an effluent limitation guideline is published in the Federal Register for a request based on an effluent limitation guideline promulgated on or after February 4, 1987. The request shall explain how the requirements of 401 KAR 5:080, Section 3, have been met.

(2) Nonconventional pollutants. A request for a variance from the BAT requirements for "nonconventional" pollutants, pursuant to Section 7(1) of this administrative regulation because of the economic capability of the owner or operator, or pursuant to Section 7(2) of this administrative regulation because of certain environmental considerations, shall be made as follows. A nonconventional pollutant variance shall be available only for ammonia; chlorine; color; iron; total phenols (4AAP), as determined by the U.S. EPA to be a pollutant covered by CWA, Section 301(b)(2)(F), 33 USC 1311(b)(2)(F); and any other pollutant which the U.S. EPA lists under CWA Section 301(g)(4), 33 USC 1311(g)(4).

(a) For those requests for a variance from an effluent limitation based upon an effluent limitation guideline by:

1. Submitting an initial request to the cabinet stating the name of the discharger, the permit number, the outfall number, the applicable effluent guideline, and whether the discharger is requesting a modification under Section 7(1) or (2) of this administrative regulation or both Section 7(1) and (2) of this administrative regulation. This request shall have been filed not later than:

a. September 25, 1978, for a pollutant which is controlled by a BAT effluent limitation guideline promulgated before December 27, 1977; or

b. 270 days after promulgation of an applicable effluent limitation guideline for guidelines promulgated after December 17, 1977; and

2. Submitting a completed request no later than the close of the public comment period under 401 KAR 5:075, Section 5 demonstrating that the requirements of 401 KAR 5:075, Section 8 and the applicable requirements of 401 KAR 5:080 have been met. Notwithstanding this provision, the complete application for a request under Section 7(2) of this administrative regulation shall be filed 180 days before a decision is desired.

(b) For those requests for a variance from effluent limitation guidelines, the request need only comply with paragraph (a)2 of this subsection and need not be preceded by an initial request under paragraph (a)1 of this subsection.

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(3) Delay in construction of POTW. An extension under CWA Section 301(i)(2), 33 USC 1311(i)(2) of the statutory deadlines in Section 301(b)(1)(A) or (b)(1)(C) of the CWA, 33 USC 1311(b)(1)(A) or (C) based on delay in completion of a POTW into which the source is to discharge shall have been requested on or before June 26, 1978 or 180 days after the relevant POTW requested an extension under 40 CFR 122.21(n)(2) whichever is later, but not later than January 30, 1988.

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

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

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

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

(2) A discharger who cannot file a complete request required under Section 3(2) of this administrative regulation may request an extension. The extension may be granted or denied by the cabinet. Extensions shall not be more than six (6) months in duration.

Section 5. General Permits. (1) Coverage. The cabinet shall issue a general permit in accordance with the following:

(a) Area. The general permit shall be written to cover one (1) or more categories or subcategories of discharges described in the permit under paragraph (b) of this subsection, except those covered by individual permits, within a geographic area. The area shall correspond to existing geographic or political boundaries, such as:

1. Designated planning areas under CWA Sections 208 and 303, 33 USC Sections 1288 and 1313;

2. City, county, or state political boundaries;

3. State highway systems;

4. Standard metropolitan statistical areas as defined by the University of Louisville Urban Studies Center, consistent with the U.S. Office of Management and Budget;

5. Urbanized areas as designated by the University of Louisville Urban Studies Center consistent with the U.S. Bureau of the Census; or

6. Other appropriate division or combination of boundaries.

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

1. Storm-water point sources; or

2. One (1) or more categories or subcategories of point sources other than storm water point sources, or one (1) or more categories or subcategories of treatment works treating domestic sewage, if the sources or treatment works treating domestic sewage within each category or subcategory all:

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

b. Discharge the same types of wastes;

- c. Require the same effluent limitations or operating conditions;
- d. Require the same or similar monitoring; and
- e. In the opinion of the cabinet, are more appropriately controlled under a general permit than under individual permits.

(c) Water quality-based limits. If sources within a specific category or subcategory of dischargers are subject to water quality-based limits imposed pursuant to 401 KAR 5:065, Section 2(4), the sources in that specific category or subcategory shall be subject to the same water quality-based effluent limitations.

(d) Other requirements.

1. The general permit shall clearly identify the applicable conditions for each category or subcategory of dischargers or treatment works treating domestic sewage covered by the permit.

2. The general permit may exclude specified sources or areas from coverage.

(2) Administration.

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

(b) Requiring an individual permit.

1. The cabinet may require any person authorized to discharge by a general permit to apply for and obtain an individual KPDES permit. Interested person may petition the cabinet to take action under this paragraph. An individual KPDES permit may be required if:

- a. The discharger is not in compliance with the conditions of the general KPDES permit;
- b. A change has occurred in the availability of demonstrated technology or practices for the control or abatement of pollutants applicable to the point source;
- c. Effluent limitation guidelines are promulgated for point sources covered by the general KPDES permit;
- d. A Kentucky Water Quality Management Plan containing requirements applicable to these point sources is approved; or
- e. The requirements of subsection (1) of this section are not met.

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

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

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

Section 6. Disposal of Pollutants into Wells, into POTWs or by Land Application. (1) The cabinet may issue permits to control the disposal of pollutants into wells, if necessary to protect the public health and welfare and to prevent the pollution of ground and surface waters.

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

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

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

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

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

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

- (a) Control concentrations of pollutants discharged but not mass; or
- (b) Specify a different specific technique for adjusting effluent limitations to account for well injection, land application, or disposal into POTWs.

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

Section 7. Variances Available to KPDES Applicants. Consistent with KRS 224.16-050, the variance provisions in this section and in 401 KAR 5:080, Sections 3 and 4, lists, inclusively, those variances available to KPDES applicants.

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

- (a) Represent the maximum use of technology within the economic capability of the owner or operator; and
- (b) Result in reasonable further progress toward the elimination of the discharge of pollutants.

(2) Environmental considerations.

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

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

2. The modified requirement shall not result in any additional requirement on any other point or nonpoint source; and

3. The modification shall not:

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

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

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

(3) Innovative technology.

(a) The cabinet shall establish a date for complying with the deadline for achieving BAT set out in 401 KAR 5:080, Section 1, no later than two (2) years after the date for compliance with the effluent limitation which would otherwise be applicable, if the owner or operator establishes to the satisfaction of the cabinet the following:

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

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

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

(b) The innovative system shall have the potential for industry-wide application.

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

(d) The cabinet may include any of the following conditions in the permit of a discharger to which a compliance extension beyond the otherwise applicable compliance date is granted:

1. A requirement that the discharger report annually on the installation, operation, and maintenance costs of the innovative technology; or

2. Alternative BAT limitations that the discharger shall meet as soon as possible and not later than two (2) years after the date for compliance with the effluent limitation which would otherwise be applicable if the innovative technology limitations that are more stringent than BAT are not achievable.

(4) Thermal pollution.

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

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

Section 8. Federal Regulations Adopted Without Change. The following federal regulations govern the subject matter of this administrative regulation and are hereby adopted without change. The federal regulations are available for inspection and copying, during normal business hours of 8 a.m. to 4:30 p.m., eastern time, excluding state holidays, at the Division of Water, 14 Reilly Road, Frankfort, Kentucky, or may be purchased from the U.S. Superintendent of Documents, Washington, D.C.

(1) 33 CFR Part 153, "Pollution by Oil and Hazardous Substances," as in effect on July 1, 2001 for the description of emergency discharges exempt from KPDES permit requirements;

(2) 40 CFR 122.21(n)(2), "Permit compliance extensions allowed for delays in construction of POTW," as in effect on July 1, 2001 for permit extensions as referenced in Section 3(3) of this administrative regulation; and

(3) 40 CFR Part 300, "The National Oil and Hazardous Substances Pollution Contingency Plan," as in effect on July 1, 2001 for the description of emergency dischargers exempt from KPDES permit requirements. (9 Ky.R. 854; Am. 1103; 10 Ky.R. 9; eff. 6-1-83; 11 Ky.R. 740; 1028; eff. 1-7-85; 12 Ky.R. 511; eff. 12-10-85; 13 Ky.R. 241; eff. 9-4-86; 20 Ky.R. 3231; 21 Ky.R. 364; eff. 8-24-94; 29 Ky.R. 1031; 1545; eff. 12-18-02.)

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401 KAR 5:057. KPDES pretreatment requirements.

RELATES TO: KRS 224.01-010, 224.01-070, 224.01-400, 224.70-100, 224.70-120, 224.99-010, 40 C.F.R. 1.25(e), 25, 130, 131, 136, 258, 261, Chapter I, Subchapter N, 401 et seq., 403 Appendices A, D, 503, 33 U.S.C. 1251 et seq., 1288, 1314(h), 1317(d), 1319(c)(4), (6), 1370, 1718, 1919(f), 42 U.S.C. 6901 et seq.

STATUTORY AUTHORITY: KRS 224.10-100, 224.16-050, 224.70-110, 224.73-120, 40 C.F.R. 1.25(e), 25, 130, 131, 136, 258, 261, Chapter I, Subchapter N, 401 et seq., 403 Appendices A, D, 503, 33 U.S.C. 1251 et seq., 1288, 1314(h), 1317(d), 1319(c)(4), (6), 1342, 1370, 42 U.S.C. 6901 et seq.

NECESSITY, FUNCTION, AND CONFORMITY: This administrative regulation implements Sections 204(b)(1)(c), 208(b)(2)(c)(iii), 301(b)(1)(A)(ii), 301(b)(2)(A)(ii), 301(h)(5) and 301(i)(2), 304(e) and (g), 307, 308, 309, 402(b), 405, and 501(a) of the Federal Water Pollution Control Act of 1977 (PL 95-217) or "the Act." It establishes responsibilities of the Commonwealth of Kentucky, local government, industry, and the public to implement the national pretreatment program to control pollutants which pass through or interfere with treatment processes in publicly owned treatment works (POTWs) or which may contaminate sewage sludge. Its objectives are to prevent the introduction of pollutants into POTWs which will interfere with the operation of a POTW, including interference with its use or disposal of municipal sludge; to prevent the introduction of pollutants into POTWs which will pass through the treatment works or otherwise be incompatible with the treatment works; and to improve opportunities to recycle and reclaim municipal and industrial wastewaters and sludges.

Section 1. Applicability. (1) This administrative regulation shall apply to:

- (a) Pollutants from nondomestic sources which are discharged into or transported by truck or rail or otherwise introduced into POTWs;
- (b) POTWs which receive wastewater from sources subject to national pretreatment standards; and
- (c) New or existing sources subject to pretreatment standards.

(2) This administrative regulation shall not apply to sources which lawfully discharge to a sewer which is not connected to a POTW treatment plant.

Section 2. Local Law. This administrative regulation shall not affect any pretreatment requirements, including any standards or prohibitions, established by local law as long as local requirements are not less stringent than those set forth in state or national pretreatment standards, or other requirements or prohibitions established under the Act or this administrative regulation.

Section 3. Pretreatment Standards: Prohibited Discharges. (1)(a) General prohibition. A user may not introduce into a POTW any pollutant which causes pass-through or interference. This general prohibition and the specific prohibitions in subsection (2) of this section shall apply to each user introducing pollutants into a POTW whether or not the user is subject to other national pretreatment standards or national or local pretreatment requirements.

(b) Affirmative defenses. A user shall have an affirmative defense in action brought against it alleging a violation of the general prohibitions established in paragraph (a) of this subsection and the specific prohibitions in subsection (2) of this section if the user demonstrates that:

1. It did not know or have reason to know that its discharge, alone or in conjunction with discharges from other sources, would cause pass-through or interference; and

2.a. A local limit designed to prevent pass-through or interference was developed in accordance with subsection (3) of this section for each pollutant in the user's discharge that caused pass-through or interference, and the user was in compliance with each local limit directly prior to and during the pass-through or interference; or

b. If a local limit designed to prevent pass-through or interference has not been developed in accordance with subsection (3) of this section for the pollutant that caused the pass-through or

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interference, the user's discharge directly prior to and during the pass-through or interference did not change substantially in nature or constituents from the user's prior discharge activity when the POTW was regularly in compliance with the POTW's KPDES permit requirements and, if the violation was interference, was in compliance with applicable requirements for sewage sludge use or disposal.

(2) Specific prohibitions. In addition, the following pollutants shall not be introduced into a POTW:

(a) Pollutants which create a fire or explosion hazard in the POTW, including, but not limited to, waste streams with a closed cup flashpoint of less than 140 degrees Fahrenheit (°F) or sixty (60) degrees Celsius (°C) using the test methods specified in 40 CFR 261.21;

(b) Pollutants which may cause corrosive structural damage to the POTW, but no discharges with pH lower than five and zero-tenths (5.0), unless the POTW is specifically designed to accommodate the discharges;

(c) Solid or viscous pollutants in amounts which would cause obstruction to the flow in the POTW resulting in interference;

(d) Pollutants, including oxygen demanding pollutants (biochemical oxygen demand (BOD), etc.) released in a discharge at a flow rate or pollutant concentration which would cause interference with the POTW;

(e) Heat in amounts which would inhibit biological activity in the POTW resulting in interference, but no heat in quantities such that the temperature at the POTW treatment plant exceeds forty (40) °C (104 °F) unless the cabinet, upon request of the POTW, approves alternate temperature limits;

(f) Petroleum oil, nonbiodegradable cutting oil, or products of mineral oil origin in amounts that would cause interference or pass-through;

(g) Pollutants which result in the presence of toxic gases, vapors, or fumes within the POTW in a quality that may cause acute worker health and safety problems; or

(h) Trucked or hauled pollutants, except at discharge points designated by the POTW.

(3) The POTW shall develop specific limits under the following conditions:

(a) Each POTW developing a pretreatment program pursuant to Section 6 of this administrative regulation shall develop and enforce specific limits to implement the prohibitions listed in subsections (1) and (2) of this section. Each POTW with an approved pretreatment program shall continue to develop these limits as necessary and effectively enforce the limits.

(b) All other POTWs, if pollutants contributed by users result in interference or pass-through, and the violation is likely to recur, shall develop and enforce specific limits for industrial users, and all other users as appropriate, which, together with appropriate changes in the POTW's treatment plant's facilities or operation, are necessary to ensure renewed and continued compliance with the POTW's KPDES permit or sludge use or disposal practices.

(c) Specific effluent limits shall not be developed and enforced without individual notice to persons or groups who have requested these notices and had an opportunity to respond.

(4) Local limits. If specific prohibitions or limits on pollutants or pollutant parameters are developed by a POTW in accordance with subsection (3) of this section, the limits shall be deemed pretreatment standards for the purposes of Section 307(d) of the Act, 33 USC Sec. 1317(d).

(5) EPA and cabinet enforcement actions under Section 309(f) of the Clean Water Act, 33 USC Sec. 1319(f). If, within thirty (30) days after notice of an interference or pass-through violation has been sent by EPA or the cabinet to the POTW and the persons or groups who have requested these notices, the POTW fails to commence appropriate enforcement action to correct the violations, EPA or the cabinet may take appropriate enforcement action under the authority provided in Section 309(f) of the Act.

Section 4. National Pretreatment Standards: Categorical Standards. National pretreatment standards specifying quantities or concentrations of pollutants or pollutant properties which may be discharged to a POTW by existing or new industrial users in specific industrial subcategories are established as separate federal regulations under the appropriate subpart of 40 CFR Chapter I, Subchapter N. These standards, unless specifically noted otherwise, shall be in addition to all applicable pretreatment standards and requirements set forth in this administrative regulation.

(1) Category determination request.

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(a) Application deadline. Within sixty (60) days after the effective date of a pretreatment standard for a subcategory under which an industrial user may be included, the industrial user or POTW may request that the cabinet provide written certification on whether the industrial user falls within that particular subcategory. If an existing industrial user adds or changes a process or operation which may be included in a subcategory, the existing industrial user shall request this certification prior to commencing discharge from the added or changed processes or operation. A new source shall request this certification prior to commencing discharge. If a request for certification is submitted by a POTW, the POTW shall notify affected industrial users of the submission. The industrial user may provide written comments on the POTW submission to the cabinet, within thirty (30) days of notification.

(b) Contents of application. Each request shall contain a statement:

1. Describing which subcategories might be applicable; and
2. Citing evidence and reasons why a particular subcategory is applicable and why others are not applicable. The person signing the application statement submitted pursuant to this section shall make the following certification: "I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

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

(d) Final decision.

1. If the cabinet receives a submittal the cabinet shall, after determining that it contains all of the information required by paragraph (b) of this subsection, consider the submission, additional evidence that may have been requested, and other available information relevant to the request. The cabinet shall then make a written determination of the applicable subcategory and state the reasons for the determination.

2. If the request is submitted to the cabinet, the cabinet shall forward the determination described in this paragraph to EPA which may make a final determination. EPA may waive receipt of these determinations. If EPA does not modify the cabinet's decision within sixty (60) days after receipt thereof, or if EPA waives receipt of the determination, the cabinet's decision shall be final.

3. If the request is submitted by the industrial user or POTW to EPA or if EPA elects to modify the cabinet's decision, EPA's decision shall be final.

4. EPA or the cabinet, as appropriate, shall send a copy of the determination to the affected industrial user and the POTW. If the final determination is made by EPA, EPA shall send a copy of the determination to the cabinet.

(e) Requests for hearing or legal decision. Within thirty (30) days following the date of receipt of notice of the final determination as provided for by paragraph (d) of this subsection, the requester may submit a petition to reconsider or contest the decision to the EPA regional administrator who shall act on the petition expeditiously and state the reasons for the determination in writing.

(2) Deadline for compliance with categorical standards. Compliance by existing sources with categorical pretreatment standards shall be within three (3) years of the date the standard is effective unless a shorter compliance time is specified in the appropriate subpart of 40 CFR Chapter I, Subchapter N. Direct dischargers with KPDES permits modified or reissued to provide a variance pursuant to Section 301(i)(2) of the Act, 33 USC 1311(i)(2) shall meet compliance dates set in applicable categorical pretreatment standards. Existing sources which become industrial users subsequent to promulgation of an applicable categorical pretreatment standard shall be considered existing industrial users unless the sources meet the definition of a new source. New sources shall install and have in operating condition, and shall start up all pollution control equipment required to

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meet applicable pretreatment standards before beginning to discharge. Within the shortest feasible time, not to exceed ninety (90) days, new sources shall meet all applicable pretreatment standards.

(3)(a) Concentration and mass limits. Pollutant discharge limits in categorical pretreatment standards shall be expressed either as concentration or mass limits. If possible, if concentration limits are specified in standards, equivalent mass limits will be provided so that local, cabinet, or federal authorities responsible for enforcement may use either concentration or mass limits. Limits in categorical pretreatment standards shall apply to the effluent of the process regulated by the standard, or as otherwise specified by the standard.

(b) If the limits in a categorical pretreatment standard are expressed only in terms of mass of pollutant per unit of production, the control authority may convert the limits to equivalent limitations expressed either as mass of pollutant discharged per day or effluent concentration for purposes of calculating effluent limitations applicable to individual industrial users.

(c) A control authority calculating equivalent mass per day limitations under paragraph (b) of this subsection shall calculate the limitations by multiplying the limits in the standard by the industrial user's average rate of production. This average rate of production shall be based not upon the designed production capacity but rather upon a reasonable measure of the industrial user's actual long term daily production, such as the average daily production during a representative year. For new sources, actual production shall be estimated using projected production.

(d) A control authority calculating equivalent concentration limitations under paragraph (b) of this subsection shall calculate the limitations by dividing the mass limitations derived under paragraph (c) of this subsection by the average daily flow rate of the industrial user's regulated process wastewater. This average daily flow rate shall be based upon a reasonable measure of the industrial user's actual long term average flow rate, such as the average daily flow rate during the representative year.

(e) Equivalent limitations calculated in accordance with paragraphs (c) and (d) of this subsection shall be deemed pretreatment standards for the purposes of Section 307(d) of the Act, 33 USC 1317(d) and this administrative regulation. Industrial users shall comply with the equivalent limitations in lieu of the promulgated categorical standards from which the equivalent limitations were derived.

(f) Many categorical pretreatment standards specify one (1) limit for calculating maximum daily discharge limitations and a second limit for calculating maximum monthly average, or four (4) day average, limitations. If these standards are being applied, the same production of flow figure shall be used in calculating both types of equivalent limitations.

(g) Industrial users operating under a control mechanism incorporating equivalent mass or concentration limits calculated from a production based standard shall notify the control authority within two (2) business days after the user has a reasonable basis to know that the production level will significantly change within the next calendar month. A user not notifying the control authority of an anticipated change shall meet the mass or concentration limits in its control mechanism that were based on the original estimate of the long term average production rate.

(4) Dilution prohibited as substitute for treatment. Unless expressly authorized to do so by an applicable pretreatment standard or requirement, no industrial user shall ever increase the use of process water, or in other ways attempt to dilute a discharge as a partial or complete substitute for adequate treatment to achieve compliance with a pretreatment standard or requirement. The control authority may impose mass limitations on industrial users which are using dilution to meet applicable pretreatment standards or requirements, or in other cases if the imposition of mass limitations is appropriate.

(5) Combined waste stream formula. If process effluent is mixed prior to treatment with wastewaters other than those generated by the regulated process, fixed alternative discharge limits may be derived by the control authority, or by the industrial user with the written concurrence of the control authority. These alternative limits shall be applied to the mixed effluent. When deriving alternative categorical limits, the control authority or industrial user shall calculate both an alternative daily maximum value using the daily maximum values specified in the appropriate categorical pretreatment standards and an alternative consecutive sampling day average value using the monthly average values specified in the appropriate categorical pretreatment standards. The industrial user shall comply with the alternative daily maximum and monthly average limits fixed by the control authority until the control authority modifies the limits or approves an industrial user

modification request. Modification shall be authorized if there is a material or significant change in the values used in the calculation to fix alternative limits for the regulated pollutant. An industrial user shall immediately report the material or significant changes to the control authority. If appropriate, new alternative categorical limits shall be calculated within thirty (30) days.

(a) Alternative limit calculation. Either of the formulas in subparagraph 2 or 3 of this paragraph shall be used for deriving an alternative limit for a specified pollutant.

1. The average daily flow (F_D) shall be a reasonable measure of the average daily flow for a thirty (30) day period from the following sources; for new sources, flows shall be estimated using projected values:

a. Boiler blowdown streams, noncontact cooling streams, storm water streams, and demineralizer backwash streams. However, if these streams contain a significant amount of a pollutant, and the combination of these streams, prior to treatment, with an industrial user's regulated process waste streams will result in a substantial reduction of that pollutant, the control authority, upon application of the industrial user, may determine whether these streams should be classified as diluted or unregulated. In its application to the control authority, the industrial user shall provide engineering, production, sampling, and analysis and other information necessary so that the control authority is able to make its determination;

b. Sanitary waste streams that are not regulated by a categorical pretreatment standard; or

c. From process waste streams which were or could have been entirely exempted from categorical pretreatment standards by the U.S. EPA for one (1) or more of the following reasons, and are listed in 40 CFR Part 403, Appendix D:

(i) The pollutants of concern are not detectable in the effluent from the industrial user;

(ii) The pollutants of concern are present only in trace amounts and are neither causing nor likely to cause toxic effects;

(iii) The pollutants of concern are present in amounts too small to be effectively reduced by technologies known to the U.S. EPA administrator; or

(iv) The waste stream contains only pollutants which are compatible with the POTW.

2. Alternative concentration limit.

$$C_T = \frac{\left[\sum_{i=1}^N C_i F_i \right]}{\left[\sum_{i=1}^N F_i \right]} \left[\frac{F_T - F_D}{F_T} \right]$$

where:

C_T = the alternative concentration limit for the combined waste stream.

C_i = the categorical pretreatment standard concentration limit for a pollutant in the regulated stream i.

F_i = the average daily flow, at least a thirty (30) day average, of stream i to the extent that it is regulated for the pollutant.

F_D = the average daily flow, at least a thirty (30) day average, from subparagraph 1 of this paragraph.

F_T = the average daily flow, at least a thirty (30) day average, through the combined treatment facility, including F_i , F_D and unregulated streams.

N = the total number of regulated streams.

3. Alternative mass limit.

$$M_T = \left[\sum_{i=1}^N M_i \right] \left[\frac{F_T - F_D}{\sum_{i=1}^N F_i} \right]$$

where:

M_T = the alternative mass limit for a pollutant in the combined waste stream.

M_i = the categorical pretreatment standard mass limit for a pollutant in the regulated stream i, or the categorical pretreatment mass limit multiplied by the appropriate measure of production.

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F_i = the average flow, at least a thirty (30) day average, of stream i to the extent that it is regulated for the pollutant.

F_D = the average daily flow, at least a thirty (30) day average, from subparagraph 1 of this paragraph.

F_T = the average daily flow, at least a thirty (30) day average, through the combined treatment facility, including F_i , F_D and unregulated streams.

N = the total number of regulated streams.

(b) Alternate limits below detection limit. An alternative pretreatment limit from paragraph (a) of this subsection shall not be used if the alternative limit is below the analytical detection limit for any of the regulated pollutants.

(c) Self-monitoring. Self-monitoring required to insure compliance with the alternative categorical limit shall be conducted in accordance with the requirements set forth in Section 9 of this administrative regulation.

(d) Choice of monitoring location. If a treated regulated process waste stream is combined prior to treatment with wastewaters other than those generated by the regulated process, the industrial user may monitor either the segregated process waste stream or the combined waste stream for the purpose of determining compliance with applicable pretreatment standards. If the industrial user chooses to monitor the segregated process waste stream, it shall apply the applicable categorical pretreatment standard. If the user chooses to monitor the combined waste stream, it shall apply an alternative discharge limit calculated using the combined waste stream formula as provided in this section. The industrial user may change monitoring points only after receiving approval from the control authority. The control authority shall ensure that a change in an industrial user's monitoring points will not allow the user to substitute dilution for adequate treatment to achieve compliance with applicable standards.

Section 5. Removal Credits. (1)(a) General. Any POTW receiving wastes from an industrial user to which a categorical pretreatment standard applies may, subject to the conditions of this section, grant removal credits to reflect removal by the POTW of pollutants specified in the categorical pretreatment standards. The POTW may grant a removal credit equal to or less than its consistent removal rate. Upon being granted a removal credit, each affected industrial user shall calculate its revised discharge limits in accordance with paragraph (c) of this subsection. Removal credits may be given only for indicator or surrogate pollutants regulated in a categorical pretreatment standard if the categorical pretreatment standard so specifies.

(b) Conditions for authorization to give removal credits. A POTW may give removal credits only if the following conditions are met:

1. Application. The POTW applies for, and receives, authorization from the cabinet to give a removal credit in accordance with the requirements and procedures specified in subsection (5) of this section.

2. Consistent removal determination. The POTW demonstrates and continues to achieve consistent removal of the pollutant in accordance with subsection (2) of this section.

3. POTW local pretreatment program. The POTW has an approved pretreatment program in accordance with and to the extent required by this administrative regulation; except, a POTW which does not have an approved pretreatment program may, pending approval of this type of program, conditionally give credits as provided in subsection (4) of this section.

4. Sludge requirements. The granting of removal credits shall not cause the POTW to violate KRS Chapter 224 and administrative regulations promulgated pursuant thereto, or the local and federal sludge requirements which apply to the sludge management method chosen by the POTW. Alternatively, the POTW may demonstrate to the cabinet that even though it is not presently in compliance with applicable sludge requirements, it will be in compliance if the industrial users to whom the removal credit would apply are required to meet their categorical pretreatment standards as modified by the removal credit. If granting removal credits forces a POTW to incur greater sludge management costs than would be incurred in the absence of granting removal credits, the additional sludge management costs shall not be eligible for EPA grant assistance. Removal credits may be made available for the following pollutants:

a.(i) For any of the pollutants listed in this clause for the use or disposal practice employed by the POTW when the requirements in 40 CFR Part 503 are met:

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Pollutants	Use or Disposal Practice		
	LA ¹	SD ²	I ³
Arsenic	X	X	X
Beryllium			X
Cadmium	X		X
Chromium	X	X	X
Copper	X		
Lead	X		X
Mercury	X		X
Molybdenum	X		
Nickel	X	X	X
Selenium	X		
Zinc	X		
Total hydrocarbons, if the hydrocarbon is listed below.			X

where:

LA - Land application;

SD - Surface disposal site without a liner and leachate collection system; and

I - Firing of sewage sludge in a sewage sludge incinerator.

(ii) The following organic pollutants are eligible for a removal credit if the requirements for total hydrocarbons in 40 CFR Part 503, Subpart E are met when sewage sludge is fired in a sewage sludge incinerator:

- i. Acrylonitrile;
- ii. Aldrin or dieldrin, or both (Total);
- iii. Benzene;
- iv. Benzidine;
- v. Benzo(a)pyrene;
- vi. Bis(2-chloroethyl)ether;
- vii. Bis(2-ethylhexyl)phthalate;
- viii. Bromodichloromethane;
- ix. Bromoethane;
- x. Bromoform;
- xi. Carbon tetrachloride;
- xii. Chlordane;
- xiii. Chloroform;
- xiv. Chloromethane;
- xv. DDD, DDE, DDT;
- xvi. Dibromochloromethane;
- xvii. Dibutyl phthalate;
- xviii. 1,2-dichloroethane;
- xix. 1,1-dichloroethylene;
- xx. 2,4-dichlorophenol 1,3-dichloropropene;
- xxi. Diethyl phthalate;
- xxii. 2,4-dinitrophenol;
- xxiii. 1,2-diphenylhydrazine;
- xxiv. Di-n-butyl phthalate;
- xxv. Endosulfan;
- xxvi. Endrin;
- xxvii. Ethylbenzene;
- xxviii. Heptachlor;
- xxix. Heptachlor epoxide;
- xxx. Hexachlorobutadiene;
- xxxi. Alpha-hexachlorocyclohexane;
- xxxii. Betahexachlorocyclohexane;

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- xxxiii. Hexachlorocyclopentadiene;
- xxxiv. Hexachloroethane;
- xxxv. Hydrogen cyanide;
- xxxvi. Isophorone;
- xxxvii. Lindane;
- xxxviii. Methylene chloride;
- xxxix. Nitrobenzene;
- xl. N-Nitrosodimethylamine;
- xli. N-Nitrosodi-n-propylamine;
- xlii. Pentachlorophenol;
- xliii. Phenol;
- xliv. Polychlorinated biphenyls;
- xlv. 2,3,7,8-tetrachlorodibenzo-p-dioxin;
- xlvi. 1,1,2,2,-tetrachloroethane;
- xlvii. Tetrachloroethylene;
- xlviii. Toluene;
- il. Toxaphene;
- I. Trichloroethylene;
- li. 1,2,4-Trichlorobenzene;
- lii. 1,1,1-Trichloroethane;
- liii. 1,1,2-Trichloroethane; and
- liv. 2,4,6-Trichlorophenol.

b. For any of the additional pollutants listed below for the use or disposal practice employed by the POTW if the concentration for a pollutant listed below in the sewage sludge that is used or disposed does not exceed the given concentration for that pollutant in milligrams per kilogram, dry weight basis.

Pollutant	Use or Disposal Practice			
	SD			
	LA	Unlined ¹	Lined ²	I
Arsenic			³ 100	
Aldrin or Dieldrin or both (Total)	2.7			
Benzene	³ 16	140	3400	
Benzo(a)pyrene	15	³ 100	³ 100	
Bis(2-ethylhexyl)phthalate		³ 100	100	
Cadmium		³ 100	³ 100	
Chlordane	86	³ 100	³ 100	
Chromium			³ 100	
Copper		³ 46	³ 100	1400
DDD, DDE, DDT (Total)	1.2	2000	2000	
2,4 Dichlorophenoxy-acetic acid		7	7	
Fluoride	730			
Heptachlor	7.4			
Hexachlorobenzene	29			
Hexachlorobutadine	600			
Iron	³ 78			
Lead		³ 100	³ 100	
Lindane	84	³ 28	³ 28	
Malathion		0.63	0.63	
Mercury		³ 100	³ 100	
Molybdenum		40	40	

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Nickel			³ 100	
N-Nitrosodimethylamine	2.1	0.088	0.088	
Pentachlorophenol	30			
Phenol		82	82	
Polychlorinated biphenyls	4.6	<50	<50	
Selenium		4.8	4.8	4.8
Toxaphene	10	³ 26	³ 26	
Trichloroethylene	³ 10	9500	³ 10	
Zinc		4500	4500	4500

where:

LA - Land application;

SD - Surface disposal;

I - Incineration;

¹ - Sewage sludge unit without a liner and leachate collection system;

² - Sewage sludge unit with a liner and leachate collection system; and

³ - Value expressed in grams per kilogram, dry weight basis.

c. For any pollutant in sewage sludge if the POTW disposes all of its sewage sludge in a municipal solid waste landfill unit that meets the criteria in 40 CFR Part 258.

5. KPDES permit limitations. The granting of removal credits shall not cause a violation of the POTW's permit limitations or conditions. Alternatively, the POTW may demonstrate to the cabinet that even though it is not presently in compliance with applicable limitations and conditions in its KPDES permit, it will be in compliance if the industrial users to whom the removal credit would apply are required to meet their categorical pretreatment standards, as modified by the removal credit provision.

(c) Calculation of revised discharge limits. Revised discharge limits for a specific pollutant shall be derived by use of the following formula:

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

where:

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

r = removal credit for that pollutant as established under subsection (2) of this section; percentage removal expressed as a proportion; i.e., a number between zero and one (1); and

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

(2) Establishment of removal credits; demonstration of consistent removal.

(a) Consistent removal. Consistent removal shall be the average of the lowest fifty (50) percent of the removal measured according to paragraph (b) of this subsection. All sample data obtained for the measured pollutant during the time period prescribed in paragraph (b) of this subsection shall be reported and used in computing consistent removal. If a substance is measurable in the influent but not in the effluent, the effluent level may be assumed to be the limit of measurement, and those data may be used by the POTW subject to approval by the cabinet. If the substance is not measurable in the influent, the data shall not be used. If the number of samples with concentrations equal to or above the limit of measurement is between eight (8) and twelve (12), the average of the lowest six (6) removals shall be used. If there are less than eight (8) samples with concentrations equal to or above the limit of measurement, the cabinet may approve alternate means for demonstrating consistent removal. Measurement shall refer to the ability of the analytical method or protocol to quantify as well as identify the presence of the substance in question.

(b) Consistent removal data. Influent and effluent operational data demonstrating consistent removal or other information as provided for in paragraph (a) of this subsection, which demonstrates consistent removal of the pollutants for which discharge limit revisions are proposed shall be considered by the cabinet. These data shall meet the following requirements:

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

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

3. Sampling procedures: composite.

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

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

(ii) In addition, upon the cabinet's concurrence, a POTW may utilize an historical data base amassed prior to November 5, 1987 if the data otherwise meet the requirements of this subsection. For the historical data base to be approved, it shall represent a statistically valid description of daily, weekly, and seasonal sewage treatment plant loadings and performance for at least one (1) year.

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

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

5. Analytical methods. The sampling referred to in subparagraphs 1 to 4 of this paragraph and an analysis of these samples shall be performed in accordance with the techniques prescribed in 40 CFR Part 136 and amendments thereto. If 40 CFR Part 136 does not contain sampling or analytical techniques for the pollutant in question, or if the cabinet or EPA determines that the Part 136 sampling and analytical techniques are inappropriate for the pollutant in question, sampling and analysis shall be performed using validated analytical methods or other applicable sampling and analytical procedures, including procedures suggested by the POTW or other parties, approved by EPA.

6. Calculation of removal. All data acquired under the provisions of this section shall be submitted to the cabinet. Removal for a specific pollutant shall be determined either, for each sample, by measuring the difference between the concentrations of the pollutant in the influent and effluent of the POTW and expressing the difference as a percent of the influent concentration, or, if these data cannot be obtained, removal may be demonstrated using other data or procedures subject to concurrence by the cabinet as provided for in paragraph (a) of this subsection.

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(3) Provisional credits. For pollutants which are not being discharged currently (i.e., new or modified facilities, or production changes) the POTW may apply for authorization to give removal credits prior to the initial discharge of the pollutant. Consistent removal shall be based provisionally on data from treatability studies or demonstrated removal at other treatment facilities if the quality and quantity of influent are similar. Within eighteen (18) months after the commencement of discharge of pollutants in question, consistent removal shall be demonstrated pursuant to the requirements of subsection (2) of this section. If, within eighteen (18) months after the commencement of the discharge of the pollutant in question, the POTW cannot demonstrate consistent removal pursuant to the requirements of subsection (2) of this section, the authority to grant provisional removal credits shall be terminated by the cabinet and all industrial users to whom the revised discharge limits had been applied shall achieve compliance with the applicable categorical pretreatment standards within a reasonable time, not to exceed the period of time prescribed in the applicable categorical pretreatment standards, as may be specified by the cabinet.

(4) Exception to POTW pretreatment program requirement. A POTW required to develop a local pretreatment program by Section 6 of this administrative regulation may conditionally give removal credits pending approval of this type of program in accordance with the following terms and conditions:

(a) All industrial users who are currently subject to categorical pretreatment standards and who wish conditionally to receive a removal credit shall submit to the POTW the information required in Section 9(1) of this administrative regulation, except that new or modified industrial users shall submit only the information required by Section 9(1)(a) to (f) of this administrative regulation, pertaining to the categorical pretreatment standard as modified by the removal credit. The industrial users shall indicate what additional technology will be needed to comply with the categorical pretreatment standards as modified by the removal credit.

(b) The POTW shall have submitted to the cabinet an application for pretreatment program approval meeting the requirements of Sections 6 and 7 of this administrative regulation in a timely manner, not to exceed the time limitation set forth in a compliance schedule for development of a pretreatment program included in the POTW's KPDES permit.

(c) The POTW shall:

1. Compile and submit data demonstrating its consistent removal in accordance with subsection (2) of this section;
2. Comply with the conditions specified in subsection (1)(b) of this section; and
3. Submit a complete application for removal credit authority in accordance with subsection (5) of this section.

(d) If a POTW receives authority to grant conditional removal credits and the cabinet subsequently makes a final determination, after appropriate notice, that the POTW failed to comply with the conditions in paragraphs (b) and (c) of this subsection, the authority to grant conditional removal credits shall be terminated by the cabinet and all industrial users to whom the revised discharge limits had been applied shall achieve compliance with the applicable categorical pretreatment standards within a reasonable time as specified by the cabinet, not to exceed the period of time prescribed in the applicable categorical pretreatment standards, as may be specified by the cabinet.

(e) If a POTW grants conditional removal credits and the POTW or the cabinet subsequently makes a final determination, after appropriate notice, that the industrial users failed to comply with the conditions in paragraph (a) of this subsection, the conditional credit shall be terminated by the POTW or the cabinet for the noncomplying industrial users and the industrial users to whom the revised discharge limits had been applied shall achieve compliance with the applicable categorical pretreatment standards within a reasonable time as specified by the cabinet, not to exceed the period of time prescribed in the applicable categorical pretreatment standards. The conditional credit shall not be terminated if a violation of the provisions of this subsection results from causes entirely outside of the control of the industrial users or the industrial users had demonstrated substantial compliance.

(f) If the cabinet does not review an application for conditional removal credit authority upon receipt of the application, the conditionally revised discharge limits shall remain in effect until reviewed by the cabinet. This review shall occur no later than the time of a pretreatment program

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approval or a related KPDES permit reissuance, according to procedures in Section 8 of this administrative regulation.

(5) POTW application for authorization to give removal credits and cabinet review.

(a) Who shall apply. A POTW that wants to give a removal credit shall apply for authorization from the cabinet.

(b) To whom application shall be made. An application for authorization to give removal credits or modify existing ones shall be submitted by the POTW to the cabinet.

(c) When to apply. A POTW may apply for authorization to give or modify removal credits at any time.

(d) Contents of the application. An application for authorization to give removal credits shall include the following information:

1. List of pollutants. A list of pollutants for which removal credits are proposed.
2. Consistent removal data. The data required pursuant to subsection (2) of this section.
3. Calculation of revised discharge limits. Proposed revised discharge limits for each affected subcategory of industrial users calculated in accordance with subsection (1)(c) of this section.
4. Local pretreatment program certification. A certification that the POTW has an approved local pretreatment program or qualifies for the exception to this requirement found at subsection (4) of this section.

5. Sludge management certification. A specific description of the POTW's current methods of using or disposing of its sludge and a certification that the granting of removal credits will not cause a violation of the sludge requirements identified in subsection (1)(b)4 of this section.

6. KPDES permit limit certification. A certification that the granting of removal credits will not cause a violation of the POTW's KPDES permit limits and conditions as required in subsection (1)(b)5 of this section.

(e) Cabinet's review. The cabinet shall review the POTW's application for authorization to give or modify removal credits in accordance with the procedures of Section 8 of this administrative regulation and shall not have more than 180 days from public notice of an application to complete the review.

(f) Nothing in this administrative regulation precludes an industrial user or other interested party from assisting the POTW in preparing and presenting the information necessary to apply for authorization.

(6) Continuation and withdrawal of authorization.

(a) Effect of authorization. After a POTW has received authorization to grant removal credits for a particular pollutant regulated in a categorical pretreatment standard it may automatically extend that removal credit to the same pollutant if it is regulated in other categorical standards, unless granting the removal credit would cause the POTW to violate the sludge requirements identified in subsection (1)(b)4 of this section or its KPDES permit limits and conditions as required by subsection (1)(b)5 of this section. If a POTW elects at a later time to extend removal credits to a certain categorical pretreatment standard, industrial subcategory or one (1) or more industrial users that initially were not granted removal credits, it shall notify the cabinet.

(b) Inclusion in POTW permit. After authority is granted, the removal credits shall be included in the POTW's KPDES permit as soon as possible and shall become an enforceable requirement of the POTW's KPDES permit. The removal credits shall remain in effect for the term of the POTW's KPDES permit, if the POTW maintains compliance with the conditions specified in paragraph (d) of this subsection.

(c) Compliance monitoring. Following authorization to give removal credits, a POTW shall continue to monitor and report on the POTW's removal capabilities at intervals as specified by the cabinet, but no less than once per year. A minimum of one (1) representative sample per month during the reporting period shall be taken, and all sampling data shall be included in the POTW's compliance report.

(d) Modification or withdrawal of removal credits.

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

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

b. That the discharge limit revisions are causing a violation of conditions or limits contained in the POTW's KPDES permit.

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

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

(7) Compensation for overflow. POTWs which overflow untreated wastewater to receiving waters at least once annually may claim consistent removal of a pollutant only by complying with either paragraph (a) or (b) of this subsection. However, this subsection shall not apply if industrial users can demonstrate that overflow does not occur between the industrial users and the POTW treatment plant.

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

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

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

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

(b)1. The consistent removal claimed shall be reduced pursuant to the following equation:

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

where:

r_m = POTW's consistent removal rate for that pollutant as established under subsection (2)(b) of this section;

r_c = removal corrected by the overflow factor; and

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

2. After July 1, 1983, consistent removal may be claimed only if reasonable efforts to correct the conditions resulting in untreated discharges by the POTW are underway in accordance with the

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policy and procedures set forth in 40 CFR Part 403, Appendix A, adopted without change. Revisions to discharge limits in categorical pretreatment standards may not be made if reasonable efforts have not been committed to by the POTW to minimize pollution from overflows. At a minimum, the POTW shall have completed the analysis required by 40 CFR Part 403, Appendix A and be making a reasonable effort to implement the plan.

3. If, by July 1, 1983, a POTW has begun the 40 CFR Part 403, Appendix A analysis but due to circumstances beyond its control has not completed it, consistent removal, subject to the approval of the cabinet, may continue to be claimed according to the formula in subparagraph 1 of this paragraph if the POTW acts in a timely fashion to complete the analysis and makes an effort to implement the nonstructural cost-effective measures identified by the analysis; and if the POTW has expressed its willingness to apply, after completing the analysis, for a construction grant necessary to implement other cost-effective overflow controls identified in the analysis if federal funds become available, applies for the funds, and proceeds with the required construction in an expeditious manner. In addition, consistent removal may, subject to the approval of the cabinet, continue to be claimed according to the formula in subparagraph 1 of this paragraph if the POTW has completed and the cabinet has accepted the analysis required by 40 CFR Part 403, Appendix A and the POTW has requested inclusion in its KPDES permit of an acceptable compliance schedule providing for timely implementation of cost-effective measures identified in the analysis. In considering what is timely implementation, the cabinet shall consider the availability of funds, cost of control measures, and seriousness of the water quality problem.

Section 6. Pretreatment Program Requirements: Development by POTW. **(1) POTWs required to develop a pretreatment program.** A POTW, or a combination of POTWs operated by the same authority, with a total design flow greater than five (5) million gallons per day (MGD) and receiving from industrial users pollutants which pass through or interfere with the operation of the POTW or are otherwise subject to pretreatment standards shall establish a pretreatment program. A POTW with a design flow of five (5) MGD or less shall develop a pretreatment program if the cabinet determines that the nature or volume of the industrial wastewater, treatment process upsets, violations of POTW effluent limitations, contamination of municipal sludge, or other circumstances warrant to prevent interference with the POTW or pass-through.

(2) Deadline for program approval. A POTW which meets the criteria of subsection (1) of this section and is identified through written notification by the cabinet shall develop and submit a pretreatment program for approval as soon as possible, but no later than one (1) year after written notification from the cabinet of the identification. The pretreatment program shall meet the criteria set forth in subsection (4) of this section and shall be administered by the POTW to ensure compliance by industrial users with applicable pretreatment standards and requirements.

(3) Incorporation of approved programs in permits. A POTW may develop an appropriate pretreatment program any time before the time limit set forth in subsection (2) of this section. The POTW's KPDES permit shall be reissued or modified by the cabinet to incorporate the approved program condition as an enforceable condition of the permit. The modification of a POTW's KPDES permit for the purpose of incorporating a POTW pretreatment program approved in accordance with the procedures in Section 8 of this administrative regulation shall be deemed a minor permit modification subject to the procedures in 401 KAR 5:070, Section 6(3).

(4) POTW pretreatment requirements. A POTW pretreatment program shall be based on the following legal authority and include the following procedures. These authorities and procedures shall be fully and effectively exercised and implemented.

(a) Legal authority. The POTW shall operate pursuant to legal authority enforceable in federal courts or courts of the Commonwealth, which authorizes or enables the POTW to apply and to enforce federal or state statutes and any administrative regulations implementing those statutes. The authority may be contained in statutes, ordinances, or joint powers agreements which the POTW is authorized to enact, enter into or implement, and which are authorized by state law. At a minimum, this legal authority shall enable the POTW to:

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

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

3. Control through permit, order, or similar means, the contribution to the POTW by each industrial user to ensure compliance with applicable pretreatment standards and requirements. If industrial users are identified as significant, this control shall be achieved through permits or equivalent individual control mechanisms issued to each identified user. The control mechanisms shall be enforceable and contain, at a minimum, the following conditions:

- a. A statement of duration of no more than five (5) years;
- b. A statement of nontransferability without, at a minimum, prior notification to the POTW and provision of a copy of the existing control mechanism to the new owner or operator;
- c. Effluent limits based on applicable general pretreatment standards in this administrative regulation, categorical pretreatment standards, local limits, and state and local law, whichever is more stringent;
- d. Self-monitoring, sampling, reporting, notification, and recordkeeping requirements, including an identification of the pollutants to be monitored, sampling location, sampling frequency, and sample type, based on the applicable general pretreatment standards in this administrative regulation, categorical pretreatment standards, local limits, and state and local law; and
- e. Statement of applicable civil and criminal penalties for violation of pretreatment standards and requirements, and applicable compliance schedules. The schedules may not extend the compliance date beyond applicable federal deadlines.

4. Require the development of a compliance schedule by each industrial user for the installation of technology required to meet applicable pretreatment standards and requirements and the submission of all notices and self-monitoring reports from industrial users as are necessary to assess and assure compliance by industrial users with pretreatment standards and requirements, including but not limited to the reports required in Section 9 of this administrative regulation;

5. Carry out all inspection, surveillance and monitoring procedures necessary to determine, independent of information supplied by industrial users, compliance or noncompliance with applicable pretreatment standards and requirements by industrial users. Representatives of the POTW shall be authorized to enter a premises of an industrial user in which a discharge source or treatment system is located or in which records are required to be kept to assure compliance with pretreatment standards and requirements. The authority shall be at least as extensive as the authority provided under Section 308 of the Act, 33 USC 1318;

6.a. Obtain remedies for noncompliance by an industrial user with any pretreatment standards or requirements. All POTWs shall be able to seek injunctive relief for noncompliance by industrial users with pretreatment standards or requirements. All POTWs shall also have authority to seek or assess civil or criminal penalties, as authorized by law, in at least the amount of \$1,000 a day for each violation by industrial users of pretreatment standards or requirements. POTWs whose approved pretreatment programs require modification to conform to the requirements of this paragraph shall submit a request for approval of a program modification in accordance with Section 15 of this administrative regulation.

b. Pretreatment requirements which will be enforced through the remedies set forth in clause a of this subparagraph shall include but not be limited to, the duty to allow or carry out inspections, entry, or monitoring activities; rules, local regulations, or orders issued by the POTW; requirements set forth in individual control mechanisms issued by the POTW; and reporting requirements imposed by the POTW or this administrative regulation. The POTW shall have authority and procedures, after informal notice to the discharger, immediately and effectively to halt or prevent a discharge of pollutants to the POTW which reasonably appears to present an imminent danger to the health or welfare of persons. The POTW shall also have authority and procedures, which shall include notice to the affected industrial users and an opportunity to respond, to halt or prevent a discharge to the POTW which presents or may present a danger to the environment or which threatens to interfere with the operation of the POTW. The cabinet shall have authority to seek judicial relief and may also use administrative penalty authority when the POTW has sought a monetary penalty which the cabinet believes to be insufficient.

7. Comply with the confidentiality requirements set forth in Section 11 of this administrative regulation.

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

1. Identify and locate all possible industrial users which might be subject to the pretreatment program. A compilation, index, or inventory of industrial users made under this administrative regulation shall be made available to the cabinet upon request;

2. Identify the character and volume of pollutants contributed to the POTW by the industrial users identified in subparagraph 1 of this paragraph. This information shall be made available to the cabinet upon request;

3. Notify industrial users identified according in subparagraph 1 of this paragraph of applicable pretreatment standards and applicable requirements under Sections 204(b) and 405 of the Act and Subtitles C and D of the Resource Conservation and Recovery Act, 42 USC 6901 et seq. Within thirty (30) days of approval pursuant to paragraph (f) of this subsection of a list of significant industrial users, notify each significant industrial user of its status and of all requirements applicable to it as a result of that status;

4. Receive and analyze self-monitoring reports and other notices submitted by industrial users in accordance with the self-monitoring requirements in Section 9 of this administrative regulation;

5. Randomly sample and analyze the effluent from industrial users and conduct surveillance activities to identify, independent of information supplied by industrial users, occasional and continuing noncompliance with pretreatment standards. Inspect and sample the effluent from each significant industrial user at least once a year. Evaluate, at least once every two (2) years, whether each significant industrial user needs a plan to control slug discharges. For purposes of this subsection, a slug discharge shall be a discharge of a nonroutine, episodic nature, including but not limited to an accidental spill or noncustomary batch discharge. The results of these activities shall be available to the cabinet upon request. If the POTW decides that a slug control plan is needed, the plan shall contain, at a minimum, the following elements:

a. Description of discharge practices, including nonroutine batch discharges;

b. Description of stored chemicals;

c. Procedures for immediately notifying the POTW of slug discharges, including a discharge that would violate a prohibition under Section 3 of this administrative regulation, with procedures for follow-up written notification within five (5) calendar days; and

d. If necessary, procedures to prevent adverse impact from accidental spills, including inspection and maintenance of storage areas, handling and transfer of materials, loading and unloading operations, control of plant site run-off, worker training, building of containment structures or equipment, measures for containing toxic organic pollutants, including solvents, or measures and equipment necessary for emergency response.

6. Investigate instances of noncompliance with pretreatment standards and requirements, as indicated in the reports and notices required by Section 9 of this administrative regulation, or indicated by analysis, inspection, and surveillance activities described in subparagraph 5 of this paragraph. Sample taking and analysis and the collection of other information shall be performed with sufficient care to produce evidence admissible in enforcement proceedings or in judicial actions; and

7. Comply with the public participation requirements of 40 CFR Part 25, adopted without change, in the enforcement of national pretreatment standards. These procedures shall include provisions for at least annual public notification, in the largest daily newspaper published in the municipality in which the POTW is located, of industrial users which, at any time during the previous twelve (12) months, were in significant noncompliance with applicable pretreatment requirements. For the purposes of this provision, an industrial user shall be in significant noncompliance if its violation meets one (1) or more of the following criteria:

a. Chronic violations of wastewater discharge limits, which shall be those violations in which sixty-six (66) percent or more of all of the measurements taken during a six (6) month period exceed by any magnitude the daily maximum limit or the average limit for the same pollutant parameter;

b. Technical review criteria (TRC) violations, which shall be those violations in which thirty-three (33) percent or more of all of the measurements for each pollutant parameter taken during a six (6) month period equal or exceed the product of the daily maximum limit or the average limit multiplied

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by the applicable TRC. TRC = 1.4 for BOD, total suspended solids (TSS), fats, oil, and grease, and TRC = 1.2 for all other pollutants except pH;

c. Other violations of a pretreatment effluent limit (daily maximum or longer term average) that the control authority determines has caused, alone or in combination with other discharges, interference or pass-through, including endangering the health of POTW personnel or the general public;

d. A discharge of a pollutant that has caused imminent danger to human health, to welfare or to the environment or has resulted in the POTW's exercise of its emergency authority under paragraph (a)6b of this subsection to halt or prevent such a discharge;

e. Failure to meet, within ninety (90) days after the schedule date, a compliance schedule milestone contained in a local control mechanism or enforcement order for starting construction, completing construction, or attaining final compliance;

f. Failure to provide, within thirty (30) days after the due date, required reports such as baseline monitoring reports, ninety (90) day compliance reports, periodic self-monitoring reports, and reports on compliance with compliance schedules;

g. Failure to accurately report noncompliance; or

h. Other violations or group of violations which the control authority determines will adversely affect the operation or implementation of the local pretreatment program.

(c) Funding. The POTW shall have sufficient resources and qualified personnel to carry out the authorities and procedures described in paragraphs (a) and (b) of this subsection. In some limited circumstances, funding and personnel may be delayed if the POTW has adequate legal authority and procedures to carry out the pretreatment program requirements described in this section; and a limited aspect of the program is not required to be implemented immediately.

(d) Local limits. The POTW shall develop local limits as required in Section 3(3)(a) of this administrative regulation or demonstrate that they are not necessary.

(e) The POTW shall develop and implement an enforcement response plan. This plan shall contain detailed procedures indicating how a POTW will investigate and respond to instances of industrial user noncompliance. The plan shall, at a minimum:

1. Describe how the POTW will investigate instances of noncompliance;

2. Describe the types of escalating enforcement responses the POTW will take in response to all anticipated types of industrial user violations and the time periods within which responses will take place;

3. Identify by title the officials responsible for each type of response; and

4. Adequately reflect the POTW's primary responsibility to enforce all applicable pretreatment requirements and standards as detailed in paragraphs (a) and (b) of this subsection.

(f) The POTW shall prepare and maintain a list of its industrial users meeting the criteria in 401 KAR 5:002, Section 1, of a significant industrial user.

1. The list shall identify the criteria in 401 KAR 5:002, Section 1, applicable to each industrial user and, for industrial users meeting the criteria of a significant industrial user, shall also indicate if the POTW has made a determination pursuant to 401 KAR 5:002, Section 1, that the industrial user shall not be considered a significant industrial user.

2. This list shall be submitted to the cabinet, pursuant to Section 7 of this administrative regulation, as a nonsubstantial program modification pursuant to Section 15(4) of this administrative regulation.

3. Modifications to the list shall be submitted to the cabinet pursuant to Section 9(8)(a) of this administrative regulation.

Section 7. Pretreatment Programs or Authorization to Revise Pretreatment Standards: Submission for Approval. (1) Who approves program. A POTW requesting approval of a pretreatment program shall develop a program description which includes the information set forth in subsection (2)(a) through (d) of this section. This description shall be submitted to the cabinet which shall make a determination on the request for program approval in accordance with the procedures described in Section 8 of this administrative regulation.

(2) Contents of POTW program submission. The program description shall contain the following information:

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(a) A statement from the city attorney or legal counsel that the POTW has adequate authority to carry out the programs described in Section 6 of this administrative regulation. This statement shall:

1. Identify the provision of the legal authority which provides the basis for each procedure identified in Section 6(4)(b) of this administrative regulation;

2. Identify the manner in which the POTW will implement the program requirements set forth in Section 6 of this administrative regulation, including the means by which pretreatment standards will be applied to individual industrial users (e.g., by order, permits, ordinance, etc.); and

3. Identify how the POTW intends to ensure compliance with pretreatment standards and requirements, and to enforce them if industrial users do not comply with them;

(b) A copy of statutes, ordinances, local regulations, agreements, or other authorities relied upon by the POTW for its administration of the program. This submission shall include a statement reflecting the endorsement or approval of the local boards or bodies responsible for supervising or funding the pretreatment program if approved;

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

(d) A description of the funding levels and full-time and part-time personnel available to implement the program.

(3) Conditional program approval. The POTW may request conditional approval of the pretreatment program pending the acquisition of funding and personnel for certain elements of the program. The request for conditional approval shall meet the requirements in subsection (2) of this section, but those requirements may be relaxed if the submission demonstrates that:

(a) A limited aspect of the program does not need to be implemented immediately;

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

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

(4) Content of removal allowance submission. The request for authority to revise categorical pretreatment standards shall contain the information required in Section 5(4) of this administrative regulation.

(5) Cabinet action. A POTW requesting pretreatment program approval shall submit to the cabinet two (2) copies of the submission described in subsection (2) of this section, and if appropriate, subsection (4) of this section. Within sixty (60) days after receiving the submission, the cabinet shall make a preliminary determination of whether the submission meets the requirements of subsection (2) of this section, and if appropriate, subsection (4) of this section. If the cabinet makes the preliminary determination that the submission meets these requirements, the cabinet shall:

(a) Notify the POTW that the submission has been received and is under review; and

(b) Commence the public notice and evaluation activities set forth in Section 8 of this administrative regulation.

(6) Notification if submission is defective. If, after review of the submission as provided for in subsection (5) of this section, the cabinet determines that the submission does not comply with the requirements of subsection (2) or (3) of this section and subsection (4) of this section, if appropriate, the cabinet shall provide notice in writing to the applying POTW and each person who has requested individual notice. This notification shall identify defects in the submission and advise the POTW and each person who has requested individual notice of the means by which the POTW can comply with the applicable requirements of subsections (2) and (3) of this section and subsection (4) of this section, if appropriate.

(7) Consistency with water quality management plans.

(a) The pretreatment program shall be consistent with approved water quality management plans developed in accordance with Section 208 Regional Facility Plan of the Clean Water Act, 33

USC 1288 and 40 CFR Parts 130, 131, as revised, if the Section 208 Regional Facility Plan includes management agency designations and addresses pretreatment in a manner consistent with this administrative regulation. To assure this consistency the cabinet shall solicit the review and comment of the appropriate Section 208 regional planning agency during the public comment period provided for in Section 8 of this administrative regulation prior to approval or disapproval of the program.

(b) If no Section 208 Regional Facility Plan has been approved or if a plan has been approved but lacks management agency designations or does not address pretreatment in a manner consistent with this administrative regulation, the cabinet shall nevertheless solicit the review and comment of the appropriate Section 208 regional planning agency.

Section 8. Approval Procedures for POTW Pretreatment Programs and POTW Granting of Removal Credits. The following procedures shall apply in approving or denying requests for approval of POTW pretreatment programs and applications for removal credit authorization:

(1) Deadline for review of submission. The cabinet shall have ninety (90) days from the date of public notice of a submission complying with the requirements of Section 7 of this administrative regulation and, if removal credit authorization is sought, with Sections 5(5) and 7(4) of this administrative regulation, to review the submission. The cabinet shall review the submission to determine compliance with the requirements of Section 6(2) and (4) of this administrative regulation and if removal credit authorization is sought, with Section 5 of this administrative regulation. The cabinet may have up to an additional ninety (90) days to complete the evaluation of the submission if the public comment period provided for in subsection (2)(a) of this section is extended beyond thirty (30) days or if a public hearing is held as provided for in subsection (2)(b) of this section. The time for evaluation of the submission shall not exceed a total of 180 days from the date of public notice of a submission meeting the requirements of Section 7(2) of this administrative regulation and, if the application is a removal credit application, Sections 5(5) and 7(2) of this administrative regulation.

(2) Public notice and opportunity for hearing. Upon receipt of a submission the cabinet shall commence its review. Within twenty (20) work days after making a determination that a submission meets the requirements of Section 7(2) of this administrative regulation and if removal allowance approval is requested, Sections 5(5) and 7(4) of this administrative regulation, the cabinet shall:

(a) Issue a public notice of request for approval of the submission.

1. This public notice shall be circulated in a manner designed to inform interested and potentially interested persons of the submission. Procedures for the circulation of public notice shall include:

a. Mailing notices of the request for approval of the submission to designated Section 208 regional planning agencies, federal fish, shellfish, and wildlife resource agencies unless these agencies have asked not to be sent the notices; Kentucky Department of Fish and Wildlife; and to other persons or groups who have requested individual notice, including those on appropriate mailing lists; and

b. Publication of a notice of request for approval of the submission in a newspaper of general circulation within the jurisdictions served by the POTW. The cost of the advertisement shall be borne by the applicant.

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

3. All written comments submitted during the thirty (30) day comment period shall be retained by the cabinet and considered in the decision on whether or not to approve the submission. The period for comment may be extended by the cabinet.

(b) Provide an opportunity for the applicant, an affected state, interested state or federal agencies, person, or group of persons to request a public hearing with respect to the submission.

1. This request for public hearing shall be filed within the thirty (30) day, or extended, comment period described in paragraph (a)2 of this subsection and shall indicate the interest of the person filing the request and the reasons why a hearing is warranted.

2. The cabinet shall hold a hearing if the POTW so requests. In addition, a hearing will be held if there is a significant public interest in issues relating to whether or not the submission should be approved. Instances of doubt should be resolved in favor of holding the hearing.

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3. Public notice of a hearing to consider a submission and sufficient to inform interested parties of the nature of the hearing and the right to participate shall be published in the same newspaper as the notice of the original request for approval of the submission under paragraph (a)1 of this subsection. The cost of the advertisement shall be borne by the applicant. In addition, notice of the hearing shall be sent to those persons requesting individual notice.

(3) Cabinet decision. At the end of the thirty (30) day, or extended, comment period and within the ninety (90) day, or extended, period provided for in subsection (1) of this section, the cabinet shall approve or deny the submission based upon the evaluation described in subsection (1) of this section and taking into consideration comments submitted during the comment period and the record of the public hearing, if held. If the cabinet makes a determination to deny the request, the cabinet shall so notify the POTW and each person who has requested individual notice. This notification shall include suggested modifications and the cabinet may allow the requestor additional time to bring the submission into compliance with applicable requirements.

(4) EPA objection to cabinet's decision. No pretreatment program or authorization to grant removal allowances shall be approved by the cabinet if following the thirty (30) day, or extended, evaluation period provided for in subsection (2)(a)2 of this section and a hearing held pursuant to subsection (2)(b) of this section the regional administrator sets forth in writing objections to the approval of the submission and the reasons for the objections. A copy of the regional administrator's objections shall be provided to the applicant and each person who has requested individual notice. The regional administrator shall provide an opportunity for written comments and may convene a public hearing on its objections. Unless retracted, the regional administrator's objections shall constitute a final ruling to deny approval of a pretreatment program or authorization to grant removal allowances ninety (90) days after the date the objections are issued.

(5) Notice of decision. The cabinet shall notify those persons who submitted comments and participated in the public hearing, if held, of the approval or disapproval of the submission. In addition, the cabinet shall cause to be published a notice of approval or disapproval in the same newspapers as the original notice of request for approval of the submission was published. The cabinet shall identify in the notice of pretreatment program approval any authorization to modify categorical pretreatment standards which the POTW may make, in accordance with Section 5 of this administrative regulation, for removal of pollutants subject to pretreatment standards.

(6) Public access to submission. The cabinet shall ensure that the submission and comments upon the submission are available to the public for inspection and copying.

Section 9. Reporting Requirements for POTWs and Industrial Users. (1) Reporting requirements for industrial users upon effective date of categorical pretreatment standard baseline report. Within 180 days after the effective date of a categorical pretreatment standard, or 180 days after the final administrative decision made upon a category determination submission under Section 4 of this administrative regulation, whichever is later, existing industrial users subject to the categorical pretreatment standards and currently discharging to or scheduled to discharge to a POTW shall submit to the control authority a report which contains the information listed in this subsection. At least ninety (90) days prior to commencement of discharge, new sources, and sources that become industrial users subsequent to the promulgation of an applicable categorical standard, shall submit to the control authority a report which contains the information listed in paragraphs (a) to (e) of this subsection. New sources shall also include in this report information on the method of pretreatment the source intends to use to meet applicable pretreatment standards. New sources shall give estimates of the information requested in paragraphs (d) and (e) of this subsection.

(a) Identifying information. The user shall submit the name and address of the facility including the name of the operator and owners.

(b) Permits. The user shall submit a list of environmental control permits held by or for the facility.

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

(d) Flow measurement. The user shall submit information showing the measured average daily and maximum daily flow, in gallons per day, to the POTW from each of the following:

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1. Regulated process streams; and
2. Other streams as necessary to allow use of the combined waste stream formula of Section 4(5) of this administrative regulation, as referenced in paragraph (e)5 of this subsection. The control authority may allow for verifiable estimates of these flows if justified by cost or feasibility considerations.

(e) Measurement of pollutants.

1. The user shall identify the pretreatment standards applicable to each regulated process;
2. In addition, the user shall submit the results of sampling and analysis identifying the nature and concentration, or mass, if mass is required by the standard or control authority, of regulated pollutants in the discharge from each regulated process. Both daily maximum and average concentration, or mass, if required, shall be reported. The sample shall be representative of daily operations; and

3. A minimum of four (4) grab samples shall be used for pH, cyanide, total phenols, oil and grease, sulfide, and volatile organics. For all other pollutants, twenty-four (24) hour composite samples shall be obtained through flow proportional composite sampling techniques if feasible. The control authority may waive flow proportional composite sampling for an industrial user that demonstrates that flow proportional sampling is not feasible. If flow sampling is not feasible, samples may be obtained through time proportional composite sampling techniques or through a minimum of four (4) grab samples if the user demonstrates that this will provide a representative sample of the effluent being discharged.

4. The user shall take a minimum of one (1) representative sample to compile that data necessary to comply with the requirements of this subsection.

5. Samples shall be taken immediately downstream from pretreatment facilities if they exist or immediately downstream from the regulated process if no pretreatment facility exists. If other wastewaters are mixed with the regulated wastewater prior to pretreatment the user shall measure the flows and concentrations necessary to allow use of the combined waste stream formula of Section 4 of this administrative regulation to evaluate compliance with the pretreatment standards. If an alternate concentration or mass limit has been calculated in accordance with Section 4 of this administrative regulation, this adjusted limit and the supporting data shall be submitted to the control authority.

6. Sampling and analysis shall be performed in accordance with the techniques prescribed in 40 CFR Part 136 and amendments thereto. If 40 CFR Part 136 does not contain sampling or analytical techniques for the pollutant in question, or if the regional administrator determines that the Part 136 sampling and analytical techniques are inappropriate for the pollutant in question, sampling and analysis shall be performed by using validated analytical methods or other applicable sampling and analytical procedures, including procedures suggested by the POTW or other parties, approved by the regional administrator;

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

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

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

(g) Compliance schedule. If additional pretreatment or O&M will be required to meet the pretreatment standards, the user shall submit the shortest schedule by which the industrial user will provide the additional pretreatment or O&M. The completion date in this schedule shall not be later than the compliance date established for the applicable pretreatment standard.

1. If the industrial user's categorical pretreatment standard has been modified by a removal allowance pursuant to Section 4 of this administrative regulation, the combined waste stream formula pursuant to Section 4(5) of this administrative regulation, or a fundamentally different factor variance pursuant to Section 10 of this administrative regulation when the user submits the report

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required by this section, the information required by paragraph (f) of this subsection and this paragraph shall pertain to the modified limits.

2. If the categorical pretreatment standard is modified by a removal allowance pursuant to Section 5 of this administrative regulation, the combined waste stream formula pursuant to Section 4(5) of this administrative regulation, or a fundamentally different factor variance pursuant to Section 10 of this administrative regulation after the user submits the report required by this section, necessary amendments to the information requested by paragraph (f) of this subsection and this paragraph shall be submitted by the user to the control authority within sixty (60) days after the modified limit is approved.

(2) Compliance schedule for meeting categorical pretreatment standards. The following conditions shall apply to the schedule required by subsection (1)(g) of this section:

(a) The schedule shall contain increments of progress in the form of dates for the commencement and completion of major events leading to the construction and operation of additional pretreatment required for the industrial user to meet the applicable categorical pretreatment standards (e.g., hiring an engineer, completing preliminary plans, completing final plans, executing contract for major components, commencing construction, completing construction, etc.).

(b) No increment referred to in paragraph (a) of this subsection shall exceed nine (9) months.

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

(3) Report on compliance with categorical pretreatment standard deadline. Within ninety (90) days following the date for final compliance with applicable categorical pretreatment standards or if a new source, following commencement of the introduction of wastewater into the POTW, an industrial user subject to pretreatment standards and requirements shall submit to the control authority a report containing the information described in subsection (1)(d) to (f) of this section. For industrial users subject to equivalent mass or concentration limits established by the control authority in accordance with Section 4(3) of this administrative regulation, this report shall contain a reasonable measure of the user's long-term production rate. For all other industrial users subject to categorical pretreatment standards expressed in terms of allowable pollutant discharge per unit of production or other measure of operation, this report shall include the user's actual production during the appropriate sampling period.

(4) Periodic reports on continued compliance.

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

(b) If the control authority has imposed mass limitations on industrial users as provided for by Section 4(4) of this administrative regulation, the report required by paragraph (a) of this subsection shall indicate the mass of pollutants regulated by pretreatment standards in the discharge from the industrial user.

(c) For industrial users subject to equivalent mass or concentration limits established by the control authority in accordance with Section 4(3) of this administrative regulation, the report required by paragraph (a) of this subsection shall contain a reasonable measure of the user's long term production rate. For all other industrial users subject to categorical pretreatment standards

expressed only in terms of allowable pollutant discharge per unit of production or other measure of operation, the report required by paragraph (a) of this subsection shall include the user's actual average production rate for the reporting period.

(5) Notice of potential problems, including slug loading. All categorical and noncategorical industrial users shall notify the POTW immediately of all discharges that could cause problems to the POTW, including slug loadings, by the industrial user.

(6) Monitoring and analysis to demonstrate continued compliance.

(a) The reports required in subsections (1), (3), and (4) of this section shall contain the results of sampling and analysis of the discharge, including the flow and the nature and concentration, or production and mass if requested by the control authority, of pollutants contained therein which are limited by the applicable pretreatment standards. This sampling and analysis may be performed by the control authority in lieu of the industrial user. If the POTW performs the required sampling and analysis in lieu of the industrial user, the user is not required to submit the compliance certification required under subsections (1) and (3) of this section. In addition, if the POTW itself collects all the information required for the report, including flow data, the industrial user is not required to submit the report.

(b) If sampling performed by an industrial user indicates a violation, the user shall notify the control authority within twenty-four (24) hours of becoming aware of the violation. The user shall also repeat the sampling and analysis and submit the results of the repeat analysis to the control authority within thirty (30) days after becoming aware of the violation, except the industrial user is not required to resample if:

1. The control authority performs sampling at the industrial user at a frequency of at least once per month; or

2. The control authority performs sampling at the user between the time when the user performs its initial sampling and the time when the user receives the results of this sampling.

(c) The reports required in subsection (4) of this section shall be based upon data obtained through appropriate sampling and analysis performed during the period covered by the report, which data are representative of conditions occurring during the reporting period. The control authority shall require that frequency of monitoring necessary to assess and assure compliance by industrial users with applicable pretreatment standards and requirements.

(d) All analyses shall be performed in accordance with procedures established by the administrator pursuant to Section 304(h) of the Act, 33 USC 1314(h) and contained in 40 CFR Part 136 and amendments thereto or with other test procedures approved by the administrator. Sampling shall be performed in accordance with the techniques approved by the administrator. If 40 CFR Part 136 does not include sampling or analytical techniques for the pollutants in question, or if the administrator determines that the Part 136 sampling and analytical techniques are inappropriate for the pollutant in question, sampling and analyses shall be performed using validated analytical methods or other sampling and analytical procedures, including procedures suggested by the POTW or other parties, approved by the administrator.

(e) If an industrial user subject to the reporting requirement in subsection (4) of this section monitors pollutants more frequently than required by the control authority, using the procedures prescribed in paragraph (d) of this subsection, the results of this monitoring shall be included in the report.

(7) Reporting requirements for industrial users not subject to categorical pretreatment standards. The control authority shall require appropriate reporting from those industrial users with discharges that are not subject to categorical pretreatment standards. Significant noncategorical industrial users shall submit to the control authority at least once every six (6) months, on dates specified by the control authority, a description of the nature, concentration, and flow of the pollutants required to be reported by the control authority. These reports shall be based on sampling and analysis performed in the period covered by the report, and performed in accordance with the techniques described in 40 CFR Part 136 and amendments thereto. If 40 CFR Part 136 does not contain sampling and analytical techniques for the pollutant in question, or if the administrator determines that the Part 136 sampling and analytical techniques are inappropriate for the pollutant in question, sampling and analysis shall be performed by using validated analytical methods or other applicable sampling and analytical procedures, including procedures suggested by the POTW or other persons, approved by the administrator. This sampling and analysis may be

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performed by the control authority in lieu of the significant noncategorical industrial user. If the POTW itself collects all the information required for the report, the noncategorical significant industrial user is not required to submit the report.

(8) Semiannual POTW reports. POTWs with approved pretreatment programs shall provide the cabinet with a report that briefly describes the POTW's program activities, including activities of all participating agencies, if more than one (1) jurisdiction is involved in the local program. The report required by this subsection shall be submitted no later than one (1) year after approval of the POTW's pretreatment program, and at least semiannually thereafter, and shall include, at a minimum, the following:

(a) An updated list of the POTW's industrial users, including their names and addresses, or a list of deletions and additions keyed to a previously submitted list. The POTW shall provide a brief explanation of each deletion. This list shall identify which industrial users are subject to categorical pretreatment standards and specify which standards are applicable to each industrial user. The list shall indicate which industrial users are subject to local standards that are more stringent than the categorical pretreatment standards. The POTW shall also list the industrial users that are subject only to local requirements;

(b) A summary of the status of industrial user compliance over the reporting period;

(c) A summary of compliance and enforcement activities including inspections, conducted by the POTW during the reporting period;

(d) A summary of changes to the POTW's pretreatment program that have not been previously reported to the cabinet; and

(e) Other relevant information requested by the cabinet.

(9) Notification of changed discharge. All industrial users shall promptly notify the POTW in advance of a substantial change in the volume or character of pollutants in their discharge, including the listed or characteristic hazardous wastes for which the industrial user has submitted initial notification under subsection (15) of this section.

(10) Compliance schedule for POTWs. The following conditions and reporting requirements shall apply to the compliance schedule for development of an approvable POTW pretreatment program required by Section 6 of this administrative regulation.

(a) The schedule shall contain increments of progress in the form of dates for the commencement and completion of major events leading to the development and implementation of a POTW pretreatment program (e.g., acquiring required authorities, developing funding mechanisms, acquiring equipment);

(b) No increment referred to in paragraph (a) of this subsection shall exceed nine (9) months;

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

(11) Signatory requirements for industrial user reports. The reports required by subsections (1), (3) and (4) of this section shall include the certification statement as set forth in Section 4(1)(b)2 of this administrative regulation and shall be signed as follows:

(a) By a responsible corporate officer, if the industrial user submitting the reports required by subsection (1) of this section is a corporation. For the purpose of this paragraph, a responsible corporate officer shall be:

1. A president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or other person who performs similar policy or decision making functions for the corporation; or

2. The manager of one (1) or more manufacturing, production, or operation facilities employing more than 250 persons or having gross annual sales or expenditures exceeding \$25,000,000 in second quarter 1980 dollars, if authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures.

(b) By a general partner or proprietor if the industrial user submitting the reports required by subsection (1), (3), or (4) of this section is a partnership or sole proprietorship respectively.

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(c) By a duly authorized representative of the individual designated in paragraph (a) or (b) of this subsection if:

1. The authorization is made in writing by the individual described in paragraph (a) or (b) of this subsection;

2. The authorization specifies either an individual or a position having responsibility for the overall operation of the facility from which the industrial discharge originates, such as the position of plant manager, operator of a well, or well field superintendent, or a position of equivalent responsibility, or having overall responsibility for environmental matters for the company; and

3. The written authorization is submitted to the control authority.

(d) If an authorization in paragraph (c) of this subsection is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, or overall responsibility for environmental matters for the company, a new authorization satisfying the requirements of paragraph (c) of this subsection shall be submitted to the control authority prior to or together with reports to be signed by an authorized representative.

(12) Signatory requirements for POTW reports. Reports submitted to the cabinet by the POTW in accordance with subsection (7) of this section shall be signed by a principal executive officer, ranking elected official or other duly authorized employee if the employee is responsible for overall operation of the POTW.

(13) Provisions governing fraud and false statements. The reports and other documents required to be submitted or maintained under this section shall be subject to:

(a) The provisions of 18 USC Section 1001 relating to fraud and false statements;

(b) The provisions of Section 309(c)(4) of the Act, 33 USC 1319(c)(4), as amended, governing false statements, representation or certification; and

(c) The provisions of Section 309(c)(6) of the Act, 33 USC 1319(c)(6) regarding responsible corporate officers.

(14) Recordkeeping requirements.

(a) Industrial users and POTWs subject to the reporting requirement established in this section shall maintain records of all information resulting from monitoring activities required by this section. These records shall include for all samples:

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

2. The date analyses were performed;

3. Who performed the analyses;

4. The analytical techniques or methods used; and

5. The results of the analyses.

(b) Industrial users or POTWs subject to the reporting requirements established in this section shall retain for a minimum of three (3) years records of monitoring activities and results, whether or not the monitoring activities are required by this section, and shall make the records available for inspection and copying by the cabinet and the regional administrator and POTW, if an industrial user. This period of retention shall be extended during the course of unresolved litigation regarding the industrial user or POTW or if requested by the cabinet or the regional administrator.

(c) A POTW to which reports are submitted by an industrial user pursuant to subsections (1), (3), (4), and (7) of this section shall retain the reports for a minimum of three (3) years and shall make the reports available for inspection and copying by the cabinet and the regional administrator. This period of retention shall be extended during the course of unresolved litigation regarding the discharge of pollutants by the industrial user or the operation of the POTW pretreatment program or if requested by the cabinet or the regional administrator.

(15)(a) The industrial user shall notify the POTW, the EPA regional waste management division director, and Kentucky Division of Waste Management in writing of a discharge into the POTW of a substance, which, if otherwise disposed of, would be a hazardous waste under 40 CFR Part 261. The notification shall include the name of the hazardous waste as set forth in 40 CFR Part 261, the EPA hazardous waste number, and the type of discharge (continuous, batch, or other). If the industrial user discharges more than 100 kilograms of this waste per calendar month to the POTW, the notification shall also contain the information in subparagraphs 1 to 3 of this paragraph to the extent the information is known and readily available to the industrial user. All notifications shall have occurred within 180 days of July 24, 1990. Industrial users who commence discharging after

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July 24, 1990 shall provide the notification no later than 180 days after the discharge of the listed or characteristic hazardous waste. A notification under this subsection shall be submitted only once for each hazardous waste discharged. However, notifications of changed discharges shall be submitted according to subsection (9) of this section. The notification requirement in this section shall not apply to pollutants already reported under self-monitoring requirements of subsections (1), (3), and (4) of this section.

1. An identification of the hazardous constituents contained in the wastes;
2. An estimation of the mass and concentration of the constituents in the waste stream discharged during that calendar month;
3. And an estimation of the mass of constituents in the waste stream expected to be discharged during the following twelve (12) months.

(b) Dischargers shall be exempt from the requirements of paragraph (a) of this subsection during a calendar month in which they discharge no more than fifteen (15) kilograms of hazardous wastes, unless the wastes are acute hazardous wastes as specified in 40 CFR 261.30(d) and 261.33(e). Discharge of more than fifteen (15) kilograms of nonacute hazardous wastes in a calendar month, or of any quantity of acute hazardous wastes as specified in 40 CFR 261.30(d) and 261.33(e), requires a one (1) time notification. Subsequent months during which the industrial user discharges more than these quantities of hazardous waste shall not require additional notification.

(c) If new federal regulations are promulgated under Section 3001 of RCRA, 42 USC 6921, identifying additional characteristics of hazardous waste or listing an additional substance as a hazardous waste, the industrial user shall notify the POTW, the EPA regional waste management division director, and Kentucky Division of Waste Management of the discharge of the substance within ninety (90) days of the effective date of the federal regulations.

(d) If a notification is made under this subsection, the industrial user shall certify that it has a program in place to reduce the volume and toxicity of hazardous wastes generated to the degree it has determined to be economically practical.

Section 10. Variances from Categorical Pretreatment Standards and Fundamentally Different Factors. (1) Purpose and scope. The U.S. EPA may, on a case-by-case basis, adjust the limits in categorical pretreatment standards, making them either more or less stringent, as they apply to a certain industrial user within an industrial category or subcategory. This adjustment will be done only if factors fundamentally different from those considered by EPA in developing the limit at issue are indicated by data specific to that industrial user. Interested persons believing that factors relating to an industrial user are fundamentally different from the factors considered during development of a categorical pretreatment standard applicable to that user and further, that the existence of those factors justifies a different discharge limit than specified in the applicable categorical pretreatment standard, may request a fundamentally different factors variance under this section or such a variance request may be initiated by the U.S. EPA.

(2) Criteria.

(a) General criteria. A request for a variance based upon fundamentally different factors shall be approved by EPA only if:

1. There is an applicable categorical pretreatment standard which specifically controls the pollutant for which alternative limits have been requested;
2. Factors relating to the discharge controlled by the categorical pretreatment standard are fundamentally different from the factors considered by EPA in establishing the standards; and
3. The request for a variance is made in accordance with the procedural requirements in subsections (6) and (7) of this section.

(b) Criteria applicable to less stringent limits. A variance request for the establishment of limits less stringent than required by the standard shall be approved by EPA only if:

1. The alternative limit requested is no less stringent than justified by the fundamental difference;
2. The alternative limit will not result in a violation of prohibitive discharge standards prescribed by or established under Section 3 of this administrative regulation;
3. The alternative limit will not result in a nonwater quality environmental impact, including energy requirements, fundamentally more adverse than the impact considered during development of the pretreatment standards; and

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4. Compliance with the standards, either by using the technologies upon which the standards are based or by using other control alternatives, would result in either:

a. A removal cost, adjusted for inflation wholly out of proportion to the removal cost considered during development of the standards; or

b. A nonwater quality environmental impact, including energy requirements, fundamentally more adverse than the impact considered during development of the standards.

(c) Criteria applicable to more stringent limits. A variance request for the establishment of limits more stringent than required by the standards shall be approved by EPA only if:

1. The alternative limit request is no more stringent than justified by the fundamental difference; and

2. Compliance with the alternative limit would not result in either:

a. A removal cost, adjusted for inflation wholly out of proportion to the removal cost considered during development of the standards; or

b. A nonwater quality environmental impact, including energy requirements, fundamentally more adverse than the impact considered during development of the standards.

(3) Factors considered fundamentally different. Factors which may be considered fundamentally different are:

(a) The nature or quality of pollutant contained in the raw waste load of the user's process wastewater;

(b) The volume of the user's process wastewater and effluent discharged;

(c) Nonwater quality environmental impact of control and treatment of the user's raw waste load;

(d) Energy requirements of the application of control and treatment technology;

(e) Age, size, land availability, and configuration as they relate to the user's equipment or facilities; processes employed; process changes; and engineering aspects of the application of control technology; and

(f) Cost of compliance with required control technology.

(4) Factors which shall not be considered fundamentally different. A variance request or portion of such a request under this section shall not be granted on the following grounds:

(a) The feasibility of installing the required waste treatment equipment within the time the Act allows;

(b) The assertion that the standards cannot be achieved with the appropriate waste treatment facilities installed, if the assertion is not based on factors listed in subsection (3) of this section;

(c) The user's ability to pay for the required waste treatment; or

(d) The impact of a discharge on the quality of the POTW's receiving waters.

(5) Local law. Nothing in this section shall be construed to impair the right of a locality under Section 510 of the Act, 33 USC 1370 to impose more stringent limitations than required by federal law or this administrative regulation.

(6) Application deadline.

(a) Requests for a variance and supporting information shall be submitted in writing to the cabinet.

(b) To be considered, a request for a variance shall be submitted no later than 180 days after the date on which a categorical pretreatment standard is published in the Federal Register.

(c) If the user has requested a categorical determination pursuant to Section 4(1) of this administrative regulation, the user may await the results of the category determination before submitting a variance request under this section. If the user so elects, the user shall submit the variance request within thirty (30) days after a final decision has been made on the categorical determination pursuant to Section 4(1)(d) of this administrative regulation.

(7) Contents submission. Written submissions for variance request made to the cabinet shall include:

(a) The name and address of the person making the request;

(b) Identification of the interest of the requester which is affected by the categorical pretreatment standard for which the variance is requested;

(c) Identification of the POTW currently receiving the waste from the industrial user for which alternative discharge limits are requested;

(d) Identification of the categorical pretreatment standards which are applicable to the industrial user;

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(e) A list of each pollutant or pollutant parameter for which an alternative discharge limit is sought;

(f) The alternative discharge limits proposed by the requester for each pollutant or pollutant parameter identified in paragraph (e) of this subsection;

(g) A description of the industrial user's existing water pollution control facilities;

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

(i) A statement of facts clearly establishing why the variance request should be approved, including detailed support data, documentation, and evidence necessary to fully evaluate the merits of the request, e.g., technical and economic data collected by the EPA and used in developing each pollutant discharge limit in the pretreatment standard.

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

(9) Public notice. Upon receipt of a complete request, the cabinet shall provide notice of receipt, opportunity to review the submission, and opportunity to comment.

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

1. The POTW into which the industrial user requesting the variance discharges;
2. Adjoining states whose waters may be affected; and
3. Designated Section 208 regional planning agencies, federal fish, shellfish and wildlife resource agencies; the Kentucky Department of Fish and Wildlife; and to other persons or groups who have requested individual notice, including those on appropriate mailing lists.

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

(c) Following the comment period, the cabinet will make a determination on the request taking into consideration comments received. Notice of this final decision shall be provided to the requester, the industrial user for which the variance is requested if different than the requester, the POTW into which the industrial user discharges, and all persons who submitted comments on the request.

(10) Review of requests by state.

(a) If the cabinet finds that fundamentally different factors do not exist, it may deny the request and notify the requester, the industrial user if they are not the same, and the POTW of the denial.

(b) If the cabinet finds that fundamentally different factors do exist, it shall forward the request, with a recommendation that the request be approved, to the regional administrator or the regional administrator's delegate.

(11) Review of requests by EPA.

(a) If the regional administrator or the regional administrator's delegate finds that fundamentally different factors do not exist, the regional administrator or delegate shall deny the request for a variance and send a copy of that determination to the cabinet, to the POTW, and to the requester and the industrial user, if they are not the same.

(b) If the regional administrator or the regional administrator's delegate finds that fundamentally different factors do exist, and that a partial or full variance is justified, the regional administrator or delegate will approve the variance. In approving the variance, the administrator or the delegate will:

1. Prepare recommended alternative discharge limits for the industrial user either more or less stringent than those prescribed by the applicable categorical pretreatment standard to the extent warranted by the demonstrated fundamentally different factors;

2. Provide the following information in the regional administrator's written determination:

- a. The recommended alternative discharge limits for the industrial user concerned;
- b. The rationale for the adjustment of the pretreatment standard, including the reasons for recommending that the variance be granted, and an explanation of how the recommended alternative discharge limits were derived;

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c. The supporting evidence submitted to the regional administrator or the regional administrator's delegate; and

d. Other information considered by the regional administrator or the regional administrator's delegate in developing the recommended alternative discharge limits;

3. Notify the cabinet and the POTW of the regional administrator's determination; and

4. Send the information described in subparagraphs 1 and 2 of this paragraph to the requester and to the industrial user if they are not the same.

(12) Request for hearing.

(a) Within thirty (30) days following the date of receipt of the notice of the decision of the administrator's delegate on a variance request, the requester or other interested persons may submit a petition to the regional administrator for a hearing to reconsider or contest the decision. If such a request is submitted by a person other than the industrial user the person shall simultaneously serve a copy of the request on the industrial user.

(b) If the regional administrator declines to hold a hearing and the regional administrator affirms the findings of the regional administrator's delegate, the requester may submit a petition for a hearing to the Environmental Appeals Board, described in 40 CFR 1.25(e), within thirty (30) days of the regional administrator's decision.

Section 11. Confidentiality. (1) Authorities. In accordance with KRS 224.10-210 and administrative regulations promulgated pursuant thereto, information submitted to the cabinet pursuant to this administrative regulation may be claimed as confidential by the submitter.

(2) POTW. All other information submitted to the POTW shall be available to the public at least to the extent provided by KRS 61.870 to 61.882 and 61.960 to 61.975.

Section 12. Net-gross Calculation. Categorical pretreatment standards may be adjusted to reflect the presence of pollutants in the industrial user's intake water in accordance with this section.

(1) Application. Industrial users wishing to obtain credit for intake pollutants shall apply to the control authority. Upon request of the industrial user, the applicable standard shall be calculated on a net basis (i.e., adjusted to reflect credit for pollutants in the intake water) if the requirements of subsections (2) and (3) of this section are met.

(2) Criteria.

(a) The industrial user shall demonstrate that the control system it proposes or uses to meet applicable categorical pretreatment standards would, if properly installed and operated, meet the standards in the absence of pollutants in the intake waters.

(b) Credit for generic pollutants such as BOD, TSS, and oil and grease shall not be granted unless the industrial user demonstrates that the constituents of the generic measure in the user's effluent are substantially similar to the constituents of the generic measure in the intake water or unless appropriate additional limits are placed on process water pollutants either at the outfall or elsewhere.

(c) Credit shall be granted only to the extent necessary to meet the applicable categorical pretreatment standards, up to a maximum value equal to the influent value. Additional monitoring may be necessary to determine eligibility for credits and compliance with standards adjusted under this section.

(d) Credit shall be granted only if the user demonstrates that the intake water is drawn from the same body of water as that into which the POTW discharges. The control authority may waive this requirement if it finds that no environmental degradation will result.

(3) The applicable categorical pretreatment standards contained in 40 CFR Chapter I, Subchapter N specifically provide that they shall be applied on a net basis.

Section 13. Upset Provision. (1) Effect of an upset. An upset shall constitute an affirmative defense to an action brought for noncompliance with categorical pretreatment standards if the requirements of subsection (2) of this section are met.

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

(a) An upset occurred and the industrial user can identify the causes of the upset;

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(b) The facility was being operated in a prudent and workmanlike manner and was in compliance with applicable operation and maintenance procedures when the upset occurred;

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

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

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

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

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

(4) Reviewability of the cabinet's consideration of claims of upset. The cabinet shall review claims that noncompliance was caused by an upset. Determinations made in the course of the review shall not constitute a final agency action subject to KRS 224.10-420. Industrial users shall have an opportunity for a hearing on claims of upset only in an enforcement action brought for noncompliance with categorical pretreatment standards.

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

Section 14. Bypass. An industrial user shall comply with this section in addressing bypasses.

(1) Bypass not violating applicable pretreatment standards or requirements. An industrial user may allow a bypass to occur if it will not cause pretreatment standards or requirements to be violated, but only if it also is for essential maintenance to assure efficient operation. These bypasses shall not be subject to subsections (2) and (3) of this section.

(2) Notice.

(a) If an industrial user knows in advance of the need for a bypass, it shall submit prior notice to the control authority, if possible at least ten (10) days before the date of the bypass.

(b) An industrial user shall submit oral notice of an unanticipated bypass that exceeds applicable pretreatment standards to the control authority within twenty-four (24) hours from the time the industrial user becomes aware of the bypass. A written submission shall also be provided within five (5) days of the time the industrial user becomes aware of the bypass. The written submission shall contain a description of the bypass and its cause; the duration of the bypass, including exact dates and times, and, if the bypass has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the bypass. The control authority may waive the written report on a case-by-case basis if the oral report has been received within twenty-four (24) hours.

(3) Prohibition of bypass.

(a) Bypass is prohibited, and the control authority may take enforcement action against an industrial user for a bypass, unless:

1. Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;

2. There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition shall not be satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventative maintenance; and

3. The industrial user submitted notices as required under subsection (2) of this section.

(b) The control authority may approve an anticipated bypass, after considering its adverse effects, if the control authority determines that it will meet the three (3) conditions listed in paragraph (a) of this subsection.

Section 15. Modification of POTW Pretreatment Programs. (1) General. Either the cabinet or a POTW with an approved POTW pretreatment program may initiate program modifications at any

time to reflect changing conditions at the POTW. Program modification is necessary if there is a significant change in the operation of a POTW pretreatment program that differs from the information in the POTW's submission, as approved under Section 8 of this administrative regulation.

(2) Substantial modifications. Substantial modifications include:

(a) Modifications that relax POTW legal authorities as described in Section 6(4)(a) of this administrative regulation, except for modifications that directly reflect a revision to this administrative regulation or to 40 CFR Chapter I, Subchapter N, and are reported pursuant to subsection (4) of this section;

(b) Modifications that relax local limits, except for the modifications to local limits for pH and reallocations of the maximum allowable industrial loading of a pollutant that do not increase the total industrial loadings for the pollutant, which are reported pursuant to subsection (4) of this section. Maximum allowable industrial loading means the total mass of a pollutant that all industrial users of a POTW or a subgroup of industrial users identified by the POTW may discharge pursuant to limits developed under Section 3(3) of this administrative regulation;

(c) Changes to the POTW's control mechanism, as described in Section 6(4)(a)3 of this administrative regulation;

(d) A decrease in the frequency of self-monitoring or reporting required of industrial users;

(e) A decrease in the frequency of industrial user inspections or sampling by the POTW;

(f) Changes to the POTW's confidentiality procedures; or

(g) Other modifications designated as substantial modifications by the cabinet on the basis that the modification could have a significant impact on the operation of the POTW's pretreatment program; shall result in an increase in pollutant loadings at the POTW; or shall result in less stringent requirements being imposed on industrial users of the POTW.

(3) Approval procedures for substantial modifications.

(a) The POTW shall submit to the cabinet a statement of the basis for the desired program modification, a modified program description pursuant to Section 7(2) of this administrative regulation, or other documents the cabinet determines to be necessary under the circumstances.

(b) The cabinet shall approve or disapprove the modification based on the requirements of Section 6(4) of this administrative regulation and use the procedures in Section 8(2) through (6) of this administrative regulation, except as provided in paragraphs (c) and (d) of this subsection of this section. The modification shall become effective upon approval by the cabinet.

(c) The cabinet shall not be required to publish a notice of decision under Section 8(5) of this administrative regulation if:

1. The notice of request for approval under Section 8(2)(a) of this administrative regulation states that the request shall be approved if no comments are received by a date specified in the notice;

2. No substantive comments are received; and

3. The request is approved without change.

(d) Notices required by Section 8(2) of this administrative regulation may be performed by the POTW if the cabinet finds that the notice otherwise satisfies the requirements of Section 8 of this administrative regulation.

(4) Approval procedures for nonsubstantial modifications.

(a) The POTW shall notify the cabinet of nonsubstantial modifications at least forty-five (45) days prior to implementation, in a statement similar to that provided for in subsection (3)(a) of this section.

(b) Within forty-five (45) days after the submission of the POTW's statement, the cabinet shall notify the POTW of its decision to approve or deny the nonsubstantial modification.

(c) If the cabinet does not notify the POTW within forty-five (45) days of its decision to approve or deny the modification, or to treat the modification as substantial under subsection (2)(g) of this section, the POTW may implement the modification.

(5) Incorporation into the permit. All modifications shall be incorporated into the POTW's KPDES permit upon approval. The permit shall be modified to incorporate the approved modification in accordance with 401 KAR 5:070, Section 6(3)(g).

KPDES pretreatment requirements – 5:057

Section 16. Pretreatment Program Reinvention Pilot Projects Under Project XL. The cabinet may allow any POTW that has a final "Project XL" agreement to implement a pretreatment program that includes legal authorities and requirements that are different than the administrative requirements otherwise applicable under this administrative regulation. The POTW shall submit the alternative requirements as a substantial program modification in accordance with the procedures outlined in Section 15 of this administrative regulation. The approved modified program shall be incorporated as an enforceable part of the POTW's KPDES permit. The cabinet shall include a reopener clause in the POTW's KPDES permit that directs the POTW to discontinue implementing the approved alternative requirements and resume implementation of its previously approved pretreatment program if the cabinet determines that the primary objectives of the local pilot pretreatment program are not being met or the "Project XL" agreement expires or is otherwise terminated.

Section 17. Federal Regulations Adopted Without Change. The cabinet shall be governed by the following federal regulations for the indicated subject matter; the federal regulations are hereby adopted without change. The federal regulations are available for inspection and copying, subject to copyright laws, during normal business hours of 8 a.m. to 4:30 p.m., eastern time, excluding state holidays, at the Kentucky Division of Water, 14 Reilly Road, Frankfort, Kentucky, or may be purchased from the U.S. Superintendent of Documents, Washington, D.C., except as noted:

- (1) 40 CFR 1.25(e), "Environmental Appeals Review Board", as in effect on July 1, 2001, for the appeals of the U.S. EPA's granting of removal credits;
- (2) 40 CFR Part 25, "Public Participation in Programs Under the Resource Conservation and Recovery Act, the Safe Drinking Water Act, and the Clean Water Act", as in effect on July 1, 2001, for public participation for enforcement of pretreatment standards;
- (3) 40 CFR Part 130, "Water Quality Planning and Management," as in effect on July 1, 2001 for regional facility plans;
- (4) 40 CFR Part 131, "Water Quality Standards, as in effect on July 1, 2001 for water quality management plans;
- (5) 40 CFR Part 136, "Test Procedures for the Analysis of Pollutants", as in effect on July 1, 2001, for sampling and analysis techniques;
- (6) 40 CFR Part 258, "Criteria for Municipal Solid Waste Landfills", as in effect on July 1, 2001 for sewage sludge standards;
- (7) 40 CFR Part 261, "Identification and Listing of Hazardous Waste", as in effect on July 1, 2001, for hazardous waste determinations;
- (8) 40 CFR Chapter I, Subchapter N, Parts 401 et seq., "Federal Effluent Limitations and Standards and New Source Performance Standards", as in effect on July 1, 2001;
- (9) 40 CFR Part 403, Appendix A, "Program Guidance Memorandum" as in effect on July 1, 2001, for claiming consistent removal for correcting conditions resulting in untreated discharges by a POTW;
- (10) 40 CFR Part 403, Appendix D, "Selected Industrial Subcategories Considered Dilute for Purposes of the Combined Waste stream Formula" as in effect on July 1, 2001, for the list of process waste streams that were or could have been entirely exempted by the U.S. EPA; and
- (11) 40 CFR Part 503, "Standards for the Use or Disposal of Sewage Sludge", as in effect on August 4, 1999, for the eligibility of specific pollutants for removal credits. (20 Ky.R. 3358; Am. 21 Ky.R. 378; eff. 8-24-94; 29 Ky.R. 1035; 1549; eff. 12-18-02.)

This informational copy is provided at no cost by Kentucky Rural Water Association for educational purposes. For an official certified copy of a regulation, contact the Legislative Research Commission Regulations Compiler's office at (502) 564-8100.

401 KAR 5:060. KPDES application requirements.

RELATES TO: KRS 224.01-010, 224.01-070, 224.01-400, 224.70-100, 224.70-120, 224.99-010, 40 C.F.R. 35.2005(b)(20), 110.6, 117.21, 122, 123.35, 136, 261, 262.34, 302.6, 355, Chapter I, Subchapter N, Parts 401 et seq., 33 U.S.C. 1251 et seq., 1314, 1315(b), 1324(a), 1329(a), 1344, 1401 et seq., 42 U.S.C. 300h et seq., 6901 et seq., 6924(u), 6928(h), 7412, 7470-7492, 7501-7515, 11023

STATUTORY AUTHORITY: KRS 224.10-100, 224.16-050, 224.70-110, 40 C.F.R. 35.2005(b)(20), 110.6, 117.21, 122, 123.35, 136, 261, 262.34, 302.6, 355, Chapter I, Subchapter N, Parts 401 et seq., 33 U.S.C. 1251 et seq., 1314, 1315(b), 1324(a), 1329(a), 1344, 1401 et seq., 42 U.S.C. 300h et seq., 6901 et seq., 6924(u), 6928(h) ,7412, 7470-7492, 7501-7515, 11023

NECESSITY, FUNCTION, AND CONFORMITY: KRS 224.10-100 authorizes the Natural Resources and Environmental Protection Cabinet to issue, continue in effect, revoke, modify, suspend or deny under such conditions as the cabinet may prescribe, permits to discharge into any waters of the Commonwealth. KRS 224.16-050 further empowers the cabinet to issue federal permits pursuant to 33 USC Section 1342(b) of the Federal Water Pollution Control Act, 33 USC Section 1251 et seq. subject to the conditions imposed in 33 USC Sections 1342(b) and (d) and that any exemptions granted shall be pursuant to the Federal Water Pollution Control Act. This administrative regulation sets forth the application requirements for all KPDES permits and contains additional requirements for general and specific categories of dischargers.

Section 1. Applying for a KPDES Permit. (1) Application requirements. Any person who is required to have a permit, including new applicants and permittees with expiring permits, shall complete, sign, and submit an application to the cabinet as described in this administrative regulation and 401 KAR 5:055. On the date of KPDES program approval by EPA, all persons permitted or authorized under NPDES shall be deemed to hold a KPDES permit, including those expired permits which EPA has continued in effect according to 40 CFR Section 122.6, continuation of expiring permits. For the purpose of this section, the cabinet shall accept the information required under subsection (7) of this section, for existing facilities, which has been submitted to EPA as part of a NPDES renewal. The applicant may be requested to update any information which is not current.

(2) Duty to apply.

(a) Any person who discharges or proposes to discharge pollutants and who does not have an effective permit, except persons covered by general permits under 401 KAR 5:055, Section 5, excluded under 401 KAR 5:055, Section 1(2), or a user of a privately owned treatment works unless the cabinet requires otherwise under 401 KAR 5:065, Section 2(12), shall submit a complete application, which shall include a BMP program if necessary under 401 KAR 5:065, Section 2(10) to the cabinet in accordance with this section.

(b) The appropriate application forms for the various discharger types are given below. The forms are incorporated by reference in Section 14 of this administrative regulation.

DISCHARGE TYPE	APPLICATION FORMS
POTWs	1 and A
Concentrated animal feeding operations and aquatic animal production facilities	1 and B
Manufacturing, commercial, mining and silvicultural discharges with process wastewater	1 and C

KPDES application requirements – 5:060

Manufacturing, commercial, mining and silvicultural discharges with nonprocess wastewater only	1 and Short C
Industrial storm water point source discharges	1 and F

(3) If a facility or activity is owned by one (1) person but is operated by another person, the operator shall obtain a permit.

(4) Time to apply. Any person proposing a new discharge shall submit an application at least 180 days before the date on which the discharge is to commence, unless permission for a later date has been granted by the cabinet. Facilities proposing a new discharge of storm water associated with industrial activity shall submit an application 180 days before that facility commences industrial activity which may result in a discharge of storm water associated with that industrial activity. Facilities with storm water runoff from construction activities as defined in 401 KAR 5:002, Section 1, shall submit applications at least ninety (90) days before the date on which construction is to commence. Different submittal dates may be required under the terms of applicable general permits. Persons proposing a new discharge are encouraged to submit their applications well in advance of the ninety (90) or 180 day requirements to avoid delay. See also Section 12(2)(a)1g and (2)(a)2 of this administrative regulation.

(5) Duty to reapply.

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

(b) All other permittees with currently effective permits shall submit a new application 180 days before the existing permit expires, except that the cabinet may grant permission to submit an application later than the deadline for submission otherwise applicable, but the new deadline shall not be later than the permit expiration date.

(c) Continuation of expiring permits.

1. The conditions of an expired permit shall continue in force until the effective date of a new permit if:

a. The permittee has submitted a timely application under subsection (2) of this section which is a complete application for a new permit; and

b. The cabinet, through no fault of the permittee, does not issue a new permit with an effective date under 401 KAR 5:075, Section 11, on or before the expiration date of the previous permit.

2. Effect. Permits continued under this paragraph shall remain fully effective and enforceable until the effective date of a new permit.

3. Enforcement. If the permittee is not in compliance with the conditions of the expiring or expired permit the cabinet may do any of the following:

a. Initiate enforcement action based upon the permit which has been continued;

b. Issue a notice of intent to deny the new permit under 401 KAR 5:075, Section 3(2);

c. Issue a new permit under 401 KAR 5:075 with appropriate conditions; or

d. Take other actions authorized by KRS Chapter 224 and 401 KAR Chapter 5.

(6) Completeness. The cabinet shall not issue a permit before receiving a complete application for a permit except for KPDES general permits. An application for a permit shall be complete when the cabinet receives an application form and any supplemental information which are completed to its satisfaction. The completeness of any application for a permit shall be judged independently of the status of any other permit application or permit for the same facility or activity.

(7) Information requirements. All applicants for KPDES permits shall provide the following information to the cabinet, using the application form provided by the cabinet. Additional information required of applicants is set forth in Sections 2 through 5 of this administrative regulation.

(a) The activities conducted by the applicant which require it to obtain a KPDES permit.

(b) Name, mailing address, and location of the facility for which the application is submitted.

(c) Up to four (4) SIC codes which best reflect the principal products or services provided by the facility.

(d) The owner's or operator's name, address, telephone number, ownership status, and status as federal, state, private, public, or other entity.

(e) A listing of all existing environmental permits.

(f) A topographic map, or other map if a topographic map is unavailable, extending one (1) mile beyond the property boundaries of the source, depicting the facility and each of its intake and discharge structures; each of its hazardous waste treatment, storage, or disposal facilities; each well where fluids from the facility are injected underground; and those wells, springs, other surface water bodies, and drinking water wells listed in public records or otherwise known to the applicant in the map area.

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

(8) KPDES permit fees. As provided for in KRS 224.70-120, KPDES applications shall include a filing fee of twenty (20) percent of the total fee applicable to the following categories:

(a) Major industry;

(b) Minor industry;

(c) Nonprocess industry;

(d) Large, nonpublicly-owned treatment works;

(e) Intermediate, nonpublicly-owned treatment works;

(f) Small, nonpublicly-owned treatment works;

(g) Agriculture; and

(h) Surface mining operation.

Section 2. Application Requirements for Manufacturing, Commercial, Mining, and Silvicultural Dischargers. Manufacturing, commercial, mining, and silvicultural dischargers applying for KPDES permits, except for those facilities subject to the requirements of Section 3 of this administrative regulation, shall provide the following information to the cabinet, using the appropriate application forms as specified in Section 1 of this administrative regulation.

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

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

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

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

(5) Maximum production. If an effluent guideline promulgated under Section 304 of CWA, 33 USC 1314 applies to the applicant and is expressed in terms of production or other measure of operation, a reasonable measure of the applicant's actual production reported in the units used in the applicable effluent guideline. The reported measure shall reflect the actual production of the facility as required by 401 KAR 5:065, Section 3(2).

(6) Improvements. If the applicant is subject to any present requirements or compliance schedules for construction, upgrading or operation of waste treatment equipment, an identification

of the abatement requirement, a description of the abatement project, and a listing of the required and projected final compliance dates.

(7) Effluent characteristics. Information on the discharge of pollutants specified in this subsection, except information on storm water discharges which is to be provided as specified in Section 12 of this administrative regulation.

(a) If quantitative data for a pollutant are required, the applicant shall collect a sample of effluent and analyze it for the pollutant in accordance with analytical methods approved under 40 CFR Part 136. If no analytical method is approved the applicant may use any suitable method but shall provide a description of the method. If an applicant has two (2) or more outfalls with substantially identical effluents, the cabinet may allow the applicant to test only one (1) outfall and report that the quantitative data also apply to the substantially identical outfalls. The requirements in paragraphs (f) and (g) of this subsection that an applicant shall provide quantitative data for certain pollutants known to be present shall not apply to pollutants present in a discharge solely as the result of their presence in intake water. An applicant shall report these pollutants as present. Grab samples shall be used for pH, temperature, cyanide, total phenols, residual chlorine, oil and grease, fecal coliform and fecal streptococcus. For all other pollutants, twenty-four (24) hour composite samples shall be used. A minimum of one (1) grab sample may be taken for effluents from holding ponds or other impoundments with a retention period greater than twenty-four (24) hours. In addition, for discharges other than storm water discharges, the cabinet may waive composite sampling for any outfall for which the applicant demonstrates that the use of an automatic sampler is not feasible and that the minimum of four (4) grab samples shall be a representative sample of the effluent being discharged. For storm water discharges, all samples shall be collected from the discharge resulting from a storm event that is greater than one-tenth (0.1) inch and at least seventy-two (72) hours from the previously measurable (greater than one-tenth (0.1) inch rainfall) storm event. If feasible, the variance in the duration of the event and the total rainfall of the event should not exceed fifty (50) percent from the average or median rainfall event in that area. For all applicants, a flow-weighted composite shall be taken for either the entire discharge or for the first three (3) hours of the discharge. The flow-weighted composite sample for a storm water discharge may be taken with a continuous sampler or as a combination of a minimum of three (3) sample aliquots taken in each hour of discharge for the entire discharge or for the first three (3) hours of the discharge, with each aliquot being separated by a minimum period of fifteen (15) minutes. Applicants submitting permit applications for storm water discharges under Section 12(3) of this administrative regulation may collect flow-weighted composite samples using different protocols with respect to the time duration between the collection of sample aliquots, subject to the approval of the cabinet. A minimum of one (1) grab sample may be taken for storm water discharges from holding ponds or other impoundments with a retention period greater than twenty-four (24) hours. For a flow-weighted composite sample, only one (1) analysis of the composite of aliquots is required. For storm water discharge samples taken from discharges associated with industrial activities, quantitative data shall be reported for the grab sample taken during the first thirty (30) minutes, or as soon thereafter as practicable, of the discharge for all pollutants specified in Section 12(2)(a) of this administrative regulation. For all storm water permit applicants taking flow-weighted composites, quantitative data shall be reported for all pollutants specified in Section 12 of this administrative regulation except pH, temperature, cyanide, total phenols, residual chlorine, oil and grease, fecal coliform, and fecal streptococcus. The cabinet may allow or establish appropriate site-specific sampling procedures or requirements, including sampling locations, the season in which the sampling takes place, the minimum duration between the previous measurable storm event and the storm event sampled, the minimum or maximum level of precipitation required for an appropriate storm event, the form of precipitation sampled (snowmelt or rainfall), protocols for collecting samples under 40 CFR Part 136, and additional time for submitting data on a case-by-case basis. An applicant knows or has reason to know that a pollutant is present in an effluent based on an evaluation of the expected use, production, or storage of the pollutant, or on any previous analyses for the pollutant. For example, any pesticide manufactured by a facility may be expected to be present in contaminated storm water runoff from the facility.

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

Biochemical oxygen demand (BOD)

Chemical oxygen demand

Total organic carbon
Total suspended solids
Ammonia, as N
Temperature both winter and summer
pH

2. The cabinet may waive the reporting requirements for individual point sources or for a particular industry category for one (1) or more of the pollutants listed in subparagraph 1 of this paragraph if the applicant has demonstrated that a waiver is appropriate because information adequate to support issuance of a permit can be obtained with less stringent requirements.

(c) Each applicant with processes in one (1) or more of the following primary industry categories contributing to a discharge shall report quantitative data for the following pollutants in each outfall containing process wastewater:

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

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

(e) Analytical results for the pollutants listed in Section 8(3) of this administrative regulation (the toxic metals, cyanide, and total phenols) shall be provided.

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(f)1. Each applicant shall indicate whether it knows or has reason to know that any of the pollutants in Section 8(4) of this administrative regulation (certain conventional and nonconventional pollutants) is discharged from each outfall. If an applicable effluent limitations guideline either directly limits the pollutant or, by its express terms, indirectly limits the pollutant through limitations on an indicator, the applicant shall report quantitative data. For every pollutant discharged which is not so limited in an effluent limitations guideline, the applicant shall either report quantitative data or briefly describe the reasons the pollutant is expected to be discharged.

2. Each applicant shall indicate whether it knows or has reason to know that any of the pollutants listed in Section 8(2) or (3) of this administrative regulation (the toxic pollutants and total phenols) for which quantitative data are not otherwise required under paragraph (b) of this subsection, is discharged from each outfall. For every pollutant expected to be discharged in concentrations of ten (10) ppb or greater the applicant shall report quantitative data. For acrolein, acrylonitrile, 2,4 dinitrophenol, and 2-methyl-4,6 dinitrophenol, if any of these four (4) pollutants are expected to be discharged in concentrations of 100 ppb or greater the applicant shall report quantitative data. For every pollutant expected to be discharged in concentrations less than ten (10) ppb, or in the case of acrolein, acrylonitrile, 2,4 dinitrophenol, and 2-methyl-4,6 dinitrophenol, in concentrations less than 100 ppb, the applicant shall either submit quantitative data or briefly describe the reasons the pollutant is expected to be discharged. An applicant qualifying as a small business under subsection (8) of this section shall not be required to analyze for pollutants listed in Section 8(2) of this administrative regulation (the organic toxic pollutants).

(g) Each applicant shall indicate whether it knows or has reason to know that any of the pollutants in Section 8(5) of this administrative regulation (certain hazardous substances and asbestos) are discharged from each outfall. For every pollutant expected to be discharged, the applicant shall briefly describe the reasons the pollutant is expected to be discharged, and report any quantitative data it has for any pollutant.

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

1. Uses or manufactures 2,4,5-trichlorophenoxy acetic acid (2,4,5,-T); 2-(2,4,5-trichlorophenoxy) propanoic acid (Silvex, 2,4,5,-TP); 2-(2,4,5-trichlorophenoxy) ethyl, 2,2-dichloropropionate (Erbon); O,O-dimethyl O-(2,4,5-trichlorophenyl) phosphorothioate (Ronnel); 2,4,5-trichlorophenol (TCP); or hexachlorophene (HCP); or

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

(8) Small business exemption. An applicant which qualifies as a small business under one (1) of the following criteria shall be exempt from the requirements in subsection (7)(b)1 or (c)1 of this section to submit quantitative data for the pollutants listed in Section 8(2) of this administrative regulation (the organic toxic pollutants):

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

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

(9) Used or manufactured toxics. A listing of any toxic pollutant which the applicant currently uses or manufactures as an intermediate or final product or byproduct shall be provided. The cabinet may waive or modify this requirement for any applicant if the applicant demonstrates that it would be unduly burdensome to identify each toxic pollutant and the cabinet has adequate information to issue the permit.

(10) Biological toxicity tests. An identification of any biological toxicity tests which the applicant knows or has reason to know have been made within the last three (3) years on any of the applicant's discharges or on a receiving water in relation to a discharge shall be provided.

(11) Contract analyses. If a contract laboratory or consulting firm performed any of the analyses required by subsection (7) of this section, the identity of each laboratory or firm and the analyses performed shall be provided.

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

Section 3. Application Requirements for Manufacturing, Commercial, Mining and Silvicultural Facilities which Discharge Only Nonprocess Wastewater. Except for storm water discharges, all manufacturing, commercial, mining and silvicultural dischargers applying for KPDES permits which discharge only nonprocess wastewater not regulated by an effluent limitations guideline or new source performance standard shall provide the following information to the cabinet, using application forms provided by the cabinet:

(1) Outfall location. Outfall number, latitude and longitude to the nearest fifteen (15) seconds, and the name of the receiving water.

(2) Discharge date for new dischargers. Date of expected commencement of discharge.

(3) Type of waste. An identification of the general type of waste discharged, or expected to be discharged upon commencement of operations, including sanitary wastes, restaurant or cafeteria wastes, or noncontact cooling water. An identification of cooling water additives, if any, that are used or expected to be used upon commencement of operations, along with their composition if existing composition is available.

(4) Effluent characteristics.

(a) The applicant shall provide quantitative data for the pollutants or parameters listed in subparagraphs 1 through 11 of this paragraph, unless testing is waived by the cabinet. The quantitative data may be data collected over the past 365 days, if they remain representative of current operations, and shall include maximum daily value, average daily value, and number of measurements taken. The applicant shall collect and analyze samples in accordance with 40 CFR Part 136. Grab samples shall be used for pH, temperature, oil and grease, total residual chlorine, and fecal coliform. For all other pollutants, twenty-four (24) hour composite samples shall be used. New dischargers shall include estimates for the pollutants or parameters listed in subparagraphs 1 through 11 of this paragraph instead of actual sampling data, along with the source of each estimate. All levels shall be reported or estimated as concentration and as total mass, except for flow, pH, and temperature.

1. Biochemical oxygen demand (BOD).
2. Total suspended solids (TSS).
3. Fecal coliform, if known to be present or if sanitary waste is or will be discharged.
4. Total residual chlorine, if chlorine is used.
5. Oil and grease.
6. Chemical oxygen demand (COD), if noncontact cooling water is or will be discharged.
7. Total organic carbon (TOC), if noncontact cooling water is or will be discharged.
8. Ammonia, as N.
9. Discharge Flow.
10. pH.
11. Temperature, winter and summer.

(b) The cabinet may waive the testing and reporting requirements for any of the pollutants or flow listed in paragraph (a) of this subsection if the applicant submits a request for a waiver before or with the application which demonstrates that information adequate to support issuance of a permit can be obtained through less stringent requirements.

(c) The requirements of paragraph (a) of this subsection that an applicant shall provide quantitative data or estimates of certain pollutants shall not apply to pollutants present in a discharge solely as a result of their presence in intake water. An applicant shall report these pollutants as present. Net credit may be provided for the presence of pollutants in intake water if the requirements of 401 KAR 5:065, Section 3(7) are met.

(5) Flow. A description of the frequency of flow and duration of any seasonal or intermittent discharge, except for storm water runoff, leaks, or spills.

(6) Treatment system. A brief description of any system used or to be used.

(7) Optional information. Any additional information the applicant wishes to be considered, such as influent data for the purpose of obtaining net credits pursuant to 401 KAR 5:065, Section 3(7).

(8) Certification. Signature of certifying official under Section 9 of this administrative regulation.

Section 4. Application Requirements for Concentrated Animal Feeding Operations and Aquatic Animal Production Facilities. Concentrated animal feeding operations and concentrated aquatic

animal production facilities shall provide the following information to the cabinet, using the applicable application form provided by the cabinet:

- (1) For concentrated animal feeding operations:
 - (a) The type and number of animals in open confinement and housed under roof.
 - (b) The number of acres used for confinement feeding.
 - (c) The design basis for the runoff diversion and control system, if one (1) exists, including the number of acres of contributing drainage, the storage capacity, and the design safety factor.
- (2) For concentrated aquatic animal production facilities:
 - (a) The maximum daily and average monthly flow from each outfall.
 - (b) The number of ponds, raceways, and similar structures.
 - (c) The name of the receiving water and the source of intake water.
 - (d) For each species of aquatic animals, the total yearly and maximum harvestable weight.
 - (e) The calendar month of maximum feeding and the total mass of food fed during that month.

Section 5. Application Requirements for **New and Existing POTWs**. All POTWs shall provide, at a minimum, the information in this section to the cabinet, using KPDES Form A provided by the cabinet. Permit applicants shall submit all information available at the time of permit application. The information may be provided by referencing information previously submitted to the cabinet. The cabinet may waive any requirement of this paragraph if it has access to substantially identical information. The cabinet may also waive any requirement of this paragraph that is not of material concern for a specific permit, if approved by the regional administrator. The waiver request to the regional administrator shall include the cabinet's justification for the waiver. A regional administrator's disapproval of the cabinet's proposed waiver shall not constitute final agency action, except it shall provide notice to the cabinet and permit applicant(s) that EPA may object to any cabinet-issued permit issued in the absence of the required information.

- (1) **Basic application information**. All applicants shall provide the following information:
 - (a) **Facility information**. Name, mailing address, and location of the facility for which the application is submitted;
 - (b) **Applicant information**. Name, mailing address, and telephone number of the applicant, and an indication as to whether the applicant is the facility's owner, operator, or both;
 - (c) **Existing environmental permits**. Identification of all environmental permits or construction approvals received or applied for (including dates) under any of the following programs:
 1. Hazardous Waste Management program under the Resource Conservation and Recovery Act (RCRA), Subpart C, 42 USC 6901 et seq.;
 2. Underground Injection Control program under the Safe Drinking Water Act (SDWA), 42 USC 300(h) et seq.;
 3. KPDES program pursuant to KRS Chapter 224;
 4. Prevention of Significant Deterioration (PSD) program under the Clean Air Act, 42. USC 7470 to 7492;
 5. Nonattainment program under the Clean Air Act, 42 USC 7501 to 7515;
 6. National Emission Standards for Hazardous Air Pollutants (NESHAPS) preconstruction approval under the Clean Air Act, 42. USC 7412;
 7. Ocean dumping permits under the Marine Protection Research and Sanctuaries Act, 33 USC 1401 et seq.;
 8. Dredge or fill permits under section 404 of the CWA, 33 USC 1344; and
 9. Other relevant environmental permits;
 - (d) **Population**. The name and population of each municipal entity served by the facility, including unincorporated connector districts. Whether each municipal entity owns or maintains the collection system and whether the collection system is separate sanitary or combined storm and sanitary, if known, shall be indicated;
 - (e) **Flow rate**. The **facility's design flow rate** (the wastewater flow rate the plant was built to handle), annual average daily flow rate, and maximum daily flow rate for each of the previous three (3) years;
 - (f) **Collection system**. Identification of **types of collection systems** used by the treatment works (i.e., separate sanitary sewers or combined storm and sanitary sewers) and an estimate of the percent of sewer line that each type comprises; and

(g) **Outfalls and other discharge or disposal methods.** The following information for outfalls to waters of the Commonwealth and other discharge or disposal methods:

1. For effluent discharges to waters of the Commonwealth, the total number and types of outfalls (e.g., treated effluent, combined sewer overflows, bypasses, constructed emergency overflows);

2. For wastewater discharged to surface impoundments:

- a. The location of each surface impoundment;
- b. The average daily volume discharged to each surface impoundment; and
- c. Whether the discharge is continuous or intermittent;

3. For wastewater applied to the land:

- a. The location of each land application site;
- b. The size of each land application site, in acres;
- c. The average daily volume applied to each land application site, in gallons per day; and
- d. Whether land application is continuous or intermittent;

4. For effluent sent to another facility for treatment prior to discharge:

- a. The means by which the effluent is transported;
- b. The name, mailing address, contact person, and phone number of the organization transporting the discharge, if the transport is provided by a party other than the applicant;
- c. The name, mailing address, contact person, phone number, and KPDES permit number, if any, of the receiving facility; and
- d. The average daily flow rate from this facility into the receiving facility, in millions of gallons per day; and

5. For wastewater disposed of in a manner not included in subparagraphs 1 through 4 of this paragraph (e.g., underground percolation, underground injection):

a. A description of the disposal method, including the location and size of each disposal site, if applicable;

b. The annual average daily volume disposed of by this method, in gallons per day; and

c. Whether disposal through this method is continuous or intermittent;

(2) Additional Information. All **applicants with a design flow greater than or equal to one-tenth (0.1) mgd** shall provide the following information:

(a) **Inflow and infiltration.** The current average daily volume of **inflow and infiltration**, in gallons per day, and steps the facility is taking to minimize inflow and infiltration;

(b) **Topographic map.** A topographic map, or other **map** if a topographic map is unavailable, **extending at least one (1) mile beyond property boundaries of the treatment plant**, including all unit processes and showing:

- 1. Treatment plant area and unit processes;
- 2. The major pipes or other structures through which wastewater enters the treatment plant and the pipes or other structures through which treated wastewater is discharged from the treatment plant. Outfalls from bypass piping, if applicable, shall be included;
- 3. Each well where fluids from the treatment plant are injected underground;
- 4. Wells, springs, and other surface water bodies listed in public records or otherwise known to the applicant within one-quarter (1/4) mile of the property boundaries of the treatment plant;
- 5. Sewage sludge management facilities including on-site treatment, storage, and disposal sites; and
- 6. Location at which waste classified as hazardous under RCRA enters the treatment plant by truck, rail, or dedicated pipe;

(c) **Process flow diagram or schematic.**

1. A diagram showing the processes of the treatment plant, including all bypass piping and all backup power sources or redundancy in the system. This shall include a water balance showing all treatment units, including disinfection, and showing daily average flow rates at influent and discharge points, and approximate daily flow rates between treatment units; and

2. A narrative description of the diagram; and

(d) **Scheduled improvements**, schedules of implementation. The following information regarding scheduled improvements:

- 1. The outfall number of each outfall affected;
- 2. A narrative description of each required improvement;

3. Scheduled or actual dates of completion for the following:
 - a. Commencement of construction;
 - b. Completion of construction;
 - c. Commencement of discharge; and
 - d. Attainment of operational level;
4. A description of permits and clearances concerning other federal and state requirements;
- (3) Information on effluent discharges. Each applicant shall provide** the following information for each outfall, including bypass points, through which effluent is discharged, as applicable:
 - (a) **Description of outfall.** The following information about each outfall:
 1. Outfall number;
 2. State, county, and city or town in which outfall is located;
 3. Latitude and longitude, to the nearest second;
 4. Distance from shore and depth below surface;
 5. Daily flow rate, in million gallons per day;
 6. The following information for each outfall with a seasonal or periodic discharge:
 - a. Number of times per year the discharge occurs;
 - b. Duration of each discharge;
 - c. Flow of each discharge;
 - d. Months in which discharge occurs; and
 7. Whether the outfall is equipped with a diffuser and the type (e.g., high-rate) of diffuser used;
 - (b) **Description of receiving waters.** The following information, if known, for each outfall through which effluent is discharged to waters of the Commonwealth:
 1. Name of receiving water;
 2. Name of watershed or river or stream system and the United States Soil Conservation Service fourteen (14) digit watershed code;
 3. Name of the State Management River Basin and United States Geological Survey eight (8) digit hydrologic cataloging unit code; and
 4. Critical flow of receiving stream and total hardness of receiving stream at critical low flow (if applicable);
 - (c) **Description of treatment.** The following information describing the treatment provided for discharges from each outfall to waters of the Commonwealth:
 1. The highest level of treatment (e.g., primary, equivalent to secondary, secondary, advanced, other) that is provided for the discharge for each outfall and:
 - a. Design biochemical oxygen demand (BOD5 or CBOD5) removal percent;
 - b. Design suspended solids (SS) removal percent; and, if applicable,
 - c. Design phosphorus (P) removal percent;
 - d. Design nitrogen (N) removal percent; and
 - e. Any other removals that an advanced treatment system is designed to achieve.
 2. A description of the type of disinfection used, and whether the treatment plant dechlorinates if disinfection is accomplished through chlorination;
- (4) Effluent monitoring for specific parameters.**
 - (a) As provided in paragraphs (b) through (j) of this subsection, all applicants shall submit to the cabinet **effluent monitoring information** for samples taken from each outfall through which effluent is discharged to waters of the Commonwealth, except for CSOs. The cabinet may allow applicants to submit sampling data for only one (1) outfall on a case-by-case basis, if the applicant has two or more outfalls with substantially identical effluent. The cabinet may also allow applicants to composite samples from one (1) or more outfalls that discharge into the same mixing zone;
 - (b) **All applicants shall sample and analyze for the pollutants listed in Table VI** in Section 8(6) of this administrative regulation;
 - (c) All applicants with a design flow greater than or equal to **one-tenth (0.1) of one (1) mgd** shall **sample and analyze for the pollutants** listed in **Table VII** in Section 8(7) of this administrative regulation. Facilities that do not use chlorine for disinfection, do not use chlorine elsewhere in the treatment process, and have no reasonable potential to discharge chlorine in their effluent may delete chlorine from Table VII;

(d) The following applicants shall sample and analyze for the pollutants listed in Table VIII in Section 8(8) of this administrative regulation, and for any other pollutants for which the cabinet or EPA have established water quality standards applicable to the receiving waters:

1. All POTWs with a design flow rate equal to or greater than 1,000,000 gallons per day;
2. All POTWs with approved pretreatment programs or POTWs required to develop a pretreatment program;
3. Other POTWs, as required by the cabinet;

(e) The cabinet may require sampling for additional pollutants, as appropriate, on a case-by-case basis;

(f) Applicants shall provide data from a minimum of three (3) samples taken within four and one-half (4 1/2) years prior to the date of the permit application. Samples shall be representative of the seasonal variation in the discharge from each outfall. Existing data may be used, if available, in lieu of sampling done solely for the purpose of this application. The cabinet shall require additional samples, as appropriate, on a case-by-case basis;

(g) All existing data for pollutants specified in paragraphs (b) through (e) of this subsection that is collected within four and one-half (4 1/2) years of the application shall be included in the pollutant data summary submitted by the applicant. If the applicant samples for a specific pollutant on a monthly or more frequent basis, it shall only be necessary to summarize all data collected within one (1) year of the application for the pollutant;

(h) Applicants shall collect samples of effluent and analyze the samples for pollutants in accordance with analytical methods approved under 40 CFR Part 136 unless an alternative is specified in the existing KPDES permit. Grab samples shall be used for pH, temperature, cyanide, total phenols, residual chlorine, oil and grease, and fecal coliform. For all other pollutants, twenty-four (24) hour composite samples shall be used. For a composite sample, only one (1) analysis of the composite of aliquots shall be required;

(i) The effluent monitoring data provided shall include at least the following information for each parameter:

1. Maximum daily discharge, expressed as concentration or mass, based upon actual sample values;
2. Average daily discharge for all samples, expressed as concentration or mass, and the number of samples used to obtain this value;
3. The analytical method used; and
4. The threshold level (i.e., method detection limit, minimum level, or other designated method endpoints) for the analytical method used.

(j) Unless otherwise required by the cabinet, metals shall be reported as total recoverable;

(5) Effluent monitoring for whole effluent toxicity.

(a) All applicants shall provide an identification of any whole effluent toxicity tests conducted during the four and one-half (4 1/2) years prior to the date of the application on any of the applicant's discharges or on any receiving water near the discharge;

(b) As provided in paragraphs (c) through (i) of this subsection, the following applicants shall submit to the cabinet the results of valid whole effluent toxicity tests for acute or chronic toxicity for samples taken from each outfall through which effluent is discharged to surface waters, except for combined sewer overflows:

1. All POTWs with design flow rates greater than or equal to 1,000,000 gallons per day;
 2. All POTWs with approved pretreatment programs or POTWs required to develop a pretreatment program;
 3. Other POTWs, as required by the cabinet, based on consideration of the following factors:
 - a. The variability of the pollutants or pollutant parameters in the POTW effluent based on chemical-specific information, the type of treatment plant, and types of industrial contributors;
 - b. The ratio of effluent flow to receiving stream flow;
 - c. Existing controls on point or nonpoint sources, including total maximum daily load calculations for the receiving stream segment and the relative contribution of the POTW;
 - d. Receiving stream characteristics, including possible or known water quality impairment, and whether the POTW discharges to a water designated as an outstanding state resource water;
- or

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e. Other considerations, including but not limited to the history of toxic impacts and compliance problems at the POTW, that the cabinet determines could cause or contribute to adverse water quality impacts;

(c) If the POTW has two (2) or more outfalls with substantially identical effluent discharging to the same receiving stream segment, the cabinet may allow applicants to submit whole effluent toxicity data for only one (1) outfall on a case-by-case basis. The cabinet may also allow applicants to composite samples from one (1) or more outfalls that discharge into the same mixing zone;

(d) Each applicant required to perform whole effluent toxicity testing pursuant to paragraph (b) of this subsection shall provide:

1. Results of a minimum of four (4) quarterly tests for a year, from the year preceding the permit application; or

2. Results from four (4) tests performed at least annually in the four and one-half (4 1/2) year period prior to the application, if the results show no appreciable toxicity using a safety factor determined by the cabinet;

(e) Applicants shall conduct tests with no less than two (2) species of fish, invertebrates, plants, etc., and shall test for acute or chronic toxicity, depending on the range of receiving water dilution. The applicant shall conduct acute or chronic testing based on the following dilutions:

1. Acute toxicity testing if the dilution of the effluent is greater than 1000:1 at the edge of the mixing zone;

2. Acute or chronic toxicity testing if the dilution of the effluent is between 100:1 and 1000:1 at the edge of the mixing zone. Acute testing may be more appropriate at the higher end of this range (1000:1), and chronic testing may be more appropriate at the lower end of this range (100:1); and

3. Chronic testing if the dilution of the effluent is less than 100:1 at the edge of the mixing zone;

(f) Each applicant required to perform whole effluent toxicity testing pursuant to paragraph (b) of this subsection shall provide the number of chronic or acute whole effluent toxicity tests that have been conducted since the last permit reissuance;

(g) Applicants shall provide the results using the form provided by the cabinet, or test summaries if available and comprehensive, for each whole effluent toxicity test conducted pursuant to paragraph (b) of this subsection for which such information has not been reported previously to the cabinet;

(h) Whole effluent toxicity testing conducted pursuant to paragraph (b) of this subsection shall be conducted using methods approved under 40 CFR part 136;

(i) For whole effluent toxicity data submitted to the cabinet within four and one-half (4 1/2) years prior to the date of the application, applicants shall provide the dates on which the data were submitted and a summary of the results; and

(j) Each POTW required to perform whole effluent toxicity testing pursuant to paragraph (b) of this subsection shall provide any information on the cause of toxicity and written details of any toxicity reduction evaluation conducted, if any whole effluent toxicity test conducted within the past four and one-half (4 1/2) years revealed toxicity;

(6) Industrial discharges. Applicants shall submit the following information about industrial discharges to the POTW:

(a) Number of significant industrial users (SIUs) and categorical industrial users (CIUs) discharging to the POTW; and

(b) POTWs with one (1) or more SIUs shall provide the following information for each SIU, as defined at 401 KAR 5:002, Section 1, that discharges to the POTW:

1. Name and mailing address;

2. Description of all industrial processes that affect or contribute to the SIU discharge;

3. Principal products and raw materials of the SIU that affect or contribute to the SIU discharge;

4. Average daily volume of wastewater discharged, indicating the amount attributable to process flow and nonprocess flow;

5. Whether the SIU is subject to local limits;

6. Whether the SIU is subject to categorical standards, and if so, under which categories and subcategories; and

7. Whether any problems at the POTW (e.g., upsets, pass through, interference) have been attributed to the SIU in the past four and one-half (4 1/2) years.

(c) The information required in paragraphs (a) and (b) of this subsection may be waived by the cabinet for POTWs with pretreatment programs if the applicant has submitted either of the following that contain information substantially identical to that required in paragraphs (a) and (b) of this subsection.

1. An annual report submitted within one (1) year of the application; or
2. A pretreatment program;

(d) POTWs with approved pretreatment programs shall provide a written technical evaluation of the need to revise local limits in accordance with 401 KAR 5:057;

(7) Discharges from hazardous waste generators and from waste cleanup or remediation sites. POTWs receiving Resource Conservation and Recovery Act (RCRA), 42 USC 6901 et seq., Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), 42 USC 6901 et seq., or RCRA Corrective Action wastes or wastes generated at another type of cleanup or remediation site shall provide the following information:

(a) If the POTW receives, or has been notified that it will receive, by truck, rail, or dedicated pipe any wastes that are regulated as RCRA hazardous wastes pursuant to 40 CFR part 261, the applicant shall report the following:

1. The method by which the waste is received; and
2. The hazardous waste number and amount received annually of each hazardous waste;

(b) If the POTW receives, or has been notified that it will receive, wastewaters that originate from remedial activities, including those undertaken pursuant to CERCLA and sections 3004(u) or 3008(h) of RCRA, 42 USC 6924(u) and 6928(h), the applicant shall report the following:

1. The identity and description of the sites or facilities at which the wastewater originates;
2. The identities of the wastewater's hazardous constituents, if known; and
3. The extent of treatment, if any, the wastewater receives or will receive before entering the POTW; and

(c) Applicants shall be exempt from the requirements of paragraphs (a) and (b) of this subsection if they receive no more than fifteen (15) kilograms per month of hazardous wastes, unless the wastes are acute hazardous wastes as specified in 40 CFR 261.30(d) and 261.33(e);

(8) Combined sewer overflows (CSO). Each applicant with combined sewer systems shall provide the following information:

(a) Combined sewer system information. The following information regarding the combined sewer system:

1. System map. A map indicating the location of the following:
 - a. All CSO discharge points;
 - b. Sensitive use areas potentially affected by CSOs (e.g., beaches, drinking water supplies, shellfish beds, sensitive aquatic ecosystems, and outstanding state resource waters); and
 - c. Waters supporting threatened and endangered species potentially affected by CSOs; and
2. System diagram. A diagram of the combined sewer collection system that includes the following information:

following information:

- a. The location of major sewer trunk lines, both combined and separate sanitary;
- b. The locations of points where separate sanitary sewers feed into the combined sewer system;
- c. In-line and off-line storage structures;
- d. The locations of flow-regulating devices; and
- e. The locations of pump stations.

(b) Information on CSO outfalls. The following information for each CSO discharge point covered by the permit application:

1. Description of outfall. The following information on each outfall:
 - a. Outfall number;
 - b. State, county, and city or town in which outfall is located;
 - c. Latitude and longitude, to the nearest second; and
 - d. Distance from shore and depth below surface;

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- e. Whether the applicant monitored any of the following in the past year for this CSO:
 - (i) Rainfall;
 - (ii) CSO flow volume;
 - (iii) CSO pollutant concentrations;
 - (iv) Receiving water quality; or
 - (v) CSO frequency; and
- f. The number of storm events monitored in the past year;
- 2. CSO events. The following information about CSO overflows from each outfall:
 - a. The number of events in the past year;
 - b. The average duration per event, if available;
 - c. The average volume per CSO event, if available; and
 - d. The minimum rainfall that caused a CSO event, if available, in the last year;
- 3. Description of receiving waters. The following information about receiving waters:
 - a. Name of receiving water;
 - b. Name of watershed or stream system and the United States Soil Conservation Service watershed 14-digit code if known; and
 - c. Name of State Management River Basin and the United States Geological Survey hydrologic cataloging unit eight (8) digit code if known; and
- 4. CSO operations. A description of any known water quality impacts on the receiving water caused by the CSO including permanent or intermittent beach closings, permanent or intermittent shellfish bed closings, fish kills, fish advisories, other recreational loss, or exceedance of any applicable water quality standard;
- (9) Contractors. All applicants shall provide the name, mailing address, telephone number, and responsibilities of all contractors responsible for any operational or maintenance aspects of the facility; and
- (10) Signature. All applications shall be signed by a certifying official in compliance with Section 9 of this regulation.

Section 6. Recordkeeping. Applicants shall keep records of all data used to complete permit applications and any supplemental information submitted under this administrative regulation for a period of at least three (3) years from the date the application is signed.

Section 7. Service of Process. Every applicant and permittee shall provide the cabinet an address for receipt of any legal document for service of process. The last address provided to the cabinet pursuant to this provision shall be the address at which the cabinet may tender any legal notice including but not limited to service of process in connection with any enforcement action.

Section 8. KPDES Application Testing Requirements. (1) Table I - Gas Chromatography/Mass Spectroscopy (GC-MS) Fractions per Industrial Category.

Industrial category	GC-MS Fraction*			
	Volatile	Acid	Neutral	Pesticide
Adhesives & sealants	(1)	(1)	(1)	
Aluminum forming	(1)	(1)	(1)	
Auto & other laundries	(1)	(1)	(1)	(1)
Battery manufacturing	(1)		(1)	
Coal mining	(1)	(1)	(1)	(1)
Coil Coating	(1)	(1)	(1)	
Copper forming	(1)	(1)	(1)	
Electric & electronic compounds	(1)	(1)	(1)	(1)

Electroplating	(1)	(1)	(1)	
Explosives manufacturing		(1)	(1)	
Foundries	(1)	(1)	(1)	
Gum & Wood	(1)	(1)	(1)	(1)
Inorganic chemicals manufacturing	(1)	(1)	(1)	
Iron & steel manufacturing	(1)	(1)	(1)	
Leather tanning & finishing	(1)	(1)	(1)	(1)
Mechanical products manufacturing	(1)	(1)	(1)	
Nonferrous metals manufacturing	(1)	(1)	(1)	(1)
Ore mining	(1)	(1)	(1)	(1)
Organic chemicals manufacturing	(1)	(1)	(1)	(1)
Paint & ink formulation	(1)	(1)	(1)	(1)
Pesticides	(1)	(1)	(1)	(1)
Petroleum refining	(1)	(1)	(1)	(1)
Pharmaceutical preparations	(1)	(1)	(1)	
Photographic equipment & supplies	(1)	(1)	(1)	(1)
Plastic & synthetic materials manufacturing	(1)	(1)	(1)	(1)
Plastic processing	(1)			
Porcelain enameling	(1)		(1)	(1)
Printing & publishing	(1)	(1)	(1)	(1)
Pulp & paperboard mills	(1)	(1)	(1)	(1)
Rubber processing	(1)	(1)	(1)	
Soap & detergent manufacturing	(1)	(1)	(1)	
Steam electric power plants	(1)	(1)	(1)	
Textile mills	(1)	(1)	(1)	(1)
Timber products processing	(1)	(1)	(1)	(1)

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¹ Testing required				
Pollutants listed in Table II				

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

Volatiles	Acid Compounds	Base/Neutral	Pesticides
1V acrolein	1A 2-chlorophenol	1B acenaphthene	1P aldrin
2V acrylonitrile	2A 2,4-	2B acenaphthylene	2P alpha-BHC
3V benzene	dichlorophenol	3B anthracene	3P beta-BHC
5V bromoform	3A 2,4-	4B benzidine	4P gamma-BHC
6V carbon tetrachloride	dimethylphenol	5B benzo(a)anthracene	5P delta-BHC
7V chlorobenzene	4A 4,6-dinitro-o-	6B benzo(a)pyrene	6P chlordane
8V	cresol	7B 3,4-benzofluoranthene	7P 4,4'-DDT
chlorodibromomethane	5A 2,4-dinitrophenol	8B benzo(ghi)perylene	8P 4,4'-DDE
9V chloroethane	6A 2-nitrophenol	9B benzo(k)fluoranthene	9P 4,4'-DDD
10V 2-chloroethylvinyl ether	7A 4-nitrophenol	10B bis(2-	10P dieldrin
11V chloroform	8A p-chloro-m-cresol	chloroethoxy)methane	11P alpha-endosulfan
12V	9A	11B bis(2-	12P beta-endosulfan
dichlorobromomethane	pentachlorophenol	chloroisopropyl)ether	13P endosulfan sulfate
14V 1,1-dichloroethane	10A phenol	12B bis(2-	14P endrin
15V 1,2-dichloroethane	11A 2,4,6-	ethylhexyl)phthalate	15P endrin aldehyde
16V 1,1-	trichlorophenol	13B 4-bromophenyl phenyl ether	16P heptachlor epoxide
dichloroethylene		14B butylbenzyl phthalate	17P heptachlor epoxide
17V 1,2-		15B 2-chloronaphthalene	18P PCB-1242
dichloropropane		16B 4-chlorophenyl phenyl ether	19P PCB-1254
18V 1,3-		17B chrysene	20P PCB-1221
dichloropropylene		18B	21P PCB-1232
19V ethylbenzene		dibenzo(a,h)anthracene	22P PCB-1248
20V methyl bromide		19B 1,2-dichlorobenzene	23P PCB-1260
21V methyl chloride		20B 1,3-dichlorobenzene	24P PCB-1016
22V methylene chloride		21B 1,4-dichlorobenzene	25P toxaphene
23V 1,1,2,2-		22B 3,3'-dichlorobenzidine	
tetrachloroethane		23B diethyl phthalate	
24V		24B dimethyl phthalate	
tetrachloroethylene		25B di-n-butyl phthalate	
25V toluene		26B 2,4-dinitrotoluene	
26V 1,2-trans-		27B 2,6-dinitrotoluene	
dichloroethylene		28B di-n-octyl phthalate	
27V 1,1,1-		29B 1,2-diphenylhydrazine (as azonbenzene)	
trichloroethane		30B fluroranthene	
28V 1,1,2-		31B fluorene	
trichloroethane		32B hexachlorobenzene	
29V trichloroethylene		33B hexachlorobutadiene	
31V vinyl chloride		34B	
		hexachlorocyclopentadiene	
		35B hexachloroethane	
		36B indneo(1,2,3-cd)pyrene	
		37B isophorone	

		38B naphthalene 39B nitrobenzene 40B N-nitrosodimethylamine 41B N-nitrosodi-n-propylamine 42B N-nitrosodiphenylamine 43B phenanthrene 44B pyrene 45B 1,2,4-trichlorobenzene	
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(3) Table III-Other Toxic Pollutants (Metals and Cyanide) and Total Phenols

Antimony, Total
Arsenic, Total
Beryllium, Total
Cadmium, Total
Chromium, Total
Copper, Total
Lead, Total
Mercury, Total
Nickel, Total
Selenium, Total
Silver, Total
Thallium, Total
Zinc, Total
Cyanide, Total
Phenols, Total

(4) Table IV-Conventional and Nonconventional Pollutants Required to Be Tested by Existing Dischargers if Expected to be present

Bromide
Chlorine, Total Residual Color
Fecal Coliform
Fluoride
Nitrate-Nitrite
Nitrogen, Total Organic
Oil and Grease
Phosphorus, Total
Radioactivity
Sulfate
Sulfide
Sulfite
Surfactants
Aluminum, Total
Barium, Total
Boron, Total
Cobalt, Total
Iron, Total
Magnesium, Total
Molybdenum, Total
Manganese, Total
Tin, Total

Titanium, Total

(5) Table V-Toxic Pollutants and Hazardous Substances Required To Be Identified by Existing Dischargers if Expected To Be Present

Toxic Pollutants	Hazardous Substances	Hazardous Substances, continued
Asbestos	Acetaldehyde Allyl alcohol Allyl chloride Amyl acetate Aniline Benzonitrile Benzyl chloride Butyl acetate Butylamine Captan Carbaryl Carbofuran Carbon disulfide Chlorpyrifos Coumaphos Cresol Crotonaldehyde Cyclohexane 2,4-D (2,4-Dichlorophenoxy acetic acid) Diazinon Dicamba Dichlobenil Dichlone 2,2-Dichloropropionic acid Dichlorvos Diethyl amine Dimethyl amine Dinitrobenzene Diquat Disulfoton Diuron Epichlorohydrin Ethion Ehtylene diamine Ethylene dibromide Formaldehyde Furfural Guthion Isoprene Isopropanolamine Dodecylbenzenesulfonate Kelthane Kepone	Malathion Mercaptodimethur Methoxychlor Methyl mercaptan Methyl methacrylate Methyl parathion Mevinphos Mexacarbate Monoethyl amine Monomethyl amine Naled Napthenic acid Nitrotoluene Parathion Phenolsulfanate Phosgene Propargite Propylene oxide Pyrethrins Quinoline Resorcinol Strontium Strychnine Styrene 2,4,5-T (2,4,5-Trichlorophenoxy acetic acid) TDE (Tetrachlorodiphenylethane) 2,4,5-TP(2-2,4,5-Trichlorophenoxy)propanoic acid Trichlorofan Triethanolamine dodecylbenzenesulfonate Triethylamine

(6) Table VI - Effluent Parameters for All POTWs

Biochemical oxygen demand (BOD-5 or CBOD-5) Fecal coliform
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Design Flow Rate
PH
Temperature
Total suspended solids

(7) Table VII - Effluent Parameters for All POTWs with a Flow Equal to or Greater than 0.1 MGD

Ammonia (as N)
Chlorine (total residual, TRC)
Dissolved oxygen
Nitrate/Nitrite
Kjeldahl nitrogen
Oil and grease
Phosphorus
Total dissolved solids

(8) Table VIII - Effluent Parameters for Selected POTWs

Volatile Organic Compounds	Acid Extractable Compounds	Base/Neutral Compounds	Metals (total recoverable), cyanide and total phenols
Acrolein	P-chloro-m-creso	Acenaphthene	Hardness
Acrylonitrile	2-chlorophenol	Acenaphthylene	Antimony
Benzene	2,4-dichlorophenol	Anthracene	Arsenic
Bromoform	2,4-dimethylphenol	Benzidine	Beryllium
Carbon tetrachloride	4,6-dinitro-o-cresol	Benzo(a)anthracene	Cadmium
Chlorobenzene	2,4-dinitrophenol	Benzo(a)pyrene	Chromium
Chlorodibromomethane	2-nitrophenol	3,4 benzofluoranthene	Copper
Chloroethane	4-nitrophenol	Benzo(ghi)perylene	Lead
2-chloroethylvinyl ether	Pentachlorophenol	Benzo(k)fluoranthene	Mercury
Chloroform	Phenol	Bis (2-chloroethoxy)	Nickel
Dichlorobromomethane	2,4,6-trichlorophenol	methane	Selenium
1,1-dichloroethane		Bis (2-chloroethyl) ether	Silver
1,2-dichloroethane		Bis (2-chloroisopropyl)	Thallium
Trans-1,2-dichloroethylene		ether	Zinc
1,1-dichloroethylene		Bis (2-ethylhexyl)	Cyanide
1,2-dichloropropane		phthalate	Total phenolic compounds
1,3-dichloropropylene		4-bromophenyl phenyl ether	
Ethylbenzene		Butyl benzyl phthalate	
Methyl bromide		2-chloronaphthalene	
Methyl chloride		4-chlorophenyl phenyl ether	
Methylene chloride		Chrysene	
1,1,2,2-tetrachloroethane		Di-n-butyl phthalate	
Tetrachloroethylene		Di-n-octyl phthalate	
Toluene		Dibenzo(a,h)anthracene	
1,1,1-trichloroethane		1,2-dichlorobenzene	
1,1,2-trichloroethane		1,3-dichlorobenzene	
Trichloroethylene		1,4-dichlorobenzene	
Vinyl chloride		3,3-dichlorobenzidine	
		Diethyl phthalate	
		Dimethyl phthalate	
		2,4-dinitrotoluene	

Volatile Organic Compounds	Acid Extractable Compounds	Base/Neutral Compounds	Metals (total recoverable), cyanide and total phenols
		2,6-dinitrotoluene 1,2-diphenylhydrazine Fluoranthene Fluorene Hexachlorobenzene Hexachlorobutadiene Hexachlorocyclopentadiene Hexachloroethane Indeno(1,2,3-cd)pyrene Isophorone Naphthalene Nitrobenzene N-nitrosodi-n-propylamine N-nitrosodimethylamine N-nitrosodiphenylamine Phenanthrene Pyrene 1,2,4,-trichlorobenzene	

Section 9. Signatories to Permit Applications and Reports. (1) Applications. All permit applications shall be signed as follows:

(a) For a corporation: by a responsible corporate officer. For the purpose of this section, a responsible corporate officer shall be:

1. A president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy- or decision-making functions for the corporation; or

2. The manager of one (1) or more manufacturing, production, or operating facilities, if the manager is authorized to make management decisions which govern the operation of the regulated facility including having the explicit or implicit duty of making major capital investment recommendations, and initiating and directing other comprehensive measures to assure long term environmental laws and regulations; the manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for permit application requirements; and if authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures;

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

(c) For a municipality, state, federal, or other public agency: by either a principal executive officer or ranking elected official. For purposes of this section, a principal executive officer of a federal agency shall include:

1. The chief executive officer of the agency; or

2. A senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., regional administrators of EPA).

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

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

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

position having overall responsibility for environmental matters for the company. A duly authorized representative may thus be either a named individual or any individual occupying a named position; and

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

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

(4) Certification. Any person signing a document under subsections (1) or (2) of this section shall make the following certification: "I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

Section 10. Concentrated Animal Feeding Operations. (1) Permit requirement. Concentrated animal feeding operations are point sources subject to the KPDES permit program.

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

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

1. The size of the animal feeding operation and the amount of wastes reaching waters of the Commonwealth;
2. The location of the animal feeding operation relative to waters of the Commonwealth;
3. The means of conveyance of animal wastes and process waste waters into waters of the Commonwealth;
4. The slope, vegetation, rainfall, and other factors affecting the likelihood or frequency of discharge of animal wastes and process waste waters into waters of the Commonwealth; and
5. Other relevant factors.

(b) No animal feeding operation with less than the numbers of animals defined in 401 KAR 5:002 shall be designated as a concentrated animal feeding operation unless:

1. Pollutants are discharged into waters of the Commonwealth through a manmade ditch, flushing system, or other similar manmade device; or
2. Pollutants are discharged directly into waters of the Commonwealth which originate outside of the facility and pass over, across, or through the facility or otherwise come into direct contact with the animals or their wastes confined in the operation.

(c) A permit application shall not be required from a concentrated animal feeding operation designated under this subsection until the cabinet has conducted an on-site inspection of the operation and determined that the operation should and could be regulated under the permit program.

Section 11. Concentrated Aquatic Animal Production Facilities. (1) Permit requirement. Concentrated aquatic animal production facilities, as set forth in this section, are point sources subject to the KPDES permit program.

(2) A hatchery, fish farm, or other facility is a concentrated aquatic animal production facility for purposes of this section if it contains, grows, or holds aquatic animals in either of the following categories:

(a) Cold water fish species or other cold water aquatic animals, including, but not limited to, the Salmonidae family of fish; e.g., trout and salmon, in ponds, raceways, or other similar structures which discharge at least thirty (30) days per year but does not include:

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

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

(b) Warm water fish species or other warm water aquatic animals, including, but not limited to, the Ameiuridae, Centrarchidae and Cyprinidae families of fish; e.g., respectively, catfish, sunfish and minnows, in ponds, raceways, or other similar structures which discharge at least thirty (30) days per year, but does not include:

1. Closed ponds which discharge only during periods of excess runoff; or
2. Facilities which produce less than 45,454 harvest weight kilograms (approximately 100,000 pounds) of aquatic animals per year.

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

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

1. The location and quality of the receiving waters of the Commonwealth;
2. The holding, feeding, and production capacities of the facility;
3. The quantity and nature of the pollutants reaching waters of the Commonwealth; and
4. Other relevant factors.

(b) A permit application shall not be required from a concentrated aquatic animal production facility designated under this subsection until the cabinet has conducted on-site inspection of the facility and has determined that the facility should and could be regulated under the permit program.

Section 12. Storm Water Discharges. (1) Permit requirement.

(a) **Prior to October 1, 1992**, discharges composed entirely of storm water **shall not be required** to obtain a KPDES permit except:

1. A discharge with respect to which a permit has been issued prior to February 4, 1987;
2. A discharge associated with industrial activity (see also paragraph (d) of this subsection);
3. A discharge from a large municipal separate storm sewer system;
4. A discharge from a medium municipal separate storm sewer system; and
5. A discharge which the cabinet or the EPA regional administrator determines to contribute to a violation of a water quality standard or is a significant contributor of pollutants to waters of the Commonwealth. This designation may include a discharge from any conveyance or system of conveyances used for collecting and conveying storm water runoff or a system of discharges from **municipal separate storm sewers**, except for those discharges from conveyances which do not require a permit under paragraph (b) of this subsection or agricultural storm water runoff which is exempted from the definition of point source in 401 KAR 5:002. The cabinet may designate discharges from municipal separate storm sewers on a system-wide or jurisdiction-wide basis. In making this determination the cabinet may consider the following factors:

- a. The location of the discharge with respect to waters of the Commonwealth;
- b. The size of the discharge;
- c. The quantity and nature of the pollutants discharged to waters of the Commonwealth; and
- d. Other relevant factors.

(b) The cabinet shall not require a permit for discharges of storm water runoff from mining operations or oil and gas exploration, production, processing or treatment operations or transmission facilities, composed entirely of flows which are from conveyances or systems of conveyances including but not limited to pipes, conduits, ditches, and channels, used for collecting and conveying precipitation runoff and which are not contaminated by contact with or that has not come into contact with, any overburden, raw material, intermediate products, finished product, byproduct or waste products located on the site of these operations.

(c) **Large and medium municipal separate storm sewer systems.**

1. Permits shall be obtained for all discharges from large and medium municipal separate storm sewer systems.

2. The cabinet may either issue one (1) system-wide permit covering all discharges from municipal separate storm sewers within a large or medium municipal storm sewer system or issue distinct permits for appropriate categories of discharges within a large or medium municipal separate storm sewer system including, but not limited to all discharges owned or operated by the

same municipality; located within the same jurisdiction; all discharges within a system that discharge to the same watershed; discharges within a system that are similar in nature; or for individual discharges from municipal separate storm sewers within the system.

3. The owner or operator of a discharge from a municipal separate storm sewer which is part of a large or medium municipal separate storm sewer system shall either:

a. Participate in a permit application, i.e., be a permittee or a copermitee, with one (1) or more other owner or operators of discharges from the large or medium municipal storm sewer system which covers all, or a portion of all, discharges from the municipal separate storm sewer system;

b. Submit a distinct permit application which only covers discharges from the municipal separate storm sewers for which the owner or operator is responsible; or

c. A regional authority may be responsible for submitting a permit application under the following guidelines:

(i) The regional authority together with coapplicants shall have authority over a storm water management program that is in existence, or shall be in existence at the time Part 1 of the application is due;

(ii) The permit applicant or coapplicants shall establish their ability to make a timely submission of Part 1 and Part 2 of the municipal application; and

(iii) Each of the owners or operators of municipal separate storm sewers within the systems defined in 401 KAR 5:002, that are under the purview of the designated regional authority, shall comply with the application requirements of subsection (3) of this section.

4. One (1) permit application may be submitted for all or a portion of all municipal separate storm sewers within adjacent or interconnected large or medium municipal separate storm sewer systems. The cabinet may issue one (1) system-wide permit covering all or a portion of all municipal separate storm sewers in adjacent or interconnected large or medium municipal separate storm sewer systems.

5. Permits for all or a portion of all discharges from large or medium municipal separate storm sewer systems that are issued on a system-wide, jurisdiction-wide, watershed or other basis may specify different conditions relating to different discharges covered by the permit, including different management programs for different drainage areas which contribute storm water to the system.

6. Copermitees shall only be required to comply with permit conditions relating to discharges from the municipal separate storm sewers for which they are owners or operators.

(d) Discharges through large and medium municipal separate storm sewer systems. In addition to meeting the requirements of subsection (2) of this section, an owner or operator of a storm water discharge associated with industrial activity which discharges through a large or medium municipal separate storm sewer system shall submit, to the owner or operator of the municipal separate storm sewer system receiving the discharge no later than May 15, 1991, or 180 days prior to commencing this discharge: the name of the facility; a contact person and phone number; the location of the discharge; a description, including Standard Industrial Classification, which best reflects the principal products or services provided by each facility; and any existing KPDES permit number.

(e) **Other municipal separate storm sewers.** The cabinet may issue permits for municipal separate storm sewers that are designated under paragraph (a)5 of this subsection on a system-wide basis, jurisdiction-wide basis, watershed basis or other appropriate basis, or may issue permits for individual discharges.

(f) Nonmunicipal separate storm sewers. For storm water discharges associated with industrial activity from point sources which discharge through a nonmunicipal or nonpublicly owned separate storm sewer system, the cabinet may issue: a single KPDES permit, with each discharger a copermitee to a permit issued to the owner or operator of the portion of the system that discharges into waters of the Commonwealth; or, individual permits to each discharger of storm water associated with industrial activity through the nonmunicipal conveyance system.

1. All storm water discharges associated with industrial activity that discharge through a storm water discharge system that is not a municipal separate storm sewer shall be covered by an individual permit, or a permit issued to the owner or operator of the portion of the system that discharges to waters of the Commonwealth, with each discharger to the nonmunicipal conveyance a copermitee to that permit.

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2. If there is more than one (1) owner or operator of a single system of nonmunicipal conveyances, all operators of storm water discharges associated with industrial activity shall submit applications.

3. Any permit covering more than one (1) owner or operator shall identify the effluent limitations, or other permit conditions, if any, that apply to each operator.

(g) **Combined sewer systems.** Conveyances that discharge storm water runoff combined with municipal sewage are point sources that shall obtain KPDES permits in accordance with the procedures of Section 5 of this administrative regulation and shall not be subject to the provisions of this section.

(h) Whether a discharge from a municipal separate storm sewer is or is not subject to regulation under this section shall have no bearing on whether the owner or operator of the discharge is eligible for funding under the Clean Water Act, 33 USC 1251 et seq. See 40 CFR Part 35, Subpart I, Appendix A.

(i) On and after October 1, 1994, for discharges composed entirely of storm water, that are not required by subsection (1)(a) of this section to obtain a permit, operators shall be required to obtain a KPDES permit only if:

1. The discharge is from a small MS4 required to be regulated pursuant to subsection (7) of this section;

2. The discharge is a storm water discharge associated with small construction activity pursuant to 401 KAR 5:002;

3. The cabinet, or the EPA Regional Administrator, determines that storm water controls are needed for the discharge based on wasteload allocations that are part of "total maximum daily loads" (TMDLs) that address the pollutant(s) of concern; or

4. The cabinet, or the EPA Regional Administrator, determines that the discharge, or category of discharges within a geographic area, contributes to a violation of a water quality standard or is a significant contributor of pollutants to waters of the Commonwealth.

(j) Operators of small MS4s designated pursuant to paragraph (i)1, 3, and 4 of this subsection shall seek coverage under an KPDES permit in accordance with subsections (8) through (10) of this section. Operators of nonmunicipal sources designated pursuant to paragraph (i)2, 3, and 4 of this subsection shall seek coverage under an KPDES permit in accordance with subsection (2)(a) of this section.

(k) Operators of storm water discharges designated pursuant to paragraph (i)3 and 4 of this subsection shall apply to the cabinet for a permit within 180 days of receipt of notice, unless permission for a later date is granted by the cabinet.

(2) Application requirements for storm water discharges associated with industrial activity and storm water discharges associated with small construction activity.

(a) Individual application. Dischargers of storm water associated with industrial activity and with small construction activity shall apply for an individual permit or seek coverage under a promulgated storm water general permit. Facilities that are required to obtain an individual permit, or any discharge of storm water which the cabinet is evaluating for designation under paragraph (a)5 of this subsection and is not a municipal separate storm sewer shall submit a KPDES application in accordance with the requirements of Section 3 of this administrative regulation as modified and supplemented by the provisions of the remainder of this paragraph. Applicants for discharges composed entirely of storm water shall submit Form 1 and Form F. Applicants for discharges composed of storm water and nonstorm water shall submit Form 1, Form Short C, and Form F.

1. Except as provided in subparagraphs 2, 3, and 4 of this paragraph the owner or operator of a storm water discharge associated with industrial activity subject to this section shall provide:

a. A site map showing topography, or indicating the outline of drainage areas served by the outfalls covered in the application if a topographic map is unavailable, of the facility including: each of its drainage and discharge structures; the drainage area of each storm water outfall; paved areas and buildings within the drainage area of each storm water outfall; each past or present area used for outdoor storage or disposal of significant materials; each existing structural control measure to reduce pollutants in storm water runoff; materials loading and access areas; areas where pesticides, herbicides, soil conditioners and fertilizers are applied, each of its hazardous waste treatment, storage or disposal facilities, including each area not required to have a RCRA permit

which is used for accumulating hazardous waste under 40 CFR 262.34; each well where fluids from the facility are injected underground; springs; and other surface water bodies which receive storm water discharges from the facility;

b. An estimate of the area of impervious surfaces, including paved areas and building roofs, and the total area drained by each outfall, within a mile radius of the facility, and a narrative description of the following: significant materials that in the three (3) years prior to the submittal of this application have been treated, stored or disposed in a manner to allow exposure to storm water; method of treatment, storage or disposal of the materials; materials management practices employed, in the three (3) years prior to the submittal of this application, to minimize contact by these materials with storm water runoff; materials loading and access areas; the location, manner and frequency in which pesticides, herbicides, soil conditioners and fertilizers are applied; the location and a description of existing structural and nonstructural control measures to reduce pollutants in storm water runoff; and a description of the treatment the storm water receives, including the ultimate disposal of any solid or fluid wastes other than by discharge;

c. A certification that all outfalls that should contain storm water discharges associated with industrial activity have been tested or evaluated for the presence of nonstorm water discharges which are not covered by a KPDES permit; tests for these nonstorm water discharges may include smoke tests, fluorometric dye tests, analysis of accurate schematics, as well as other appropriate tests. The certification shall include a description of the method used, the date of any testing, and the on-site drainage points that were directly observed during a test;

d. Existing information regarding significant leaks or spills of toxic or hazardous pollutants at the facility that have taken place within the three (3) years prior to the submittal of this application;

e. Quantitative data based on samples collected during storm events and collected in accordance with Section 3 of this administrative regulation from all outfalls containing a storm water discharge associated with industrial activity for the following parameters:

- (i) Any pollutant limited in an effluent guideline to which the facility is subject;
- (ii) Any pollutant listed in the facility's KPDES permit for its process wastewater, if the facility is operating under an existing KPDES permit;
- (iii) Oil and grease, pH, BOD, COD, TSS, total phosphorus, total Kjeldahl nitrogen, and nitrate plus nitrite nitrogen;
- (iv) Any information on the discharge required under Section 2(7)(f) and (g) of this administrative regulation;
- (v) Flow measurements or estimates of the flow rate, and the total amount of discharge for the storm events sampled, and the method of flow measurement or estimation; and
- (vi) The date and duration in hours of the storm events sampled, rainfall measurements or estimates of the storm event in inches which generated the sampled runoff and the duration between the storm event sampled and the end of the previous measurable (greater than one-tenth (0.1) inch rainfall) storm event in hours;

f. Owners or operators of a discharge which is composed entirely of storm water shall be exempt from the requirements of Section 2(2), (3), (4), (5), and (7)(a), (b) and (e) of this administrative regulation; and

g. Owners or operators of new sources or new discharges which are composed in part or entirely of storm water shall include estimates for the pollutants or parameters listed in clause e of this subparagraph instead of actual sampling data, along with the source of each estimate. Owners or operators of new sources or new discharges composed in part or entirely of storm water shall provide quantitative data for the parameters listed in clause e of this subparagraph within two (2) years after commencement of discharge, unless data have already been reported under the monitoring requirements of the KPDES permit for the discharge.

2. The owner or operator of an existing or new storm water discharge that is storm water associated with construction activity solely as defined in 401 KAR 5:002 or is associated with small construction activity solely as defined in 401 KAR 5:002, shall be exempt from the requirements of Section 2 of this administrative regulation and subparagraph 1 of this paragraph. The owner or operator shall provide a narrative description of:

- a. The location, including a map, and the nature of the construction activity;
- b. The total area of the site and the area of the site that is expected to undergo excavation during the life of the permit;

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c. Proposed measures, including best management practices, to control pollutants in storm water discharges during construction, including a brief description of applicable state and local erosion and sediment control requirements;

d. Proposed measures to control pollutants in storm water discharges that will occur after construction operations have been completed, including a brief description of applicable state or local erosion and sediment control requirements;

e. An estimate of the runoff coefficient of the site and the increase in impervious area after the construction addressed in the permit application is completed, the nature of fill material and existing data describing the soil or the quality of the discharge; and

f. The name of the receiving water.

3. The owner or operator of an existing or new discharge composed entirely of storm water from an oil or gas exploration, production, processing, or treatment operation, or transmission facility shall not be required to submit a permit application in accordance with subparagraph 1 of this paragraph unless the facility:

a. Has had a discharge of storm water resulting in the discharge of a reportable quantity for which notification is or was required pursuant to 40 CFR 117.21 or 40 CFR 302.6 at anytime since November 16, 1987;

b. Has had a discharge of storm water resulting in the discharge of a reportable quantity for which notification is or was required pursuant to 40 CFR 110.6 at any time since November 16, 1987; or

c. Contributes to a violation of a water quality standard.

4. The owner or operator of an existing or new discharge composed entirely of storm water from a mining operation shall not be required to submit a permit application unless the discharge has come into contact with, any overburden, raw material, intermediate products, finished product, byproduct or waste products located on the site of these operations.

5. Applicants shall provide such other information the cabinet may reasonably require under Section 2(12) of this administrative regulation to determine whether to issue a permit and may require any facility subject to subparagraph 2 of this paragraph to comply with subparagraph 1 of this paragraph.

(b) Group application for discharges associated with industrial activity. In lieu of individual applications or notice of intent to be covered by a general permit for storm water discharges associated with industrial activity, a group application may be filed by an entity representing a group of applicants, except facilities that have existing individual KPDES permits for storm water, that are part of the same subcategory (see 40 CFR Chapter I, Subchapter N, Part 405 to 471) or, if such grouping is inapplicable, are sufficiently similar as to be appropriate for general permit coverage under 401 KAR 5:055, Section 5. The Part 1 application shall be submitted to the Office of Water Enforcement and Permits, U.S. EPA, 401 M Street, SW., Washington, DC 20460 (EN-336) for approval. Once a Part 1 application is approved, group applicants shall submit Part 2 of the group application to the Office of Water Enforcement and Permits. A group application shall consist of:

1. Part 1 of a group application shall:

a. Identify the participants in the group application by name and location. Kentucky facilities participating in the group application are listed in precipitation zone 2 as given in Appendix E of 40 CFR Part 122;

b. Include a narrative description summarizing the industrial activities of participants of the group application and explaining why the participants, as a whole, are sufficiently similar to be covered by a general permit;

c. Include a list of significant materials stored exposed to precipitation by participants in the group application and materials management practices employed to diminish contact by these materials with precipitation and storm water runoff; and

d. Identify ten (10) percent of the dischargers participating in the group application, with a minimum of ten (10) dischargers, and either a minimum of two (2) dischargers from each precipitation zone indicated in Appendix E of 40 CFR Part 122 in which ten (10) or more members of the group are located, or one (1) discharger from each precipitation zone indicated in Appendix E of 40 CFR Part 122 in which nine (9) or fewer members of the group are located, from which quantitative data will be submitted in Part 2. If more than 1,000 facilities are identified in a group application, no more than 100 dischargers shall submit quantitative data in Part 2. Groups of

between four (4) and ten (10) dischargers may be formed. In groups of between four (4) and ten (10), at least half the facilities shall submit quantitative data, and at least one (1) facility in each precipitation zone in which members of the group are located shall submit data. A description of why the facilities selected to perform sampling and analysis are representative of the group as a whole in terms of the information provided in clauses b and c of this subparagraph, shall accompany this section of the application. Different factors impacting the nature of the storm water discharges, such as processes used and material management, shall be represented, to the extent feasible, in a manner roughly equivalent to their proportion in the group.

2. Part 2. Part 2 of a group application shall contain quantitative data (NPDES Form 2F), as modified by paragraph (a) of this subsection, so that when Part 1 and Part 2 of the group application are taken together, a complete NPDES application (Form 1, Form 2C, and Form 2F) can be evaluated for each discharger identified in subparagraph 1d of this paragraph.

(3) Application requirements for large and medium municipal separate storm sewer discharges. The owner or operator of a discharge from a large or medium municipal separate storm sewer or a municipal separate storm sewer that is designated by the cabinet under subsection (1)(a)5 of this section, may submit a jurisdiction-wide or system-wide permit application. If more than one (1) public entity owns or operates a municipal separate storm sewer within a geographic area including adjacent or interconnected municipal separate storm sewer systems, the owners or operators may be coapplicants to the same application. Permit applications for discharges from large and medium municipal storm sewers or municipal storm sewers designated under subsection (1)(a)5 of this section shall include:

(a) Part 1. Part 1 of the application shall consist of:

1. General information. The applicants' name, address, telephone number of contact person, ownership status and status as a state or local government entity.

2. Legal authority. A description of existing legal authority to control discharges to the municipal separate storm sewer system. If existing legal authority is not sufficient to meet the criteria provided in paragraph (b)1 of this subsection, the description shall list additional authorities as will be necessary to meet the criteria and shall include a schedule and commitment to seek the additional authority that will be needed to meet the criteria.

3. Source identification.

a. A description of the historic use of ordinances, guidance or other controls which limited the discharge of nonstorm water discharges to any POTW serving the same area as the municipal separate storm sewer system.

b. A USGS seven and one-half (7.5) minute topographic map, or equivalent topographic map with a scale between 1:10,000 and 1:24,000 if cost effective, extending one (1) mile beyond the service boundaries of the municipal storm sewer system covered by the permit application. The following information shall be provided:

(i) The location of known municipal storm sewer system outfalls discharging to waters of the Commonwealth;

(ii) A description of the land use activities (e.g., divisions indicating undeveloped, residential, commercial, agricultural and industrial uses) accompanied with estimates of population densities and projected growth for a ten (10) year period within the drainage area served by the separate storm sewer. For each land use type, an estimate of an average runoff coefficient shall be provided;

(iii) The location and a description of the activities of the facility of each currently operating or closed municipal landfill or other treatment, storage or disposal facility for municipal waste;

(iv) The location and the permit number of any known discharge to the municipal storm sewer that has been issued a KPDES permit;

(v) The location of major structural controls for storm water discharge (retention basins, detention basins, major infiltration devices, etc.); and

(vi) The identification of publicly owned parks, recreational areas, and other open lands.

4. Discharge characterization.

a. Monthly mean rain and snow fall estimates or summary of weather bureau data and the monthly average number of storm events.

b. Existing quantitative data describing the volume and quality of discharges from the municipal storm sewer, including a description of the outfalls sampled, sampling procedures and analytical methods used.

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c. A list of water bodies that receive discharges from the municipal separate storm sewer system, including downstream segments and lakes, where pollutants from the system discharges may accumulate and cause water degradation and a brief description of known water quality impacts. At a minimum, the description of impacts shall include a description of whether the water bodies receiving these discharges have been:

(i) Assessed and reported in Section 305(b), 33 USC 1315(b) reports submitted by the Commonwealth, the basis for the assessment, evaluated or monitored, a summary of designated use support and attainment of Clean Water Act (CWA) goals (fishable and swimmable waters), and causes of nonsupport of designated uses;

(ii) Listed under Section 304(l)(1)(A)(i), Section 304(l)(1)(A)(ii), or Section 304(l)(1)(B) of the CWA, 33 USC 1314(l)(1)(B) that is not expected to meet water quality standards or water quality goals;

(iii) Listed in state nonpoint source assessments required by Section 319(a) of the CWA, 33 USC 1329(a), that, without additional action to control nonpoint sources of pollution, cannot reasonably be expected to attain or maintain water quality standards due to storm sewers, construction, highway maintenance and runoff from municipal landfills and municipal sludge adding significant pollution, or contributing to a violation of water quality standards;

(iv) Identified and classified according to eutrophic condition of publicly owned lakes listed in state reports required under Section 314(a) of the CWA, 33 USC 1324(a). The following shall be included: a description of those publicly owned lakes for which uses are known to be impaired; a description of procedures, processes and methods to control the discharge of pollutants from municipal separate storm sewers into these lakes; and a description of methods and procedures to restore the quality of those lakes;

(v) Recognized by the applicant as highly valued or sensitive waters;

(vi) Defined by the U.S. Fish and Wildlife Service's National Wetlands Inventory as wetlands; and

(vii) Found to have pollutants in bottom sediments, fish tissue or biosurvey data.

d. Field screening. Results of a field screening analysis for illicit connections and illegal dumping for either selected field screening points or major outfalls covered in the permit application. At a minimum, a screening analysis shall include a narrative description, for either each field screening point or major outfall, of visual observations made during dry weather periods. If any flow is observed, two (2) grab samples shall be collected during a twenty-four (24) hour period with a minimum period of four (4) hours between samples. For all samples, a narrative description of the color, odor, turbidity, the presence of an oil sheen or surface scum as well as any other relevant observations regarding the potential presence of nonstorm water discharges or illegal dumping shall be provided. In addition, a narrative description of the results of a field analysis using suitable methods to estimate pH, total chlorine, total copper, total phenol, and detergents (surfactants) shall be provided along with a description of the flow rate. If the field analysis does not involve analytical methods referenced in 40 CFR Part 136, the applicant shall provide a description of the method used including the name of the manufacturer of the test method along with the range and accuracy of the test. Field screening points shall be either major outfalls, other outfall points or any other point of access such as manholes randomly located throughout the storm sewer system by placing a grid over a drainage system map and identifying those cells of the grid which contain a segment of the storm sewer system or major outfall. The field screening points shall be established using the following guidelines and criteria:

(i) A grid system consisting of perpendicular north-south and east-west lines spaced one-fourth (1/4) mile apart shall be overlaid on a map of the municipal storm sewer system, creating a series of cells;

(ii) All cells that contain a segment of the storm sewer system shall be identified; one (1) field screening point shall be selected in each cell; major outfalls may be used as field screening points;

(iii) Field screening points should be located downstream of any sources of suspected illegal or illicit discharge;

(iv) Field screening points shall be located to the degree practicable at the farthest manhole or other accessible location downstream in the system, within each cell. Safety of personnel and accessibility of the location shall be considered in making this determination;

(v) Hydrological conditions; total drainage area of the site; population density of the site; traffic density; age of the structures or buildings in the area; history of the area; and land use types;

(vi) For medium municipal separate storm sewer systems, at least 250 cells shall have identified field screening points; in large municipal separate storm sewer systems, at least 500 cells shall have identified field screening points; cells established by the grid that contain no storm sewer segments shall be eliminated from consideration; if fewer than 250 cells in medium municipal sewers are created, and fewer than 500 in large systems are created by the overlay on the municipal sewer map, then all those cells which contain a segment of the sewer system shall be subject to field screening, unless access to the separate storm sewer system is impossible; and

(vii) Large or medium municipal separate storm sewer systems which are unable to utilize the procedures described in clause d(i) through (vi) of this subparagraph, because a sufficiently detailed map of the separate storm sewer systems is unavailable, shall field screen no more than 500 or 250 major outfalls respectively, or all major outfalls in the system, if less. In these circumstances, the applicant shall establish a grid system consisting of north-south and east-west lines spaced one-fourth (1/4) mile apart as an overlay to the boundaries of the municipal storm sewer system, thereby creating a series of cells. The applicant shall then select major outfalls in as many cells as possible until at least 500 major outfalls for large municipalities or 250 major outfalls for medium municipalities are selected; a field screening analysis shall be undertaken at these major outfalls.

e. Characterization plan. Information and a proposed program to meet the requirements of paragraph (b)3 of this subsection. The description shall include: the location of outfalls or field screening points appropriate for representative data collection under paragraph (b)3a of this subsection, a description of why the outfall or field screening point is representative, the seasons during which sampling is intended, a description of the sampling equipment. The proposed location of outfalls or field screening points for sampling shall reflect water quality concerns (see clause c of this subparagraph to the extent practicable.

5. Management programs.

a. A description of the existing management programs to control pollutants from the municipal separate storm sewer system. The description shall provide information on existing structural and source controls, including operation and maintenance measures for structural controls, that are currently being implemented. Controls may include, but are not limited to procedures to control pollution resulting from construction activities; floodplain management controls; wetland protection measures; best management practices for new subdivisions; and emergency spill response programs. The description may address controls established under state law as well as local requirements.

b. A description of the existing program to identify illicit connections to the municipal storm sewer system. The description shall include inspection procedures and methods for detecting and preventing illicit discharges, and describe areas where this program has been implemented.

6. Fiscal resources. A description of the financial resources currently available to the municipality to complete Part 2 of the permit application. A description of the municipality's budget for existing storm water programs, including an overview of the municipality's financial resources and budget, including overall indebtedness and assets, and sources of funds for storm water programs shall be provided.

(b) Part 2. Part 2 of the application shall consist of:

1. Adequate legal authority. A demonstration that the applicant can operate pursuant to legal authority established by statute, ordinance or series of contracts which authorizes or enables the applicant at a minimum to:

a. Control through ordinance, permit, contract, order or similar means, the contribution of pollutants to the municipal storm sewer by storm water discharges associated with industrial activity and the quality of storm water discharged from sites of industrial activity;

b. Prohibit through ordinance, order or similar means, illicit discharges to the municipal separate storm sewer;

c. Control through ordinance, order or similar means the discharge to a municipal separate storm sewer of spills, dumping or disposal of materials other than storm water;

d. Control through interagency agreements among coapplicants the contribution of pollutants from one (1) portion of the municipal system to another portion of the municipal system;

e. Require compliance with conditions in ordinances, permits, contracts or orders; and

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f. Carry out all inspection, surveillance and monitoring procedures necessary to determine compliance and noncompliance with permit conditions including the prohibition on illicit discharges to the municipal separate storm sewer.

2. Source identification. List the locations of any major outfalls that discharge to waters of the Commonwealth that were not reported under paragraph (a)3b(i) of this subsection. Provide an inventory, organized by watershed of the name and address, and a description, such as SIC codes, which best reflects the principal products or services provided by each facility which may discharge to the municipal separate storm sewer, storm water associated with industrial activity;

3. Characterization data. If quantitative data for a pollutant are required under paragraph (a)3a(iii) of this subsection, the applicant shall collect a sample of effluent in accordance with Section 2(7) of this administrative regulation and analyze it for the pollutant in accordance with analytical methods referenced in 40 CFR Part 136. If no analytical method is approved the applicant may use any suitable method but shall provide a description of the method. The applicant shall provide information characterizing the quality and quantity of discharges covered in the permit application, including:

a. Quantitative data from representative outfalls designated by the cabinet. Based on information received in Part 1 of the application, the cabinet shall designate between five (5) and ten (10) outfalls or field screening points as representative of the commercial, residential and industrial land use activities of the drainage area contributing to the system. If there are less than five (5) outfalls covered in the application, the cabinet shall designate all outfalls. A monitoring plan shall be developed as follows:

(i) For each outfall or field screening point designated under this clause, samples shall be collected of storm water discharges from three (3) storm events occurring at least one (1) month apart in accordance with the requirements at Section 2(7) of this administrative regulation. The cabinet may allow exemptions to sampling three (3) storm events if climatic conditions create good cause for these exemptions;

(ii) A narrative description shall be provided of the date and duration of the storm events sampled, rainfall estimates of the storm event which generated the sampled discharge and the duration between the storm event sampled and the end of the previous greater than one-tenth (0.1) inch rainfall storm event;

(iii) For samples collected and described under subclause (i) and (ii) of this clause, quantitative data shall be provided for the pollutants listed in Section 8(2) and (3) of this administrative regulation, and for the following pollutants:

- Total suspended solids (TSS)
- Total dissolved solids (TDS)
- COD
- BOD
- Oil and grease
- Fecal coliform
- Fecal streptococcus
- pH
- Total Kjeldahl nitrogen
- Nitrate plus nitrite
- Dissolved phosphorus
- Total ammonia plus organic nitrogen
- Total phosphorus

(iv) List additional limited quantitative data required by the cabinet for determining permit conditions. The cabinet may require that quantitative data be provided for additional parameters, and may establish sampling conditions such as the location, season of sample collection, form of precipitation (snowmelt, rainfall) and other parameters necessary to insure representativeness;

b. Estimates of the annual pollutant load of the cumulative discharges to waters of the Commonwealth from all identified municipal outfalls and the event mean concentration of the cumulative discharges to waters of the Commonwealth from all identified municipal outfalls during a storm event for BOD, COD, TSS, dissolved solids, total nitrogen, total ammonia plus organic nitrogen, total phosphorus, dissolved phosphorus, cadmium, copper, lead, and zinc. Estimates shall

be accompanied by a description of the procedures for estimating constituent loads and concentrations, including any modelling, data analysis, and calculation methods;

c. A proposed schedule to provide estimates for each major outfall identified in either subparagraph 2 of this paragraph or paragraph (a)3b(i) of this subsection of the seasonal pollutant load and of the event mean concentration of a representative storm for any constituent detected in any sample required under clause a of this subparagraph; and

d. A proposed monitoring program for representative data collection for the term of the permit that describes the location of outfalls or field screening points to be sampled, or the location of instream stations, why the location is representative, the frequency of sampling, parameters to be sampled, and a description of sampling equipment.

4. Proposed management program. A proposed management program shall cover the duration of the permit. It shall include a comprehensive planning process which involves public participation and if necessary intergovernmental coordination, to reduce the discharge of pollutants to the maximum extent practicable using management practices, control techniques and system, design and engineering methods, and other provisions which are appropriate. The program shall also include a description of staff and equipment available to implement the program. Separate proposed programs may be submitted by each coapplicant. Proposed programs may impose controls on a system-wide basis, a watershed basis, a jurisdiction basis, or on individual outfalls. Proposed programs shall be considered by the cabinet when developing permit conditions to reduce pollutants in discharges to the maximum extent practicable. Proposed management programs shall describe priorities for implementing controls. The programs shall be based on:

a. A description of structural and source control measures to reduce pollutants from runoff from commercial and residential areas that are discharged from the municipal storm sewer system that are to be implemented during the life of the permit, accompanied with an estimate of the expected reduction of pollutant loads and a proposed schedule for implementing such controls. At a minimum, the description shall include:

(i) A description of maintenance activities and a maintenance schedule for structural controls to reduce pollutants, including floatables, in discharges from municipal separate storm sewers;

(ii) A description of planning procedures including a comprehensive master plan to develop, implement and enforce controls to reduce the discharge of pollutants from municipal separate storm sewers which receive discharges from areas of new development and significant redevelopment. The plan shall address controls to reduce pollutants in discharges from municipal separate storm sewers after construction is completed. Controls to reduce pollutants in discharges from municipal separate storm sewers containing construction site runoff are addressed in clause d of this subparagraph;

(iii) A description of practices for operating and maintaining public streets, roads and highways and procedures for reducing the impact on receiving waters of discharges from municipal storm sewer systems, including pollutants discharged as a result of deicing activities;

(iv) A description of procedures to assure that flood management projects assess the impacts on the water quality of receiving water bodies and that existing structural flood control devices have been evaluated to determine if retrofitting the device to provide additional pollutant removal from storm water is feasible;

(v) A description of a program to monitor pollutants in runoff from operating or closed municipal landfills or other treatment, storage or disposal facilities for municipal waste, which shall identify priorities and procedures for inspections and establishing and implementing control measures for the discharges. This program may be coordinated with the program developed under clause c of this subparagraph; and

(vi) A description of a program to reduce to the maximum extent practicable, pollutants in discharges from municipal separate storm sewers associated with the application of pesticides, herbicides and fertilizer which shall include, as appropriate, controls such as educational activities, permits, certifications and other measures for commercial applicators and distributors, and controls for application in public right-of-ways and at municipal facilities.

b. A description of a program, including a schedule, to detect and remove, or require the discharger to the municipal separate storm sewer to obtain a separate KPDES permit for, illicit discharges and improper disposal into the storm sewer. The proposed program shall include:

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(i) A description of a program, including inspections, to implement and enforce an ordinance, orders or similar means to prevent illicit discharges to the municipal separate storm sewer system. This program description shall address all types of illicit discharges. The following category of nonstorm water discharges or flows shall be addressed if the discharges are identified by the municipality as sources of pollutants to waters of the Commonwealth: water line flushing, landscape irrigation, diverted stream flows, rising ground waters, uncontaminated ground water infiltration (as specified at 40 CFR 35.2005(b)(20)) to separate storm sewers, uncontaminated pumped ground water, discharges from potable water sources, foundation drains, air conditioning condensation, irrigation water, springs, water from crawl space pumps, footing drains, lawn watering, individual residential car washing, flows from riparian habitats and wetlands, dechlorinated swimming pool discharges, and street wash water. Program descriptions shall address discharges or flows from firefighting only if the discharges or flows are identified as significant sources of pollutants to waters of the Commonwealth;

(ii) A description of procedures to conduct on-going field screening activities during the life of the permit, including areas or locations that will be evaluated by the field screens;

(iii) A description of procedures to be followed to investigate portions of the separate storm sewer system that, based on the results of the field screen, or other appropriate information, indicate a reasonable potential of containing illicit discharges or other sources of nonstorm water. The procedures may include sampling procedures for constituents such as fecal coliform, fecal streptococcus, surfactants (MBAS), residual chlorine, fluorides and potassium; testing with fluorometric dyes; or conducting in storm sewer inspections if safety and other considerations allow. The description shall include the location of storm sewers that have been identified for the evaluation;

(iv) A description of procedures to prevent, contain, and respond to spills that may discharge into the municipal separate storm sewer;

(v) A description of a program to promote, publicize, and facilitate public reporting of the presence of illicit discharges or water quality impacts associated with discharges from municipal separate storm sewers;

(vi) A description of educational activities, public information activities, and other appropriate activities to facilitate the proper management and disposal of used oil and toxic materials; and

(vii) A description of controls to limit infiltration of seepage from municipal sanitary sewers to municipal separate storm sewer systems if necessary.

c. A description of a program to monitor and control pollutants in storm water discharges to municipal systems from municipal landfills, hazardous waste treatment, disposal and recovery facilities, industrial facilities that are subject to Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA, 42 USC 11023), and industrial facilities that the municipal permit applicant determines are contributing a substantial pollutant loading to the municipal storm sewer system. The program shall:

(i) Identify priorities and procedures for inspections and establishing and implementing control measures for these discharges; and

(ii) Describe a monitoring program for storm water discharges associated with the industrial facilities identified in clause c of this subparagraph, to be implemented during the term of the permit, including the submission of quantitative data on the following constituents: any pollutants limited in effluent guidelines subcategories, if applicable; any pollutant listed in an existing KPDES permit for a facility; oil and grease, COD, pH, BOD, TSS, total phosphorus, total Kjeldahl nitrogen, nitrate plus nitrite nitrogen, and any information on discharges required under Section 2(7)(f) and (g) of this administrative regulation.

d. A description of a program to implement and maintain structural and nonstructural best management practices to reduce pollutants in storm water runoff from construction sites to the municipal storm sewer system, which shall include:

(i) A description of procedures for site planning which incorporate consideration of potential water quality impacts;

(ii) A description of requirements for nonstructural and structural best management practices;

(iii) A description of procedures for identifying priorities for inspecting sites and enforcing control measures which consider the nature of the construction activity, topography, and the characteristics of soils and receiving water quality; and

(iv) A description of appropriate educational and training measures for construction site operators.

5. Assessment of controls. Estimated reductions in loadings of pollutants from discharges of municipal storm sewer constituents from municipal storm sewer systems expected as the result of the municipal storm water quality management program. The assessment shall also identify known impacts of storm water controls on ground water.

6. Fiscal analysis. For each fiscal year to be covered by the permit, a fiscal analysis of the necessary capital and operation and maintenance expenditures necessary to accomplish the activities of the programs under subparagraphs 3 and 4 of this paragraph. This analysis shall include a description of the source of funds that are proposed to meet the necessary expenditures, including legal restrictions on the use of the funds.

7. If more than one (1) legal entity submits an application, the application shall contain a description of the roles and responsibilities of each legal entity and procedures to ensure effective coordination.

8. If requirements under paragraph (a)4e of this subsection and subparagraphs 2, 3b, and 4 of this paragraph are not practicable or are not applicable, the cabinet may exclude any operator of a discharge from a municipal separate storm sewer which is designated under subsection (1)(a)5, (2)(d)2 or (2)(g)2 of this section from these requirements. The cabinet shall not exclude the owner or operator of a discharge from a municipal separate storm sewer identified in 40 CFR 122, Appendix F, G, H, or I, from any of the permit application requirements under this subparagraph except if authorized under this section.

(4) Application deadlines. Any owner or operator of a point source required to obtain a permit under subsection (1)(a) of this section that does not have an effective KPDES permit covering its storm water outfalls shall submit an application in accordance with the following deadlines:

(a) Individual applications.

1. Except as provided in subparagraph 2 of this paragraph, for any storm water discharge associated with industrial activity defined in 401 KAR 5:002 that is not part of a group application as described in subsection (2)(b) of this section or which is not authorized by a storm water general permit, a permit application made pursuant to subsection (2) of this section shall be submitted to the cabinet by October 1, 1992;

2. For any storm water discharge associated with industrial activity from a facility that is owned or operated by a municipality with a population of less than 100,000 other than an airport, power plant or uncontrolled sanitary landfill, the permit application shall be submitted by March 10, 2003.

(b) For any group application submitted in accordance with subsection (2)(b) of this section:

1. Part 1.

a. Except as provided in clause b of this subparagraph, Part 1 of the application shall be submitted to the U.S. EPA Director, Office of Water Enforcement and Permits by September 30, 1991;

b. Any municipality with a population of less than 250,000 shall be required to submit a Part 1 application before May 18, 1992; and

c. For any storm water discharge associated with industrial activities from a facility that is owned or operated by a municipality with a population of less than 100,000 other than an airport, power plant or uncontrolled sanitary landfill, permit applications shall not be required.

2. Based on information in the Part 1 application, the director shall approve or deny the members in the group application within sixty (60) days after receiving Part 1 of the group application.

3. Part 2.

a. Except as provided in clause b of this subparagraph, Part 2 of the application shall be submitted to the Director, Office of Water Enforcement and Permits by October 1, 1992;

b. Any municipality with a population of less than 250,000 shall not be required to submit a Part 1 application before May 17, 1993; and

c. For any storm water discharge associated with industrial activity from a facility that is owned or operated by a municipality with a population of less than 100,000 other than an airport, power plant or uncontrolled sanitary landfill, permit applications shall not be required.

4. Rejected facilities.

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a. Except as provided in clause b of this subparagraph, facilities that are rejected as members of a group shall submit an individual application or obtain coverage under an applicable general permit no later than twelve (12) months after the date of receipt of the notice of rejection or October 1, 1992, whichever comes first.

b. Facilities that are owned or operated by a municipality and that are rejected as members of Part I group application shall submit an individual application no later than 180 days after the date of the receipt of the notice of registration or October 1, 1992, whichever is later.

5. A facility defined as a storm water associated with industrial activity in 401 KAR 5:002 may add on to a group application submitted in accordance with subparagraph 1 of this paragraph at the discretion of the U.S. EPA Office of Water Enforcement and Permits, if there is a showing of good cause by the facility and the group applicant; the request for the addition of the facility shall be made no later than February 18, 1992. The addition of the facility shall not cause the percentage of the facilities that are required to submit quantitative data to be less than ten (10) percent, unless there are over 100 facilities in the group that are submitting quantitative data. Approval to become part of group application shall be obtained from the group or the trade association representing the individual facilities.

(c) For any discharge from a large municipal separate storm sewer system:

1. Part 1 of the application shall be submitted to the cabinet by November 18, 1991;

2. Based on information received in the Part 1 application the cabinet shall approve or deny a sampling plan under subsection (3)(a)4e of this section within ninety (90) days after receiving the Part 1 application; and

3. Part 2 of the application shall be submitted to the cabinet by November 16, 1992.

(d) For any discharge from a medium municipal separate storm sewer system:

1. Part 1 of the application shall be submitted to the cabinet by May 18, 1992.

2. Based on information received in the Part 1 application the cabinet shall approve or deny a sampling plan within ninety (90) days after receiving the Part 1 application.

3. Part 2 of the application shall be submitted to the cabinet by May 17, 1993.

(e) For any discharge from a regulated small MS4, the permit application made under subsection (8) of this section shall be submitted to the cabinet by:

1. March 10, 2003 if designated under subsection (7)(a)1 of this section unless the MS4 serves a jurisdiction with a population under 10,000 and the cabinet has established a phasing schedule under 40 CFR 123.35(d)(3) (see subsection (8)(c)1 of this section); or

2. Within 180 days of notice, unless the cabinet grants a later date, if designated under subsection (7)(a)2 of this section (see subsection (8)(c)2 of this section).

(f) For any storm water discharge associated with small construction activity identified in 401 KAR 5:002, Section 1 (see subsection (4) of this section). Discharges from these sources shall require permit authorization by March 10, 2003, unless designated for coverage before then.

(g) A permit application shall be submitted to the cabinet within 180 days of notice, unless permission for a later date is granted by the cabinet for:

1. A storm water discharge which either the cabinet or the EPA Regional Administrator determines that the discharge contributes to a violation of a water quality standard or is a significant contributor of pollutants to waters of the Commonwealth (see subsection (1)(a)5 of this section and 401 KAR 5:002, Section 1(290)(b)); or

2. A storm water discharge subject to subsection (2)(a)5 of this section.

(h) Facilities with existing KPDES permits for storm water discharges associated with industrial activity shall maintain existing permits. New applications shall be submitted in accordance with the requirements of Section 2 of this administrative regulation and subsection (2) of this section 180 days before the expiration of the permits.

(5) Petitions.

(a) Any owner or operator of a municipal separate storm sewer system may petition the cabinet to require a separate KPDES permit for any discharge into the municipal separate storm sewer system.

(b) Any person may petition the cabinet to require a KPDES permit for a discharge which is composed entirely of storm water which contributes to a violation of a water quality standard or is a significant contributor of pollutants to waters of the Commonwealth.

(c) The owner or operator of a municipal separate storm sewer system may petition the cabinet to reduce the census estimates of the population served by such separate system to account for storm water discharged to combined sewers as defined by 401 KAR 5:002, Section 1(55), that is treated in a publicly owned treatment works. In municipalities or regional authorities in which combined sewers are operated, the census estimates of population may be reduced proportional to the fraction, based on estimated lengths, of the length of combined sewers over the sum of the length of combined sewers and municipal separate storm sewers if an applicant has submitted the KPDES permit number associated with each discharge point and a map indicating areas served by combined sewers and the location of any combined sewer overflow discharge point.

(d) Any person may petition the cabinet for the designation of a large, medium or small municipal separate storm sewer system as defined in 401 KAR 5:002.

(e) The cabinet shall make a final determination on any petition received under this section within ninety (90) days after receiving the petition with the exception of petitions to designate a small MS4 in which case the cabinet shall make a final determination on the petition within 180 days after its receipt.

(6) Conditional exclusion for "no exposure" of industrial activities and materials to storm water. Discharges composed entirely of storm water shall not be storm water discharges associated with industrial activity if there is "no exposure" of industrial materials and activities to rain, snow, snowmelt, or runoff, and the discharger satisfies the conditions in paragraphs (a) through (d) of this subsection. "No exposure" occurs if all industrial materials and activities are protected by a storm resistant shelter to prevent exposure to rain, snow, snowmelt, or runoff. Industrial materials or activities shall include, but are not limited to, material handling equipment or activities, industrial machinery, raw materials, intermediate products, by-products, final products, or waste products. Material handling activities shall include, but are not limited to, the storage, loading and unloading, transportation, or conveyance of any raw material, intermediate product, final product or waste product.

(a) Qualification. To qualify for this exclusion, the operator of the discharge shall:

1. Provide a storm resistant shelter to protect industrial materials and activities from exposure to rain, snow, snowmelt, and runoff;
2. Complete and sign, according to Section 9 of this administrative regulation, a certification that there are no discharges of storm water contaminated by exposure to industrial materials and activities from the entire facility, except as provided in paragraph (b) of this subsection;
3. Submit the signed certification to the cabinet once every five (5) years;
4. Allow the cabinet to inspect the facility to determine compliance with the "no exposure" conditions;
5. Allow the cabinet to make any "no exposure" inspection reports available to the public upon request; and
6. For facilities that discharge through an MS4, upon request, submit a copy of the certification of "no exposure" to the MS4 operator, as well as allow inspection and public reporting by the MS4 operator.

(b) Industrial materials and activities not requiring storm resistant shelter. To qualify for this exclusion, storm resistant shelter shall not be required for:

1. Drums, barrels, tanks, and similar containers that are tightly sealed, if those containers are not deteriorated, do not leak, and are banded or otherwise secured and without operational taps or valves;
2. Adequately maintained vehicles used in material handling; and
3. Final products, other than products that would be mobilized in storm water discharge (e.g., rock salt).

(c) Limitations.

1. Storm water discharges from construction activities defined in 401 KAR 5:002, Section 1, shall not be eligible for this conditional exclusion.
2. This conditional exclusion from the requirement for a KPDES permit shall be available on a facility-wide basis only, and shall not be available for individual outfalls. If a facility has some discharges of storm water that would otherwise be "no exposure" discharges, individual permit requirements shall be adjusted accordingly.

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3. If circumstances change and industrial materials or activities become exposed to rain, snow, snowmelt, or runoff, the conditions for this exclusion shall not apply any longer. If that occurs, the discharge shall become subject to enforcement for unpermitted discharge. Any conditionally exempt discharger who anticipates changes in circumstances shall apply for and obtain permit authorization prior to the change of circumstances.

4. Notwithstanding the provisions of this paragraph, the cabinet shall retain the authority to require permit authorization and deny this exclusion if the cabinet determines that the discharge causes, has a reasonable potential to cause, or contributes to an instream excursion above an applicable water quality standard, including designated uses.

(d) Certification. The no exposure certification shall require the submission of the following information, at a minimum, to aid the cabinet in determining if the facility qualifies for the no exposure exclusion:

1. The legal name, address and phone number of the discharger, see Section 1(3) of this administrative regulation;

2. The facility name and address, the county name and the latitude and longitude where the facility is located;

3. The certification shall indicate that none of the following materials or activities are, or will be in the foreseeable future, exposed to precipitation:

a. Using, storing or cleaning industrial machinery or equipment, and areas where residuals from using, storing or cleaning industrial machinery or equipment remain and are exposed to storm water;

b. Materials or residuals on the ground or in storm water inlets from spills/leaks;

c. Materials or products from past industrial activity;

d. Material handling equipment, except adequately maintained vehicles;

e. Materials or products during loading/unloading or transporting activities;

f. Materials or products stored outdoors, except final products intended for outside use, e.g., new cars, if exposure to storm water does not result in the discharge of pollutants;

g. Materials contained in open, deteriorated or leaking storage drums, barrels, tanks, and similar containers;

h. Materials or products handled/stored on roads or railways owned or maintained by the discharger;

i. Waste material, except waste in covered, nonleaking containers, e.g., dumpsters;

j. Application or disposal of process wastewater, unless otherwise permitted; and

k. Particulate matter or visible deposits of residuals from roof stacks/vents not otherwise regulated, i.e., under an air quality control permit, and evident in the storm water outflow;

4. All "no exposure" certifications shall include the following certification statement, and be signed in accordance with the signatory requirements of Section 9 of this administrative regulation: "I certify under penalty of law that I have read and understand the eligibility requirements for claiming a condition of "no exposure" and obtaining an exclusion from KPDES storm water permitting; and that there are no discharges of storm water contaminated by exposure to industrial activities or materials from the industrial facility identified in this document, except as allowed under paragraph (b) of this subsection. I understand that I am obligated to submit a no exposure certification form once every five years to the cabinet and, if requested, to the operator of the local MS4 into which this facility discharge, where applicable. I understand that I shall allow the cabinet, or MS4 operator where the discharge is into the local MS4, to perform inspections to confirm the condition of no exposure and to make such inspection reports publicly available upon request. I understand that I shall obtain coverage under an KPDES permit prior to any point source discharge of storm water from the facility. I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based upon my inquiry of the person or persons who manage the system, or those persons directly involved in gathering the information, the information submitted is to the best of my knowledge and belief true, accurate and complete. I am aware there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

(7) Regulated small MS4.

(a) Unless qualifying for a waiver under paragraph (c) of this subsection, an operator of a small MS4 shall be regulated, including but not limited to systems operated by federal, state, and local governments, including state departments of transportation; and:

1. The small MS4 is located in an urbanized area as determined by the latest Decennial Census by the Bureau of the Census. If the small MS4 is not located entirely within an urbanized area, only the portion that is within the urbanized area shall be regulated; or

2. Designated by the cabinet, including where the designation is pursuant to 40 CFR 123.35(b)(3) and (b)(4), or is based upon a petition under subsection (5) of this section.

(b) Subject of a petition to the cabinet to require an KPDES permit for discharge of storm water. If the cabinet determines a permit is needed, then subsections (7) through (10) of this section shall apply.

(c) The cabinet may waive the requirements otherwise applicable in accordance with paragraph (d) or (e) of this subsection. A waiver under this section may subsequently require coverage under a KPDES permit in accordance with subsection (8)(a) of this section, if circumstances change, see also 40 CFR 123.35(b).

(d) The cabinet may waive permit coverage if the MS4 serves a population of less than 1,000 within the urbanized area and meets the following criteria:

1. The system is not contributing substantially to the pollutant loadings of a physically interconnected MS4 that is regulated by the KPDES storm water program, see 40 CFR 123.35(b)(4); and

2. The system discharges any pollutant(s) that have been identified as a cause of impairment of any water body receiving the discharge, storm water controls are not needed based on wasteload allocations that are part of an EPA approved or established "total maximum daily load" (TMDL) that addresses the pollutant(s) of concern.

(e) The cabinet may waive permit coverage if the MS4 serves a population under 10,000 and meets the following criteria:

1. The cabinet has evaluated all waters of the Commonwealth, including small streams, tributaries, lakes, and ponds, that receive a discharge from the MS4;

2. For those waters, the cabinet has determined that storm water controls are not needed based on wasteload allocations that are part of an EPA approved or established TMDL that addresses the pollutant(s) of concern or, if a TMDL has not been developed or approved, an equivalent analysis that determines sources and allocations for the pollutant(s) of concern;

3. For the purpose of this paragraph, the pollutant(s) of concern shall include, but are not limited to, biochemical oxygen demand (BOD), sediment or a parameter that addresses sediment such as total suspended solids, turbidity or siltation, pathogens, oil and grease, and any pollutant that has been identified as a cause of impairment of any water body that will receive a discharge from the MS4; and

4. The cabinet has determined that future discharges from the MS4 do not have the potential to result in exceedances of water quality standards, including impairment of designated uses, or other significant water quality impacts, including habitat and biological impacts.

(8) Application requirements for small MS4.

(a) Operators of a regulated small MS4 under subsection (7) of this section shall seek coverage under a KPDES permit issued by the cabinet.

(b) Authorization to discharge shall be under a general or individual KPDES permit, as follows:

1. For a general permit issued by the cabinet applicable to the discharge, the applicant shall submit a Notice of Intent (NOI) that includes the information on best management practices and measurable goals required by subsection (9)(d)1 of this section. An individual NOI, or joint NOI with other municipalities or governmental entities, shall be submitted. Shared responsibilities for meeting the minimum measures with other municipalities or governmental entities, shall be indicated on the NOI describing which minimum measures shall be implemented by each within the area served by the MS4. Coverage as a copermitee under a general permit by means of a joint Notice of Intent, shall require each MS4 to be subject to the enforcement actions and penalties for the failure to comply with the terms of the permit in each respective jurisdiction except as set forth in subsection (10)(b) of this section.

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2.a. Authorization to discharge under an individual permit to implement a program under subsection (9) of this section, shall require submittal of an application to the cabinet that includes the information required under Section 1(7) of this administrative regulation and subsection (9)(d) of this section, an estimate of square mileage served by the small MS4, and any additional information that the cabinet requests. A storm sewer map that satisfies the requirement of subsection(9)(b)3 of this section shall satisfy the map requirement in Section 1(7)(f) of this administrative regulation.

b. Authorization to discharge under an individual permit to implement a program that is different from the program under subsection (9) of this section, shall require compliance with the permit application requirements of subsection (3) of this section. Both parts of the application requirements in subsection (3)(a) and (b) of this section shall be submitted by March 10, 2003. Information required by subsection (3)(a)2 and (b)1 of this section regarding legal authority shall not be required, unless the small MS4 intends for the permit writer to take that information into account when developing the other permit conditions.

c. If allowed by the cabinet, multiple entities may jointly apply under either paragraph (b)2a or b of this subsection to be copermittees under an individual permit. Coverage as a copermittee under an individual permit by means of a joint notice of intent shall require each MS4 to be subject to the enforcement actions and penalties for the failure to comply with the terms of the permit in each respective jurisdiction except as set forth in subsection (10)(b) of this section.

3. If a small MS4 is in the same urbanized area as a medium or large MS4 with a KPDES storm water permit and that other MS4 is willing to have the small MS4 participate in its storm water program, the entities may jointly seek a modification of the other MS4 permit to include the small MS4 as a limited copermittee. As a limited copermittee, the small MS4 shall be responsible for compliance with the permit's conditions applicable to its jurisdiction. Choice of this option shall require compliance with the permit application requirements of subsection (1), rather than the requirements of subsection (9) of this section. Compliance with the specific application requirements of subsection (3)(a)3 and 4 and (b)3 of this section (discharge characterization) shall not be required. The small MS4 may satisfy the requirements in subsection (3)(a)5 and (b)4 of this section (identification of a management program) by referring to the other MS4's storm water management program.

(c) Operation of a regulated small MS4:

1. Designated under subsection (7)(a)1 of this section, shall require coverage under a KPDES permit, or application for a modification of an existing KPDES permit under paragraph (b)3 of this subsection by March 10, 2003, unless the MS4 serves a jurisdiction with a population under 10,000 and the cabinet has established a phasing schedule under 40 CFR 123.35(d)(3).

2. Designated under subsection (7)(a)2 of this section, shall require coverage under an KPDES permit, or application for a modification of an existing KPDES permit under paragraph (b)3 of this subsection, within 180 days of notice, unless the cabinet grants a later date.

(9) Permit requirements for small MS4. The KPDES MS4 permit shall require at a minimum the MS4:

(a) To develop, implement, and enforce a storm water management program designed to reduce the discharge of pollutants from the MS4 to the maximum extent practicable (MEP), to protect water quality, and to satisfy the appropriate water quality requirements of the Clean Water Act. The storm water management program shall include the minimum control measures described in paragraph (b) of this subsection unless the MS4 applies for a permit under subsection (3) of this section. For purposes of this section, narrative effluent limitations requiring implementation of best management practices (BMPs) may generally be the most appropriate form of effluent limitations if designed to satisfy technology requirements, including reductions of pollutants to the maximum extent practicable and to protect water quality. Implementation of best management practices consistent with the provisions of the storm water management program required pursuant to this section and the provisions of the permit required pursuant to subsection (8) of this section shall constitute compliance with the standard of reducing pollutants to the "maximum extent practicable." The cabinet shall specify a time period of up to five (5) years from the date of permit issuance for the MS4 to develop and implement the program.

(b) Minimum control measures:

1. Public education and outreach on storm water impacts. Implement a public education program to distribute educational materials to the community or conduct equivalent outreach activities about the impacts of storm water discharges on water bodies and the steps that the public can take to reduce pollutants in storm water runoff.

2. Public involvement/participation. At a minimum, comply with state, and local public notice requirements when implementing a public involvement/ participation program.

3. Illicit discharge detection and elimination. Develop, implement and enforce a program to detect and eliminate illicit discharges as defined in 401 KAR 5:002 Section 1 into the small MS4 to include:

a. A storm sewer system map, showing the location of all outfalls and the names and location of all waters of the Commonwealth that receive discharges from those outfalls;

b. To the extent allowable under state, or local law, effectively prohibit, through ordinance, or other regulatory mechanism, nonstorm water discharges into the storm sewer system and implement appropriate enforcement procedures and actions;

c. Develop and implement a plan to detect and address nonstorm water discharges, including illegal dumping, to the system;

d. Inform public employees, businesses, and the general public of hazards associated with illegal discharges and improper disposal of waste; and

e. Address the following categories of nonstorm water discharges or flows, i.e., illicit discharges only if identified as significant contributors of pollutants to the small MS4: water line flushing, landscape irrigation, diverted stream flows, rising ground waters, uncontaminated ground water infiltration as defined at 40 CFR 35.2005(b)(20), uncontaminated pumped ground water, discharges from potable water sources, foundation drains, air conditioning condensation, irrigation water, springs, water from crawl space pumps, footing drains, lawn watering, individual residential car washing, flows from riparian habitats and wetlands, dechlorinated swimming pool discharges, and street wash water discharges or flows from fire fighting activities. These activities shall be excluded from the effective prohibition against nonstorm water and shall only be addressed if they are identified as significant sources of pollutants to waters of the Commonwealth.

4. Construction site storm water runoff control.

a. Develop, implement, and enforce a program to reduce pollutants in any storm water runoff to the small MS4 from construction activities that result in a land disturbance of greater than or equal to one (1) acre. Reduction of storm water discharges from construction activity disturbing less than one (1) acre shall be included in the program if that construction activity is part of a larger common plan of development or sale that would disturb one (1) acre or more. If the cabinet waives requirements for storm water discharges associated with small construction activity, the small MS4 shall not be required to develop, implement, or enforce a program to reduce pollutant discharges from those sites.

b. The program shall include the development and implementation of, at a minimum:

(i) An ordinance or other regulatory mechanism to require erosion and sediment controls, as well as sanctions to ensure compliance, to the extent allowable under state or local law;

(ii) Requirements for construction site operators to implement appropriate erosion and sediment control best management practices;

(iii) Requirements for construction site operators to control waste such as discarded building materials, concrete truck washout, chemicals, litter, and sanitary waste at the construction site that may cause adverse impacts to water quality;

(iv) Procedures for site plan review which incorporate consideration of potential water quality impacts;

(v) Procedures for receipt and consideration of information submitted by the public; and

(vi) Procedures for site inspection and enforcement of control measures.

5. Postconstruction storm water management in new development and redevelopment.

a. Develop, implement, and enforce a program to address storm water runoff from new development and redevelopment projects that disturb greater than or equal to one (1) acre, including projects less than one (1) acre that are part of a larger common plan of development or sale, that discharge into the small MS4. The program shall ensure that controls are in place that would prevent or minimize water quality impacts;

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b. Develop and implement strategies which include a combination of structural or nonstructural best management practices (BMPs) appropriate for the community;

c. Use an ordinance or other regulatory mechanism to address postconstruction runoff from new development and redevelopment projects to the extent allowable under state or local law; and

d. Ensure adequate long-term operation and maintenance of BMPs.

6. Pollution prevention/good housekeeping for municipal operations.

e. The small MS4 shall develop and implement an operation and maintenance program that includes a training component and has the ultimate goal of preventing or reducing pollutant runoff from municipal operations. Using training materials that are available from EPA, state, or other organizations, the program shall include employee training to prevent and reduce storm water pollution from activities such as park and open space maintenance, fleet and building maintenance, new construction and land disturbances, and storm water system maintenance.

(c) If an existing qualifying local program requires the implementation of one (1) or more of the minimum control measures of paragraph (b) of this subsection, the cabinet may include conditions in the KPDES permit that direct the small MS4 to follow that qualifying program's requirements rather than the requirements of paragraph (b) of this subsection. A qualifying local program shall be a local or state municipal storm water management program that imposes, at a minimum, the relevant requirements of paragraph (b) of this subsection.

(d)1. In the permit application, either a notice of intent for coverage under a general permit or an individual permit application, the small MS4 shall identify and submit to the cabinet the following information:

a. The BMPs that the small MS4 or another entity will implement for each of the storm water minimum control measures at paragraphs (b)1 through 6 of this subsection;

b. The measurable goals for each of the BMPs including, as appropriate, the months and years in which the responsible party will undertake required actions, including interim milestones and the frequency of the action; and

c. The person or persons responsible for implementing or coordinating the storm water management program.

2. If covered under a general permit, the small MS4 shall not be required to meet any measurable goal(s) identified in the notice of intent in order to demonstrate compliance with the minimum control measures in paragraph (b)3 through 6 of this subsection unless, prior to submitting the NOI, EPA or the state has provided or issued a menu of BMPs that addresses each minimum measure. Even if no regulatory authority issues the menu of BMPs, the small MS4 shall comply with other requirements of the general permit, including good faith implementation of BMPs designed to comply with the minimum measures.

(e) The small MS4 shall comply with any more stringent effluent limitations in the permit, including permit requirements that modify, or are in addition to, the minimum control measures based on an approved total maximum daily load (TMDL) or equivalent analysis. The cabinet may include more stringent limitations based on a TMDL or equivalent analysis that determines such limitations are needed to protect water quality.

(f) The small MS4 shall comply with other applicable KPDES permit requirements, standards and conditions established in the individual or general permit, developed consistent with the provisions of 401 KAR 5:065 and 5:070, as appropriate.

(g) Evaluation and assessment.

1. Evaluation. The small MS4 shall evaluate program compliance, the appropriateness of identified best management practices, and progress towards achieving identified measurable goals. The cabinet may determine monitoring requirements in accordance with state monitoring plans appropriate to a watershed.

2. Recordkeeping. The small MS4 shall keep records required by the KPDES permit for at least three (3) years. Records shall be submitted to the cabinet only if specifically asked to do so. Records, including a description of the storm water management program, shall be made available to the public at reasonable times during regular business hours, see 400 KAR 1:060 for confidentiality provision.

3. Reporting. Unless relying on another entity to satisfy the KPDES permit obligations under subsection (10)(a) of this section, the small MS4 shall submit annual reports to the cabinet for the

first permit term. For subsequent permit terms, reports shall be submitted in year two (2) and four (4) unless the cabinet requires more frequent reports. The report shall include:

- a. The status of compliance with permit conditions, an assessment of the appropriateness of identified best management practices and progress towards achieving identified measurable goals for each of the minimum control measures;
- b. Results of information collected and analyzed, including monitoring data, if any, during the reporting period;
- c. A summary of the storm water activities planned during the next reporting cycle;
- d. A change in any identified best management practices or measurable goals for any of the minimum control measures; and
- e. Notice of reliance on another governmental entity to satisfy some of the permit obligations, if applicable.

(10) Shared responsibilities for minimum control measures.

(a) The small MS4 may rely on another entity to satisfy the KPDES permit obligations to implement a minimum control measure if:

- 1. The other entity, in fact, implements the control measure;
- 2. The particular control measure, or component thereof, is at least as stringent as the corresponding KPDES permit requirement; and
- 3. The other entity agrees to implement the control measure on the small MS4 behalf. In the reports submitted under subsection (9)(g)3 of this section, the small MS4 shall also specify reliance on another entity to satisfy some of the permit obligations. If relying on another governmental entity regulated under this section to satisfy all of the permit obligations, including the obligation to file periodic reports required by subsection (9)(g)3 of this section, that fact shall be noted in the NOI and the small MS4 shall not be required to file the periodic reports. The small MS4 shall remain responsible for compliance with the permit obligations if the other entity fails to implement the control measure (or component thereof).

(b) In some cases, the cabinet may recognize, either in the individual KPDES permit or in an KPDES general permit, that another governmental entity is responsible under an KPDES permit for implementing one (1) or more of the minimum control measures for the small MS4 or that the cabinet itself is responsible. If the cabinet does so, the small MS4 shall not be required to include minimum control measure(s) in the storm water management program. For example, if a state is subject to an KPDES permit that requires it to administer a program to control construction site runoff at the state level and that program satisfies all of the requirements of subsection (9)(b)4 of this section, the small MS4 could avoid responsibility for the construction measure, but would be responsible for the remaining minimum control measures. The permit may be reopened and modified to include the requirement to implement a minimum control measure if the entity fails to implement it.

Section 13. Silvicultural Activities. Permit requirement. Silvicultural point sources, as defined in 401 KAR 5:002, are point sources subject to the KPDES permit program.

Section 14. Federal Regulations Adopted Without Change. The following federal regulations govern the subject matter of this administrative regulation and are hereby adopted without change. The federal regulations are published by the Office of the Federal Register, National Archives and Government Services, General Services Administration, and are available for inspection and copying, subject to copyright laws, during normal business hours of 8 a.m. to 4:30 p.m., excluding state holidays, at the Division of Water, 14 Reilly Road, Frankfort, Kentucky. Copies are also available from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402.

- (1) 40 CFR 35.2005(b)(20), "Grants for Construction of Treatment Works, Definitions, Infiltration", revised as of July 1, 2001;
- (2) 40 CFR 110.6, "Discharge of Oil, Notice Requirements", revised as of July 1, 2001;
- (3) 40 CFR 117.21, "Notice of Discharge of Reportable Quantity", revised as of July 1, 2001;
- (4) 40 CFR 122, "National Pollutant Discharge Elimination System", revised as of July 1, 2001;

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(5) 40 CFR 123.35, "Regulation of Small Municipal Separate Storm Sewer Systems", revised as of July 1, 2001;

(6) 40 CFR Part 136, "Guidelines Establishing Test Procedures for the Analyses of Pollutant", revised as of July 1, 2001;

(7) 40 CFR Part 261, "Identification and Listing of Hazardous Waste", revised as of July 1, 2001;

(8) 40 CFR 262.34, "Hazardous Waste, Pre-transport Requirements, Accumulation Time", revised as of July 1, 2001;

(9) 40 CFR 302.6, "Designation, Reportable Quantities and Notification, Notification Requirements", revised as of July 1, 2001;

(10) 40 CFR Part 355, Appendix A, "The List of Extremely Hazardous Substances", revised as of July 1, 2001; and

(11) 40 CFR Chapter I, Subchapter N, Part 401 et seq., "Federal Effluent Limitations and Standards and New Source Performance Standards", revised as of July 1, 2001.

Section 15. Incorporation by Reference. (1) The following material is incorporated by reference:

- (a) KPDES Form 1, DEP 7032, revised February 2002;
- (b) KPDES Form A, DEP 7032A, revised February 2002;
- (c) KPDES Form B, DEP 7032B, revised February 2002;
- (d) KPDES Form C, DEP 7032C, revised February 2002;
- (e) KPDES Short Form C, DEP 7032SC, revised February 2002; and
- (f) KPDES Form F, DEP 7032F, revised February 2002.

(2) This material may be inspected, copied, or obtained, subject to applicable copyright law, at the KPDES Branch at the Division of Water, 14 Reilly Road, Frankfort, Kentucky 40601, (502) 564-3410, Monday through Friday, 8 a.m. to 4:30 p.m. (9 Ky.R. 858; Am. 1119; 10 Ky.R. 25; eff. 6-1-83; 11 Ky.R. 756; eff. 1-7-85; 12 Ky.R. 528; eff. 12-10-85; 20 Ky.R. 3246; 21 Ky.R. 396; eff. 8-24-94; 28 Ky.R. 2686; 29 Ky.R. 1053; 1566; eff. 12-18-02.)

This informational copy is provided at no cost by Kentucky Rural Water Association for educational purposes. For an official certified copy of a regulation, contact the Legislative Research Commission Regulations Compiler's office at (502) 564-8100.

401 KAR 5:065. KPDES permit conditions.

RELATES TO: KRS 224.01-010, 224.01-070, 224.01-400, 224.70-100, 224.70-120, 224.99-010, 40 C.F.R. 129, 136, Chapter I, Subchapter N, 401 et seq., 503, 33 U.S.C. 1251 et seq.

STATUTORY AUTHORITY: KRS 224.10-100, 224.16-050, 224.70-110, 40 C.F.R. 129, 136, Chapter I, Subchapter N, 401 et seq., 503, 33 U.S.C. 1251 et seq., 1342

NECESSITY, FUNCTION, AND CONFORMITY: KRS 224.10-100 authorizes the Natural Resources and Environmental Protection Cabinet to issue, continue in effect, revoke, modify, suspend or deny under such conditions as the cabinet may prescribe, permits to discharge into any waters of the Commonwealth. KRS 224.16-050 further empowers the cabinet to issue federal permits pursuant to 33 USC Section 1342(b) of the Federal Water Pollution Control Act, 33 USC Section 1251 et seq. subject to the conditions imposed in 33 USC Sections 1342(b) and (d) and that any exemptions granted shall be pursuant to the Federal Water Pollution Control Act. This administrative regulation sets forth the conditions applicable to all KPDES permits and the procedures for establishing and calculating permit conditions.

Section 1. Conditions Applicable to all KPDES Permits. All conditions applicable to KPDES permits shall be incorporated into the permits either expressly or by reference. If incorporated by reference, a specific citation to these administrative regulations shall be given in the permit. In addition to conditions required in all KPDES permits, the cabinet shall establish conditions as required on a case-by-case basis under Section 2 of this administrative regulation and 401 KAR 5:070.

(1) Duty to comply.

(a) General requirement. The permittee shall comply with all conditions of this permit. Any permit noncompliance shall constitute a violation of KRS Chapter 224, among which shall be the following remedies: enforcement action, permit revocation, revocation and reissuance, or modification; or denial of a permit renewal application.

(b) Specific duties.

1. The permittee shall comply with effluent standards or prohibitions established under 40 CFR Part 129 as of July 1, 2001, as adopted without change, within the time provided in the federal regulations that establish these standards or prohibitions, even if the permit has not yet been modified to incorporate the requirement.

2. Any person who violates a permit condition as set forth in the KPDES administrative regulations shall be subject to penalties under KRS 224.99-010(1) and (4).

(2) Duty to reapply. If the permittee wishes to continue an activity regulated by this permit after the expiration date of this permit, the permittee shall apply for and obtain a new permit as required in 401 KAR 5:060, Section 1.

(3) Need to halt or reduce activity not a defense. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

(4) Duty to mitigate. The permittee shall take all reasonable steps to minimize or prevent any discharge in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment.

(5) Proper operation and maintenance. The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control and related appurtenances which are installed or used by the permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance also shall include adequate laboratory controls, and appropriate quality assurance procedures. This provision shall require the operation of back-up or auxiliary facilities or similar systems which are installed by a permittee only if the operation is necessary to achieve compliance with the conditions of the permit.

(6) Permit actions. The permit may be modified, revoked and reissued, or revoked for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or

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revocation, or a notification of planned changes or anticipated noncompliance, shall not stay any permit condition.

(7) Property rights. This permit shall not convey any property rights of any kind, or any exclusive privilege.

(8) Duty to provide information. The permittee shall furnish to the cabinet, within a reasonable time, any information which the cabinet may request to determine whether cause exists for modifying, revoking and reissuing, or revoking this permit, or to determine compliance with this permit. The permittee shall also furnish to the cabinet, upon request, copies of records required to be kept by this permit.

(9) Inspection and entry. The permittee shall allow the cabinet, or an authorized representative, upon the presentation of credentials and other documents as may be required by law, to:

(a) Enter upon the permittee's premises where a regulated facility or activity is located or conducted, or where records pertinent to the KPDES program are or may be kept;

(b) Have access to and copy, at reasonable times, any records that are required to be kept under the conditions of this permit;

(c) Inspect at reasonable times any facilities, equipment, including monitoring and control equipment, practices, or operations regulated or required under this permit; and

(d) Sample or monitor at reasonable times, for the purposes of assuring KPDES program compliance or as otherwise authorized by KRS Chapter 224, any substances or parameters at any location.

(10) Monitoring and records.

(a) Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity.

(b) The permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this permit, and records of all data used to complete the application for this permit, for a period of at least three (3) years from the date of the sample, measurement, report, or application. This period may be extended by request of the cabinet at any time.

(c) Records of monitoring information shall include:

1. The date, exact place, and time of sampling or measurements;
2. The individuals who performed the sampling or measurements;
3. The dates analyses were performed;
4. The individuals who performed the analyses;
5. The analytical techniques or methods used; and
6. The results of the analyses.

(d) Monitoring shall be conducted according to test procedures approved under 40 CFR Part 136, unless other test procedures have been specified in the permit.

(e) Any person who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained under the permit shall, upon conviction, be subject to penalties under KRS 224.99-010(4).

(11) Signatory requirement. All applications, reports, or information submitted to the cabinet shall be signed and certified as indicated in 401 KAR 5:060, Section 9. Any person who knowingly makes any false statement, representation, or certification in any record or other document submitted or required to be maintained under this permit, including monitoring reports or reports of compliance or noncompliance shall, upon conviction, be subject to penalties under KRS 224.99-010(4).

(12) Reporting requirements.

(a) Planned changes. The permittee shall give notice to the cabinet as soon as possible of any planned physical alteration or additions to the permitted facility. Notice shall be required only if:

1. The alteration or addition to a permitted facility may meet one (1) of the criteria for determining whether a facility is a new source in 401 KAR 5:080, Section 5; or

2. The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification only applies to pollutants which are subject either to effluent limitations in the permit, or to notification requirements under 401 KAR 5:080, Section 5.

(b) Anticipated noncompliance. The permittee shall give advance notice to the cabinet of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements.

(c) Transfers. The permit shall not be transferable to any person except after notice to the cabinet. The cabinet may require modification or revocation and reissuance of the permit to change the name of the permittee and incorporate other requirements as may be necessary under KRS Chapter 224.

(d) Monitoring reports. Monitoring results shall be reported at the intervals specified in the permit. Monitoring results shall be reported as follows:

1. Monitoring results shall be reported on a Discharge Monitoring Report (DMR).
2. If the permittee monitors any pollutant more frequently than required by the permit, using test procedures approved under 40 CFR Part 136 or as specified in the permit, the results of this monitoring shall be included in the calculation and reporting of the data submitted in the DMR.
3. Calculations for all limitations which require averaging of measurements shall utilize an arithmetic mean unless otherwise specified by the cabinet in the permit.

(e) Compliance schedules. Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this permit shall be submitted no later than fourteen (14) days following each schedule date.

(f) Twenty-four (24) hour reporting. The permittee shall follow the provisions of 401 KAR 5:015 and shall orally report any noncompliance which may endanger health or the environment, within twenty-four (24) hours from the time the permittee becomes aware of the circumstances. This report shall be in addition to and not in lieu of any other reporting requirement applicable to the noncompliance. A written submission shall also be provided within five (5) days of the time the permittee becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance. The cabinet may waive the written report on a case-by-case basis if the oral report has been received within twenty-four (24) hours. The following shall be included as events which shall be reported within twenty-four (24) hours:

1. Any unanticipated bypass which exceeds any effluent limitation in the permit, as indicated in subsection (13) of this section.
2. Any upset which exceeds any effluent limitation in the permit.
3. Violation of a maximum daily discharge limitation for any of the pollutants listed by the cabinet in the permit to be reported within twenty-four (24) hours, as indicated in Section 2(7) of this administrative regulation.

(g) Other noncompliance. The permittee shall report all instances of noncompliance not reported under paragraphs (d), (e), and (f) of this subsection, when monitoring reports are submitted. The reports shall contain the information listed in paragraph (f) of this subsection.

(h) Other information. Where the permittee becomes aware that it failed to submit any relevant fact in a permit application, or submitted incorrect information in a permit application or in any report to the cabinet, it shall promptly submit these facts or information.

(13) Occurrence of a bypass.

(a) Bypass not exceeding limitations. The permittee may allow any bypass to occur which does not cause effluent limitations to be exceeded, but only if it also is for essential maintenance to assure efficient operation. This type of bypass shall not be subject to the provisions of paragraphs (b) and (c) of this subsection.

(b) Notice.

1. Anticipated bypass. If the permittee knows in advance of the need for a bypass, it shall submit prior notice, if possible at least ten (10) days before the date of the bypass. Compliance with this requirement constitutes compliance with 401 KAR 5:015, Section 1.

2. Unanticipated bypass. The permittee shall submit notice of an unanticipated bypass as required in subsection (12)(f) of this section, twenty-four (24) hour notice. Compliance with this requirement constitutes compliance with 401 KAR 5:015, Section 4.

(c) Prohibition of a bypass.

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1. **Bypassing shall be prohibited**, and the cabinet may take enforcement action against a permittee for bypass, unless:

a. The bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;

b. There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition shall not be satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventive maintenance; and

c. The permittee submitted notices as required under paragraph (b) of this subsection.

2. The cabinet may approve an anticipated bypass, after considering its adverse effects, if the cabinet determines that it will meet the three (3) conditions listed in subparagraph 1a, b, and c of this paragraph.

(14) Occurrence of an upset.

(a) Effect of an upset. An upset constitutes an affirmative defense to an action brought for noncompliance with technology-based permit effluent limitations if the requirements of paragraph (b) of this subsection are met.

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

1. An upset occurred and that the permittee can identify the causes of the upset;

2. The permitted facility was at the time being properly operated;

3. The permittee submitted notice of the upset as required in subsection (12)(f) of this section;

and

4. The permittee complied with any remedial measures required under subsection (4) of this section.

(c) Burden of proof. In any enforcement proceeding, the permittee seeking to establish the occurrence of an upset shall have the burden of proof.

(15) Additional conditions applicable to specified categories of KPDES permits. The following conditions, in addition to others set forth in this administrative regulation, shall apply to all KPDES permits within the categories specified below:

(a) Existing manufacturing, commercial, mining, and silvicultural dischargers. In addition to the reporting requirements under subsections (12), (13), and (14) of this section, any existing manufacturing, commercial, mining, and silvicultural discharger shall notify the cabinet as soon as it knows or has reason to know:

1. That any activity has occurred or will occur which would result in the discharge on a routine or frequent basis, of any toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following "notification levels:"

a. 100 micrograms per liter (100 µg/l);

b. 200 micrograms per liter (200 µg/l) for acrolein and acrylonitrile; 500 micrograms per liter (500 µg/l) for 2,4-dinitrophenol and for 2-methyl-4,6-dinitrophenol; and one (1) milligram per liter (1 mg/l) for antimony;

c. Five (5) times the maximum concentration value reported for that pollutant in the permit application in accordance with 401 KAR 5:060, Section 2(7);

d. The level established by the cabinet in accordance with Section 2(6) of this administrative regulation.

2. That any activity has occurred or will occur which would result in any discharge, on a nonroutine or infrequent basis, of a toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following "notification levels:"

a. 500 micrograms per liter (500 µg/l);

b. One (1) milligram per liter (1 mg/l) for antimony;

c. Ten (10) times the maximum concentration value reported for that pollutant in the permit application in accordance with 401 KAR 5:060, Section 2(7); or

d. The level established by the cabinet in accordance with Section 2(6) of this administrative regulation.

(b) POTWs.

1. POTWs shall provide adequate notice to the cabinet of the following:
 - a. Any new introduction of pollutants into that POTW from an indirect discharger which would be subject to the KPDES administrative regulations if it were directly discharging those pollutants; or
 - b. Any substantial change in the volume or character of pollutants being introduced into that POTW by a source introducing pollutants into the POTW at the time of issuance of the permit.
2. For purposes of this paragraph, adequate notice shall include information on the quality and quantity of effluent introduced into the POTWs and any anticipated impact of the change on the quantity or quality of effluent to be discharged from the POTW.

Section 2. Establishing Permit Conditions. For the purpose of this section, permit conditions shall include any statutory or regulatory requirement which takes effect prior to the final administrative disposition of a permit. An applicable requirement may be any requirement which takes effect prior to the modification or revocation or reissuance of a permit, to the extent allowed in 401 KAR 5:070, Section 6. New or reissued permits, and to the extent allowed under 401 KAR 5:070, Section 6 modified or revoked and reissued permits, shall incorporate each of the applicable requirements referenced in this section. In addition to the conditions established under Section 1 of this administrative regulation each KPDES permit shall include conditions meeting the following requirements as applicable.

(1) Technology-based effluent limitations and standards; new source performance standards; and pretreatment requirements and standards, as required by 40 CFR Chapter I, Subchapter N (Part 401 et seq.), adopted without change in Section 4 of this administrative regulation, or case-by-case effluent limitations and standards and pretreatment requirements or based on a combination of those standards in accordance with 401 KAR 5:080, Section 1(2) shall be included, as applicable. For new sources or new discharges, these technology-based limitations and standards shall be subject to the provisions of 401 KAR 5:080, Section 5(2)(a).

(2) Other effluent limitations and standards of KRS Chapter 224 shall be included as applicable. If any applicable toxic effluent standard or prohibition, including any schedule of compliance specified in the effluent standard or prohibition, is promulgated by EPA for a toxic pollutant and that standard or prohibition is more stringent than any limitation on the pollutant in the permit, the cabinet shall institute proceedings under these administrative regulations to modify or revoke and reissue the permit to conform to the toxic effluent standard or prohibition.

(3) Reopener clause. For any discharger within a primary industry category, as listed in Section 4(2) of this administrative regulation requirements under the KPDES administrative regulations shall be incorporated as applicable, as follows:

(a) On or before June 30, 1981.

1. If applicable standards or limitations have not yet been promulgated, the permit shall include a condition stating that if an applicable standard or limitation is promulgated by EPA and that effluent standard or limitation is more stringent than any effluent limitation in the permit or controls a pollutant not limited in the permit, the permit shall be promptly modified or revoked and reissued to conform to that effluent standard or limitation.

2. If applicable standards or limitations have been promulgated or approved, the permit shall include those standards or limitations.

(b) After June 30, 1981, any permit issued shall include effluent limitations and a compliance schedule to meet the applicable requirements indicated in Section 1(1)(b) of this administrative regulation, whether or not applicable effluent limitations guidelines have been promulgated or approved by EPA. These permits need not incorporate the reopener clause required by paragraph (a) of this subsection.

(c) The cabinet shall promptly modify or revoke and reissue any permit containing the clause required under paragraph (a) of this subsection to incorporate an applicable EPA effluent standard or limitation which is promulgated or approved after the permit is issued if that effluent standard or limitation is more stringent than any effluent limitation in the permit, or controls a pollutant not limited in the permit.

(4) Water quality standards and state requirements shall be included as applicable. Any requirements in addition to or more stringent than EPA's effluent limitations guidelines or standards shall be included, if necessary to:

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(a) Achieve water quality standards established under KRS Chapter 224 and administrative regulations promulgated pursuant thereto, including any narrative criteria contained in 401 KAR 5:031.

1. Limitations shall control all pollutants or pollutant parameters (either conventional, nonconventional, or toxic pollutants) which the cabinet determines are or may be discharged at a level which will cause, have the reasonable potential to cause, or contribute to an excursion above any water quality standard, including narrative criteria for water quality.

2. If determining whether a discharge causes, has the reasonable potential to cause, or contributes to an in-stream excursion above a narrative or numeric criteria within a water quality standard, the cabinet shall use procedures which account for existing controls on point and nonpoint sources of pollution, the variability of the pollutant or pollutant parameter in the effluent, the sensitivity of the species to toxicity testing, if evaluating whole effluent toxicity, and if appropriate, the dilution of the effluent in the receiving water.

3. If the cabinet determines, using the procedures in subparagraph 2 of this paragraph, that a discharge causes, has the reasonable potential to cause, or contributes to an in-stream excursion above the allowable ambient concentration of a numeric criteria within a water quality standard for an individual pollutant, the permit shall contain effluent limits for that pollutant.

4. If the cabinet determines, using the procedures in subparagraph 2 of this paragraph, that a discharge causes, has the reasonable potential to cause, or contributes to an in-stream excursion above the numeric criterion for whole effluent toxicity, the permit shall contain effluent limits for whole effluent toxicity.

5. Except as provided in this subparagraph, if the cabinet determines, using the procedures in subparagraph 2 of this paragraph, toxicity testing data, or other information, that a discharge causes, has the reasonable potential to cause, or contributes to an in-stream excursion above a narrative criterion within an applicable water quality standard, the permit shall contain effluent limits for whole effluent toxicity. Limits on whole effluent toxicity shall not be necessary if the cabinet demonstrates in the fact sheet or statement of basis of the KPDES permit, using the procedures in subparagraph 2 of this paragraph, that chemical-specific limits for the effluent are sufficient to attain and maintain applicable numeric and narrative water quality standards.

6. If 401 KAR 5:031 does not specify a water quality criterion for a specific chemical pollutant that is present in an effluent at a concentration that causes, has the reasonable potential to cause, or contributes to an excursion above a narrative criterion within an applicable water quality standard, the cabinet shall establish effluent limits using one (1) or more of the following options:

a. Establish effluent limits using a calculated numeric water quality criterion for the pollutant which the cabinet demonstrates will attain and maintain applicable narrative water quality criteria and will fully protect the designated use. The criterion may be derived using administrative regulation interpreting the narrative water quality criterion, supplemented with other relevant information which may include: EPA's Water Quality Standards Handbook, September 1993, risk assessment data, exposure data, information about the pollutant from the Food and Drug Administration, and current EPA criteria documents; or

b. Establish effluent limits on a case-by-case basis, using water quality criteria listed in 401 KAR 5:031, supplemented if necessary by other relevant information; or

c. Establish effluent limitations on an indicator parameter for the pollutant of concern, if:

(i) The permit identifies which pollutants are intended to be controlled by the use of the effluent limitation;

(ii) The fact sheet required by 401 KAR 5:075 sets forth the basis for the limit, including a finding that compliance with the effluent limit on the indicator parameter will result in controls on the pollutant of concern which are sufficient to attain and maintain applicable water quality standards;

(iii) The permit requires all effluent and ambient monitoring necessary to show that during the term of the permit the limit on the indicator parameter continues to attain and maintain applicable water quality standards; and

(iv) The permit contains a reopener clause allowing the cabinet to modify or revoke and reissue the permit if the limits on the indicator parameter no longer attain and maintain applicable water quality standards.

7. If developing water quality-based effluent limits under this paragraph the cabinet shall ensure that:

a. The level of water quality to be achieved by limits on point sources established under this paragraph is derived from, and complies with all applicable water quality standards; and

b. Effluent limits developed to protect a narrative water quality criterion, a numeric water quality criterion, or both, are consistent with the assumptions and requirements of any available wasteload allocation for the discharge prepared by the cabinet;

(b) Attain or maintain a specified water quality through water quality related effluent limits established under Section 302 of the Clean Water Act, or CWA, 33 USC Section 1312;

(c) Conform to applicable water quality requirements if the discharge affects a state other than Kentucky;

(d) Incorporate any more stringent limitations, treatment standards, or schedule of compliance requirements established under federal or state law or administrative regulations in accordance with Section 301(b)(1)(c) of CWA, 33 USC Section 1311(b)(1)c.

(e) Ensure consistency with the requirements of any Kentucky Water Quality Management Plan approved by EPA.

(f) Incorporate alternative effluent limitations or standards if warranted by "fundamentally different factors," under 401 KAR 5:080, Section 3.

(5) Toxic pollutants. Limitations established under subsections (1), (2) or (4) of this section, to control pollutants meeting the criteria listed in paragraph (a) of this subsection shall be included in the permit, if applicable. Limitations shall be established in accordance with paragraph (b) of this subsection. An explanation of the development of these limitations shall be included in the fact sheet under 401 KAR 5:075, Section 4.

(a) Limitations shall control all toxic pollutants which:

1. The cabinet determines, based on information reported in a permit application under 401 KAR 5:060, Section 2(7), or in a notification under Section 1(15)(a) of this administrative regulation or on other information, are or may be discharged at a level greater than the level which can be achieved by the technology-based treatment requirements appropriate to the permittee under 401 KAR 5:080, Section 1(2)(c); or

2. The discharger does or may use or manufacture as an intermediate or final product or by-product.

(b) The requirement that the limitations control the pollutants meeting the criteria of paragraph (a) of this subsection shall be satisfied by:

1. Limitations on those pollutants; or

2. Limitations on other pollutants which, in the judgment of the cabinet, will provide treatment of the pollutants under paragraph (a) of this subsection to the levels required by 401 KAR 5:080, Section 1(2)(c).

(6) Notification level. A "notification level" which exceeds the notification level of Section 1(15)(a)1a, b, or c of this administrative regulation, upon a petition from the permittee or on the cabinet's initiative shall be incorporated as a permit condition, if applicable. This new notification level shall not exceed the level which can be achieved by the technology-based treatment requirements appropriated to the permittee under 401 KAR 5:080, Section 1(2)(c).

(7) Twenty-four (24) hour reporting. Pollutants for which the permittee shall report violations of maximum daily discharge limitations under Section 1(12)(f) of this administrative regulation (twenty-four (24) hour reporting) shall be listed as such in the permit. This list shall include any toxic pollutant or hazardous substance, or any pollutant specifically identified as the method to control a toxic pollutant or hazardous substance.

(8) Monitoring requirements. The permit shall incorporate, as applicable in addition to Section 1(12) of this administrative regulation, the following monitoring requirements:

(a) To assure compliance with permit limitations, requirements to monitor:

1. The mass, or other measurement specified in the permit, for each pollutant limited in the permit;

2. The **volume of effluent** discharged from each outfall; and

3. Other measurements as appropriate; including pollutants in internal waste streams under Section 3(8) of this administrative regulation; frequency, rate of discharge, etc., for noncontinuous discharges under Section 3(5) of this administrative regulation; and pollutants subject to notification requirements under Section 1(15)(a) of this administrative regulation.

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(b) According to test procedures approved under 40 CFR Part 136 for the **analyses of pollutants** having approved methods under the federal regulation, and according to a test procedure specified in the permit for pollutants with no approved methods.

(c) Requirements to report monitoring results with a frequency dependent on the nature and effect of the discharge, but not less than once a year with the following exceptions:

1. Requirements to report monitoring results for storm water discharges associated with industrial activity which are subject to an effluent limitation guideline shall be established on a case-by-case basis with a frequency dependent on the nature and effect of the discharge, but not less than once a year.

2. Requirements to report monitoring results for storm water discharges associated with industrial activity, other than those addressed in subparagraph 1 of this paragraph shall be established on a case-by-case basis with a frequency dependent on the nature and effect of the discharge. At a minimum, a permit for such a discharge shall require:

a. The discharger to conduct an annual inspection of the facility site to identify areas contributing to a storm water discharge associated with industrial activity and evaluate whether measures to reduce pollutant loadings identified in a storm water pollution prevention plan are adequate and properly implemented in accordance with the terms of the permit or whether additional control measures are needed;

b. The discharger to maintain for a period of three (3) years a record summarizing the results of the inspection and a certification that the facility is in compliance with the plan and the permit, and identifying any incidents of noncompliance;

c. The report and certification be signed in accordance with 401 KAR 5:060, Section 9; and

d. Permits for storm water discharges associated with industrial activity from inactive mining operations may, if annual inspections are impracticable, require certification once every three (3) years by a professional engineer that the facility is in compliance with the permit, or alternative requirements.

3. Permits which do not require the submittal of monitoring result reports at least annually shall require that the permittee report all instances of noncompliance not reported under Section 1(12)(g) of this administrative regulation at least annually.

(d) Monitoring waivers for certain guideline-listed pollutants.

1. The cabinet may authorize a discharger subject to technology-based effluent limitations guidelines and standards in an KPDES permit to forego sampling of a pollutant found at 40 CFR Chapter I, Subchapter N if the discharger has demonstrated through sampling and other technical factors that the pollutant is not present in the discharge or is present only at background levels from intake water and without any increase in the pollutant due to activities of the discharger.

2. This waiver shall be good only for the term of the permit and shall not be available during the term of the first permit issued to a discharger.

3. Any request for this waiver shall be submitted when applying for a reissued permit or modification of a reissued permit. The request shall demonstrate through sampling or other technical information, including information generated during an earlier permit term, that the pollutant is not present in the discharge or is present only at background levels from intake water and without any increase in the pollutant due to activities of the discharger.

4. Any grant of the monitoring waiver shall be included in the permit as an express permit condition and the reasons supporting the grant shall be documented in the permit's fact sheet or statement of basis.

5. This provision shall not supersede certification processes and requirements already established in existing effluent limitations guidelines and standards, 40 CFR Chapter I, Subchapter N.

(9) Pretreatment program for POTWs. If applicable to the facility the permit shall incorporate as a permit condition requirements for POTWs to:

(a) Identify, in terms of character and volume of pollutants, any significant indirect dischargers into the POTW subject to pretreatment standards under the KPDES administrative regulations.

(b) Submit a local program if required by and in accordance with 401 KAR 5:057, to assure compliance with pretreatment standards to the extent applicable in the KPDES administrative regulations. The local program shall be incorporated into the permit as described in 401 KAR 5:057.

The program shall require all indirect dischargers to the POTW to comply with the applicable reporting requirements.

(10) Best management practices shall be included as a permit condition, as applicable, to control or abate the discharge of pollutants if:

(a) Applicable under KRS Chapter 224 and the KPDES administrative regulations for the control of toxic pollutants and hazardous substances from ancillary activities;

(b) Numeric effluent limitations are infeasible;

(c) The practices are reasonably necessary to achieve effluent limitations and standards or to carry out the purposes and intent of KRS Chapter 224; or

(d) Authorized under section 402(p) of the CWA, 33 USC 1342(p) for the control of storm water discharges.

(11) Qualifying state or local programs.

(a) For storm water discharges associated with small construction activity, as identified in 401 KAR 5:002, Section 1, the KPDES permit may include permit conditions that incorporate qualifying state or local erosion and sediment control program requirements by reference. If a qualifying state or local program does not include one (1) or more of the elements in this paragraph, then the KPDES shall include those elements as conditions in the permit. A qualifying state or local erosion and sediment control program shall be one that includes:

1. Requirements for construction site operators to implement appropriate erosion and sediment control best management practices;

2. Requirements for construction site operators to control waste such as discarded building materials, concrete truck washout, chemicals, litter, and sanitary waste at the construction site that may cause adverse impacts to water quality; and

3. Requirements for construction site operators to develop and implement a storm water pollution prevention plan; a storm water pollution prevention plan shall include site descriptions, descriptions of appropriate control measures, copies of approved state or local requirements, maintenance procedures, inspection procedures, and identification of nonstorm water discharges.

(b) For storm water discharges from construction activity, as identified in 401 KAR 5:002, Section 1, KPDES permit may include permit conditions that incorporate qualifying state or local erosion and sediment control program requirements by reference. A qualifying state or local erosion and sediment control program shall be one that includes the elements listed in paragraph (a) of this subsection and any additional requirements necessary to achieve "best available technology" and "best conventional technology" based on the best professional judgement of the permit writer.

(12) Reissued permits.

(a) The permit shall include a condition concerning reissued permits, as applicable. If a permit is renewed or reissued, interim limitations, standards or conditions which are at least as stringent as any final limitations, standards, or conditions in the previous permit shall be incorporated unless the circumstances on which the previous permit was based have materially and substantially changed since the time the permit was issued and would constitute cause for permit modification or revocation and reissuance under 401 KAR 5:070, Section 6.

(b) For effluent limitations established on the basis of 401 KAR 5:080, Section 1(2)(c)2, a permit shall not be renewed, revoked and reissued, or modified on the basis of effluent guidelines promulgated under CWA Section 304(b), 33 USC 1314(b), subsequent to the original issuance of the permit, to contain effluent limitations which are less stringent than the comparable effluent limitations in the previous permit.

1. Exceptions. A permit to which paragraph (a) of this subsection applies may be renewed, reissued, or modified to contain a less stringent effluent limitation applicable to a pollutant if:

a. Material and substantial alterations or additions to the permitted facility occurred after permit issuance which justify the application of a less stringent effluent limitation;

b. Information is available which was not available at the time of permit issuance, other than revised regulations, guidance, or test methods, and which would have justified the application of a less stringent effluent limitation at the time of permit issuance;

c. The cabinet determines that technical mistakes or mistaken interpretations of law were made in issuing the permit under 401 KAR 5:080, Section 1(2)(c)2;

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d. A less stringent effluent limitation is necessary because of events over which the permittee has no control and for which there is no reasonably available remedy;

e. The permittee has received a permit modification under 401 KAR 5:055, Section 3; or

f. The permittee has installed the treatment facilities required to meet the effluent limitations in the previous permit and has properly operated and maintained the facilities but has nevertheless been unable to achieve the previous effluent limitations. If this occurs, the limitations in the reviewed, reissued, or modified permit may reflect the level of pollutant control actually achieved, but shall not be less stringent than required by effluent guidelines in effect at the time of permit renewal, reissuance, or modification.

2. Limitations. A permit to which paragraph (a) of this subsection applies shall not be renewed, reissued, or modified to contain an effluent limitation which is less stringent than required by effluent guidelines in effect when the permit is renewed, reissued, or modified. The permit to discharge into waters shall not be renewed, issued, or modified to contain less stringent effluent limitation if the implementation of the limitation would result in a violation of a water quality standard under 401 KAR 5:031 applicable to those waters.

(13) Privately owned treatment works. For a privately owned treatment works, any conditions expressly applicable to any user, as a limited copermitee, that may be necessary in the permit issued to the treatment works to ensure compliance with applicable requirements under this administrative regulation shall be imposed as applicable. Alternatively, the cabinet may issue separate permits to the treatment works and to its users, or may require a separate permit application from any user. The cabinet's decision to issue a permit with no conditions applicable to any user, to impose conditions on one (1) or more users, to issue separate permits or to require separate applications, and the basis for that decision shall be stated in the fact sheet for the draft permit for the treatment works.

(14) Grants or loans. Any conditions imposed in grants or loan made by the cabinet to POTWs which are reasonably necessary for the achievement of federally issued effluent limitations shall be required as applicable.

(15) Sewage sludge. Requirements shall be imposed, as applicable, governing the disposal of sewage sludge from publicly owned treatment works, in accordance with 40 CFR Part 503.

(16) Coast Guard. If a permit is issued to a facility that may operate at certain times as a means of transportation over water, the permit shall be conditioned as applicable. A condition that the discharge shall comply with any applicable federal regulations promulgated by the secretary of the department in which the Coast Guard is operating which establish specifications for safe transportation, handling, carriage, and storage of pollutants shall be imposed if applicable.

(17) Navigation. Any conditions that the Secretary of the United States Army considers necessary to ensure that navigation and anchorage will not be substantially impaired, in accordance with 401 KAR 5:075, Section 9, shall be included as applicable.

(18) Duration of permits shall be imposed, as set forth in 401 KAR 5:070, Section 1.

Section 3. Calculating KPDES Permit Conditions. The following provisions shall be used to calculate terms and conditions of the KPDES permit.

(1) Outfalls and discharge points. All permit effluent limitations, standards, and prohibitions shall be established for each outfall or discharge point of the permitted facility, except as otherwise provided: under Section 2(10) of this administrative regulation; with BMPs if limitations are infeasible; and under subsection (8) of this section, limitations on internal waste streams.

(2) Production-based limitations.

(a) For POTWs, permit limitations, standards, or prohibitions shall be calculated based on design flow.

(b)1. Except in the case of POTWs or as provided in subparagraph 2a(ii) of this paragraph, calculation of any permit limitations, standards, or prohibitions which are based on production (or other measure of operation) shall be based not upon the designed production capacity but rather upon a reasonable measure of actual production of the facility. For new sources or new dischargers, actual production shall be estimated using projected production. The time period of the measure of production shall correspond to the time period of the calculated permit limitations; for example, monthly production shall be used to calculate average monthly discharge limitations.

2.a.(i) The cabinet may include a condition establishing alternate permit limitations, standards, or prohibitions based upon anticipated increased (not to exceed maximum production capability) or decreased production levels.

(ii) For the automotive manufacturing industry only, the cabinet may establish a condition under subparagraph 2a(i) of this paragraph if the applicant satisfactorily demonstrates to the cabinet at the time the application is submitted that its actual production, as indicated in subparagraph 2a(i) of this paragraph, is substantially below maximum production capability and that there is a reasonable potential for an increase above actual production during the duration of the permit.

b. If the cabinet establishes permit conditions under subparagraph 2a(i) of this paragraph:

(i) The permit shall require the permittee to notify the cabinet at least two (2) business days prior to a month in which the permittee expects to operate at a level higher than the lowest production level identified in the permit. The notice shall specify the anticipated level and the period during which the permittee expects to operate at the alternate level. If the notice covers more than one (1) month, the notice shall specify the reasons for the anticipated production level increase. New notice of discharge at alternate levels shall be required to cover a period or production level not covered by prior notice or, if during two (2) consecutive months otherwise covered by a notice, the production level at the permitted facility does not in fact meet the higher level designated in the notice.

(ii) The permittee shall comply with the limitations, standards, or prohibitions that correspond to the lowest level of production specified in the permit, unless the permittee has notified the cabinet under subparagraph 2b of this paragraph, then the permittee shall comply with the lower of the actual level of production during each month or the level specified in the notice.

(iii) The permittee shall submit with the DMR the level of production that actually occurred during each month and the limitations, standards, or prohibitions applicable to that level of production.

(3) Metals. All permit effluent limitations, standards, or prohibitions for a metal shall be expressed in terms of "total recoverable metal" as described in 40 CFR Part 136 unless:

(a) An applicable effluent standard or limitation has been promulgated under the CWA and specifies the limitation for the metal in the dissolved or valent or total form;

(b) In establishing permit limitations on a case-by-case basis under 401 KAR 5:080, Section 1(2), it is necessary to express the limitation on the metal in the dissolved or valent total form to carry out the provisions of KRS 224.16-050; or

(c) All approved analytical methods for the metal inherently measure only its dissolved form (e.g., hexavalent chromium).

(4) Continuous discharges. For continuous discharges all permit effluent limitations, standards, and prohibitions, including those necessary to achieve water quality standards, unless impracticable shall be stated as:

(a) Maximum daily and average monthly discharge limitations for all dischargers other than publicly owned treatment works; and

(b) Average weekly and average monthly discharge limitations for POTWs.

(5) Noncontinuous discharges. Discharges which are not continuous, as defined in 401 KAR 5:002, Section 1, shall be particularly described and limited, considering the following factors, as appropriate:

(a) Frequency: for example, a batch discharge shall not occur more than once every three (3) weeks;

(b) Total mass: for example, not to exceed 100 kilograms of zinc and 200 kilograms of chromium per batch discharge;

(c) Maximum rate of discharge of pollutants during the discharge: for example, not to exceed two (2) kilograms of zinc per minute; and

(d) Prohibition or limitation of specified pollutants by mass, concentration, or other appropriate measure: for example, shall not contain at any time more than one-tenth (0.1) mg/l zinc or more than 250 grams (0.25 kilogram) of zinc in any discharge.

(6) Mass limitations.

(a) All pollutant limited in permits shall have limitations, standards, or prohibitions expressed in terms of mass except:

1. For pH, temperature, radiation, or other pollutants which cannot appropriately be expressed by mass;

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2. When applicable standards and limitations are expressed in terms of other units of measurement; or

3. If in establishing permit limitations on a case-by-case basis under 401 KAR 5:080, Section 1, limitations expressed in terms of mass are infeasible because the mass of the pollutant discharged cannot be related to a measure of operation, for example, discharges of TSS from certain mining operations, and permit conditions ensure that dilution will not be used as a substitute for treatment.

(b) Pollutants limited in terms of mass additionally may be limited in terms of other units of measurement, and the permit shall require the permittee to comply with both limitations.

(7) Pollutants in intake water.

(a) Upon request of the discharger, technology-based effluent limitations or standards shall be adjusted to reflect credit for pollutants in the discharger's intake water if:

1. The applicable effluent limitations and standards contained in 40 CFR Chapter I, Subchapter N, Part 401 et seq., specifically provide that they may be applied on a net basis; or

2. The discharger demonstrates that the control system it proposes or uses to meet applicable technology-based limitations and standards would, if properly installed and operated, meet the limitations and standards in the absence of pollutants in the intake waters.

(b) Credit for generic pollutants such as biochemical oxygen demand (BOD) or total suspended solids (TSS) shall not be granted unless the permittee demonstrates that the constituents of the generic measure in the effluent are substantially similar to the constituents of the generic measure in the intake water or unless appropriate additional limits are placed on process water pollutants either at the outfall or elsewhere.

(c) Credit shall be granted only to the extent necessary to meet the applicable limitations or standard, up to a maximum value equal to the influent value. Additional monitoring may be necessary to determine eligibility for credits and compliance with permit limits.

(d) Credit shall be granted only if the discharger demonstrates that the intake water is drawn from the same body of water into which the discharge is made. The cabinet may waive this requirement if the cabinet finds that no environmental degradation will result.

(e) This subsection shall not apply to the discharge of raw water clarifier sludge generated from the treatment of intake water.

(8) Internal waste streams.

(a) If permit effluent limitations or standards imposed at the point of discharge are impractical or infeasible, effluent limitations or standards for discharges of pollutants may be imposed on internal waste streams before mixing with other waste streams or cooling water streams. In those instances, the monitoring required by Section 2(8) of this administrative regulation shall also be applied to the internal waste streams.

(b) Limits on internal waste streams shall be imposed only if the fact sheet under 401 KAR 5:075, Section 4, sets forth the exceptional circumstances which make such limitations necessary, such as when the final discharge point is inaccessible, for example, under ten (10) meters of water, the wastes at the point of discharge are so diluted as to make monitoring impracticable, or the interferences among pollutants at the point of discharge would make detection or analysis impracticable.

(9) Disposal of pollutants into wells, into POTWs, or by land application. Permit limitations and standards shall be calculated as provided in 401 KAR 5:055, Section 6.

(10) Secondary treatment information. Permit conditions that involve secondary treatment shall be written as provided in 401 KAR 5:045.

Section 4. Primary Industry Categories. Any KPDES permit issued to dischargers in the following categories shall include effluent limitations and a compliance schedule to meet the requirements of the KPDES administrative regulations whether or not applicable effluent limitations guidelines have been promulgated.

- (1) Adhesives and sealants.
- (2) Aluminum forming.
- (3) Auto and other laundries.
- (4) Battery manufacturing.
- (5) Coal mining.
- (6) Coil coating.

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

Section 5. Federal Regulations Adopted Without Change. The following federal regulations govern the subject matter of this administrative regulation and are hereby adopted without change. The federal regulations are published by the Office of the Federal Register, National Archives and Government Services, General Services Administration, and are available for inspection and copying, subject to copyright laws, during normal business hours of 8 a.m. to 4:30 p.m., excluding state holidays, at the Division of Water, 14 Reilly Road, Frankfort, Kentucky. Copies are also available from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402.

- (1) Toxic Pollutant Effluent Standards, 40 CFR Part 129, revised as of July 1, 2001;
- (2) Test Procedures for the Analysis of Pollutants, 40 CFR Part 136, revised as of July 1, 2001;
- (3) Federal Effluent Limitations and Standards and New Source Performance Standards. 40 CFR Chapter I, Subchapter N, revised as of July 1, 2001; and
- (4) Standards for the Use or Disposal of Sewage Sludge, 40 CFR Part 503, revised as of August 4, 1999. (9 Ky.R. 866; Am. 1127; eff. 6-1-83; 11 Ky.R. 765; eff. 1-7-85; 12 Ky.R. 540; eff. 12-10-85; 13 Ky.R. 258; eff. 9-4-86; 20 Ky.R. 3272; 21 Ky.R. 421; 918; eff. 8-24-94; 29 Ky.R. 1075; 1587; eff. 12-18-02.)

This informational copy is provided at no cost by Kentucky Rural Water Association for educational purposes. For an official certified copy of a regulation, contact the Legislative Research Commission Regulations Compiler's office at (502) 564-8100.

401 KAR 5:070. Provisions of the KPDES permit.

RELATES TO: KRS 224.01-010, 224.01-070, 224.01-400, 224.70-100, 224.70-120, 224.99-010, 40 C.F.R. sec. 403, 33 U.S.C. 1251 et seq.

STATUTORY AUTHORITY: KRS 224.10-100, 224.16-050, 224.70-110, 40 C.F.R. sec. 403, 33 U.S.C. 1251 et seq., 1342

NECESSITY, FUNCTION, AND CONFORMITY: KRS 224.16-050(1) provides that the Natural Resources and Environmental Protection Cabinet may issue federal permits pursuant to 33 USC Section 1342(b) of the Federal Water Pollution Control Act, 33 USC Section 1251 et seq. subject to the conditions imposed in 33 USC Sections 1342(b) and (d). KRS 224.16-050(1) requires that any exemptions granted in the issuance of NPDES permits shall be pursuant to 33 USC Sections 1311, 1312, and 1326(a). Further, KRS 224.16-050(4) requires that the cabinet shall not impose under any permit issued pursuant to this section any effluent limitation, monitoring requirement or other condition which is more stringent than the effluent limitation, monitoring requirement or other condition which would have been applicable under the federal regulation if the permit were issued by the federal government. This administrative regulation contains the basis for provisions, terms, and effect of a KPDES permit, including permit duration, schedule of compliance, and basis for permit modification or revocation and reissuance.

Section 1. Duration of Permits. **(1)** KPDES permits shall be effective for a fixed term not to exceed five (5) years. Except as provided in 401 KAR 5:060, Section 1(5)(c), the term of a permit shall not be extended by modification beyond this maximum duration. The cabinet may issue a permit for a duration that is less than the full five (5) year term.

(2) A permit may be issued for the full term if the permit includes effluent limitations and a compliance schedule to meet the requirements of 401 KAR 5:080, Section 1(2) whether or not applicable federal effluent limitations guidelines have been promulgated or approved.

Section 2. Schedules of Compliance. **(1)** The permit may, if appropriate, specify a schedule of compliance leading to compliance with KRS Chapter 224 and administrative regulations promulgated pursuant thereto.

(a) Time for compliance. Any schedules of compliance under this section shall require compliance as soon as possible. In addition, schedules of compliance shall require compliance not later than the applicable deadline specified in 401 KAR 5:080.

(b) The first KPDES permit issued to a new source or a new discharger shall contain a schedule of compliance only if necessary to allow a reasonable opportunity to attain compliance with requirements issued or revised after commencement of construction but less than three (3) years before commencement of the relevant discharge. For recommencing dischargers, a schedule of compliance shall be available only if necessary to allow a reasonable opportunity to attain compliance with requirements issued or revised less than three (3) years before recommencement of discharge.

(c) Interim dates. Except as provided in subsection (2)(a)2 of this section, if a permit establishes a schedule of compliance which exceeds one (1) year from the date of permit issuance, the schedule shall set forth interim requirements and the dates for their achievement.

1. The time between interim dates shall not exceed one (1) year.

2. If the time necessary for completion of any interim requirement, such as the construction of a control facility, is more than one (1) year and is not readily divisible into stages for completion, the permit shall specify interim dates for the submission of reports of progress toward completion of the interim requirements and indicate a projected completion date.

(d) Reporting. The permit shall be written to require that no later than fourteen (14) days following each interim date and the final date of compliance, the permittee shall notify the cabinet in writing of its compliance or noncompliance with the interim or final requirements, or submit progress reports.

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(2) Alternative schedules of compliance. A KPDES permit applicant or permittee may cease conducting regulated activities, by termination of direct discharge for KPDES sources, rather than continue to operate and meet permit requirements as follows:

(a) If the permittee decides to cease conducting regulated activities at a given time within the term of a permit which has already been issued:

1. The permit may be modified to contain a new or additional schedule leading to timely cessation of activities; or

2. The permittee shall cease conducting permitted activities before noncompliance with any interim or final compliance schedule requirement already specified in the permit.

(b) If the decision to cease conducting regulated activities is made before issuance of a permit whose term will include the termination date, the permit shall contain a schedule leading to termination which shall ensure timely compliance no later than the statutory deadline.

(c) If the permittee is undecided whether to cease conducting regulated activities, the cabinet shall issue or modify a permit to contain two (2) schedules as follows:

1. Both schedules shall contain an identical interim deadline requiring a final decision on whether to cease conducting regulated activities no later than a date which ensures sufficient time to comply with applicable requirements in a timely manner if the decision is to continue conducting regulated activities;

2. One (1) schedule shall lead to timely compliance no later than the deadline contained in 401 KAR 5:080;

3. The second schedule shall lead to cessation of regulated activities by a date which shall ensure timely compliance no later than the deadline specified in 401 KAR 5:080; and

4. Each permit containing two (2) schedules shall include a requirement that after the permittee has made a final decision under subparagraph 1 of this paragraph it shall follow the schedule leading to compliance if the decision is to continue conducting regulated activities, and follow the schedule leading to termination if the decision is to cease conducting regulated activities.

(d) The applicant's or permittee's decision to cease conducting regulated activities shall be evidenced by a firm public commitment satisfactory to the cabinet, such as a resolution of the board of directors of a corporation.

Section 3. Requirements for Recording and Reporting of Monitoring Results. All permits shall specify:

(1) Requirements concerning the proper use, maintenance, and installation, if appropriate, of monitoring equipment or methods, including biological monitoring methods if appropriate;

(2) Required monitoring including type, intervals, and frequency sufficient to yield data which are representative of the monitored activity including, if appropriate, continuous monitoring; and

(3) Applicable reporting requirements based upon the impact of the regulated activity and as specified in 401 KAR 5:065, Sections 1 and 2. Reporting shall not be less frequent than specified in Section 2 of this administrative regulation.

Section 4. Effect of a Permit. (1) Except for any toxic effluent standards and prohibitions included in 401 KAR 5:065, Section 1(1)(b), compliance with a KPDES permit during its term shall constitute compliance, for purposes of enforcement, with the KPDES program. A permit may be modified, revoked and reissued, or revoked during its term for cause as set forth in Sections 6 and 7 of this administrative regulation.

(2) The issuance of a permit shall not convey any property rights of any sort, or any exclusive privilege.

(3) The issuance of a permit shall not authorize any injury to persons or property or invasion of other private rights, or any infringement of state or local law or administrative regulations.

Section 5. Transfer of Permits. (1) Transfers by modification. Except as provided in subsection (2) of this section, a permit may be transferred by the permittee to a new owner or operator only if the permit has been modified or revoked and reissued, under Section 6 of this administrative regulation, or if a minor modification has been made to identify the new permittee and incorporate other requirements as may be necessary under the KPDES administrative regulations.

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(2) Automatic transfers. As an alternative to transfers under subsection (1) of this section, any KPDES permit may be automatically transferred to a new permittee if:

(a) The current permittee notifies the cabinet at least thirty (30) days in advance of the proposed transfer date in paragraph (b) of this subsection;

(b) The notice includes a written agreement between the existing and new permittees containing a specific date for transfer of permit responsibility, coverage, and liability between them; and

(c) The cabinet does not notify the existing permittee and the proposed new permittee of an intent to modify or revoke and reissue the permit. A modification under this paragraph may also be a minor modification under Section 6(3) of this administrative regulation. If this notice is not received, the transfer shall be effective on the date specified in the agreement mentioned in paragraph (b) of this subsection.

Section 6. Modification or Revocation and Reissuance of Permit. If the cabinet receives any information, the cabinet may determine whether or not one (1) or more of the causes, listed in subsections (1) and (2) of this section for modification or revocation and reissuance or both, exist. If cause exists, the cabinet may modify or revoke and reissue the permit accordingly, and may request an updated application if necessary. If a permit is modified, only the conditions subject to modification shall be reopened. If a permit is revoked and reissued, the entire permit shall be reopened and subject to revision and the permit shall be reissued for a new term. If cause does not exist under this section, the cabinet shall not modify or revoke and reissue the permit. If a permit modification satisfies the criteria in subsection (3) of this section for "minor modifications" the permit may be modified without a draft permit or public review. Otherwise, a draft permit shall be prepared and other procedures in 401 KAR 5:075 shall be followed.

(1) Causes for modification. The following shall be causes for modification but not revocation and reissuance of permits unless the permittee agrees to revocation and reissuance as well as modification of a permit.

(a) Alterations. If there are material and substantial alterations or additions made to the permitted facility or activity which occurred after permit issuance, the alterations may justify the application of permit conditions that are different or absent in the existing permit.

(b) Information. If the cabinet has received information, cause may exist for modification. KPDES permits may be modified during their terms for this cause only if the information was not available at the time of permit issuance, except for revised administrative regulations, guidance, or test methods which would have justified application of different conditions at the time of permit issuance. In addition, the applicant shall show that the information would have justified the application of different permit conditions at the time of issuance. For KPDES general permits this cause shall include any information indicating that cumulative effects on the environment are unacceptable.

(c) New administrative regulations. If the standards or administrative regulations on which the permit was based have been changed by promulgation of amended standards or administrative regulations or by judicial decision after the permit was issued, then cause may exist for modification. The permit shall be modified only as follows:

1. For promulgation of amended standards or administrative regulations, if:

a. The permit condition requested to be modified was based on a promulgated effluent limitation guideline, EPA approved or promulgated water quality standards of 401 KAR 5:031, or the secondary treatment administrative regulations of 401 KAR 5:045;

b. EPA has revised, withdrawn, or modified that portion of the federal regulation or effluent limitation guideline or has approved a cabinet action with regard to a water quality standard on which the permit condition was based; and

c. A permittee requests modification in accordance with 401 KAR 5:075, Section 2, within ninety (90) days after the amendment, revision, or withdrawal is promulgated.

2. For judicial decisions, a court of competent jurisdiction has remanded and stayed EPA promulgated effluent limitation guidelines, if the remand and stay concern that portion of the guidelines on which the permit condition was based and a request is filed by the permittee in accordance with 401 KAR 5:075, Section 2, within ninety (90) days of judicial remand.

(d) Compliance schedules. A permit may be modified if the cabinet determines good cause exists for modification of a compliance schedule, based on an act of God, strike, flood, materials

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shortage, or other events over which the permittee has little or no control and for which there is no reasonably available remedy. A KPDES compliance schedule shall not be modified to extend beyond an applicable statutory deadline in 401 KAR 5:080.

(e) For a small municipal separate storm sewer system (MS4), to include an effluent limitation requiring implementation of minimum control measures as specified in 401 KAR 5:060, Section 12(9)(b), if:

1. The permit does not include these measures based upon the determination that another entity was responsible for implementation of the requirements; and

2. The other entity fails to implement measures that satisfy the requirements.

(f) In addition the cabinet may modify a permit:

1. If the permittee has filed a request for any variance under 401 KAR 5:055, Section 7, or 401 KAR 5:080, Section 3, and the cabinet processes the request under the applicable provisions.

2. If required to incorporate applicable toxic effluent standard or prohibition under 401 KAR 5:065, Section 2(2).

3. If required by the "reopener" conditions in a permit, which are established in the permit under 401 KAR 5:065, Section 2(3), for toxic effluent limitations, or 401 KAR 5:065, Section 2 (40 CFR Section 403.10(e), pretreatment program).

4. Upon request of a permittee who qualifies for a change in effluent limitations based on pollutants in intake water under 401 KAR 5:065, Section 3(7).

5. If a discharger is no longer eligible for net limitations, as provided in 401 KAR 5:065, Section 3(7).

6. As necessary under EPA effluent limitations guidelines concerning compliance schedule for development of a pretreatment program.

7. If the level of discharge of any pollutant which is not limited in the permit exceeds the level which can be achieved by the technology-based treatment requirements appropriate to the permittee under 401 KAR 5:080, Section 1(2)(c).

8. If the permittee begins or expects to begin to use or manufacture as an intermediate or final product or by-product any toxic pollutant which was not reported in the permit application under 401 KAR 5:060, Section 2.

9. To establish a "notification level" as provided in 401 KAR 5:065, Section 2(6).

10. To modify a schedule of compliance to reflect the time lost during the construction of an innovative or alternative facility, for a POTW which has received a grant under CWA Section 202(a)(3), 33 USC Section 1282(a)(3) for 100 percent of the cost to modify or replace facilities constructed with a grant for innovative or alternative wastewater technology under CWA Section 202(a)(2), 33 USC Section 1282(a)(2). Without exception, the compliance schedule shall not be modified to extend beyond an applicable statutory deadline for compliance indicated in 401 KAR 5:080.

11. Upon failure of the cabinet to notify an affected state whose waters may be affected by a discharge from Kentucky.

12. If the permit becomes final and effective on or after August 19, 1981, if the permittee shows a good cause for the modification, to conform to changes respecting the following administrative regulation: 401 KAR 5:065, Section 1(3) and (4).

13. To correct technical mistakes, such as errors in calculation, or mistaken interpretations of law made in determining permit conditions.

14. If the discharger has installed the treatment technology considered by the cabinet in setting effluent limitations imposed under 401 KAR 5:080, Section 1 and CWA Section 402(a)(1), 33 USC Section 1342(a)(1) and has properly operated and maintained the facilities but nevertheless has been unable to achieve those effluent limitations. If this occurs, the limitations in the modified permit may reflect the level of pollutant control actually achieved (but shall not be less stringent than required by a subsequently promulgated effluent limitations guideline).

15. If the permit becomes final and effective on or after March 9, 1982, and the permittee applies for the modification no later than January 24, 1985, if the permittee shows good cause in its request and that it qualifies for the modification, to conform to changes respecting the following administrative regulations: 401 KAR 5:055, Section 6(2) and 401 KAR 5:065, Section 3(2) and (3).

(2) Causes for modification or revocation and reissuance. The following shall be causes to modify or, alternatively revoke and reissue a permit:

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(a) Cause exists for revocation under Section 7 of this administrative regulation and the cabinet determines that modification or revocation and reissuance is appropriate.

(b) The cabinet has received notification of a proposed transfer of the permit. A permit also may be modified to reflect a transfer after the effective date of an automatic transfer but shall not be revoked and reissued after the effective date of the transfer except upon the request of the new permittee.

(3) Minor modifications of permits. Upon the consent of the permittee, the cabinet shall modify a permit to make the corrections or allowances for changes in the permitted activity listed in this section, without following the procedures of 401 KAR 5:075. Any permit modification not processed as a minor modification under this section shall be made for cause and with a 401 KAR 5:075 draft permit and public notice as required under this section. Minor modifications shall only:

(a) Correct typographical errors;

(b) Require more frequent monitoring or reporting by the permittee;

(c) Change an interim compliance date in a schedule of compliance, if the new date is not more than 120 days after the date specified in the existing permit and does not interfere with attainment of the final compliance date requirements;

(d) Allow for a change in ownership or operational control of a facility if the cabinet determines that no other change in the permit is necessary, if a written agreement containing a specific date for transfer of permit responsibility, coverage, and liability between the current and new permittees has been submitted to the cabinet;

(e) Change the construction schedule for a discharger which is a new source;

(f) Delete a point source outfall if the discharge from that outfall is terminated and does not result in discharge of pollutants from other outfalls except in accordance with permit limits; or

(g) Incorporate conditions of a POTW pretreatment program that has been approved in accordance with the procedures in 401 KAR 5:057 or a modification thereto that has been approved in accordance with the procedures in 401 KAR 5:057 as enforceable conditions of the POTW's permits.

Section 7. Revocation of Permit. **(1)** The following shall be causes for revoking a permit during its term, or for denying a renewal application:

(a) Noncompliance by the permittee with any condition of the permit;

(b) The permittee's failure in the application or during the permit issuance process to disclose fully all relevant facts, or the permittee's misrepresentation of any relevant fact at any time; or

(c) A determination that the permitted activity endangers human health or the environment and can only be regulated to acceptable levels by permit modification or revocation.

(2) KPDES permits may be modified or revoked if there is a change in any condition that requires either a temporary or a permanent reduction or elimination of any discharge controlled by the permit for example, plant closure or termination of discharge by connection to a POTW.

(3) The cabinet shall follow the applicable procedures in 401 KAR 5:075 in revoking any KPDES permit under this section, except that if the entire discharge is permanently terminated by elimination of the flow or by connection to a POTW, but not by land application or disposal into a well, the cabinet may revoke the permit by notice to the permittee. Revocation by notice shall be effective thirty (30) days after notice is sent, unless the permittee objects within that time. If the permittee objects during that period, the cabinet shall follow 401 KAR 5:075, Section 2, revocation procedures. Expedited permit revocation procedures shall not be available to permittees that are subject to pending enforcement actions including citizen suits brought under KRS Chapter 224 and the Clean Water Act, 33 USC 1365. If requesting expedited permit revocation procedures, a permittee shall certify that it is not subject to any pending enforcement actions including citizen suits brought under KRS Chapter 224.

Section 8. Federal Regulation Adopted Without Change. The following federal regulation governs the subject matter of this administrative regulation and is hereby adopted without change. 40 CFR Section 403.10(e), "State Pretreatment Program in Lieu of POTW Program", revised as of July 1, 2001. The federal regulation is available for inspection and copying, subject to copyright laws, during normal business hours of 8 a.m. to 4:30 p.m., excluding state holidays, at the Division of Water, 14 Reilly Road, Frankfort, Kentucky. Copies are also available from the

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Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402. (9 Ky.R. 872; Am. 1133; eff. 6-1-83; 11 Ky.R. 773; eff. 1-7-85; 12 Ky.R. 550; eff. 12-10-85; 20 Ky.R. 3282; 21 Ky.R. 430; eff. 8-24-94; 29 Ky.R. 1083; 1594; eff. 12-18-02.)

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401 KAR 5:075. Cabinet review procedures for KPDES permits.

RELATES TO: KRS 224.01-010, 224.01-070, 224.01-400, 224.70-100, 224.70-120, 224.99-010, 33 U.S.C. 1251 et seq.

STATUTORY AUTHORITY: KRS 224.10-100, 224.16-050, 224.70-110, 33 U.S.C. 1251 et seq., 1342

NECESSITY, FUNCTION, AND CONFORMITY: KRS 224.10-100 authorizes the Natural Resources and Environmental Protection Cabinet to issue, continue in effect, revoke, modify, suspend or deny under such conditions as the cabinet may prescribe, permits to discharge into any waters of the Commonwealth. KRS 224.16-050(1) establishes that the cabinet may issue federal permits pursuant to 33 USC Section 1342(b) of the Federal Water Pollution Control Act (33 USC Section 1251 et seq.) subject to the conditions imposed in 33 USC Section 1342(b) and (d). This administrative regulation sets forth the procedures through which the cabinet will follow in receiving permit applications, preparing draft permits, issuing public notice, inviting public comment and holding public hearings on draft permits.

Section 1. Review of the Application. (1) Any person who requires a permit under the KPDES program shall complete, sign, and submit to the cabinet an application for the permit as required under 401 KAR 5:060, Section 1. Applications shall not be required for KPDES general permits. Operators who elect to be covered by a general permit shall submit written notification to the cabinet at the time the cabinet indicates in Section 3 of this administrative regulation.

(2) The cabinet shall not begin the processing of a permit until the applicant has fully complied with the application requirements for the permit, as required by 401 KAR 5:060, Section 1.

(3) Permit applications shall comply with the signature and certification requirements of 401 KAR 5:060, Section 9.

(4) The cabinet shall review for completeness every application for a KPDES permit. Each application submitted by a KPDES new source or KPDES new discharger shall be reviewed for completeness by the cabinet within thirty (30) days of its receipt. Each application for a KPDES permit submitted by an existing source shall be reviewed for completeness within sixty (60) days of receipt. Upon completing the review, the cabinet shall notify the applicant in writing whether the application is complete. If the application is incomplete, the cabinet shall list the information necessary to make the application complete. If the application is for an existing source, the cabinet shall specify in the notice of deficiency a date for submitting the necessary information. The cabinet shall notify the applicant that the application is complete upon receiving this information. After the application is completed, the cabinet may request additional information from an applicant if necessary to clarify, modify, or supplement previously submitted material. Requests for the additional information shall not render an application incomplete.

(5) If an applicant fails or refuses to correct deficiencies in the application, the permit may be denied and appropriate enforcement actions may be taken under KRS Chapter 224 and administrative regulations promulgated pursuant thereto.

(6) If the cabinet decides that a site visit is necessary for any reason in conjunction with the processing of an application, the cabinet shall notify the applicant and a date shall be scheduled.

(7) The effective date of an application shall be the date on which the cabinet notifies the applicant that the application is complete as provided in subsection (4) of this section.

(8) For each application from a major facility new source, or major facility new discharger, the cabinet shall no later than the effective date of the application, prepare and mail to the applicant a project decision schedule. The schedule shall specify target dates by which the cabinet intends to:

- (a) Prepare a draft permit;
- (b) Give public notice;
- (c) Complete the public comment period, including any public hearing;
- (d) Issue a final permit; and
- (e) Complete any formal proceedings under this administrative regulation.

(9) Conflicts of interest.

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(a) Any person who issues a permit shall be subject to the conflict of interest provisions of KRS 11A.020 and 11A.030. The director of the Division of Water shall not receive or have received during the previous two (2) years, a significant portion of income directly or indirectly from permit holders or applicants for a permit.

(b) Any person aggrieved by the issuance of a permit under the KPDES administrative regulations may challenge the permit pursuant to Section 13 of this administrative regulation if paragraph (a) of this subsection has been violated.

(c) The hearing officer shall remand any permit issued in violation of paragraph (a) of this subsection to the cabinet for reconsideration.

(d) Following remand, any cabinet employee who reconsiders the permit shall be subject to the conflict of interest provisions set forth in paragraph (a) of this subsection. The reconsideration shall require a new public comment period and public hearing only if information offered during earlier permit proceedings was excluded by the cabinet as a direct result of a conflict of interest.

Section 2. Review Procedures for Permit Modification, Revocation and Reissuance, or Revocation. (1) Permits may be modified, revoked and reissued, or revoked either at the request of any interested person, including the permittee, or upon the cabinet's initiative. Permits may only be modified, revoked and reissued, or revoked for the reasons specified in 401 KAR 5:070, Sections 6 or 7. All requests shall be in writing and shall contain facts or reasons supporting the request.

(2) If the cabinet decides the request is not justified, the cabinet shall send the requester a brief written response giving a reason for the decision. Denials of requests for modification, revocation and reissuance, or revocation shall not be subject to public notice, comment, or hearings.

(3) If the cabinet tentatively decides to modify or revoke and reissue a permit under 401 KAR 5:070, Section 6, the cabinet shall prepare a draft permit under Section 3 of this administrative regulation incorporating the proposed changes. The cabinet may request additional information and, in the case of a modified permit, may require the submission of an updated permit application. In the case of revoked and reissued permits, the cabinet shall require the submission of a new application.

(a) In a permit modification under this section, only those conditions to be modified shall be reopened when a new draft permit is prepared. All other aspects of the existing permit shall remain in effect for the duration of the unmodified permit. If a permit shall be revoked and reissued under this section, the entire permit is reopened as if the permit had expired and was being reissued. During any revocation and reissuance proceeding, the permittee shall comply with all conditions of the existing permit until a new final permit is reissued.

(b) "Minor modifications" as described in 401 KAR 5:070, Section 6(3) shall not be subject to the requirements of this section.

(4) If the cabinet preliminarily decides to revoke a permit under 401 KAR 5:070, Section 7, the cabinet shall issue a notice of intent to revoke. A notice of intent to revoke shall be a type of draft permit which follows the same procedure as any draft permit prepared under Section 3 of this administrative regulation.

Section 3. Draft Permits. (1) Once an application is complete, the cabinet shall preliminarily decide whether to prepare a draft permit or to deny the application.

(2) If the cabinet makes a preliminary decision to deny the permit application, the cabinet shall issue a notice of intent to deny. A notice of intent to deny the permit application shall be a type of draft permit which follows the same procedure as any draft permit prepared under this section. If the cabinet's determination under Section 11 of this administrative regulation is that the preliminary decision to deny the permit application was incorrect, the cabinet shall withdraw the notice of intent to deny and proceed to prepare a draft permit under subsection (4) of this section.

(3) If the cabinet makes a preliminary decision to issue a KPDES general permit, the cabinet shall prepare a draft general permit in accordance with subsection (4) of this section.

(4) If the cabinet decides to prepare a draft permit, the cabinet shall prepare a draft permit that contains the following information:

- (a) All conditions under 401 KAR 5:065, Section 1;
- (b) All compliance schedules under 401 KAR 5:070, Section 2;
- (c) All monitoring requirements under 401 KAR 5:070, Section 3; and

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(d) Effluent limitations, standards, prohibitions, and conditions under 401 KAR 5:057, 401 KAR 5:060, 401 KAR 5:065, 401 KAR 5:070, 401 KAR 5:075, and 401 KAR 5:080 and all variances that are to be included.

(5) All draft permits prepared by the cabinet under this section shall be accompanied by a fact sheet and shall be based on the administrative record, publicly noticed, and made available for public comment. The cabinet shall give notice of opportunity for a public hearing, issue a final decision, and respond to comments. A demand for a hearing may be made pursuant to KRS 224.10-420 and Section 13 of this administrative regulation following the issuance of a final decision.

Section 4. Fact Sheets. (1) A fact sheet shall be prepared for every draft permit for a major KPDES facility or activity, for every KPDES general permit, for every KPDES draft permit that incorporates a variance or requires an explanation under subsection (3) of this section, and for every draft permit which the cabinet finds is the subject of widespread public interest or raises major issues. The fact sheet shall briefly set forth the principal facts and the significant factual, legal, methodological, and policy questions considered in preparing the draft permit. The cabinet shall send this fact sheet to the applicant and, on request, to any other persons.

(2) The fact sheet shall include, if applicable:

- (a) A brief description of the type of facility or activity which is the subject of the draft permit;
- (b) A quantitative and qualitative description of the discharges described in the application;
- (c) A brief summary of the basis for the draft permit conditions including references to applicable statutory or regulatory provisions;
- (d) Reasons why any requested variances or alternatives to required standards do or do not appear justified;
- (e) A description of the procedures for reaching a final decision on the draft permit including:
 - 1. The beginning and ending dates of the comment period under Section 5 of this administrative regulation and the address where comments will be received;
 - 2. Procedures for requesting a hearing and the nature of that hearing;
 - 3. Any other procedures under KRS 224.10-420 and Section 13 of this administrative regulation by which the public may participate in the final decision;
- (f) Name and telephone number of a person to contact for additional information; and
- (g) Any calculations or other necessary explanation of the derivation of specific effluent limitations and conditions, including a citation to the applicable effluent limitation guidelines or performance standard provisions, and reasons why they are applicable or an explanation of how the alternate effluent limitations were developed.

(3)(a) If the draft permit contains any of the following conditions, an explanation of the reasons why the conditions are applicable:

- 1. Limitations to control toxic pollutants under 401 KAR 5:065, Section 2(5);
- 2. Limitations on internal waste streams under 401 KAR 5:065, Section 3(8);
- 3. Limitations on indicator pollutants under 401 KAR 5:080, Section 1(2)(a) ;
- 4. Limitations set on a case-by-case basis under 401 KAR 5:080, Section 1(2)(c)2; or
- 5. Limitations to meet the criteria for permit issuance under 401 KAR 5:055, Section 2(7).

(b) For every permit to be issued to a treatment works owned by a person other than the Commonwealth or its subdivisions, an explanation of the cabinet's decision on regulation of users under 401 KAR 5:065, Section 2(12).

(4) If appropriate, a sketch or detailed description of the location of the discharge described in the application.

(5) Justification for waiver of any application requirements under 401 KAR 5:060, Section 5.

Section 5. Public Notice of Permit Actions and Public Comment Period. (1) Scope.

(a) The cabinet shall give public notice that the following actions have occurred:

- 1. A permit application has been preliminarily denied under Section 3(2) of this administrative regulation;
- 2. A draft permit has been prepared under Section 3(4) of this administrative regulation;
- 3. A hearing has been scheduled under Section 7 of this administrative regulation; or

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4. A KPDES new source determination has been made in accordance with the definition in 401 KAR 5:002.

(b) Public notice shall not be required if a request for permit modification, revocation and reissuance, or revocation is denied under Section 2 of this administrative regulation. Written notice of that denial shall be given to the requester and to the permittee.

(c) Public notices may describe more than one (1) permit or permit action.

(2) Timing.

(a) Public notice of the preparation of a draft permit, including a notice of intent to deny a permit application, required under subsection (1) of this section shall allow at least thirty (30) days for public comment.

(b) Public notice of a public hearing shall be given at least thirty (30) days before the hearing. Public notice of the hearing may be given at the same time as public notice of the draft permit and the two (2) notices may be combined.

(3) Methods. Public notice of activities described in subsection (1)(a) of this section shall be given by the following methods:

(a) The cabinet shall mail a notice to the persons listed in subparagraphs 1 through 5 of this paragraph. Any person otherwise entitled to receive notice under this paragraph may waive their rights to receive notice for any classes and categories of permits.

1. The applicant, except for KPDES general permittees, and Region IV, EPA.

2. Federal and state agencies with jurisdiction over fish, shellfish, and wildlife resources, the Advisory Council on Historic Preservation, Kentucky Historical Society and other appropriate government authorities, including any affected states;

3. The U.S. Army Corps of Engineers, the U.S. Fish and Wildlife Service and the National Marine Fisheries Service;

4. Any user identified in the permit application of a privately owned treatment works; and

5. Persons on a mailing list developed by:

a. Including those who request in writing to be on the list;

b. Soliciting persons for area lists from participants in past permit proceedings in that area; and

c. Notifying the public of the opportunity to be put on the mailing list through periodic publication in the public press and in such publications as newsletters, environmental bulletins, or state law journals. The cabinet may update the mailing list from time to time by requesting written indication of continued interest from those listed. The cabinet may delete from the list the name of any person who fails to respond to that request.

(b) For major permits and KPDES general permits, the cabinet shall publish a notice in a daily or weekly newspaper within the area affected by the facility or activity;

(c) In a manner constituting legal notice to the public under Kentucky law; and

(d) Any other method reasonably calculated to give actual notice of the action in question to the persons potentially affected by it, including press releases or any other forum or medium to elicit public participation.

(4) Contents.

(a) All public notices. All public notices issued under this administrative regulation shall contain the following minimum information:

1. Name and address of the office processing the permit action for which notice is being given;

2. Name and address of the permittee or permit applicant and, if different, of the facility or activity regulated by the permit, except for KPDES draft general permits under 401 KAR 5:055, Section 5;

3. A brief description of the business conducted at the facility or activity described in the permit application or the draft permit, for KPDES general permits if there is no application;

4. Name, address, and telephone number of a person from whom interested persons may obtain further information, including copies of the draft permit or draft general permit as the case may be, fact sheet, and the application;

5. A brief description of the comment procedures required by Sections 6 and 7 of this administrative regulation and the time and place of any hearing that will be held, including a statement of procedures to request a hearing, unless a hearing has already been scheduled, and other procedures by which the public may participate in the final permit decision;

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6. A general description of the location of each existing or proposed discharge point and the name of the receiving water. For draft general permits, this requirement shall be satisfied by a map or description of the permit area; and

7. Any additional information considered necessary or proper.

(b) Public notices for hearings. In addition to the general public notice described in paragraph (a) of this subsection, the public notice for a permit hearing under Section 7 of this administrative regulation shall contain the following information:

1. Reference to the date of previous public notices, relating to the permit;

2. Date, time, and place of the hearing; and

3. A brief description of the nature and purpose of the hearing, including the applicable rules and procedures.

(c) Requests under 401 KAR 5:055, Section 7(4). In addition to the information required under subsection (4)(a) of this section, public notice of a KPDES draft permit for a discharge if a 401 KAR 5:055, Section 7(4) request has been filed under 401 KAR 5:055, Section 3, shall include:

1. A statement that the thermal component of the discharge is subject to effluent limitations under 401 KAR 5:065, Section 2(1) and a brief description, including a quantitative statement, of the thermal effluent limitations proposed under CWA Sections 301 or 306 (33 USC Sections 1311 or 1316); and

2. A statement that a 401 KAR 5:055, Section 7(4), request has been filed and that alternative less stringent effluent limitations may be imposed on the thermal component of the discharge and a brief description, including a quantitative statement, of the alternative effluent limitations, if any, included in the request.

(5) In addition to the general public notice described in subsection (4)(a) of this section all persons identified in subsection (3)(a)1, 2, 3, and 4 of this section shall be mailed a copy of the fact sheet, the permit application (if any) and the draft permit (if any).

Section 6. Public Comments and Requests for Public Hearings. During the public comment period provided under Section 5 of this administrative regulation, any interested person may submit written comments on the draft permit and may request a public hearing, if no hearing has already been scheduled. A request for a public hearing shall be in writing and shall state the nature of the issues proposed to be raised in the hearing. All comments shall be considered in making the final decision and shall be answered as provided in Section 12 of this administrative regulation.

Section 7. Public Hearings. (1) The cabinet shall hold a public hearing if a significant degree of public interest in a draft permit is found on the basis of requests. The cabinet also may hold a public hearing if, for instance, a hearing might clarify one (1) or more issues involved in the permit decision.

(2) Public notice of the hearing shall be given as specified in Section 5 of this administrative regulation.

(3) Any person may submit oral or written statements and data concerning the draft permit. Reasonable limits may be set upon the time allowed for oral statements, and the submission of statements in writing may be required. The public comment period under Section 5 of this administrative regulation shall automatically be extended to the close of any public hearing under this section. The cabinet may also extend the comment period by so stating at the hearing.

(4) A tape recording or written transcript of the hearing shall be made available to the public.

Section 8. Obligation to Raise Issues and Provide Information During the Public Comment Period. All persons, including applicants, who believe any condition of a draft permit is inappropriate or that the cabinet's preliminary decision to deny an application, revoke a permit, or prepare a draft permit is inappropriate, shall raise all reasonably ascertainable issues and submit all reasonably available arguments and factual grounds supporting their position, including all supporting material, by the close of the public comment period including any public hearing under Section 5 of this administrative regulation. All supporting materials shall be included in full and may not be incorporated by reference, unless they consist of state or federal statutes and regulations, EPA or the cabinet's documents of general applicability, or other generally available reference materials. Commenters shall make supporting material not already included in the record available to the

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cabinet as directed by the cabinet. A comment period longer than thirty (30) days may be necessary in complicated proceedings to give commenters a reasonable opportunity to comply with the requirements of this section. Commenters may request longer comment periods, which may be established under Section 5 of this administrative regulation. Nothing in this section shall be construed to prevent any person aggrieved by a final permit decision from filing a demand for a hearing under KRS 224.10-420 and Section 13 of this administrative regulation.

Section 9. Conditions Requested by the Corps of Engineers and Other Government Agencies.

(1) If during the comment period for a KPDES draft permit, the district engineer of the Corps of Engineers advises the cabinet in writing that anchorage and navigation of any of the waters of the Commonwealth would be substantially impaired by the granting of a permit, the permit shall be denied and the applicant so notified. If the district engineer advises the cabinet that imposing specified conditions upon the permit is necessary to avoid any substantial impairment of anchorage or navigation, then the cabinet shall include the specified conditions in the permit. Review or appeal of denial of a permit or of conditions specified by the district engineer shall be made through the applicable procedures of the Corps of Engineers, and shall not be made through the procedures provided in this administrative regulation. If the conditions are stayed by a court of competent jurisdiction or by applicable procedures of the Corps of Engineers, those conditions shall be considered stayed in the KPDES permit for the duration of that stay.

(2) If during the comment period the U.S. Fish and Wildlife Service, the National Marine Fisheries Service, or any other state or federal agency with jurisdiction over fish, wildlife, or public health advises the director in writing that the imposition of specified conditions upon the permit is necessary to avoid substantial impairment of fish, shellfish, or wildlife resources, the cabinet may include the specified conditions in the permit to the extent they are determined necessary to carry out the provisions of KRS Chapter 224.

(3) In appropriate cases the cabinet may consult with one (1) or more of the agencies referred to in this section before issuing a draft permit and may reflect their views in the fact sheet or the draft permit.

Section 10. Reopening of the Public Comment Period. (1) If any data information or arguments submitted during the public comment period appear to raise substantial new questions concerning a permit, the cabinet may take one (1) or more of the following actions:

(a) Prepare a new draft permit, appropriately modified, under Section 3 of this administrative regulation;

(b) Prepare a revised fact sheet under Section 4 of this administrative regulation and reopen the comment period; or

(c) Reopen and extend the comment period under Section 5 of this administrative regulation to give interested persons the opportunity to comment on the information or arguments submitted.

(2) Comments filed during the reopened comment period shall be limited to the substantial new questions that caused its reopening. The public notice under Section 5 of this administrative regulation shall define the scope of the reopening.

(3) Public notice of any of the above actions will be issued under Section 5 of this administrative regulation.

Section 11. Issuance and Effective Date of Permit. (1) After the close of the public comment period under Section 5 of this administrative regulation, the cabinet shall issue, deny, modify, revoke and reissue, or revoke a permit. The cabinet shall notify the applicant and each person who has submitted written comments or requested notice of that determination. This notice shall include reference to the procedures for appealing the decision. For the purpose of this section, a final permit decision shall mean a final decision to issue, deny, modify, revoke and reissue, or revoke a permit.

(2) A final permit decision shall become effective thirty (30) days after the service of notice of the decision under subsection (1) of this section, unless:

(a) A later effective date is specified in the decision;

(b) A stay is granted pursuant to KRS 224.10-420(2) and Section 13 of this administrative regulation; or

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(c) No comments requested a change in the draft permit, and if that occurs, the permit shall become effective immediately upon issuance.

(3) The determination which is a condition precedent to demanding a hearing under KRS 224.10-420(2) and Section 13 of this administrative regulation shall be the final permit decision. The thirty (30) day appeal period shall begin on the date the determination is entered by the cabinet and shall not begin on the date the permit decision becomes effective.

Section 12. Response to Comments. (1) When any final permit decision is issued under Section 11 of this administrative regulation the cabinet shall issue a response to comments. This response shall:

(a) Specify which provisions, if any, of the draft permit have been changed in the final permit decision, and the reasons for the change; and

(b) Briefly describe and respond to all significant comments on the draft permit raised during the public comment period or during any hearing. This response shall fully consider all comments resulting from any hearing conducted under this administrative regulation.

(2) The response to comments shall be available to the public. Any demand for a hearing on this response shall be filed according to procedures specified in KRS 224.10-420, 224.10-440, 224.10-470 and any administrative regulations promulgated pursuant thereto.

Section 13. Hearings under KRS 224.10-420. (1) A determination under Section 11 of this administrative regulation when issued by the cabinet shall be subject to a demand for a hearing pursuant to KRS 224.10-420(2).

(2) Any person aggrieved by the issuance of a final permit may demand a hearing pursuant to KRS 224.10-420(2).

(3) Any hearing held pursuant to this section shall be subject to the provisions of KRS 224.10-440 and 224.10-470.

(4) Failure to raise issued pursuant to Section 8 of this administrative regulation shall not preclude an aggrieved person from making a demand for a hearing pursuant to KRS 224.10-420(2). (9 Ky.R. 874; Am. 1136; eff. 6-1-83; 12 Ky.R. 554; eff. 12-10-85; 20 Ky.R. 3285; 21 Ky.R. 432; eff. 8-24-94; 29 Ky.R. 1087; 1597; eff. 12-18-02.)

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401 KAR 5:080. Criteria and standards for the Kentucky Pollutant Discharge Elimination System.

RELATES TO: KRS 224.10-100, 224.16-050, 224.70-100, 224.70-110

STATUTORY AUTHORITY: KRS 224.10-100

NECESSITY, FUNCTION, AND CONFORMITY: KRS 224.10-100 authorizes the Natural Resources and Environmental Protection Cabinet to issue, continue in effect, revoke, modify, suspend or deny under such conditions as the cabinet may prescribe, permits to discharge into any waters of the Commonwealth. KRS 224.16-050 provides that the cabinet may issue federal permits pursuant to 33 USC Section 1342(b) of the Federal Water Pollution Control Act (33 USC Section 1251 et seq.) subject to the conditions imposed in 33 USC Section 1342(b) and (d). This section further provides that any exemptions granted in the issuance of KPDES permits shall be pursuant to 33 USC Sections 1311, 1312, and 1326(a). This administrative regulation sets forth the criteria and standards for the KPDES permitting system.

Section 1. Criteria and Standards for Technology-based Treatment Requirements. **(1)** Purpose and scope. This section establishes criteria and standards for the imposition of technology-based treatment requirements in KPDES permits including the application of EPA promulgated effluent limitations and case-by-case determinations of effluent limitations.

(2) Compliance with technology-based treatment requirements in KPDES permits.

(a) General. Technology-based treatment requirements represent the minimum level of control that shall be imposed in a KPDES permit. Permits shall contain the following technology-based treatment requirements in accordance with the deadlines indicated herein:

1. For POTWs effluent limitations based upon:

a. Secondary treatment as required by CWA Section 301(b)(1)(B) (33 USC Section 1311(b)(1)(B)) - from date of permit issuance; and

b. The best practicable waste treatment technology as required by CWA Section 301(b)(1)(A) (33 USC Section (b)(1)(A)) - not later than July 1, 1983; and

2. For dischargers other than POTWs, except as otherwise provided in the KPDES administrative regulations, effluent limitations requiring:

a. The best practicable control technology currently available (BPT):

(i) For effluent limitations promulgated under CWA Section 304(b) after January 1, 1982 and requiring a level of control substantially greater or based on fundamentally different control technology than under permits for an industrial category issued before this date, compliance as expeditiously as practicable but not later than three (3) years after the date the limitations are promulgated under CWA Section 304(b) and not later than March 31, 1989;

(ii) For effluent limitations established on a case-by-case basis based on best professional judgment (BPJ) under paragraph (c)2 of this subsection in a permit issued after February 4, 1987, compliance as expeditiously as practicable but not later than three (3) years after the date the limitations are established and not later than March 31, 1989; or

(iii) For all other BPT effluent limitations compliance is required from the date of permit issuance.

b. For conventional pollutants, the best conventional pollutant control technology (BCT):

(i) For effluent limitations promulgated under CWA Section 304(b), as expeditiously as practicable but not later than three (3) years after the date the limitations are promulgated under CWA Section 304(b), and not later than March 31, 1989; or

(ii) For effluent limitations established on a case-by-case basis based on BPJ under paragraph (c)2 of this subsection, in a permit issued after February 4, 1987, compliance as expeditiously as practicable but not later than three (3) years after the date the limitations are established and not later than March 31, 1989;

c. For all toxic pollutants referred to in Section 6 of this administrative regulation the best available technology economically achievable (BAT):

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(i) For effluent limitations established under CWA Section 304(b), as expeditiously as practicable but not later than three (3) years after the date the limitations are promulgated under CWA Section 304(b), and not later than March 31, 1989; or

(ii) For permits issued on a case-by-case basis based on BPJ under paragraph (c)2 of this subsection after February 4, 1987 establishing BAT effluent limitations, compliance is required as expeditiously as practicable but not later than three (3) years after the date the limitations are established, and not later than March 31, 1989.

d. For all toxic pollutants other than those listed in Section 6 of this administrative regulation, effluent limitations based on BAT:

(i) For effluent limitations promulgated under CWA Section 304(b) compliance is required as expeditiously as practicable, but not later than three (3) years after the date the limitations are promulgated under CWA Section 304(b) and not later than March 31, 1989; or

(ii) For permits issued on a case-by-case BPJ basis under paragraph (c)2 of this subsection after February 4, 1987 establishing BAT effluent limitations, compliance is required as expeditiously as practicable but not later than three (3) years after the date the limitations are established and not later than March 31, 1989.

e. For all pollutants which are neither toxic nor conventional pollutants, effluent limitations based on BAT.

(i) For effluent limitations promulgated under CWA Section 304(b) compliance is required as expeditiously as practicable, but not later than three (3) years after the date the limitations are established and not later than March 31, 1989; or

(ii) For permits issued on a case-by-case BPJ basis under paragraph (c)2 of this subsection after February 4, 1987 establishing BAT effluent limitations, compliance is required as expeditiously as practicable but not later than three (3) years after the date the limitations are established and not later than March 31, 1989.

(b) Variances and extensions.

1. The following variance from technology-based treatment requirements is authorized by KRS Chapter 224 and may be applied for under 401 KAR 5:055. For dischargers other than POTWs:

a. Economic variance from BAT, as indicated in 401 KAR 5:055, Section 7(1);

b. Thermal variance from BPT, BCT, and BAT, under Section 4 of this administrative regulation, may be authorized.

2. An extension of the BAT deadline may be applied for under 401 KAR 5:055, Section 7(3) for dischargers other than POTWs, for use of innovative technology.

(c) Methods of imposing technology-based treatment requirements in permits. Technology-based treatment requirements may be imposed through one (1) of the following three (3) methods:

1. Application of EPA-promulgated effluent limitations to dischargers by category or subcategory. These effluent limitations are not applicable to the extent that they have been withdrawn by EPA or remanded. In the case of a court remand, determinations underlying effluent limitations shall be binding in permit issuance proceedings where those determinations are not required to be reexamined by a court remanding the regulations. In addition, dischargers may seek fundamentally different factors variances from these effluent limitations under 401 KAR 5:055, and Section 3 of this administrative regulation.

2. On a case-by-case basis under CWA Section 402(a)(1) (33 USC Section 1342(a)(1)), to the extent that EPA-promulgated effluent limitations are inapplicable. The cabinet shall apply the appropriate factors listed in paragraph (d) of this subsection and shall consider:

a. The appropriate technology for the category or class of point sources of which the applicant is a member, based upon all available information; and

b. Any unique factors relating to the applicant.

3. Through a combination of the methods in paragraph (c)1 and 2 of this subsection. Where EPA-promulgated effluent limitations guidelines only apply to certain aspects of the discharger's operation, or to certain pollutants, other aspects or activities are subject to administrative regulation on a case-by-case basis in order to carry out the provisions of KRS Chapter 224.

4. Limitations developed under paragraph (c)2 of this subsection may be expressed, where appropriate, in terms of toxicity if it is shown that the limits reflect the appropriate requirements of KRS Chapter 224.

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(d) In setting case-by-case limitations pursuant to paragraph (c) of this subsection, the cabinet shall consider the following factors:

1. For BPT requirements:
 - a. The total cost of application of technology in relation to the effluent reduction benefits to be achieved from such application;
 - b. The age of equipment and facilities involved;
 - c. The process employed;
 - d. The engineering aspects of the application of various types of control techniques;
 - e. Process changes; and
 - f. Nonwater quality environmental impact (including energy requirements).
2. For BCT requirements:
 - a. The reasonableness of the relationship between the costs of attaining a reduction in effluent and the effluent reduction benefits derived;
 - b. The comparison of the cost and level of reduction of the pollutants from the discharge from publicly owned treatment works to the cost and level of reduction of the pollutants from a class or category of industrial sources;
 - c. The age of equipment and facilities involved;
 - d. The process employed;
 - e. The engineering aspects of the application of various types of control techniques;
 - f. Process changes; and
 - g. Nonwater quality environmental impact (including energy requirements).
3. For BAT requirements:
 - a. The age of equipment and facilities involved;
 - b. The process employed;
 - c. The engineering aspects of the application of various types of control techniques;
 - d. Process changes;
 - e. The cost of achieving such effluent reduction; and
 - f. Nonwater quality environmental impact (including energy requirements).

(e) Technology-based treatment requirements are applied prior to or at the point of discharge.
(f) Technology-based treatment requirements shall not be satisfied through the use of "nontreatment" techniques such as flow augmentation and in-stream mechanical aerators. However, these techniques may be considered as a method of achieving water quality standards on a case-by-case basis when:

1. The technology-based treatment requirements applicable to the discharge are not sufficient to achieve the standards;
2. The discharger agrees to waive any opportunity to request a variance under 401 KAR 5:055, Section 3; and
3. The discharger demonstrates that such a technique is the preferred environmental and economic method to achieve the standards after consideration of alternatives such as advanced waste treatment, recycle and reuse, land disposal, changes in operating methods, and other available methods.

(g) Technology-based effluent limitations shall be established under this administrative regulation for solids, sludges, filter backwash, and other pollutants removed in the course of treatment or control of wastewaters in the same manner as for other pollutants.

(h)1. The cabinet may set a permit limit for a conventional pollutant at a level more stringent than the best conventional pollution control technology (BCT), or a limit for a nonconventional pollutant which shall not be subject to modification where:

- a. Effluent limitations guidelines specify the pollutant as an indicator for a toxic pollutant; or
- b.(i) The limitation reflects BAT-level control of discharges of one (1) or more toxic pollutants which are present in the waste stream, and a specific BAT limitation upon the toxic pollutants is not feasible for economic or technical reasons;
- (ii) The permit identifies which toxic pollutants are intended to be controlled by use of the limitation; and
- (iii) The fact sheet required by 401 KAR 5:075, Section 4, sets forth the basis for the limitation, including a finding that compliance with the limitations will result in BAT-level control of the toxic

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pollutant discharges identified in paragraph (h)1b(ii) of this subsection, and a finding that it would be economically or technically infeasible to directly limit the toxic pollutants.

2. The cabinet may set a permit limit for a conventional pollutant at a level more stringent than BCT when:

a. Effluent limitations guidelines specify the pollutant as an indicator for a hazardous substance; or

b.(i) The limitation reflects BAT-level control of discharges, or an appropriate level of one (1) or more hazardous substances which are present in the waste stream, and a specific BAT, or other appropriate limitation upon the hazardous substances which are present in the waste stream, and a specific BAT, or other appropriate limitation upon the hazardous substance is not feasible for economic or technical reasons;

(ii) The permit identifies which hazardous substances are intended to be controlled by use of the limitation; and

(iii) The fact sheet, required by 401 KAR 5:075, Section 4, sets forth the basis for the limitation, including a finding that compliance with the limitations will result in BAT-level, or other appropriate level, control of the hazardous substances discharges identified in paragraph (h)1b(ii) of this subsection, and a finding that it would be economically or technically infeasible to directly limit the hazardous substances.

c. Hazardous substances which are also toxic pollutants are subject to paragraph (h)1 of this subsection.

3. The cabinet shall not set a more stringent limit under the preceding paragraphs if the method of treatment required to comply with the limit differs from that which would be required if the toxic pollutants or hazardous substances controlled by the limit were limited directly.

4. Toxic pollutants identified under paragraph (h)1 of this subsection remain subject to 401 KAR 5:065, Section 1(15), which requires notification of increased discharges of toxic pollutants above levels reported in the application form.

Section 2. Criteria for Issuance of Permits to Aquaculture Projects. **(1)** Purpose and scope.

(a) This section establishes guidelines for approval of any discharge of pollutants associated with an aquaculture project.

(b) This section authorizes, on a selective basis, controlled discharges which would otherwise be unlawful under KRS Chapter 224 in order to determine the feasibility of using pollutants to grow aquatic organisms which can be harvested and used beneficially.

(c) Permits issued for discharges into aquaculture projects under this section are KPDES permits and are subject to all applicable requirements. Any permit shall include such conditions, including monitoring and reporting requirements, as are necessary to comply with the KPDES administrative regulations. Technology-based effluent limitations need not be applied to discharges into the approved project except with respect to toxic pollutants.

(2) Criteria.

(a) KPDES permits shall not be issued to an aquaculture project unless:

1. The cabinet determines that the aquaculture project:

a. Is intended by the project operator to produce a crop which has significant direct or indirect commercial value, or is intended to be operated for research into possible production of such a crop; and

b. Does not occupy a designated project area which is larger than can be economically operated for the crop under cultivation or than is necessary for research purposes.

2. The applicant has demonstrated, to the satisfaction of the cabinet, that the use of the pollutant to be discharged to the aquaculture project shall result in an increased harvest of organisms under culture over what would naturally occur in the area;

3. The applicant has demonstrated, to the satisfaction of the cabinet, that if the species to be cultivated in the aquaculture project is not indigenous to the immediate geographical area, there shall be minimal adverse effects on the flora and fauna indigenous to the area, and the total commercial value of the introduced species is at least equal to that of the displaced or affected indigenous flora and fauna;

4. The cabinet determines that the crop shall not have a significant potential for human health hazards resulting from its consumption; and

5. The cabinet determines that migration of pollutants from the designated project area to waters of the Commonwealth outside of the aquaculture project will not cause or contribute to a violation of the applicable standards and limitations applicable to the supplier of the pollutant that would govern if the aquaculture project were itself a point source. The approval of an aquaculture project shall not result in the enlargement of a preexisting mixing zone area beyond what had been designated for the original discharge.

(b) Permits shall not be issued for any aquaculture project in conflict with a water quality management plan or an amendment to a plan approved by EPA.

(c) Designated project areas shall not include a portion of a body of water large enough to expose a substantial portion of the indigenous biota to the conditions within the designated project area.

(d) Any pollutants not required by or beneficial to the aquaculture crop shall not exceed applicable standards and limitations when entering the designated project area.

Section 3. Criteria and Standards for Determining Fundamentally Different Factors. (1) Purpose and scope.

(a) This section establishes the criteria and standards to be used in determining whether effluent limitations or pretreatment standards alternative to those required by promulgated EPA effluent limitations guidelines and categorical pretreatment standards, hereinafter referred to as "national limits," shall be imposed on a discharger because factors relating to the discharger's facilities, equipment, processes or other factors related to the discharger are fundamentally different from the factors considered by EPA in development of the national limits. This section applies to all national limits promulgated by EPA except for best practicable treatment standards for steam-electric plants.

(b) This case-by-case review shall not be done unless data specific to that discharger indicate they present factors fundamentally different from those considered by EPA in developing the limit at issue. Any interested person asserting that factors relating to a discharger's facilities, equipment, processes, or other facilities related to the discharger are fundamentally different from the factors considered during the development of the national limits may request a fundamentally different factors variance under 401 KAR 5:055, Section 3. In addition, such a variance may be proposed by the cabinet in the draft permit.

(2) Criteria.

(a) A request for the establishment of effluent limitations under this section, fundamentally different factors variance, shall not be approved unless:

1. There is an applicable national limit which is applied in the permit and specifically controls the pollutant for which alternative effluent limitations or standards have been requested;

2. Factors relating to the discharge controlled by the permit are fundamentally different from those considered by EPA in establishing the national limits; and

3. The request for alternative effluent limitations or standards is made in accordance with the procedural requirements of 401 KAR 5:075.

(b) A request for the establishment of effluent limitations less stringent than those required by national limits guidelines shall not be approved unless:

1. The alternative effluent limitation requested is not less stringent than justified by the fundamental difference;

2. The alternative effluent limitation or standard shall ensure compliance with the KPDES administrative regulations and KRS Chapter 224; and

3. Compliance with the national limits, either by using the technologies upon which the national limits are based or by other control alternative, would result in:

a. A removal cost wholly out of proportion to the removal cost considered during development of the national limits; or

b. A nonwater quality environmental impact, including energy requirements, fundamentally more adverse than the impact considered during development of the national limits.

(c) A request for alternative limits more stringent than required by national limits shall not be approved unless:

1. The alternative effluent limitation or standard requested is no more stringent than justified by the fundamental difference; and

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2. Compliance with the alternative effluent limitation or standard would not result in:
 - a. A removal cost wholly out of proportion to the removal cost considered during development of the national limits; or
 - b. A nonwater quality environmental impact, including energy requirements, fundamentally more adverse than the impact considered during development of the national limits.
- (d) Factors which may be considered fundamentally different are:
 1. The nature or quality of pollutants contained in the raw waste load of the discharger's process wastewater;
 2. The volume of the discharger's process wastewater and effluent discharged;
 3. Nonwater quality environmental impact of control and treatment of the discharger's raw waste load;
 4. Energy requirements of the application of control and treatment technology;
 5. Age, size, land availability, and configuration as they relate to the discharger's equipment or facilities, processes employed, process changes, and engineering aspects of the application of control technology; and
 6. Cost of compliance with required control technology.
- (e) A variance request or portion of such a request under this section shall not be granted on any of the following grounds:
 1. The infeasibility of installing the required waste treatment equipment within the time allowed in Section 1 of this administrative regulation;
 2. The assertion that the national limits cannot be achieved with the appropriate waste treatment facilities installed, if such assertion is not based on factors listed in paragraph (d) of this subsection;
 3. The discharger's ability to pay for the required waste treatment; or
 4. The impact of a discharge on local receiving water quality.
- (3)** Method of application.
 - (a) A written request for a variance under this administrative regulation shall be submitted in duplicate to the cabinet in accordance with 401 KAR 5:075.
 - (b) The burden is on the person requesting the variance to demonstrate that:
 1. Factors listed in subsection (2) of this section regarding the discharger's facility are fundamentally different from the factors EPA considered in establishing the national limits. The requester shall refer to all relevant material and information, such as the published guideline regulations development document, all associated technical and economic data collected for use in developing each national limit, all records of legal proceedings, and all written and printed documentation including records of communication, etc., relevant to the regulations which are kept on public file by the EPA;
 2. The alternative limitations requested are justified by the fundamental difference alleged in subparagraph 1 of this paragraph; and
 3. The appropriate requirements of subsection (2) of this section have been met.

Section 4. Criteria for Determining Alternative Effluent Limitations. **(1)** Purpose and scope. The factors, criteria and standards for the establishment of alternative thermal effluent limitations described in CWA Section 316(a) (33 USC Section 1326(a)) shall also be used in KPDES permits and shall be referred to as 401 KAR 5:055, Section 7(4), variances.

- (2)** Early screening of applications for 401 KAR 5:055, Section 7(4), variances.
- (a) Any initial application for the variance shall include the following early screening information:
 1. A description of the alternative effluent limitation requested;
 2. A general description of the method by which the discharger proposes to demonstrate that the otherwise applicable thermal discharge effluent limitations are more stringent than necessary;
 3. A general description of the type of data, studies, experiments, and other information which the discharger intends to submit for the demonstration; and
 4. Data and information as may be available to assist the cabinet in selecting the appropriate representative important species.
 - (b) After submitting the early screening information under paragraph (a) of this subsection, the discharger shall consult with the cabinet at the earliest practicable time, but not later than thirty (30) days after the application is filed, to discuss the discharger's early screening information. Within sixty (60) days after the application is filed, the discharger shall submit for the cabinet's approval a

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detailed plan of study which the discharger will undertake to support its 401 KAR 5:055, Section 7(4), demonstration. The discharger shall specify the nature and extent of the following type of information to be included in the plan of study: biological, hydrographical, and meteorological data; physical monitoring data; engineering or diffusion models; laboratory studies; representative important species; and other relevant information. In selecting representative important species, special consideration shall be given to species mentioned in applicable water quality standards. After the discharger submits its detailed plan of study, the cabinet shall either approve the plan or specify any necessary revisions to the plan. The discharger shall provide any additional information or studies which the cabinet subsequently determines necessary to support the demonstration, including such studies or inspections as may be necessary to select representative important species. The discharger shall provide any additional information or studies which the discharger contends are appropriate to support the demonstration.

(c) Any application for the renewal of 401 KAR 5:055, Section 7(4), variance shall include only the information described in paragraphs (a) and (b) of this subsection and 401 KAR 5:075 as the cabinet requests within sixty (60) days after receipt of the permit application.

(d) The cabinet shall promptly notify the Secretary of the U.S. Department of Commerce, the Secretary of the U.S. Department of the Interior, and any affected state of the filing of the request and shall consider any timely recommendations they submit.

(e) In making the demonstration the discharger shall consider any information or guidance published by EPA to assist in making the demonstrations.

(f) If an applicant desires a ruling on a 401 KAR 5:055, Section 7(4), application before the ruling on any other necessary permit terms and conditions, it shall so request upon filing its application under paragraph (a) of this subsection. This request will be granted or denied at the discretion of the cabinet.

3 Criteria and standards for the determination of alternative effluent limitations.

(a) Thermal discharge effluent limitations or standards established in permits may be less stringent than those required by applicable standards and limitations if the discharger demonstrates to the satisfaction of the cabinet that the effluent limitations are more stringent than necessary to assure the protection and propagation of a balanced, indigenous community of shellfish, fish, and wildlife in and on the body of water into which the discharge is made. This demonstration shall show that the alternative effluent limitation desired by the discharger, considering the cumulative impact of its thermal discharge together with all other significant impacts on the species affected, shall assure the protection and propagation of a balanced indigenous community of shellfish, fish, and wildlife in and on the body of water into which the discharge is to be made.

(b) In determining if the protection and propagation of the affected species will be assured, the cabinet may consider any information contained or referenced in any applicable thermal water quality criteria and information published by the administrator under CWA Section 304(a) (33 USC Section 1314(a)) or any other information it deems relevant.

(c) Existing dischargers may base their demonstration upon the absence of prior appreciable harm in lieu of predictive studies. Any demonstrations shall show:

1. That no appreciable harm has resulted from the normal component of the discharge, taking into account the interaction of such thermal component with other pollutants and the additive effect of other thermal sources to a balanced, indigenous community of shellfish, fish, and wildlife in and on the body of water into which the discharge has been made; or

2. That despite the occurrence of previous harm, the desired alternative effluent limitations, or appropriate modifications thereof, shall nevertheless assure the protection and propagation of a balanced, indigenous community of shellfish, fish, and wildlife in and on the body of water into which the discharge is made.

(d) In determining if prior appreciable harm has occurred, the cabinet shall consider the length of time in which the applicant has been discharging and the nature of the discharge.

Section 5. New Sources and New Dischargers. **1** Criteria for new source determination.

(a) Except as otherwise provided in an applicable new source performance standard, a source is a "new source" if it meets the definition of "new source" in 401 KAR 5:001; and:

1. It is constructed at a site at which no other source is located;

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2. It totally replaces the process or production equipment that causes the discharge of pollutants at an existing source; or

3. Its processes are substantially independent of an existing source at the same site. In determining whether these processes are substantially independent, the cabinet shall consider such factors as the extent to which the new facility is integrated with the existing plant, and the extent to which the new facility is engaged in the same general type of activity as the existing source.

(b) A source meeting the requirements of paragraph (a) of this subsection is a new source only if a new source performance standard is independently applicable to it. If there is no independently applicable standard, the source is a new discharger. See 401 KAR 5:001.

(c) Construction on a site at which an existing source is located results in a modification subject to 401 KAR 5:070, Section 6 rather than a new source or a new discharger if the construction does not create a new building, structure, facility, or installation meeting the criteria of paragraph (a) of this subsection but otherwise alters, replaces, or adds to existing process or production equipment.

(d) Construction of a new source as defined under 401 KAR 5:001 has commenced if the owner or operator has:

1. Begun or caused to begin as part of a continuous on-site construction program:

a. Any placement, assembly, or installation of facilities or equipment; or

b. Significant site preparation work including clearing, excavation, or removal of existing buildings, structures, or facilities which is necessary for the placement, assembly, or installation of new source facilities or equipment; or

2. Entered into a binding contractual obligation for the purchase of facilities or equipment which are intended to be used in its operation within a reasonable time. Options to purchase or contracts which can be revoked or modified without substantial loss, and contracts for feasibility, engineering, and design studies do not constitute a contractual obligation under this subsection.

(e) When a KPDES permit issued to a source with a "protection period" under subsection (2)(a) of this section will expire on or after the expiration of the protection period, that permit shall require the owner or operator of the source to comply with the requirements of Section 1 of this administrative regulation and CWA Section 301 (33 USC Section 1311) and any other then applicable CWA requirements immediately upon the expiration of the protection period. No additional period for achieving compliance with these requirements shall be allowed except when necessary to achieve compliance with requirements promulgated less than three (3) years before the expiration of the protection period.

(f) The owner or operator of a new source, a new discharger which commenced discharge after August 13, 1979, or a recommencing discharger shall install and have in operating condition, and shall "start-up" all pollution control equipment required to meet the conditions of its permits before beginning to discharge. Within the shortest feasible time (not to exceed ninety (90) days), the owner or operator shall meet all permit conditions. The requirements of this subsection do not apply if the owner or operator is issued a permit containing a compliance schedule under 401 KAR 5:070, Section 2(1).

(g) After the effective date of new source performance standards, no owner or operator shall operate the source in violation of those standards applicable to the source.

(2) Effect of compliance with new source performance standards. The provisions of this subsection do not apply to existing sources which modify their pollution control facilities or construct new pollution control facilities and achieve performance standards, but which are neither new sources or new dischargers or otherwise do not meet the requirements of this subsection.

(a) Except as provided in paragraph (b) of this subsection, any new discharger, the construction of which commenced after October 18, 1972, or new source which meets the applicable promulgated new source performance standards before the commencement of discharge, shall not be subject to any more stringent new source performance standards or to any more stringent technology-based standards under CWA Section 301(b)(2) (33 USC Section 1311(b)(2)) for the soonest ending of the following periods:

1. Ten (10) years from the date that construction is completed;

2. Ten (10) years from the date the source begins to discharge process or other nonconstruction related wastewater; or

3. The period of depreciation or amortization of the facility for the purposes of Internal Revenue Code Section 167 or 169 (26 USC Section 167 or 169).

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(b) The protection from more stringent standards of performance afforded by paragraph (a) of this subsection does not apply to:

1. Additional or more stringent permit conditions which are not technology based; for example, conditions based on water quality standards, or toxic effluent standards or prohibitions under CWA Section 307(a) (33 USC Section 1317 (a)); or

2. Additional permit conditions in accordance with 401 KAR 5:065, Section 2(5) controlling toxic pollutants or hazardous substances which are not controlled by new source performance standards. This includes permit conditions controlling pollutants other than those identified as toxic pollutants or hazardous substances when control of these pollutants has been specifically identified as the method to control the toxic pollutants or hazardous substances.

Section 6. Toxic Pollutants. References throughout the KPDES administrative regulations establish specific requirements for discharges of toxic pollutants. The following listing identifies those toxic pollutants required to be considered for each of these KPDES requirements:

- (1) Acenaphthene.
- (2) Acrolein.
- (3) Acrylonitrile.
- (4) Aldrin or dieldrin.
- (5) Antimony and compounds.
- (6) Arsenic and compounds.
- (7) Asbestos.
- (8) Benzene.
- (9) Benzidine.
- (10) Beryllium and compounds.
- (11) Cadmium and compounds.
- (12) Carbon tetrachloride.
- (13) Chlordane (technical mixture and metabolites).
- (14) Chlorinated benzenes (other than dichloro-benzenes).
- (15) Chlorinated ethanes (including 1,2-dichloroethane, 1,1,1-trichloroethane, and hexachloroethane).
- (16) Chloroalkyl ethers (chloromethyl, chloroethyl, and mixed ethers).
- (17) Chlorinated naphthalene.
- (18) Chlorinated phenols (other than those listed elsewhere; includes trichlorophenols and chlorinated cresols).
- (19) Chloroform.
- (20) 2-chlorophenol.
- (21) Chromium and compounds.
- (22) Copper and compounds.
- (23) Cyanides.
- (24) DDT and metabolites.
- (25) Dichlorobenzenes (1,2-, 1,3-, and 1,4- dichlorobenzenes).
- (26) Dichlorobenzidine.
- (27) Dichloroethylenes (1,1- and 1,2-dichloroethylene).
- (28) 2,4-dichlorophenol.
- (29) Dichloropropane and dichloropropene.
- (30) 2,4-dimethylphenol.
- (31) Dinitrotoluene.
- (32) Diphenylhydrazine.
- (33) Endosulfan and metabolites.
- (34) Endrin and metabolites.
- (35) Ethylbenzene.
- (36) Fluoranthene.
- (37) Haloethers (other than those listed elsewhere; includes chlorophenylphenyl ether, bromophenylphenyl ether, bis(dichloroisopropyl) ether, bis(chloroethoxy) methane and polychlorinated diphenyl ethers).

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(38) Halomethanes (other than those listed elsewhere; includes methylene chloride methylchloride, methyl-bromide, bromoform, dichlorobromomethane, trichlorofluoromethane, dichlorodifluoromethane).

(39) Heptachlor and metabolites.

(40) Hexachlorobutadiene.

(41) Hexachlorocyclohexane (all isomers).

(42) Hexachlorocyclopentadiene.

(43) Isophorone.

(44) Lead and compounds.

(45) Mercury and compounds.

(46) Naphthalene.

(47) Nickel and compounds.

(48) Nitrobenzene.

(49) Nitrophenols (including 2,4-dinitrophenol, dinitrocresol).

(50) Nitrosamines.

(51) Pentachlorophenol.

(52) Phenol.

(53) Phthalate esters.

(54) Polychlorinated biphenyls (PCBs).

(55) Polynuclear aromatic hydrocarbons (including benzanthracenes, benzopyrenes, benzofluoranthene, chrysenes, dibenzanthracenes, and indenopyrenes).

(56) Selenium and compounds.

(57) Silver and compounds.

(58) 2,3,7,8-tetrachlorodibenzo-p-dioxin (TCDD).

(59) Tetrachloroethylene.

(60) Thallium and compounds.

(61) Toluene.

(62) Toxaphene.

(63) Trichloroethylene.

(64) Vinyl chloride.

(65) Zinc and compounds.

(66) The term "compounds" shall include organic and inorganic compounds. (9 Ky.R. 879; Am. 1141; eff. 6-1-83; 12 Ky.R. 559; eff. 12-10-85; 20 Ky.R. 3290; 21 Ky.R. 436; eff. 8-24-94.)

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

RELATES TO: KRS Chapters 151, 224

STATUTORY AUTHORITY: KRS 151.125, 224.10-100, 224.70-110

NECESSITY, FUNCTION, AND CONFORMITY: KRS 224.10-100 requires that the cabinet promulgate administrative regulations pertaining to the issuance of permits and the prevention, abatement and control of water pollution. This administrative regulation provides for preventing, abating, and controlling water pollution from oil and gas facilities.

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

(2) Owners or operators of dry gas wells as defined in Section 2(8) of this administrative regulation shall be exempt from the requirements of this administrative regulation except under Sections 4, 5(2)(b), and 8(3) of this administrative regulation.

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

(1) "Area of review" means a fixed radius around the facility of not less than one-fourth (1/4) mile.

(2) "Barrel" means forty-two (42) U.S. gallons.

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

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

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

(6) "Division" means Division of Water, Natural Resources and Environmental Protection Cabinet.

(7) "Drilling pit" means an earthen excavation for the collection of fluids associated with the drilling, construction, completion, acidizing, or fracturing of an oil or gas well.

(8) "Dry gas well" means a gas well producing one (1) barrel or less of produced water at maximum production conditions during a given twenty-four (24) hour period.

(9) "Enhanced recovery well" means a well used for the injection of fluids to improve or maintain reservoir productivity.

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

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

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

(13) "Holding pit" means an earthen excavated depression designed to receive and store produced water at a facility.

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

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

(16) "Operate" means any act relating to the construction, operation or maintenance of any facility.

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(17) "Operator" means any person who operates any facility.

(18) "Owner" means any person who possesses any interest in:

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

(b) Any facility.

(19) "Person" means as defined in KRS 224.01-010(12).

(20) "Pollutant" means as defined in KRS 224.01-010(28).

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

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

(23) "Stripper well" means any oil well producing ten (10) barrels or less per day of oil.

(24) "Tank battery" means an installation where oil is collected from wellheads and separated from produced water.

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

(26) "Treatment lagoon" or "effluent lagoon," as used in 401 KAR 5:029, Section 1(1)(bb) and as applied to facilities subject to this administrative regulation, means a secondary recovery or water-flood impoundment on which on-site construction commenced before May 19, 1980, owned or operated by a person eligible to receive a KPDES permit for a discharge from that impoundment, if used for the purpose of diluting produced water, and if the owner or operator has received prior approval from the cabinet of its request for designation as such.

(27) "Waters of the Commonwealth" means waters of the Commonwealth as defined in KRS 224.01-010(26).

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

(29) "Zone" means a subsurface layer or stratum capable of producing or receiving fluids.

Section 3. Prohibition. No person shall construct, modify, or operate a facility in violation of state or federal water quality standards or other applicable standards in this administrative regulation.

Section 4. Registration. (1) All operators shall register their facilities with the division using a form approved by the director containing name of operation, location of lease, oil and produced water production rates, method of produced water disposal, and other necessary information. The operator shall register each tank battery with associated wells, pits, and other similar structures as one (1) facility. Those facilities not associated with a tank battery shall be registered individually.

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

(3) Operators shall post waterproof signs, at each facility, of a size and type approved by the director. The signs shall identify the operator's name, address, permit and registration number, phone number, and other information required by the director.

(4) New facilities are required to register with the division within sixty (60) days after the facility begins producing oil and/or gas.

(5) Dry gas wells are exempted from the registration requirements of this section, unless not registered with the Kentucky Department of Mines and Minerals.

Section 5. Produced Water Disposal. Produced water shall be disposed into an enhanced recovery well, a disposal well permitted under Section 11(3) of this administrative regulation, a well permitted under the 40 CFR 146 underground injection control program (this must be obtained in addition to a Section 11(3) disposal well authorization, if 40 CFR 146 requirements apply), by a

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surface discharge permitted under Section 8 of this administrative regulation, by evaporation, by reverse osmosis, or by any other method first approved by the cabinet, provided that no such method approved by the cabinet will violate water quality standards or other KPDES requirements as applicable. A KPDES permit is not required for a point source discharge meeting the exclusion of 401 KAR 5:055, Section 1(2)(h), as long as there is no surface water point source discharge.

Section 6. Disposal of Produced Water Off the Facility. (1) No person shall transport produced water away from a tank battery to any location other than a cabinet-permitted disposal system or an individual Underground Injection Control (UIC) permitted site, or a disposal system in another state.

(2) No operator shall authorize or allow the transportation of produced water away from a facility where it is produced unless such operator has first submitted the following information to the director and obtained approval:

- (a) Operator's name, mailing address, and telephone number.
- (b) Transporter's name, mailing address, telephone number.
- (c) Name of disposer, mailing address, telephone number, disposal site, and permit number.
- (d) Vehicle identification information, including license number and vehicle description.
- (e) Quantity of produced water to be transported.

(3) The operator of a disposal well may receive produced water from other facilities in accordance with the notification procedures of subsection (2) of this section.

(4) Spills during transfer of produced water shall be reported in accordance with 401 KAR 5:015.

Section 7. Approval Requirements for Continuation of Existing Facilities. (1) Applicability. The provisions of this section shall apply to operators of facilities in existence prior to the effective date of this administrative regulation.

(2) Continuation requirements. Operators may continue to operate existing facilities for a period not to exceed one (1) year from the date of the submittal of a compliance plan provided all the following provisions are met:

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

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

(c) Both the written request and plan shall be submitted to the director by June 1, 1984.

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

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

(a) Review the plan and request any additional information from the operator, if needed, within twenty (20) working days of receipt of the plan;

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

(c) Issue a written approval to the operator containing the compliance schedule and an identification number within forty (40) working days after the plan is deemed complete.

(4) Nothing in this section shall be construed to authorize any discharge from any facility except pursuant to Section 8 of this administrative regulation.

Section 8. Surface Discharges of Produced Water. (1) The provisions of 401 KAR 5:026, 5:029, 5:031, and 5:050 through 5:085, inclusive, shall apply according to their terms to the owner or operator of any facility which causes or is capable of causing produced water. The provisions of this section apply to the operator of any facility discharging produced water into surface water of the Commonwealth.

(2) A KPDES permit, issued pursuant to 401 KAR 5:050 through 5:085, inclusive, is required prior to beginning a discharge of pollutants into waters of the Commonwealth. A KPDES permit will include effluent limitations developed pursuant to 401 KAR 5:065, Sections 2 and 4. A permit may contain a zero discharge condition or may be denied, where authorized by the KPDES regulations.

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(3) For purposes of setting KPDES permit limitations, the chloride criterion of 600 mg/l, set forth in 401 KAR 5:031, Section 4, Table I, shall be utilized as a thirty (30) day average.

(4) An owner or operator applying for a KPDES permit may request an exception to the water quality criteria of 401 KAR 5:031, Sections 4 through 7. Applications for the exception shall be processed by the cabinet as a part of the KPDES application, if the applicant applies for both at the same time. For exception to water quality criteria applications which are received by the cabinet at other times, application for the exception need not be processed by the cabinet as part of the KPDES application. In either case, the review procedure of 401 KAR 5:075 applies. A public hearing, after public notice, shall be conducted prior to granting any exception to criteria request.

(5) A KPDES applicant may combine outfalls on one (1) application, if all outfalls are owned or operated by the applicant, and if the outfalls discharge to a common watershed and are similar in effluent quality and environmental impact. If the cabinet disapproves the combination the applicant may seek review of that decision pursuant to KRS 224.10-420(2).

(6) Notwithstanding 401 KAR 5:085, Section 4, applicants shall pay a base KPDES application fee of \$350. An additional fee may be assessed by the cabinet for combined outfalls, if the time required to process the application exceeds that necessary for processing a single-outfall application. Exceptions to criteria applications submitted pursuant to subsection (4) of this section shall pay a water quality variance fee pursuant to 401 KAR 5:085, Section 6.

Section 9. Holding Pits. (1) Applicability. The provisions of this section apply to the operators of holding pits which are constructed after the effective date of this administrative regulation, and to the operators of existing pits that are incapable of demonstrating pursuant to Section 7 of this administrative regulation that those pits do not contaminate surface or groundwaters.

(2) Exemption. Spill Prevention Control and Countermeasure (SPCC) pits developed pursuant to Section 13 of this administrative regulation are exempted from the requirements of this section.

(3) General requirements. Operators of holding pits shall supplement the registration form required under Section 4 of this administrative regulation with information regarding the construction and operation of any holding pit and any other information deemed necessary by the director. This information shall be submitted to the director on forms provided by the director not less than thirty (30) days prior to the date the permit is desired.

(4) Permits. The director will issue permits to operators of holding pits to contain any condition necessary to satisfy any requirement of this administrative regulation notwithstanding any less stringent provision of the law to the contrary.

(5) Conditions applicable to holding pits.

(a) Construction requirements.

1. Holding pits shall be constructed in accordance with KRS Chapter 151 and Division of Waste Management administrative regulation 401 KAR 30:030.

2. Holding pits shall be constructed with an impermeable synthetic liner having a minimum thickness of twenty (20) mils or equivalent as approved by the director.

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

(b) Operating requirements.

1. No holding pit shall discharge produced water into waters of the Commonwealth except in accordance with a KPDES permit, nor shall any holding pit be used for the ultimate disposal of produced waters.

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

3. Waste shall be removed from the holding pit to maintain a one (1) foot minimum freeboard. Disposal of wastes shall be in accordance with Kentucky laws and administrative regulations.

(c) Closure requirements.

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

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

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3. Disposal of all wastes shall be in accordance with Kentucky laws and administrative regulations.

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

Section 10. Drilling Pits. Facilities shall be constructed for the collection of fluids, other than produced water, associated with well construction, acidizing and chemically enhanced recovery in areas where waters of the Commonwealth may be affected. If the life of the facilities is longer than thirty (30) days following completion of exploration or drilling activities they shall meet all requirements of Section 9 of this administrative regulation. Upon written request, the director may, with good cause, extend the allowable life of the facility to a maximum ninety (90) days if the extension will not cause or contribute to contamination of waters of the Commonwealth. The closure requirements for these facilities shall be as specified in Section 9(5)(c) of this administrative regulation.

Section 11. Disposal Wells. (1) Applicability. The provisions of this section apply to operators of disposal wells until issuance of an individual Underground Injection Control (UIC) permit by the agency having jurisdiction under the Safe Drinking Water Act (42 USC Section 300f, et seq.).

(2) General requirements. Operators of disposal wells shall supplement the registration form required under Section 4 of this administrative regulation with information regarding the construction and operation of any disposal well, a plan showing the location of all existing and abandoned wells within the area of review and any other information deemed necessary by the director. This information shall be submitted to the director on forms provided by the division not less than thirty (30) days prior to the date the permit is desired.

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

(4) Conditions applicable to all disposal wells. Disposal wells shall reinject all produced waters into a formation which is geologically isolated and contains more than 10,000 mg/l of total dissolved solids or meets the criteria of an exempted aquifer as set forth in 40 CFR 146.4. If a formation is unacceptable for injection solely because abandoned and improperly plugged boreholes have established communication between it and other strata, the operator is obligated to find and properly plug these boreholes within the area of review established by the division. Disposal well failure or shutdown shall be reported immediately to the director. All plugging, casing, and operation of wells shall be done in accordance with Department of Mines and Minerals administrative regulations 805 KAR 1:020, 1:060, and 1:070.

Section 12. Inspection and Enforcement. The cabinet may inspect any facility pursuant to KRS 224.10-100 and shall provide written notification of any violation to the operator. Following the determination of any violation of any applicable provision of law, the cabinet may initiate any enforcement action including an order to abate and alleviate such condition or activity pursuant to KRS 224.10-410 and any other applicable remedy including civil penalties pursuant to KRS 224.99-010.

Section 13. Spills and Leaks. (1) General provision. Operators of facilities shall develop and implement Spill Prevention Control and Countermeasure (SPCC) plans when required under 40 CFR Part 112.

(2) Reporting.

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

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

Section 14. Permit Fees. (1) The provisions of this section shall apply to the operator of each facility required to have a permit by this administrative regulation except for any facility permitted under a general permit.

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(a) Every operator who is issued a permit under the provisions of this administrative regulation shall be assessed a permit fee in accordance with the provisions set forth in subsection (2) of this section.

(b) Upon making the determination that a permit can be issued under this administrative regulation, the director will notify upon receipt of the total amount of the permit fee. Failure by the applicant to pay the assessed permit fee on or before the due date may result in the denial of the permit.

(2) The fee for each type of permit is listed below:

Facility and Type of Permit	Permit Fee
Construction of "holding pit"	\$100
Operation of existing "disposal well"	\$125
Construction of "disposal well"	\$200

(3) In addition to the requirements of this administrative regulation, facilities issued KPDES permits will be assessed a fee pursuant to 401 KAR 5:085.

(4) Duplicate permit fee. Upon application for the issuance of a duplicate permit for activities covered under this administrative regulation, the duplicate permit shall be issued by the cabinet upon receipt of a fifteen (15) dollar permit fee.

(5) Terms of payment.

(a) Payment of a permit fee as provided for by this section will be made within thirty (30) days of the billing date.

(b) Certified checks or money orders, if used, shall be payable to the Kentucky State Treasurer. (9 Ky.R. 1070; Am. 10 Ky.R. 35; 336; eff. 8-3-83; 345; 765; eff. 1-4-84; 1084; eff. 5-1-84; 13 Ky.R. 44; 505; eff. 9-4-86.)

This informational copy is provided at no cost by Kentucky Rural Water Association for educational purposes. For an official certified copy of a regulation, contact the Legislative Research Commission Regulations Compiler's office at (502) 564-8100.

401 KAR 5:200. Documents incorporated by reference for water quality and wastewater treatment.

RELATES TO: KRS 224.01-070, 224.10-010, 224.10-100, 224.10-270, 224.10-275, 224.10-420, 224.10-440, 224.16-050, 224.16-060, 224.70-100, 224.70-110, 224.73-110, 224.73-120

STATUTORY AUTHORITY: KRS 224.01-110, 224.10-100

NECESSITY, FUNCTION, AND CONFORMITY: KRS 13A.120 prohibits an administrative body from issuing standards or by any other name a document where an administrative regulation is required or authorized by law. KRS 13A.130 prohibits an administrative body from using a policy, memorandum, or other form of action to modify or expand a statute or administrative regulation, or to expand or limit a right guaranteed by the Constitution of the United States, the Constitution of Kentucky, a statute, or an administrative regulation. This administrative regulation provides for the incorporation by reference allowed under 1 KAR 1:010 of the documents used by the Natural Resources and Environmental Protection Cabinet to implement 401 KAR Chapter 5, Water Quality and Wastewater Treatment. Copies of these documents may be obtained or examined at the Division of Water Frankfort Office.

Section 1. Operating and Construction Permits for Wastewater Treatment Facilities. (1) The following documents, which are in effect at the time of the effective date of this administrative regulation, are incorporated herein by reference:

(a) U.S. Environmental Protection Agency, Guidance Manual for POTW Pretreatment, U.S. Environmental Protection Agency, Washington, D.C., October, 1983.

(b) U.S. Department of the Army, Corps of Engineers, Office of the Chief of Engineers, Dredging and Dredged Material Disposal, Department of the Army, Washington, D.C., March, 1983.

(c) Great Lakes Board of Sanitary Engineers, Recommended Standards for Sewage Works, Health Education Service, Inc., Albany, N.Y., 1978.

(d) U.S. Environmental Protection Agency, Title 40 Code of Federal Regulations (CFR) Parts 4, 6, 7, 8, 12, 15, 16, 25, 29, 30, 32, 33, and 35, U.S. Government Printing Office, Washington, D.C., 1983 Edition and Annual Reprints thereafter.

(e) U.S. Environmental Protection Agency, Title 48 Code of Federal Regulations (CFR) Part 15, U.S. Government Printing Office, Washington, D.C., 1983 Edition and Annual Reprints thereafter.

(2) The following policy statements, which are in effect at the time of the effective date of this administrative regulation, are incorporated herein by reference: Kentucky Division of Water, Five Mile Policy Requiring No Wastewater Discharges Within Five Miles of Water Intake, Division of Water, Frankfort, Kentucky; August 28, 1984.

Section 2. Compliance With and Enforcement of State Water Laws and Administrative Regulations. (1) The following documents, which are in effect at the time of the effective date of this administrative regulation, are incorporated herein by reference: (Reserved).

(2) The following policy statements, which are in effect at the time of the effective date of this administrative regulation, are incorporated herein by reference:

(a) Kentucky Division of Water, Enforcement Management System, Division of Water, Frankfort, Kentucky, April, 1983.

(b) Kentucky Division of Water, State Municipal Strategy, Division of Water, Frankfort, Kentucky, April, 1984.

Section 3. Wastewater Operator Certification. (1) The following documents, which are in effect at the time of the effective date of this administrative regulation, are incorporated herein by reference:

(a) Oerther, Robert, Process Control Manual, Finance Printing Press, Frankfort, Kentucky, 1981.

(b) Water Pollution Control Federation, Operation of Wastewater Treatment Plants MOP 11, Water Pollution Control Federation, Washington, D.C., 1976.

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(c) New York State Department of Environmental Conservation, Manual of Instruction for Wastewater Treatment, Health Education Service, Inc., Albany, N.Y., 1978.

(2) The following policy statements, which are in effect at the time of the effective date of this administrative regulation, are incorporated herein by reference: (Reserved).

Section 4. Wastewater Construction Grant Administration. The following policy statement, which is in effect at the time of the effective date of this administrative regulation, is incorporated herein by reference: Value Improvement Program, Construction Grants Branch, Division of Water, Frankfort, Kentucky, December 12, 1984. (10 Ky.R. 1213; Am. 11 Ky.R. 177; eff. 8-7-84; 1066; eff. 3-12-85.)

permit timetables for 401 KAR Chapter 5 – 5:300

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401 KAR 5:300. Permit timetables for 401 KAR Chapter 5.

RELATES TO: KRS 224.10-100, 224.10-220, 224.16-050(1)

STATUTORY AUTHORITY: KRS 224.10-100, 224.10-220

NECESSITY, FUNCTION, AND CONFORMITY: KRS 224.10-220 requires the Natural Resources and Environmental Protection Cabinet to prescribe timetables for the issuance of all permits by the cabinet, except those permits for which a timetable is set out by statute. This administrative regulation establishes timetables for permits that are required by 401 KAR Chapter 5.

Section 1. Permit Timetables. This section shall apply for permits required by 401 KAR 5:005 and permits for the transportation of produced water required by 401 KAR 5:090. The cabinet shall issue its final decision on a complete permit application within the review time specified in this section. A complete permit application shall contain all the administrative and technical information required by applicable statutes and administrative regulations.

(1) For approvals for the transportation of produced water granted by the cabinet pursuant to 401 KAR 5:090, the review time shall be thirty (30) calendar days after receipt of a complete permit application; and

(2) For permits required by 401 KAR 5:005, the review time shall be forty-five (45) calendar days from receipt of a complete permit application.

Section 2. Timetables for KPDES Permits. This section shall apply for KPDES permits pursuant to KRS 224.16-050(1). The cabinet shall issue its final decision on a complete permit application within 180 calendar days after receipt of an administratively complete permit application, except as provided in Section 3 of this administrative regulation. A complete permit application shall contain all the administrative and technical information required by applicable statutes and administrative regulations.

(1) Within thirty (30) calendar days of initial receipt of an application for a KPDES permit, the cabinet shall notify the applicant as to whether the application is administratively complete, or if not complete, of the deficiencies which make the application administratively incomplete. A determination that the application is administratively complete shall not mean that the application is complete in every detail, nor shall it mean that any aspect of the application is technically sufficient or approvable.

(2) If the application is determined to be administratively incomplete, the applicant shall correct identified deficiencies within thirty (30) calendar days of the date of notification. If the applicant does not correct identified deficiencies within the time frame, the cabinet may return the application, and the filing fees shall be retained by the cabinet.

(3) After the notification that the application is administratively complete, if the cabinet determines that the application is technically deficient, the cabinet shall notify the applicant of deficiencies which make the application technically incomplete or unapprovable. The applicant shall correct the technical deficiencies within thirty (30) calendar days of the notification, or other time as agreed upon by the applicant and cabinet. If the technical deficiencies are not corrected within thirty (30) calendar days or the agreed upon time frame, the cabinet may deny the permit, and the filing fee shall be retained by the cabinet.

Section 3. Timetable Exclusions. Time periods which shall not be included in the cabinet's consideration of its decision on a KPDES application shall include:

- (1) Time waiting for the applicant to respond to a notice of deficiency;
- (2) Time during which the permit, application, decision, or related matter is held in litigation, including but not limited to administrative hearings;
- (3) Time during which an opportunity for public hearing or public comment period on a draft or proposed permit is given, and time during which a public hearing is scheduled and held;
- (4) Time waiting for federal, state or local agencies to comment on the permit or to respond to written requests from the cabinet for additional information;

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- (5) Time waiting for permit fees to be paid after the cabinet's final permit decision regarding the application is made; and
- (6) Other times as agreed to by the applicant and the cabinet.

Section 4. Timetable Extensions. (1) If two (2) or more permits for a facility, site, source, construction project, or other entity are required from the cabinet, the cabinet may coordinate the issuance of the permits, establishing different review and action times that shall be accomplished by the cabinet or applicant. If the permits are coordinated, the cabinet shall so notify the applicant and indicate the time frames under which the intermediate and final permit actions shall be accomplished. The established time frame for final action shall not exceed the last date for action that is provided for under applicable statutes and administrative regulations, based on all applications being considered and their filing dates.

(2) The applicant and the cabinet may agree that the timetables or review times specified in this administrative regulation may be extended.

Section 5. For permit applications submitted to the division prior to the effective date of this administrative regulation, the review times shall be applied as if the application were submitted on the effective date of this administrative regulation. (19 Ky.R. 1943; Am. 2402; eff. 4-28-93.)

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