

1 ENERGY AND ENVIRONMENT CABINET

2 Department for Environmental Protection

3 Division of Water

4 (Amendment)

5 401 KAR 10:029. General provisions.

6 RELATES TO: KRS 146.200-146.360, 146.410-146.535, 146.550-146.570, 146.600-
7 146.619, 146.990, 224.1-010~~[224.01-010]~~, 224.1-400~~[224.01-400]~~, 224.16-050, 224.16-070,
8 224.70-100-224.70-140, 224.71-100-224.71-145, 224.73-100-224.73-120, 40 C.F.R. 136, 33
9 U.S.C. 1326(a)~~], EO 2008-507, 2008-531]~~

10 STATUTORY AUTHORITY: KRS 146.220, 146.241, 146.270, 146.410, 146.450,
11 146.460, 146.465, 224.10-100, 224.16-050, 224.16-060, 224.70-100, 224.70-110, 40 C.F.R. 131,
12 136, 16 U.S.C. 1531-1544, 33 U.S.C. 1311, 1312, 1313, 1314, 1316, 1341

13 NECESSITY, FUNCTION, AND CONFORMITY: KRS 224.10-100 requires the cabinet
14 to develop and conduct a comprehensive program for the management of water resources and to
15 provide for the prevention, abatement, and control of water pollution. This administrative
16 regulation and 401 KAR 10:001, 10:026, 10:030, and 10:031 establish procedures to protect the
17 surface waters of the commonwealth, and thus protect water resources. ~~[EO 2008-507 and 2008-~~
18 ~~531, effective June 16, 2008, abolish the Environmental and Public Protection Cabinet and~~
19 ~~establish the new Energy and Environment Cabinet.]~~ This administrative regulation establishes
20 the commonwealth's surface water antidegradation policy, provides for withdrawals of waters
21 not meeting water quality standards, and addresses sample collection and analytical methodology

1 and mixing zones.

2 Section 1. Antidegradation Policy. (1) The purpose of 401 KAR 10:026 through 401
3 KAR 10:031 is to safeguard the surface waters of the commonwealth for their designated uses, to
4 prevent the creation of new pollution of these waters, and to abate^[5] existing pollution.

5 (2) Where the quality of surface waters exceeds that necessary to support propagation of
6 fish, shellfish, wildlife and recreation in and on the water, that quality shall be maintained and
7 protected unless the cabinet finds, after full satisfaction of the intergovernmental coordination
8 and public participation provisions of the cabinet's continuing planning process required by 33
9 U.S.C. 1313 and 40 C.F.R. 130.5, that allowing lower water quality is necessary to accommodate
10 important economic or social development in the area in which the waters are located.

11 (a) For point source discharges, water quality shall be maintained and protected in these
12 waters according to the procedures specified in 401 KAR 10:030, Section 1(2)(b) or (3)(b).

13 (b) In allowing degradation or lower water quality, the cabinet shall assure water quality
14 adequate to protect existing uses fully.

15 (c) The cabinet shall assure that there shall be achieved the highest statutory and
16 regulatory requirements for waste treatment by all new and existing point sources and that
17 nonpoint sources of pollutants be controlled by application of all cost effective and reasonable
18 best management practices.

19 (3) Water quality shall be maintained and protected in a water categorized as an
20 outstanding national resource water according to the procedures specified in 401 KAR 10:030,
21 Section 1(1)(b).

22 (4) Water quality shall be maintained and protected in those waters designated as
23 outstanding state resource waters according to the procedures specified in 401 KAR 10:031,

1 Section 8.

2 (5) If potential water quality impairment associated with a thermal discharge is involved,
3 a successful demonstration conducted under Section 316 of the Clean Water Act, 33 U.S.C.
4 1326, shall be in compliance with this section.

5 Section 2. Withdrawal of Contaminated Water. Surface waters occasionally do not meet
6 the criteria established in 401 KAR 10:031.

7 (1) Withdrawal and subsequent discharge of these waters without alteration of the
8 physical or chemical characteristics into the same or similar surface water shall not be considered
9 a violation of water quality standards.

10 (2) The cabinet shall determine KPDES permit limitations in these situations based on the
11 quality of the raw and receiving waters.

12 (3) The cabinet retains the right to require permit modification under the provisions of
13 401 KAR 5:035, 5:065, 5:070, 5:075, and 5:080.

14 Section 3. Sample Collection and Analytical Methodology.(1) All methods of
15 preservation and analysis used to determine conformity or nonconformity with water quality
16 standards shall be governed by 40 C.F.R. 136, as amended, if applicable.

17 (2) Sample collection and other methods not established in subsection (1) of this section
18 may be used as appropriate if they:

19 (a) Meet commonly accepted quality assurance and quality control principles;

20 (b) Are within the accuracy required for determining conformity or nonconformity with
21 water quality standards; and

22 (c) Receive prior written approval by the cabinet.

23 Section 4. Mixing Zones.[The following requirements shall apply to a mixing zone:] (1)

1 The cabinet may assign definable geometric limits for mixing zones for a discharge of a pollutant
2 or pollutants within a discharge based on the following criteria:

3 (a) Applicable limits shall include the linear distances from the point of discharge,
4 surface area involvement, volume of receiving water, and shall take into account other nearby
5 mixing zones;

6 (b) Dilution provided by assigned mixing zones shall not be allowed until applicable
7 limits are assigned by the cabinet in accordance with this section;

8 (c) In a stream or river, unless assigned on or before December 8, 1999, an assigned
9 mixing zone, from the point of discharge in a spatial direction, shall not exceed one-third (1/3) of
10 the width of the receiving stream or one-half (1/2) of the cross-sectional area;

11 (d) In a lake or a reservoir, unless assigned on or before December 8, 1999, an assigned
12 mixing zone, from the point of discharge in any spatial direction, shall not exceed one-tenth
13 (1/10) of the width of the lake, or reservoir at the discharge point;

14 (e) An assigned mixing zone shall be limited to an area or volume that shall not adversely
15 affect the designated uses of the receiving water and shall not be so large as to adversely affect
16 an established community of aquatic organisms;

17 (f) The location of a mixing zone shall not:

18 1. Interfere with fish spawning or nursery areas, fish migration routes, public water
19 supply intakes, or bathing areas;

20 2. Preclude the free passage of fish or other aquatic life; or

21 3. Jeopardize the continued existence of endangered or threatened aquatic species listed
22 under Section 4 of the Endangered Species Act, 16 U.S.C. 1531 through 1544, or result in the
23 destruction or adverse modification of their critical habitat;

1 (g) For thermal discharges, a successful demonstration conducted under Section 316(a) of
2 the Clean Water Act, 33 U.S.C. Section 1326(a), shall constitute compliance with this section;
3 and

4 (h) Unless assigned by the cabinet on or before September 8, 2004, there shall not be
5 mixing zones for bioaccumulative chemicals of concern.

6 1. A mixing zone that was assigned by the cabinet for a bioaccumulative chemical of
7 concern shall not expire later than September 8, 2014.

8 2.a. A bioaccumulative chemical of concern is one that accumulates in one (1) or more
9 aquatic organisms by a human health bioaccumulation factor of greater than 1,000.

10 b. For the purposes of this administrative regulation, bioaccumulative chemicals of
11 concern shall consist of the following:

12 (i) alpha-Hexachlorocyclohexane;

13 (ii) beta-Hexachlorocyclohexane;

14 (iii) Chlordane;

15 (iv) DDD;

16 (v) DDE;

17 (vi) DDT;

18 (vii) delta-Hexachlorocyclohexane;

19 (viii) Dieldrin;

20 (ix) Hexachlorobenzene;

21 (x) Hexachlorobutadiene;

22 (xi) Hexachlorocyclohexane;

23 (xii) Lindane;

- 1 (xiii) Mercury;
- 2 (xiv) Mirex;
- 3 (xv) Octachlorostyrene;
- 4 (xvi) PCBs;
- 5 (xvii) Pentachlorobenzene;
- 6 (xviii) Photomirex;
- 7 (xix) Toxaphene;
- 8 (xx) 1,2,3,4-Tetrachlorobenzene;
- 9 (xxi) 1,2,4,5-Tetrachlorobenzene; and
- 10 (xxii) 2,3,7,8-TCDD (Dioxin).

11 (2) Concentrations of toxic substances that exceed the acute criteria for protection of
12 aquatic life in 401 KAR 10:031 shall not exist within an assigned mixing zone or in the
13 discharge itself unless a zone of initial dilution is assigned.

14 (a) A zone of initial dilution shall be assigned pursuant to subsection (3) of this section.

15 (b) Chronic criteria for the protection of aquatic life and criteria for the protection of
16 human health regarding~~from~~ the consumption of fish tissue shall be met at the edge of the
17 assigned mixing zone.

18 (3) The following requirements shall apply to a zone of initial dilution:

19 (a) The cabinet shall require an applicant to provide a technical evaluation for a zone of
20 initial dilution;

21 (b) Concentrations of toxic substances shall not exceed the acute criteria for the
22 protection of aquatic life at the edge of the assigned zone of initial dilution, except, numeric
23 acute criteria may be exceeded within the zone if the frequency and duration of exposure of

1 aquatic organisms are not sufficient to cause acute toxicity; and

2 (c) Unless assigned on or before December 8, 1999, a zone of initial dilution for a
3 pollutant shall not be allowed in an exceptional water.

4 (4) Unless assigned on or before July 6, 2009~~[the most recent effective date of this~~
5 ~~administrative regulation]~~, a zone of initial dilution for a pollutant shall be available only to a
6 submerged high-rate multiport outfall structure and shall be limited in size to the most restrictive
7 of the acute criteria which shall be met~~[following]~~:

8 (a) ~~[The acute criteria shall be met]~~ Within ten (10) percent of the distance from the edge
9 of the outfall structure to the edge of the regulatory mixing zone in a spatial direction;

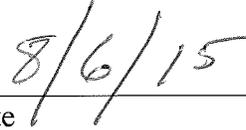
10 (b) ~~[The acute criteria shall be met]~~ Within a distance of fifty (50) times the square root of
11 the cross-sectional area of a discharge port, in a spatial direction; or

12 (c) ~~[The acute criteria shall be met]~~ In a horizontal direction within a distance of five (5)
13 times the natural water depth that prevails under mixing zone design conditions, and exists
14 before the installation of a discharge outlet.

401 KAR 10:029 General provisions
approved for filing.



Leonard K. Peters, Secretary
Energy and Environment Cabinet



Date

PUBLIC HEARING AND PUBLIC COMMENT PERIOD: A public hearing on this administrative regulation shall be held on Thursday, September 24, 2015 at 6:00 p.m. Eastern Time at the Department for Environmental Protection, Room 301D, 300 Fair Oaks Lane, Frankfort, Kentucky 40601. Individuals interested in being heard at this hearing shall notify this agency in writing by 5 workdays prior to the hearing of their intent to attend. If no notification of intent to attend the hearing is received by that date, the hearing may be canceled. This hearing is open to the public. Any person who wishes to be heard will be given an opportunity to comment on the proposed administrative regulation. A transcript of the public hearing will not be made unless a written request for a transcript is made. If you do not wish to be heard at the public hearing, you may submit written comments on the proposed administrative regulation. Written comments shall be accepted until the close of business on September 30, 2015. Send written notification of intent to be heard at the public hearing or written comments on the proposed administrative regulation to the contact person.

Contact person: Carole J. Catalfo, Internal Policy Analyst, RPPS, Division of Water, 200 Fair Oaks Lane, 4th Floor, Frankfort, Kentucky 40601, phone (502) 564-3410, fax (502) 564-9003.

REGULATORY IMPACT ANALYSIS AND TIERING STATEMENT

Administrative Regulation #: 401 KAR 10:029 Contact Person: Peter Goodmann, Director

(1) Provide a brief summary of:

(a) What this administrative regulation does: This administrative regulation establishes general operating provisions for water quality regulations that protect the surface waters of the Commonwealth. This administrative regulation provides for withdrawal of contaminated water, sample collection and methodology, and mixing zones. This administrative regulation is also used in conjunction with 401 KAR 10:030 to implement antidegradation requirements. The purpose of this administrative regulation is to address water quality protection issues not covered in 10:026, 10:030, or 10:031 to form a complete protection program.

(b) The necessity of this administrative regulation: This administrative regulation is necessary to establish requirements for the protection of the surface waters of the Commonwealth.

(c) How this administrative regulation conforms to the content of the authorizing statutes: KRS 224.10-100 requires the Energy and Environment Cabinet to develop and conduct a comprehensive program for the management of water resources, and to prevent, abate, and control water pollution. This administrative regulation, with 401 KAR 10:026, 10:030, and 10:031, establish procedures to protect the surface waters of the Commonwealth and thus manage water resources and prevent water pollution. In conjunction with 401 KAR 10:030, this administrative regulation establishes the Commonwealth's surface water antidegradation policy, provides for withdrawals of waters not meeting water quality standards, addresses sample collection and analytical methodology, and eliminates mixing zones for discharges of bioaccumulative chemicals.

(d) How this administrative regulation currently assists or will assist in the effective administration of the statutes: This administrative regulation will assist in the administration of the statutes by providing specific requirements for the protection of surface waters of the Commonwealth as required by the authorizing statutes.

(2) If this is an amendment to an existing administrative regulation, provide a brief summary of:

(a) How the amendment will change this existing administrative regulation: This amendment corrects statutory references, eliminates an outdated EO reference, and makes technical regulatory grammatical changes.

(b) The necessity of the amendment to this administrative regulation: This amendment is necessary to comply with regulatory language changes since the regulation was last revised and to provide consistency in 401 KAR Chapter 10.

(c) How the amendment conforms to the content of the authorizing statutes: KRS 224.10-100 requires the Cabinet to develop and conduct a comprehensive program to manage water resources and provide for the prevention, abatement, and control of water pollution. This amendment and 401 KAR 10:026, 10:030, and 10:031 establish procedures to protect the surface waters of the Commonwealth and thus protect water resources. For Kentucky to maintain its delegation over the NPDES permit program, the Clean Water Act requires that the Commonwealth review its water quality standards every three years (the "Triennial Review") and comply with programmatic requirements of 40 C.F.R. Part 131. This administrative

regulation is being amended as part of the Triennial Review

(d) How the amendment will assist in the effective administration of the statutes: This amendment will assist in the administration of the statutes by providing clear and consistent regulatory language.

(3) List the type and number of individuals, businesses, organizations, or state and local governments affected by this administrative regulation: This administrative regulation applies to the surface waters of the Commonwealth and establishes general provisions applicable to municipalities, campgrounds, subdivisions, businesses, marinas residences, and government agencies with permitted discharges into surface waters of the Commonwealth.

(4) Provide an analysis of how the entities identified in question (3) will be impacted by either the implementation of this administrative regulation, if new, or by the change, if it is an amendment, including:

(a) List the actions that each of the regulated entities identified in question (3) will have to take to comply with this administrative regulation or amendment: There will be no additional actions needed to comply with these technical amendments.

(b) In complying with this administrative regulation or amendment, how much will it cost each of the entities identified in question (3): The costs to comply with this administrative will not change since there are no additional actions that the regulated community will need to take.

(c) As a result of compliance, what benefits will accrue to the entities identified in question (3): Maintaining existing water quality may have a positive influence on revenues derived from water-based tourism and can lower the cost of treating drinking water.

(5) Provide an estimate of how much it will cost the administrative body to implement this administrative regulation:

(a) Initially: There are no additional initial costs to implement this administrative regulation.

(b) On a continuing basis: Costs of implementation will remain the same.

(6) What is the source of the funding to be used for the implementation and enforcement of this administrative regulation? The source of revenue is a combination of General Funds appropriated by the Kentucky General Assembly and federal funds from the U.S. Environmental Protection Agency.

(7) Provide an assessment of whether an increase in fees or funding will be necessary to implement this administrative regulation, if new, or by the change if it is an amendment: An increase in fees will not be necessary to implement this amendment.

(8) State whether or not this administrative regulation established any fees or directly or indirectly increased any fees: This administrative regulation does not establish fees or directly or indirectly increase fees.

(9) TIERING: Is tiering applied? (Explain why or why not) Yes, tiering is applied in this administrative regulation. Dischargers with mixing zones and zones of initial dilution must comply with 401 KAR 10:029, Section 4. Dischargers with mixing zones must comply with the

Endangered Species Act and must limit discharges of bioaccumulative chemicals of concern in mixing zones. Dischargers with zones of initial dilution must meet specific criteria specified in Section 4 of this administrative regulation.

FISCAL NOTE ON STATE OR LOCAL GOVERNMENT

Regulation Number: 401 KAR 10:029

Contact Person: Peter Goodmann, Director
Phone Number: (502) 564-3410

1. What units, parts or divisions of state or local government (including cities, counties, fire departments, or school districts) will be impacted by this administrative regulation? This administrative regulation may affect the wastewater treatment operations of local government if they have new or expanded discharges into surface waters of the Commonwealth.

2. Identify each state or federal statute or federal regulation that requires or authorizes the action taken by the administrative regulation: This administrative regulation relates to local government wastewater treatment service. KRS 224.10-100, 224.70-100, and 224.70-110 mandate action taken by this administrative regulation.

3. Estimate the effect of this administrative regulation on the expenditures and revenues of a state or local government agency (including cities, counties, fire departments, or school districts) for the first full year the administrative regulation is to be in effect.

(a) How much revenue will this administrative regulation generate for the state or local government (including cities, counties, fire departments, or school districts) for the first year? This administrative regulation will not generate any revenue.

(b) How much revenue will this administrative regulation generate for the state or local government (including cities, counties, fire departments, or school districts) for subsequent years? This administrative regulation will not generate any revenue.

(c) How much will it cost to administer this program for the first year? The amendment to this administrative regulation will not increase administration costs.

(d) How much will it cost to administer this program for subsequent years? The amendment to this administrative regulation will not increase administration costs.

Note: If specific dollar estimates cannot be determined, provide a brief narrative to explain the fiscal impact of the administrative regulation.

Revenues (+/-):

Expenditures (+/-):

Other Explanation: The amendments are to correct technical language only. There will be no additional fiscal impacts.

FEDERAL MANDATE ANALYSIS COMPARISON

Administrative Regulation #: 401 KAR 10:029

Contact Person: Peter Goodmann, Director

1. Federal statute or regulation constituting the federal mandate: There is no federal mandate to implement a water pollution control program. For Kentucky to maintain its delegation authority over the NPDES permit program, the Clean Water Act requires that Kentucky review its water quality standards every three years (known as the "Triennial Review") and comply with the programmatic requirements of 40 C.F.R. Part 131, including implementing the antidegradation policy.

2. State compliance standards: 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, and 224.70-110.

3. Minimum or uniform standards contained in the federal mandate: 40 C.F.R. Part 131, 16 U.S.C. 1271-1287, 1531-1544, 33 U.S.C. 1311, 1313, 1314, and 1341. The Clean Water Act requires designated uses, criteria, standards, and antidegradation policies in water quality standards.

4. Will this administrative regulation impose stricter requirements, or additional or different responsibilities or requirements than those required by the federal mandate? No

5. Justification for the imposition of the stricter standard, or additional or different responsibilities or requirements: There are no stricter standards or additional or different responsibilities or requirements.