



1 ENERGY AND ENVIRONMENTAL CABINET

2 Department of Environmental Protection

3 Division of Water

4 (Amendment)

5 401 KAR 8:200. Microbiological monitoring.

6 RELATES TO: KRS 224.10-110, 40 C.F.R. 141.21, 141.52, 141.63~~[, EO 2009-538]~~

7 STATUTORY AUTHORITY: KRS 224.10-100(28), 224.10-110(2), 40 C.F.R. 141.21,
8 42 U.S.C. 300f-300j-26~~[, EO 2009-538]~~

9 NECESSITY, FUNCTION, AND CONFORMITY: KRS 224.10-110(2) requires the
10 cabinet to enforce administrative regulations promulgated by the secretary for the regulation and
11 control of the purification of water for public and semipublic use.~~[EO 2009-538, effective June~~
12 ~~12, 2009, establishes the new Energy and Environment Cabinet.]~~ This administrative regulation
13 establishes a schedule and method for sampling drinking water to test for bacteriological
14 contaminants, ~~[and]~~ establishes maximum contaminant levels for bacteria, and establishes~~[. This~~
15 ~~administrative regulation also specifies]~~ requirements if tests show maximum contaminant levels
16 have been exceeded.~~[This administrative regulation is more stringent than the corresponding~~
17 ~~federal regulation in that a minimum of two (2) monitoring samples for total coliforms shall be~~
18 ~~taken each month.]~~

19 Section 1. A “public water system” as defined by 40 C.F.R. 141.2 shall meet the
20 requirements established in 40 C.F.R. 141.21, 141.52, and 141.63~~[except that a public water~~

1 ~~system shall take a minimum of two (2) coliform bacteria samples each month the system is in~~
2 ~~operation].~~

3 Section 2. Beginning January 1, 2016, a public water system shall comply with the
4 requirements established in 40 C.F.R. 141.851 through 861.~~[A semipublic water system shall~~
5 ~~take a minimum of two (2) total coliform bacteria samples each month the system is in~~
6 ~~operation.]~~

7 Section 3. Population served shall be determined by the appropriate method established
8 in this section.

9 (1) A supplier of water serving an area defined by an official census count or population
10 projection shall:

11 (a) Use the most recent census count or serviceable population determined by the cabinet;
12 and

13 (b) Provide the figure and its source in its Monthly Operating Report established in 401
14 KAR 8:020, Section 2(7) by the tenth day of the month following the determination~~[official~~
15 ~~population projection].~~

16 (2) ~~A~~[If a]supplier of water serving~~[serves]~~ an area without available or applicable
17 official figures for population of the area served shall:

18 (a) Use the serviceable population determined by the cabinet; or

19 (b) Calculate~~[;]~~ the population served according to the appropriate method established in
20 this subsection.

21 1. A “community water system” as defined by 40 C.F.R. 141.2 shall calculate population
22 served by multiplying the number of service connections by 2.78.

23 2. A “non-transient non-community water public water system” as defined by 40 C.F.R.

1 141.2 shall use the actual population served.

2 3. A "semi-public water system" as defined by as defined by 401 KAR 8:010 shall use
3 the actual population served.

4 4. A "transient non-community public water system" as defined by 40 C.F.R. 141.2 shall
5 use the greater of:

6 a. The number of service connections multiplied by 2.78; or

7 b. The actual population served. [shall be considered to be the greater of:

8 (a) A factor of not less than 2.97 times the number of residential meters; or

9 (b) A factor of not less than 2.47 times the total number of residential, commercial, and industrial
10 service connections.

401 KAR 8:200 "Microbiological monitoring" approved for promulgation:

7/9/14

Date



LEONARD K. Peters, Secretary
Energy and Environment Cabinet

PUBLIC HEARING AND PUBLIC COMMENT PERIOD: A public hearing on this administrative regulation shall be held on August 28, 2014 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 2, 2014. 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, 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 8:200

Contact Person: Peter Goodmann, Director

(1) Provide a brief summary of:

- (a) What this administrative regulation does: This administrative regulation establishes monitoring requirements, analytical techniques and maximum levels for microbiological contaminants in water used for public consumption. The proposed amendments clarify reporting requirements, establish a maximum contaminant level for *E. Coli* which triggers additional assessments, requires public water systems to identify sanitary problems and take corrective action, and establishes more accurate methodology in calculating "population served" based on the most recent census information.
- (b) The necessity of this administrative regulation: This administrative regulation requires public water systems to monitor coliform levels and take corrective action should an exceedance occur to assure microbiological purity of drinking water which is essential to protect public health.
- (c) How this administrative regulation conforms to the content of the authorizing statutes: KRS 224.10-100(28) and 224.10-110 authorize the Cabinet to adopt and enforce administrative regulations for the purification of water for public and semipublic use, and for the construction and operation of water treatment systems and distribution systems.
- (d) How this administrative regulation currently assists or will assist in the effective administration of the statutes: This administrative regulation establishes limits on microbiological contaminants in drinking water and decreases the pathways by which pathogenic contaminants can enter drinking water systems which are essential to protect public health.

(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: The substantive requirements of the existing regulations remain unchanged. This amendment adopts 40 C.F.R 141.851 through 861 (the federal Revised Total Coliform Rule or RTCR) which establishes better sampling techniques, establishes a maximum contaminant level for *E. Coli* and triggers additional assessments, and requires public water systems to take corrective action, when sanitary problems are identified. The proposed amendments also clarify reporting requirements and increase flexibility and establish a more accurate method of determining "population served" based on the most recent census information or WRIS data. The amendments also strike a reference to an outdated Executive Order.
- (b) The necessity of the amendment to this administrative regulation: Adoption of 40 C.F.R 141.851 through 861 (the Revised Total Coliform Rule) is necessary for the Cabinet to maintain its primary authority to administer and enforce the Commonwealth's Safe Drinking Water program, pursuant to 40 C.F.R 142, Subpart B.
- (c) How the amendment conforms to the content of the authorizing statutes: KRS 224.10-100(28) and 224.10-110 authorize the cabinet to adopt and enforce administrative regulations for the purification of water for public and semipublic use, and for the construction and operation of water treatment systems and distribution systems. Adoption of 40 C.F.R. 141.851 though 861 will make the administrative regulation conform exactly to federal

requirements.

(d) How the amendment will assist in the effective administration of the statutes: The adoption of the Revised Total Coliform Rule will allow the Cabinet to maintain its primary authority in administering the federal Safe Drinking Water Act consistent with the authorizing statutes, and provides consistency with federal requirements.

(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 457 public and 50 semipublic water systems which are commonly owned by city governments or organized under county governments. Other districts may, in some cases, have a public water system.

(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: The substantive requirements of the existing regulations remain unchanged. Adoption of the Revised Total Coliform Rule (RTCR) will require public water systems to update sampling plans and perform assessments of, and corrections to, their drinking water systems should coliform exceedances occur. Seasonal systems will be required to perform and document start-up procedures.

(b) In complying with this administrative regulation or amendment, how much will it cost each of the entities identified in question (3): The costs of complying with this administrative regulation remain largely unchanged. The Revised Total Coliform Rule formalizes assessment and correction practices that the majority of drinking water systems have been using.

(c) As a result of compliance, what benefits will accrue to the entities identified in question (3): Public water systems will continue to provide drinking water that meets the microbiological requirements of the Safe Drinking Water Act. The assessments will provide the systems with information needed to correct any sanitary defects that could compromise microbiological quality. Additionally, reducing monitoring requirements for public water systems with a population of less than 1000 will result in a potential cost savings for 62 systems of approximately \$240/year.

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

(a) Initially: The cabinet does not anticipate significant additional personnel time or funding to implement the revised regulation. Any assessments performed by division personnel should be minimal. A 5-year trend (2009-2013) indicates no more than six Level 2 assessments would be conducted by division personnel in that 5-year period.

(b) On a continuing basis: The cabinet does not anticipate significant additional personnel time or funding to implement the revised regulation. Any assessments performed by Cabinet personnel should be minimal. A 5-year trend (2009-2013) indicates no more than six Level 2 assessments would be conducted by division personnel in that 5-year period.

- (6) What is the source of the funding to be used for the implementation and enforcement of this administrative regulation? The source of funding for the drinking water program is a combination of state general funds and federal funds provided to administer the Safe Drinking Water Act.
- (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.
- (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. The numbers of required samples for public water systems differs based on the size of the population served. Fewer samples are required for smaller, non-community public water systems than for large public water systems. Additionally, reduced monitoring (quarterly and annually) may be available for systems that use only groundwater as a source, serve a population of 1000 or less, and meet certain additional criteria.

FISCAL NOTE ON STATE OR LOCAL GOVERNMENT

Regulation Number: 401 KAR 8:200

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 applies to public and semipublic water systems. Public water systems are commonly owned by city governments or organized under county governments. Semipublic water systems may be owned by individuals. Other districts may, in some cases, have a water system.

2. Identify each state or federal statute or federal regulation that requires or authorizes the action taken by the administrative regulation.

KRS 224.10-100(28) and 224.10-110 authorize the cabinet to adopt and enforce administrative regulations for the purification of water for public and semipublic use, and for the construction and operation of water treatment systems and distribution systems. The Safe Drinking Water Act (42 U.S.C. 300f through 300j-26), requires the establishment of national primary drinking water regulations. 40 CFR 141.21, 141.52, and 141.63 establish monitoring requirements, analytical techniques, and maximum contaminant levels for microbiological contaminants. Adoption of 40 C.F.R 141.851 through 861 (the Revised Total Coliform Rule or RTCR) is necessary for the Cabinet to maintain its primary authority to administer and enforce the Commonwealth's Safe Drinking Water program, pursuant to 40 C.F.R 142, Subpart B.

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 for local governments for the first year.

- (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 for local governments in subsequent years.

- (c) How much will it cost to administer this program for the first year? The cabinet does not anticipate significant additional personnel time or funding to administer the revised regulation. Any assessments performed by division personnel should be minimal. A 5-year trend (2009-2013) indicates no more than six Level 2 assessments would be conducted by division personnel in that 5-year period. Public water systems with a population of less than 1000 will have reduced monitoring requirements which will result in a potential cost savings

for 62 systems of approximately \$240/year.

- (d) How much will it cost to administer this program for subsequent years? The cabinet does not anticipate significant additional personnel time or funding to administer the revised regulation. Any assessments performed by division personnel should be minimal. A 5-year trend (2009-2013) indicates no more than six Level 2 assessments would be conducted by division personnel in that 5-year period. Public water systems with a population of less than 1000 will have reduced monitoring requirements which will result in a potential cost savings for 62 systems of approximately \$240/year.

FEDERAL MANDATE ANALYSIS COMPARISON

Administrative Regulation#: 401 KAR 8:200

Contact Person: Peter Goodmann, Director

1. Federal statute or regulation constituting the federal mandate.

The Safe Drinking Water Act (42 U.S.C. 300f through 300j-26), 40 C.F.R. 141.21, 141.52, and 141.63

2. State compliance standards.

KRS 224.10-100(28), 224.10-110

3. Minimum or uniform standards contained in the federal mandate.

The Safe Drinking Water Act (42 U.S.C. 300f through 300j-26) requires the establishment of national primary drinking water regulations. 40 CFR 141.21, 141.52, 141.63 and 141.851-861 establish monitoring requirements, analytical techniques, and maximum contaminant levels for microbiological contaminants.

4. Will this administrative regulation impose stricter requirements, or additional or different responsibilities or requirements than those required by the federal mandate?

At the request of industry, this regulation establishes an earlier compliance date of January 1, 2015, rather than March 1, 2015. The amendment to this regulation does not impose stricter or additional requirements than the federal regulations. The regulation does require at least one microbiological test each month for most systems. This is a reduction of 1 test per month for 62 public water systems which will save those systems approximately \$240 per year.

5. Justification for the imposition of the stricter standard, or additional or different responsibilities or requirements.

At the request of industry, this regulation establishes an earlier compliance date of January 1, 2015, rather than March 1, 2015. KRS 24.10-110 requires the cabinet to regulate semipublic as well as public water systems. The previous regulation required a minimum of two bacteriological samples per month. The amended regulation requires one microbiological test each month and immediate corrective action in the event of an exceedance. This combination is both reasonable and offers better protection for public health.