



ENERGY AND ENVIRONMENT CABINET

DEPARTMENT FOR ENVIRONMENTAL PROTECTION

DIVISION OF WATER

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R. Bruce Scott
Commissioner

Peter T. Goodman
Acting Director

Leonard K. Peters
Secretary

September 15, 2014

Dear Concerned Citizen:

On July 15, the Kentucky Division of Water filed proposed amendments to 401 KAR 8:200 (Microbiological monitoring), 8:300 (Lead and copper), and 8:700 (Bottled water), and held a public hearing on August 28, 2014 in accordance with the requirements of KRS Chapter 13A. The Division received verbal and written comments only regarding proposed amendments to 401 KAR 8:200 (Microbiological monitoring). The public comment period closed on September 2, 2014.

On September 12, the Division filed a Statement of Consideration and further proposed amendments to the regulation with the Legislative Research Commission. These documents are made available for your convenience.

The Division appreciates and recognizes the importance of public participation in the regulatory process and the role it plays in meeting and protecting the needs of Kentucky citizens, stakeholders, and state resources.

Sincerely,

A handwritten signature in black ink, appearing to read "Peter T. Goodman".

Peter T. Goodman, Director
Kentucky Division of Water

PTG/cjc
Enclosures

FILED WITH LRC
TIME: *NOON*
SEP 12 2014
Donna Little
REGULATIONS COMPILER

1 ENERGY AND ENVIRONMENT CABINET

2 Department of Environmental Protection

3 Division of Water

4 (Amended After Comments)

5 401 KAR 8:200. Microbiological monitoring.

6 RELATES TO: KRS 224.10-110, 40 C.F.R. 141.21, 141.52, 141.63, 141.851 - 861 [~~EO~~
7 ~~2009-538~~]

8 STATUTORY AUTHORITY: KRS 224.10-100(28), 224.10-110(2), 40 C.F.R. 141.21,
9 42 U.S.C. 300f-300j-26 [~~EO-2009-538~~]

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

20 Section 1. A “public water system” as defined by 40 C.F.R. 141.2”, shall meet the

1 requirements established in 40 C.F.R. 141.21, 141.52, and 141.63~~[except that a public water~~
2 ~~system shall take a minimum of two (2) coliform bacteria samples each month the system is in~~
3 ~~operation]~~.

4 Section 2. Beginning January 1, 2016, a public water system shall comply with the
5 requirements established in 40 C.F.R. 141.851 through 141.861, except that a sample site plan
6 required by 40 C.F.R. 141.853 shall be submitted to the cabinet no later than December 31,
7 2015. A semipublic water system shall take a minimum of one (1) total coliform bacteria
8 sample each month the system is in operation~~[A semipublic water system shall take a~~
9 ~~minimum of two (2) total coliform bacteria samples each month the system is in operation]~~.

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

12 (1) A “community water system”, as defined by 40 C.F.R. 141.2, and a “semipublic
13 water system”, as defined by 401 KAR 8:010,~~[supplier of water serving an area defined by~~
14 ~~an official census count or population projection]~~ shall:

15 (a) Use the most recent decennial census count conducted by the United States Census
16 Bureau; ~~[or serviceable population determined by the cabinet; and]~~

17 (b) Use the serviceable population established by the Water Resources
18 Infrastructure System database located at <http://kia.ky.gov/wris/>;

19 (c) Multiply the number of service connections by 2.69; or

20 (d) Utilize a method mutually agreed upon by a community or semipublic water
21 system and the cabinet~~[Provide the figure and its source in its Monthly Operating Report~~
22 ~~established in 401 KAR 8:020, Section 2(7) by the tenth day of the month following the~~
23 ~~determination~~~~[official population projection]~~.

1 (2) ~~[If]~~ A "non-transient non-community public water system", as defined by 40
2 C.F.R. 141.2, shall use the actual population served.

3 (3) A "transient non-community public water system", as defined by 40 C.F.R.
4 141.2, shall use the actual population served.

5 (4) A public water system shall provide the figure to the cabinet in its December
6 Monthly Operating Report established in 401 KAR 8:020, Section 2(7), by the tenth day of
7 the month following the determination.

8 (5) A semipublic water system shall immediately notify the cabinet in writing if the
9 population served calculation changes its classification from a semipublic water system to
10 another classification.~~[supplier of water serving][serves] [an area without available or~~
11 ~~applicable official figures for population of the area served shall:~~

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

13 (b) ~~Calculate~~^[5]~~[the population served according to the appropriate method~~
14 ~~established in this subsection.~~

15 ~~1. A "community water system", as defined by 40 C.F.R. 141.2 shall calculate~~
16 ~~population served by multiplying the number of service connections by 2.78.~~

17 ~~2. A "non-transient non-community water public water system", as defined by 40~~
18 ~~C.F.R. 141.2 shall use the actual population served.~~

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

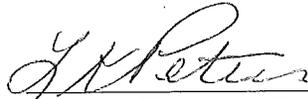
21 ~~4. A "transient non-community public water system", as defined by 40 C.F.R. 141.2~~
22 ~~shall use the greater of:~~

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

- 1 **b. The actual population served**][shall be considered to be the greater of:
- 2 (a) A factor of not less than 2.97 times the number of residential meters; or
- 3 (b) A factor of not less than 2.47 times the total number of residential, commercial, and industrial
- 4 service connections.]

I have reviewed and approved 401 KAR 8:200 "Microbiological monitoring" (Amended After Comments) for promulgation.

9/11/14
Date



Leonard K. Peters, Secretary
Energy and Environment Cabinet

REGULATORY IMPACT ANALYSIS AND TIERING STATEMENT

Administrative Regulation #: 401 KAR 8:200 (Amended After Comments)
Contact Person: Peter Goodman, 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. The amendments made after comments reduced the multiplier in Section 3 from 2.78 to 2.69 which more accurately reflects the population served, and specifically allows systems to use the Water Resources Information System to report population served. These changes give systems more flexibility in reporting. The amendments reinstate language that was inadvertently deleted regarding sampling for semipublic water systems, and reduces testing for those systems from twice per month to once per month, aligning with federal requirements for small groundwater systems. The amendments also correct a reference to "supplier of water" for consistency with the C.F.R. and K.A.R. reference, and clarified sample site plan submission requirements.

(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 through 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 amendments clarify sampling and reporting requirements, allow for flexibility and more accurate calculation of population served, and maintain consistency with authorizing statutes and federal requirements for Kentucky to maintain its primary authority in administering the federal Safe Drinking Water Act.

(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 Water Drinking 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.

STATEMENT OF CONSIDERATION
Relating to 401 KAR 8:200
(Amended After Comments)

Energy and Environment Cabinet
Department for Environmental Protection
Division of Water

I. The public hearing for proposed amendments to 401 KAR 8:200 was held on August 28, 2014 at 6 p.m. at 300 Fair Oaks Lane, Conference Room 301D, Frankfort Kentucky. The Division of Water also received written comments regarding this administrative regulation.

II. The following people submitted comments:

<u>Name and Title</u>	<u>Agency/Organization/Entity/Other</u>	<u>Comments</u>
Gary Larimore	Kentucky Rural Water Association	Written
Donna McNeal	Kentucky Rural Water Association	Written and Verbal

III. The following people from the promulgating administrative body responded to the written and verbal comments:

Peter Goodmann, Director, Division of Water
Julie Roney, Drinking Water Program Coordinator, Division of Water

IV. Summary of Comments and Responses:

(1) Subject Matter: The Multiplier Used to Determine "Population Served"

(a) Commenters: Gary Larimore and Donna McNeil (Kentucky Rural Water Association)
Comment: The Kentucky Rural Water Association suggests language that would apply the Kentucky average persons per household number after each Decennial Census as the multiplier to determine "population served." This would provide flexibility to water systems to use either the census data for its county or the Water Resource Information System (WRIS), to determine population served. The 2010 Census established the Kentucky average persons per household at 2.49, which should be used as the current multiplier. Traditionally, population served has been determined by using a multiplier times the number of meter connections, which is directly related to the cost of water system compliance with the Safe Drinking Water Act. The multiplier in the proposed regulation does not reflect the reduction in Kentucky's average persons per household established by the U.S. Census.

(b) Response: The division appreciates the comments and has amended Section 3 of the proposed regulation to reflect a lower population factor than that proposed in the original

regulation. The amended multiplier of 2.69 persons per connection is higher than the 2.49 proposed by the commenter, but more accurately reflects the estimated Kentucky population served by public water systems. The multiplier of 2.69 attempts to account for non-traditional household connections, such as apartment complexes, mobile home parks, and other multi-family units, in the population served.

(2) Subject Matter: Deletion of Bacteriological Sampling for Semipublic Water Systems

(a) Commenter: Donna McNeal (Kentucky Rural Water Association)

Comment: The requirement for bacteriological sampling for semipublic water systems was deleted from the regulation, making the sampling and reporting requirements for semipublic systems confusing and contradictory and contradicting the federal Environmental Protection Agency's definition of "supplier of water".

(b) Response: The division appreciates that this comment draws attention to an inadvertent deletion of language. Language requiring semipublic water systems to take a minimum of one total coliform bacteria sample each month, which aligns with the new federal requirement for small groundwater systems, will be included in an amendment to Section 2 in the regulation. Additionally, language regarding the frequency and manner of reporting to the cabinet, and a corrected reference to a "supplier of water" will be included in the regulation.

(3) Subject Matter: Level 1 and Level 2 Assessment Guidance

(a) Commenter: Donna McNeil (Kentucky Rural Water Association)

Comment: Will Kentucky provide a guidance document (standard operating procedures) for directives concerning Level 1 and Level 2 assessments for situations such as when the concern is hydraulically isolated from the remaining system?

(b) Response: The EPA already provides a guidance document for assessments. The division appreciates the opportunity to assist systems with operations, and may offer training on Assessments in 2015.

(4) Subject Matter: Sample Siting Plans

(a) Commenter: Donna McNeil (Kentucky Rural Water Association)

Comment: Would Kentucky accept electronic submittal of written sample siting plans?

(b) Response: The division can accept electronic copies of the sample site selection forms and schedules.

(5) Subject Matter: Submittal and Implementation Dates

(a) Commenter: Donna McNeal (Kentucky Rural Water Association)

Comment: Doesn't the submittal date need to be prior to the implementation date of the proposed Kentucky regulation?

(b) Response: The division appreciates the opportunity to clarify the regulation. The division will amend 401 KAR 8:200, Section 2 accordingly.

(6) Subject Matter: Standard Operating Procedures for Sample Siting Plans

(a) Commenter: Donna McNeal (Kentucky Rural Water Association)

Comment: The Drinking Water Advisory Compliance Subcommittee made recommendations regarding routing and repeat sampling sites. Will the attached Standard Operating Procedure (SOP) meet the regulatory requirements?

(b) Response: The division appreciated assistance from the Drinking Water Advisory Committee in developing the standard operating procedure (SOP). The SOP is a guidance document only which systems may, but are not required to, use to comply with 40 C.F.R. 141.853(a)(5)(i). The SOP is part of the division's "primacy package," which will be submitted to EPA Region 4 for approval. The SOP will be available for use once it receives approval.

V. Summary of Action Taken by the Promulgating Agency:

The public hearing on this administrative regulation was held on August 28, 2014 and verbal comments were received. Additionally, the division received written comments on this administrative regulation. In response to public comments, this administrative regulation is amended as follows:

Page 1

RELATES TO:

Line 6

After "141.63", insert the following:
141.851 - 861.

Page 2

Section 2

Line 4

After "40 C.F.R. 141.851 through 141.861", insert the following:
, except that a sample site plan required by 40 C.F.R. 141.853 shall be submitted to the cabinet no later than December 31, 2015. A semipublic water system shall take a minimum of one (1) total coliform bacteria sample each month the system is in operation

Page 2

Section 3(1)

Lines 9 and 10

After "(1) A", insert the following:
"community water system", as defined by 40 C.F.R. 141.2, and a "semipublic water system", as defined by 401 KAR 8:010,

Delete the following:
supplier of water serving an area defined by an official census count or population projection

Page 2

Section 3(1)(a)

Line 11

After "the most recent", insert "decennial".
After "census count", insert the following:
conducted by the United States Census Bureau;
Delete the remainder of paragraph (a) in its entirety.

Page 2

Section 3(1)(b)

Lines 13 through 15

After “(b)”, insert the following:

Use the serviceable population established by the Water Resources Infrastructure System database located at <http://kia.ky.gov/wris/>;

(c) Multiply the number of service connections by 2.69; or

(d) Utilize a method mutually agreed upon by a community or semipublic water system and the cabinet

Delete the remainder of paragraph (b), except the period.

Pages 2 and 3

Section 3(2), Including all Paragraphs and Subparagraphs Thereto

Lines 16 through 23 and 1 through 10

After “(2) A”, insert the following:

“non-transient non-community public water system”, as defined by 40 C.F.R. 141.2, shall use the actual population served.

(3) A “transient non-community public water system”, as defined by 40 C.F.R. 141.2, shall use the actual population served.

(4) A public water system shall provide the figure to the cabinet in its December Monthly Operating Report established in 401 KAR 8:020, Section 2(7), by the tenth day of the month following the determination.

(5) A semipublic water system shall immediately notify the cabinet in writing if the population served calculation changes its classification from a semipublic water system to another classification.

Delete the remainder of subsection (2) in its entirety, including all paragraphs and subparagraphs thereto.