ENERGY AND ENVIRONMENT CABINET

Department for Environmental Protection

Division of Water

(Amendment)

401 KAR 8:300. Lead and copper and special monitoring for corrosivity characteristics.

RELATES TO: 40 C.F.R. 141.42, 40 C.F.R. Part 141, Subpart I [~~141.43, 141.80-141.91~~], 40 C.F.R. 141.154, 40 C.F.R. Part 143, Subpart B, 42 U.S.C. 300f-300j-26

STATUTORY AUTHORITY: KRS 224.10-100(28), 224.10-110(2), 40 C.F.R. Part 141, Subpart I[~~141.43, 141.80-141.91~~], 40 C.F.R. Part 143, Subpart B, 42 U.S.C. 300f-300j-26

NECESSITY, FUNCTION, AND CONFORMITY: KRS 224.10-100(28) authorizes the cabinet to promulgate administrative regulations consistent with statutes administered by the cabinet. KRS [~~224.10-100(28) and~~] 224.10-110(2) requires[~~require~~] the cabinet to promulgate administrative regulations for the regulation and control of the purification of water for public and semipublic use. This administrative regulation limits lead in drinking water facilities and establishes standards for lead and copper in drinking water. This administrative regulation also provides for special monitoring for corrosivity characteristics within a drinking water distribution system.

Section 1. Community water systems and non-transient, non-community water systems subject to 40 C.F.R. 141.80 shall comply with:

[~~A public water system shall meet the requirements for control of lead corrosivity and~~

~~copper as established in:~~]

(1) 40 C.F.R. 141.42;

(2) 40 C.F.R. Part 141, Subpart I;

(3) 40 C.F.R. 141.154; and

(4) 42 U.S.C. 300g-6. [~~(1) 40 C.F.R. 141.42, 141.43, 141.80 through 141.91, and 141.154; and (2) 42 U.S.C. 300g-6.~~]

Section 2. Prohibition of reconnection of Lead or Galvanized Requiring Replacement Service Lines.

(1) A lead service line or a galvanized requiring replacement service line that is disconnected from the water main or other service line but not removed, shall not be reconnected to the water main or other service line.

(2) A physically disconnected but not removed lead service line or galvanized requiring replacement service line that is not in use shall not be reconnected to the distribution system. A new non-lead service line must be installed if active use is to resume.

(3) The provisions in subsection (1) and (2) of this section shall not apply to temporary, emergency disconnections for repairs critical to maintain water service to the customer.

Section 3. Any person who introduces pipes, pipe or plumbing fittings, or fixtures, solder and flux into commerce, such as manufacturers, importers, wholesalers, distributors, re-sellers, and retailers or any person who uses these products in the installation or repair of a public water system or a residential or nonresidential facility providing water for human consumption shall comply with the provisions of 40 C.F.R. 143, Subpart B.

401 KAR 8:300 Lead and copper and special monitoring for corrosivity characteristics is approved for filing.

John S. Lyons, Secretary
Energy and Environment Cabinet

8/25/26
Date

PUBLIC HEARING AND PUBLIC COMMENT PERIOD:

A public hearing on this administrative regulation shall, if requested, be held on November 23, 2026, at 10:00 a.m. (Eastern Time); 9:00 a.m. (Central Time). The Zoom invitation will be emailed to each requester the week prior to the scheduled hearing. Individuals interested in attending the virtual hearing shall notify this agency in writing by November 16, 2026, five (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 cancelled. This hearing is open to the public. Any person who attends virtually will be given the opportunity to comment on the proposed administrative regulation. The virtual public hearing will be recorded, and the recording provided upon a written request to the contact person. Written comments shall be accepted through November 30, 2026. Send written notification of intent to attend the public hearing or written comments on the proposed administrative regulation to the contact person.

The public hearing is accessible to any person with disabilities. Reasonable accommodation, including auxiliary aids and services necessary to participate in the hearing may be made to the contact person at least five (5) working days prior to the hearing.

Contact person: Lisa Jones
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REGULATORY IMPACT ANALYSIS AND TIERING STATEMENT

401 KAR 8:300
Contact Person: Lisa Jones
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Subject Headings: *Environment and Conservation, Drinking Water, Lead*

(1) Provide a brief summary of:

(a) What this administrative regulation does: This administrative regulation establishes standards and requirements to control amounts of lead and copper in public drinking water, as well as provides requirements for special monitoring for corrosivity characteristics.

(b) The necessity of this administrative regulation: This administrative regulation limits the amount of lead and copper in drinking water which is essential to protect public health. The proposed amendment is required by 42 U.S.C. §300g-6 (b) and (c) in order to maintain Kentucky's primary authority and federal funding to administer its Safe Drinking Water Program. All states with primary authority to implement the federal Safe Drinking Water Act must have compatible state regulations. Additionally, the federal Lead and Copper Rule Revisions, published in January 2021 and effective in October 2024, and the federal Lead and Copper Rule Improvements, published in October 2024 and having a compliance date in November 2027, that require water systems to monitor schools and childcare facilities for lead, and to take other measures to reduce lead and copper in public drinking water require an amendment to this administrative regulation. Additional requirements are added for the control and use of lead-free pipes, fittings, fixtures, solder, and flux for drinking water, as well as provisions for compliance flexibility for certain small water systems.

(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. The proposed amendment provides standards and requirements for enhancing the purity of drinking water and for use of construction materials used in the distribution of public water.

(d) How this administrative regulation currently assists or will assist in the effective administration of the statutes: This administrative regulation limits lead and copper amounts in drinking water which is essential to protect public health. The proposed amendment incorporates and conforms to federal requirements for monitoring schools and childcare facilities for lead, and allows compliance flexibility where the State has obtained primacy and the State adopts

regulations to provide compliance flexibility consistent with 40 C.F.R. 141. Other requirements are included for the special monitoring for corrosivity characteristics within a water system and for the control and use of lead-free pipes, fittings, fixtures, solder, and flux for drinking water, as well as provisions for compliance flexibility for certain small water systems.

(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 proposed amendment incorporates the federal Lead and Copper Rule Improvements, published in October 2024 and has a compliance date in November 2027, for monitoring schools and childcare facilities for lead, monitoring residences and businesses for lead, replacing lead and lead-contaminated galvanized iron service lines in drinking water distribution systems, and allowing compliance flexibility where the State has obtained primacy over its Safe Drinking Water program and adopts regulations to provide compliance flexibility consistent with 40 CFR 141.

(b) The necessity of the amendment to this administrative regulation: The proposed amendment is required by 42 U.S.C. §300g-6 (b) and (c) in order to maintain Kentucky's primary authority and federal funding to administer its Safe Drinking Water Program, and also to allow compliance flexibility where the State has obtained primacy for this subpart and the State adopts regulations to provide compliance flexibility consistent with 40 CFR 141.

(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. The proposed amendment incorporates and conforms to federal regulations.

(d) How the amendment will assist in the effective administration of the statutes: This administrative regulation limits lead and copper amounts in drinking water which is essential to protect public health. The proposed amendment is required by 42 U.S.C. §300g-6 (b) and (c) in order to maintain Kentucky's primary authority and federal funding to administer its Safe Drinking Water Program, and also to allow compliance flexibility where the State has obtained primacy for this subpart and the State adopts regulations to provide compliance flexibility consistent with 40 CFR 141.

(3) Does this administrative regulation or amendment implement legislation from the previous five years? No, this administrative regulation or amendment does not implement Kentucky legislation from the previous five years.

(4) List the type and number of individuals, businesses, organizations, or state and local governments affected by this administrative regulation: This administrative regulation applies to 391 public water systems which are often owned by city governments or organized under county governments. Other districts may, in some cases, have a public water system. Most Kentuckians are served by a water system that must comply with the federal Lead and Copper Rule Improvements rule.

(5) Provide an analysis of how the entities identified in question (4) 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 (4) will have to take to comply with this administrative regulation or amendment: Public water systems will need to monitor and provide education to schools and childcare facilities, and increase public communication and education in general, regarding lead in drinking water, develop replacement plans and replace all lead and lead-contaminated galvanized service lines by December 2037, increase monitoring (annual or triennial) for lead and copper at select individual residences and businesses, monitor water quality parameters that impact corrosivity, install or adjust corrosion controls to limit lead and copper from corroding into drinking water, provide point-of-use filtration devises to customers impacted by lead service line disturbance and replacement activities, and adjust or install source water treatment if appropriate.

Small systems will be allowed compliance flexibility where the State has obtained primacy and the State adopts regulations to provide compliance flexibility consistent with 40 CFR 141.

Lead service lines in Kentucky residential properties (estimated to be 0.3% - 1.5%) or lead-contaminated galvanized service lines (estimated to be 1.3%) must be replaced by 2037, either by the property owner or the water system which serves them. Other requirements are included for the special monitoring for corrosivity characteristics within a water system and for the control and use of lead free pipes, fittings, fixtures, solder, and flux for drinking water.

(b) In complying with this administrative regulation or amendment, how much will it cost each of the entities identified in question (4): The estimated annual cost to the cabinet is $1,660,290. The EPA-estimated cost for all water systems to be in compliance is $12.5 million. Costs will be much lower for those with no service lines requiring replacement, than for those with many lead and galvanized service lines. Kentucky has fewer lead service lines than the national average, and some water systems will see only marginal expense increases for water sampling, public education, and administration.

(c) As a result of compliance, what benefits will accrue to the entities identified in question (4): Public water systems will benefit from clear and consistent state and federal regulations with equivalent requirements. Kentuckians with lead or galvanized service lines in household, school,

or childcare facilities will gain health benefits from reduced drinking water lead levels due to increased monitoring, improved corrosion control treatment, and replacement of lead and galvanized services lines. The EPA estimates that the total child cognitive benefits of implementing the LCRI nationwide range from $5.789 billion to $8.108 billion. These benefits are due to prevention of IQ loss, ADHD, and low birth rate, all impacts of lead poisoning. Kentucky is home to 1.3% of the U.S. population, with 79% fewer lead service lines than the national average; therefore, the child cognitive benefit of implementing this rule in Kentucky is estimated to be $15.8 million to $22.1 million.

In adults, high blood lead levels can cause cardiovascular disease and premature mortality. EPA estimates that the total national cost of lead-caused cardiovascular disease (specific to lead from drinking water) is between $7.704 billion and $17.04 billion. For Kentucky alone, implementing this rule would have a healthcare savings benefit of $21 million to $46.5 million for adults.

Other benefits of implementing this rule that have been identified through extensive research but have not been quantified monetarily, include reductions in cardiovascular morbidity effects, renal effects, reproductive and developmental effects (apart from ADHD and low birth weight), immunological effects, neurological effects (apart from children's IQ), and cancer. This rule requires water systems to provide extensive public communication about lead, which will educate consumers and enable them to reduce lead exposure in other areas as well, including more common lead exposure pathways such as lead-based paint and environmental lead.

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

(a) Initially: The current cost of the program to the agency is approximately $113,000 per year. The amendment to this administrative regulation is expected to cost the agency an additional $201,907 per year for the first five years, to cover about 5,071 hours per year, or 3 FTEs, for initial compliance monitoring and technical support.

(b) On a continuing basis: The cost for this amendment to this administrative regulation is expected to cost approximately $1,660,290 annually (9 FTEs), an increase of $1,547,290 over the current primacy costs, for compliance monitoring and technical support after the first five years.

(7) What is the source of the funding to be used for the implementation and enforcement of this administrative regulation or this amendment: Funding for Kentucky's drinking water program is a combination of state general funds and federal funds to administer the Safe Drinking Water Act and, through FFY 2026, the federal Infrastructure Investment and Jobs Act, provided there are no changes to current commitments. The proposed amendment is required by 42 U.S.C. §300g-6 (b) and (c) to maintain Kentucky's primary authority and federal funding to administer its Safe Drinking Water Program.

(8) 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: This administrative regulation does not establish any fees, or directly or indirectly increase any fees.

(9) State whether or not this administrative regulation establishes any fees or directly or indirectly increases any fees: This administrative regulation does not establish any fees, or directly or indirectly increase any fees.

(10) TIERING: Is tiering applied? Yes, tiering is applied. The proposed amendment to this administrative regulation provides separate standards and requirements for water systems based on the size and characteristics of the population served by the water system and type of construction materials used in drinking water distribution lines.

FISCAL IMPACT STATEMENT

401 KAR 8:300
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(1) Identify each state statute, 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) and 40 C.F.R. 141.42, and 141 Subpart I, Sections 141.80 through 141.93 establish analytical methods, monitoring and mitigation requirements and action levels, school and childcare facility lead monitoring and education, and small systems compliance flexibility where the State has obtained primacy for this subpart and the State adopts regulations to provide compliance flexibility consistent with 40 CFR 141, for public water systems to follow for the control of lead and copper. The Reduction of Lead in Drinking Water Act of 2011 (42 U.S.C. § 300g-6) established limits on lead contained in drinking water plumbing materials. The proposed amendment is required by 42 U.S.C. §300g-6 (b) and (c) to maintain Kentucky's primary authority and federal funding to administer its Safe Drinking Water Program.

(2) Identify the promulgating agency and any other affected state units, parts, or divisions: The promulgating agency is the Division of Water.

(a) Estimate the following for the first year:

Expenditures: The current cost of the program to the agency is approximately $113,000 per year. For the first five years, the amendment to this administrative regulation is expected to cost the agency an additional $201,907 annually for 5,071 hours per year, or 3 FTEs, for initial compliance monitoring and technical support.

Revenues: The amendment to this administrative regulation will not generate revenue.

Cost Savings: The amendment to this administrative regulation and implementation of this program does not have any direct cost savings to the cabinet or regulated entities. However, the health benefits are expected to save $220 to $417 million in health care costs nationwide, especially for children who are most impacted by lead poisoning.

(b) How will expenditures, revenues, or cost savings differ in subsequent years? The amendment to this administrative regulation is expected to cost approximately $1,660,290 annually (9 FTEs), an increase of $1,547,290 over the current primacy costs, for compliance

monitoring and technical support after the first over the current primacy costs, for compliance monitoring and technical support.

(3) Identify affected local entities (for example: cities, counties, fire departments, school districts): This administrative regulation applies to 391 public water systems which are often owned by city governments or organized under county governments. Other districts may, in some cases, have a water system.

(a) Estimate the following for the first year:

Expenditures: The current costs to the regulated community range from $2.9 million - $3.4 million per year. The amendment to this administrative regulation will result in approximate annual expenditures for water systems of $12.5 million; however, this number will be borne largely by the water systems with lead service lines and galvanized service lines requiring replacement, and will be higher in the first 10 years than in subsequent years. Kentucky has fewer lead service lines than the national average. The majority of water systems will only have cost increases related to additional sampling, public education, and administration, estimated to be $8,931/system per year.

Estimated increases in individual household water bills, averaged over the whole state, will be $6.73/year; however, there is likely to be a broad range, with customers in communities with lead service lines potentially seeing larger increases.

Revenues: This amendment will not generate revenue.

Cost Savings: The amendment to this administrative regulation and implementation of this program does not have any direct cost savings to the cabinet or regulated entities. However, the health benefits are expected to save $220 to $417 million in health care costs nationwide, especially for children who are most impacted by lead poisoning.

(b) How will expenditures, revenues, or cost savings differ in subsequent years? During years 1-3 (2025 through 2027), expenditures will remain relatively stable while most water systems meet administrative requirements and plan for the new requirements. Starting in 2028, costs will increase for water systems coinciding with the start or increase of water sampling, service line replacement, and customer communication requirements. Costs will be highest from 2028-2037, due to the required 10-year timeframe in which water systems must replace all lead and certain galvanized iron service lines.

(4) Identify additional regulated entities not listed in questions (2) or (3): There are no additional regulated entities.

(a) Estimate the following for the first year:

Expenditures: N/A

Revenues: N/A

Cost Savings: N/A

(b) How will expenditures, revenues, or cost savings differ in subsequent years? There are no additional regulated entities.

(5) Provide a narrative to explain the:

(a) Fiscal impact of this administrative regulation: The estimated increase in annual costs to the cabinet is $201,907/year for the first five years, and $1,547,290 over the current primacy costs, for compliance monitoring and technical support after the first /year in subsequent years.

Assuming a 35-year timeframe to implement this rule, the annual cost to all water systems in Kentucky is estimated by the EPA to be $12.5 million; however, this number will be borne largely by the water systems with lead service lines and galvanized service lines requiring replacement, and will be higher in the first 10 years (2028-2037) than in subsequent years. Water systems with *no* lead or galvanized service lines needing replacement are expected to see their costs increase by an average of $8,931 per system per year for public education, sampling, and administrative expenses; whereas those with many lead service lines will have annual costs in the millions of dollars.

Estimated increases in individual household water bills, averaged over the whole state, will be $6.73/year; however, there is likely to be a broad range, with customers in communities with lead service lines potentially seeing larger increases.

(b) Methodology and resources used to determine the fiscal impact: The cabinet referred to estimates provided by the EPA in its Economic Analysis for the Final Lead and Copper Rule Improvements (https://www.epa.gov/system/files/documents/2024-10/508_lcri_final_ea_10-21-2024.pdf) and associated appendices (https://www.epa.gov/system/files/documents/2024-10/508_lcri_final-ea_appendices_10_23_24.pdf) to calculate costs. Current costs to the Division of Water are based on the compensation to the Lead and Copper Rule manager (2/3 of employee time), and technical assistants (five staff at 15-20 hours per year). Costs to industry are estimated as increases to the "baseline" conditions described in *Economic Analysis Appendices for the Final Lead and Copper Rule Improvements* (EPA 810-R-24-005), U.S. Environmental Protection Agency, Office of Water (October 2024), which compare the expected costs of the LCRI with the baseline costs of the 1991 Lead and Copper Rule.

(6) Explain:

(a) Whether this administrative regulation will have an overall negative or adverse major economic impact to the entities identified in questions (2) - (4). ($500,000 or more, in aggregate) Yes, the amendment to this administrative regulation will have a major economic impact of $500,000 or more, in the aggregate.

(b) The methodology and resources used to reach this conclusion: The cabinet referred to estimates provided by the EPA in its https://www.epa.gov/system/files/documents/2024-10/508_lcri_final_ea_10-21-2024.pdf Economic Analysis for the Final Lead and Copper Rule Improvements (https://www.epa.gov/system/files/documents/2024-10/508_lcri_final_ea_10-21-2024.pdf) and associated appendices (https://www.epa.gov/system/files/documents/2024-10/508_lcri_final-ea_appendices_10_23_24.pdf) as well as agency data to calculate costs.

FEDERAL MANDATE ANALYSIS COMPARISON

401 KAR 8:300
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1. Federal statute or regulation constituting the federal mandate. The Safe Drinking Water Act (42 U.S.C. §300f through §300j-26) and 40 C.F.R. 141.42, 141 Subpart I, 143 Subpart B, and the Reduction of Lead in Drinking Water Act of 2011 (42 U.S.C. § 300g-6).

2. State compliance standards. KRS 224.10-100(28) and 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) and 40 C.F.R. 141.42, and 141 Subpart I, establish analytical methods, monitoring requirements and action levels, school and childcare facility lead monitoring and education, and small systems compliance flexibility where the State has obtained primacy for this subpart and the State adopts regulations to provide compliance flexibility consistent with 40 CFR 141, for public water systems to follow for the control of lead and copper. The Reduction of Lead in Drinking Water Act of 2011 (42 U.S.C. § 300g-6) established limits on lead contained in drinking water plumbing materials. The proposed amendment is required by 42 U.S.C. §300g-6 (b) and (c) in order to maintain Kentucky's primary authority and federal funding to administer its Safe Drinking Water Program.

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

5. Justification for the imposition of the stricter standard, or additional or different responsibilities or requirements. The amendment to this administrative regulation does not impose stricter standards, or additional or different responsibilities or requirements, from the federal standard.