

Executive Summary

The Kansas Department of Health and Environment is proposing a comprehensive package of new regulations which are consistent with Kansas statutes and federal rules and standards for public drinking water supplies. K.S.A. 65-171m provides as follows:

K.S.A. 65-171m. Public water supply systems; primary drinking water standards; rules and regulations, authority to adopt, scope; stringency of standards; requiring fluorides prohibited. The secretary of health and environment shall adopt rules and regulations for the implementation of this act [*]. In addition to procedural rules and regulations, the secretary may adopt rules and regulations providing for but not limited to: (a) Primary drinking water standards applicable to all public water supply systems in the state. The primary drinking water standards may (1) identify contaminants which may have an adverse effect on the health of persons; (2) specify for each contaminant either a maximum contaminant level that is acceptable in water for human consumption, if it is economically and technologically feasible to ascertain the level of such contaminant in water in public water supply systems; or the treatment techniques or methods which lead to a reduction of the level of the contaminant sufficient to protect the public health, if it is not economically or technologically feasible to ascertain the level of the contaminant in the water in the public water supply system; and (b) establish the requirements for adequate monitoring, maintenance of records and submission of reports, sampling and analysis of water, citing criteria and review and inspections to insure compliance with the contaminant levels or methods of treatment and to insure proper operation and maintenance of the public water supply system; and (c) the definition of different categories of public water supply systems such as community water supply systems and noncommunity water supply systems and may provide for varying requirements for monitoring, maintenance of records and reporting, sampling and analysis of water, citing criteria, and review and inspections based on numbers of persons served, source of supply whether surface or groundwater or other conditions as the secretary may determine to be in the interest of public health and welfare and economic benefits. *The standards established under this section shall be at least as stringent as the national primary drinking water regulations adopted under public law 93-523.* No primary drinking water standard or rule and regulation may require the addition of fluorides to public water supplies. * “This act” see also 65-162a, 65-163, 65-163a, 65-170b and 65-171n et seq.

With a few minor exceptions, the proposed new regulations are adopting (or re-incorporating) the current National Primary Drinking Water Regulations by reference. Therefore, most of the national rules and standards which the Environmental Protection Agency has promulgated pursuant to the federal Safe Drinking Water Act will become the standards and procedures by which the Kansas Department of Health and Environment concurrently administers its rules and regulations regarding public water supplies in the state. Except in cases where Kansas has previously adopted stricter regulations, the proposed new regulations are no more stringent than is necessary to meet the requirements of federal law for the purposes of enforcing the Safe Drinking Water Act.

The Safe Drinking Water Act (P.L.104-182), title XIV of the Public Health Service Act (P.L. 93-523), is the key federal law for protecting public water systems from harmful contaminants. First enacted in 1974 and substantively amended in 1986 and 1996, the Safe Drinking Water Act is administered through

regulatory programs that establish standards and treatment requirements for drinking water, control underground injection of wastes that might contaminate water supplies, and protect groundwater. The Environmental Protection Agency is the federal agency responsible for administering provisions of the act.

The 1974 law established the current federal-state arrangement in which states may be delegated primary implementation and enforcement authority for the drinking water program. The Public Water Supply Supervision program and the Drinking Water State Revolving Fund loan program are the basic federal programs for regulating and financing Safe Drinking Water Act requirements to the nation's public water systems through state, tribal, and territorial governments.

The Kansas Department of Health and Environment has frequently adopted revised drinking water regulations (K.A.R. 28-15-1 to K.A.R. 28-15-37) to comply with the Safe Drinking Water Act and its various amendments as re-authorized by Congress since 1974 (the most recent federal amendments being added in 2002). Since the last administrative adoption of state rules and regulations by the Kansas Department of Health and Environment in 1995, the Environmental Protection Agency has promulgated nine new major drinking water rules of significant import, and is preparing to promulgate at least four additional drinking water rules in the near future, which are mandatory for states to concurrently adopt in order to retain administrative and enforcement primacy over drinking water programs.

Due to the highly technical and complex features of the subject matter, and because of the overlapping and variable nature of the numerous classification categories of public water supplies to which the rules are applicable, it has become increasingly difficult to develop stand-alone Kansas regulations. The Kansas Department of Health and Environment now considers a comprehensive adoption of the appurtenant federal regulations by reference to be in the best interest of the agency and the client public at this time. These proposed new rules are being presented as a package in order to comprehensively revise the existing drinking water regulations and to eliminate the possibility of redundancy or omissions concerning the federal requirements.

100 new regulations (under a new Article 15a entitled "Primary Drinking Water Regulations") will essentially mirror the National Primary Drinking Water Regulations in structure and content by adopting (in most cases) the federal regulations by reference. An additional 32 numbers and sections will be reserved for future expansion; K.A.R. 28-15-11, K.A.R. 28-15-13 through K.A.R. 28-15-14, K.A.R. 28-15-15a, and K.A.R. 28-15-20 through K.A.R. 28-15-22 will be simultaneously revoked in order to avoid duplicating updated regulations being adopted under the new article 15. Current Article 15 will be retained with existing regulations K.A.R. 28-15-16 and K.A.R. 28-15-18 being modified to address permitting and construction / operation requirements for public water supplies.

This strategy will easily accommodate revisions to state regulations when the federal regulations are revised (which will be frequently). It will also, by a considerable measure, simplify and streamline the administrative filing process necessary to add new (or delete outdated) state administrative regulations in the future. It will provide the most clear and straightforward method for users to index, access and understand the construction, location, and meaning of the regulations.

Since 1998, the Environmental Protection Agency has adopted nine major new rules concerning drinking water standards and practices under the Safe Drinking Water Act. These rules have been

promulgated under unique subject categories which, in some cases, revise old regulations and establish new regulations under many sections comprising the entirety of National Primary Drinking Water Regulations. The following rules are the subjects of regulation revisions required at this time.

Consumer Confidence Reports Rule
Interim Enhanced Surface Water Treatment Rule
Stage 1 Disinfectants and Disinfection Byproducts Rule
Lead and Copper Minor Rule Revisions
Revisions to the Public Notification Rule
Radionuclides Rule
Arsenic Rule
Filter Backwash Recycling Rule
Long Term 1 Enhanced Surface Water Treatment Rule

It is important to note that almost all of these proposed new and amended Kansas Administrative Regulations, and the existing Kansas Administrative Regulations proposed to be revoked, are organized according to the major rule categories as referenced above. For purposes of compiling the regulatory impact statements, they are grouped and presented to the reviewer in the same way.

For example, a separate regulatory impact statement has been prepared for each of these rules, and the appurtenant federal rule language accompanies each specific rule incorporating the federal language to be adopted by reference. When compiled, the separate regulation components of each major new rule category, in addition to the existing rule components previously adopted as Kansas Administrative Regulations and being re-presented under a new numbering format (new Article 15a), form the comprehensive framework for an entire set of new primary drinking water regulations for the State of Kansas as we are required to maintain to date (to comply with the primacy requirements established by the Environmental Protection Agency).

Because nine new rules have been adopted within the last five years, and several of the rules have sequentially and repeatedly revised individual regulations, it will appear that some of the proposed new regulations identified in the regulatory impact statements are duplicated. Actually, the proposed regulations which have been repetitively modified are just being re-presented under each of the unique rule categories for purposes of consistency. Upon final adoption of all the new regulations under Article 15a, only the most current version of the related federal regulations as in effect on July 1, 2002 will be adopted by reference.

Also, upon inspection, it is apparent that the proposed numbering format consists of many scattered, and in some cases, sizeable blocks of reserved number sequences - this serves three purposes: 1) it provides room for future additions to the regulations; 2) it keeps the Kansas numbering version of primary drinking water regulations topically consistent with the federal numbering version; and 3) it reflects the very few federal regulations which the Department did not feel were appropriate to adopt by reference, and those numbers have just been reserved. This methodology will greatly aid agents and clients who wish to consult the federal version of the regulations where Kansas has adopted some or all of the federal language by reference.

There are a few proposed new regulations which are not specifically a part of any of the nine new rule categories being implemented, but are still part of the National Primary Drinking Water Regulations and serve to clarify and enhance some or all of the major rule components. These additional regulations are proposed in order to provide uniformity and clarity to other existing regulations which Kansas has not previously adopted. These remaining regulations (ones which are not duplicated by any other existing Kansas Administrative Regulations but are just being converted to the new article 15a and numbering format) are also addressed in the separate, "Miscellaneous Provisions" regulatory impact statement.

Proposed new regulations which are just effectively replacing existing regulations under the different numbering format, and therefore do not require additional regulatory impact statements, are as follows:

- K.A.R. 28-15a-4. Variances and exemptions for small systems.** (Replaces K.A.R. 28-15-20. Exemptions and variances.)
- K.A.R. 28-15a-27. Alternate analytical techniques.** (Replaces paragraph (g) of K.A.R. 28-15-13. Standards for bacteriological, chemical, physical, and radiological quality.)
- K.A.R. 28-15a-28. Approved laboratories.** (Replaces paragraph (g) of K.A.R. 28-15-13. Standards for bacteriological, chemical, physical, and radiological quality.)
- K.A.R. 28-15a-41. Special monitoring for sodium.**
(Replaces paragraph (f) of K.A.R. 28-15-13. (Standards for bacteriological, chemical, physical, and radiological quality., and replaces paragraph (n)(3 and paragraph (o) of K.A.R. 28-15-14. Monitoring requirements for laboratory tests.)
- K.A.R. 28-15a-42. Special monitoring for corrosivity characteristics.** (Replaces paragraph (f)(3) of K.A.R. 28-15-13. Standards for bacteriological, chemical, physical, and radiological quality.)
- K.A.R. 28-15a-61. Maximum contaminant levels for organic contaminants.**
(Replaces paragraph (c) of K.A.R. 28-15-13. Standards for bacteriological, chemical, physical, and radiological quality.)
- K.A.R. 28-15a-72. Disinfection.** (Replaces paragraph (b) of K.A.R. 28-15-21. Surface water treatment rule.)
- K.A.R. 28-15a-74. Filtration and disinfection: Analytical and monitoring requirements.**
(Replaces paragraphs (d) and (e) of K.A.R. 28-15-21. Surface water treatment rule.)
- K.A.R. 28-15a-111. Treatment techniques for acrylamide and epichlorohydrin.**
(Replaces paragraph (r) of K.A.R. 28-15-14. Monitoring requirements

for laboratory tests.)

Proposed new regulations which are not directly associated with the nine major rule categories now being implemented, but are being incorporated into Article 15a as Primary Drinking Water Regulations for purposes of consistency and uniformity with the National Primary Drinking Water Regulations, and therefore require a separate regulatory impact statement (Miscellaneous Provisions*), are as follows:

K.A.R. 28-15a-3. Coverage; conditions for exclusion.

K.A.R. 28-15a-29. Monitoring of consecutive public water supply systems.

K.A.R. 28-15a-100. Requirements for public water supply systems using point-of-entry devices.

K.A.R. 28-15a-101. Use of bottled water.

K.A.R. 28-15a-110. General requirements for treatment techniques.

*Note: these proposed new regulations are not necessarily related to one another as a unique rule, but rather comprise a “catch-all” of the remaining regulations which are not covered in the other nine major rule categories and/or have never been previously addressed in Kansas regulations. The Kansas Department of Health and Environment recommends the adoption of these additional regulations as being advisable and necessary to achieve a comprehensive package of regulations which mirror the federal requirements. No new provisions are being added in these proposed new regulations other than are necessary to fulfill the primacy requirements of the Environmental Protection Agency.

General Outline

When implemented, the composition and format of the proposed new regulations will conform to the general organization of categories and content, as follows

KANSAS PRIMARY DRINKING WATER REGULATIONS

General

28-15a-1. (To be Reserved)

28-15a-2. Definitions; replaced terms.

28-15a-3. Coverage; conditions for exclusion.

28-15a-4. Variances and exemptions for small systems.

28-15a-5. (To be Reserved)

28-15a-6. Effective dates.

28-15a-7 through 28-15a-10. (Blank - Reserved).

Maximum Contaminant Levels

28-15a-11. Maximum contaminant levels for inorganic chemicals.

28-15a-12 through 28-15a-16. (To be Reserved)

28-15a-17 through 28-15a-20. (Blank - Reserved).

Monitoring and Analytical Requirements

28-15a-21. Coliform sampling.

28-15a-22. (To be Reserved)

28-15a-23. Inorganic chemical sampling and analytical requirements.

28-15a-24. Requirements for sampling and analyzing organic chemicals.

28-15a-25. Analytical methods for measuring radioactivity.

28-15a-26. Frequency of monitoring for radioactivity.

28-15a-27. Alternate analytical techniques.

28-15a-28. Approved laboratories.

28-15a-29. Monitoring of consecutive public water supply systems.

28-15a-30. (To be Reserved)

Reporting and Recordkeeping

28-15a-31. General reporting requirements.

28-15a-32. (To be Reserved)

28-15a-33. General record maintenance.

28-15a-34 through 28-15a-39. (Blank - Reserved).

Special Monitoring Regulations and Prohibition on Lead Use

28-15a-40. (To be Reserved)

28-15a-41. Special monitoring for sodium.

28-15a-42. Special monitoring for corrosivity characteristics.

28-15a-43. Prohibition on use of lead pipes, solder, and flux.

28-15a-44 through 28-15a-49. (Blank - Reserved).

Maximum Contaminant Level Goals and Maximum Residual Disinfectant Level Goals (Reserved)

28-15a-50 through 28-15a-59. (To be Reserved)

Revised Primary Drinking Water Regulations: Maximum Contaminant Levels and Maximum Residual Disinfectant Levels

28-15a-60. Effective dates for maximum contaminant levels and maximum residual disinfectant levels.

28-15a-61. Maximum contaminant levels for organic contaminants.

28-15a-62. Maximum contaminant levels for inorganic contaminants.

28-15a-63. Maximum contaminant levels for microbiological contaminants.

28-15a-64. Maximum contaminant levels for disinfection byproducts.

28-15a-65. Maximum residual disinfectant levels.

28-15a-66. Maximum contaminant levels for radionuclides.

28-15a-67 through 28-15a-69. (Blank - Reserved).

Filtration and Disinfection

28-15a-70. General requirements for filtration and disinfection.

28-15a-71. (To be Reserved)

28-15a-72. Disinfection.

28-15a-73. Filtration.

28-15a-74. Filtration and disinfection: analytical and monitoring requirements.

28-15a-75. Filtration and disinfection: reporting and recordkeeping requirements.

28-15a-76. Filter recycling requirements.

28-15a-77 through 28-15a-79. (Blank - Reserved).

Control of Lead and Copper

- 28-15a-80. General requirements for control of lead and copper.
- 28-15a-81. Applicability of corrosion control treatment steps.
- 28-15a-82. Requirements for corrosion control treatment.
- 28-15a-83. Requirements for source water treatment.
- 28-15a-84. Requirements for lead service line replacement.
- 28-15a-85. Requirements for public education and supplemental monitoring.
- 28-15a-86. Monitoring requirements for lead and copper in tap water.
- 28-15a-87. Monitoring requirements for water quality parameters.
- 28-15a-88. Monitoring requirements for lead and copper in source water.
- 28-15a-89. Analytical methods for control of lead and copper.
- 28-15a-90. Reporting requirements for lead and copper control.
- 28-15a-91. Recordkeeping requirements for lead and copper control.
- 28-15a-92 through 28-15a-99. (Blank - Reserved).**

Use of Non-Centralized Treatment Devices

- 28-15a-100. Requirements for public water supply systems using point-of-entry devices.
- 28-15a-101. Use of bottled water.
- 28-15a-102 through 28-15a-109. (Blank - Reserved).**

Treatment Techniques

- 28-15a-110. General requirements for treatment techniques.
- 28-15a-111. Treatment techniques for acrylamide and epichlorohydrin.
- 28-15a-112 through 28-15a-129. (Blank - Reserved).**

Disinfectant Residuals, Disinfection Byproducts, and Disinfection Byproduct Precursors

- 28-15a-130. Disinfectant residuals, disinfection byproducts, and disinfection byproduct precursors: general requirements.
- 28-15a-131. Disinfectant residuals, disinfection byproducts, and disinfection byproduct precursors: analytical requirements.
- 28-15a-132. Disinfectant residuals, disinfection byproducts, and disinfection byproduct precursors: monitoring requirements.
- 28-15a-133. Disinfectant residuals, disinfection byproducts, and disinfection byproduct precursors: compliance requirements.
- 28-15a-134. Disinfectant residuals, disinfection byproducts, and disinfection byproduct precursors: reporting and recordkeeping requirements.
- 28-15a-135. Treatment technique for control of disinfection byproduct precursors.
- 28-15a-136 through 28-15a-150. (Blank - Reserved).**

Consumer Confidence Reports

28-15a-151. Applicability of requirement for consumer confidence reports.

28-15a-152. Effective dates for required consumer confidence reports.

28-15a-153. Content of consumer confidence reports.

28-15a-154. Required additional health information.

28-15a-155. Report delivery and recordkeeping.

28-15a-156 through 28-15a-169. (Blank - Reserved).

Enhanced Filtration and Disinfection for Systems Serving 10,000 or More People

28-15a-170. General requirements for enhanced filtration and disinfection for subpart H systems serving 10,000 or more people.

28-15a-171. (To be Reserved)

28-15a-172. Disinfection profiling and benchmarking for subpart H systems serving 10,000 or more people.

28-15a-173. Enhanced filtration requirements for subpart H systems serving 10,000 or more people.

28-15a-174. Enhanced filtration sampling requirements for subpart H systems serving 10,000 or more people.

28-15a-175. Enhanced filtration and disinfection reporting and recordkeeping requirements for subpart H systems serving 10,000 or more people.

28-15a-176 through 28-15a-200. (Blank - Reserved).

Public Notification of Drinking Water Violations

28-15a-201. General requirements for public notification.

28-15a-202. Tier 1 public notice - form, manner, and frequency of notice.

28-15a-203. Tier 2 public notice - form, manner, and frequency of notice.

28-15a-204. Tier 3 public notice - form, manner, and frequency of notice.

28-15a-205. Content of public notice.

28-15a-206. Notice to new billing units or new customers.

28-15a-207. Special notice of availability of results of unregulated contaminant monitoring.

28-15a-208. Special notice exceedance of the secondary maximum contaminant level (SMCL) for fluoride.

28-15a-209. Special notice for nitrate exceedances above MCL by non-community water supply systems (NCWSS).

28-15a-210. Notice by department on behalf of the public water supply system.

28-15a-211 through 28-15a-299. (Blank - Reserved).

(Title Reserved)

28-15a-300 through 28-15a-399. (Blank - Reserved).

(Title Reserved)

28-15a-400 through 28-15a-499. (Blank - Reserved).

Enhanced Filtration and Disinfection for Systems Serving Fewer than 10,000 People

General Requirements

28-15a-500. General requirements for enhanced filtration and disinfection for subpart H systems serving fewer than 10,000 people.

28-15a-501. Applicability of general requirements for enhanced filtration and disinfection in subpart H systems serving fewer than 10,000 people.

28-15a-502. Effective dates of requirements for enhanced filtration and disinfection in subpart H systems serving fewer than 10,000 people.

28-15a-503. Compliance criteria for enhanced filtration and disinfection in subpart H systems serving fewer than 10,000 people.

28-15a-504 through 28-15a-509. (Blank - Reserved).

Finished Water Reservoirs

28-15a-510 through 28-15a-511. (To be Reserved)

28-15a-512 through 28-15a-519. (Blank - Reserved).

Additional Watershed Control Requirements for Unfiltered Systems

28-15a-520 through 28-15a-522. (To be Reserved)

28-15a-523 through 28-15a-529. (Blank - Reserved).

Disinfection Profile

28-15a-530. Disinfection profiling for subpart H systems serving fewer than 10,000 people.

28-15a-531. Criteria for avoiding disinfection profiling in subpart H systems serving fewer than 10,000 people.

28-15a-532. Effective dates for required disinfection profiling in subpart H systems serving fewer than 10,000 people..

28-15a-533. Collection of disinfection profile data for subpart H systems serving fewer than 10,000 people.

28-15a-534. Calculation of inactivation ratio for subpart H systems serving fewer than 10,000 people.

28-15a-535. Inactivation ratio for viruses in subpart H systems serving fewer than 10,000 people.

28-15a-536. Retention of disinfection profile data for subpart H systems serving fewer than 10,000 people.

28-15a-537 through 28-15a-539. (Blank - Reserved).

Disinfection Benchmark

- 28-15a-540. Disinfection benchmark for subpart H systems serving fewer than 10,000 people.
- 28-15a-541. Significant changes to disinfection practice in subpart H systems serving fewer than 10,000 people.
- 28-15a-542. Consultation regarding significant change to disinfection practice for subpart H systems serving fewer than 10,000 people.
- 28-15a-543. Calculation of disinfection benchmark for subpart H systems serving fewer than 10,000 people.
- 28-15a-544. Disinfection benchmark for primary disinfectants other than chlorine for subpart H systems serving fewer than 10,000 people.
- 28-15a-545 through 28-15a-549. (Blank - Reserved).**

Combined Filter Effluent Requirements

- 28-15a-550. Requirements for combined filter effluent turbidity in subpart H systems serving fewer than 10,000 people.
- 28-15a-551. Limits for strengthened combined filter effluent turbidity in subpart H systems serving fewer than 10,000 people.
- 28-15a-552. Alternative filtration demonstration for subpart H systems serving fewer than 10,000 people.
- 28-15a-553. Special provision for combined filter effluent in subpart H systems serving fewer than 10,000 people.
- 28-15a-554 through 28-15a-559. (Blank - Reserved).**

Individual Filter Turbidity Requirements

- 28-15a-560. Requirements for individual filter turbidity in subpart H systems serving fewer than 10,000 people.
- 28-15a-561. Contingency requirements for individual filter turbidity in subpart H systems serving fewer than 10,000 people.
- 28-15a-562. Special provision for continuous monitoring of combined filter effluent turbidity in subpart H systems serving fewer than 10,000 people.
- 28-15a-563. Follow-up actions to monitoring of individual filter turbidity for subpart H systems serving fewer than 10,000 people.
- 28-15a-564. Special provision for alternative turbidity exceedance levels in subpart H systems serving fewer than 10,000 people.
- 28-15a-565 through 28-15a-569. (Blank - Reserved).**

Reporting Requirements

- 28-15a-570. Reporting requirements for enhanced filtration and disinfection for subpart H systems serving fewer than 10,000 people.
- 28-15a-571. Recordkeeping requirements for enhanced filtration and disinfection for subpart H systems serving fewer than 10,000 people.