PROPOSED AMENDMENTS TO THE RULES
OF THE GEORGIA DEPARTMENT OF NATURAL RESOURCES
ENVIRONMENTAL PROTECTION DIVISION
RELATING TO SAFE DRINKING WATER, CHAPTER 391-3-5

The Rules of the Department of the Natural Resources, Chapter 391-3-5, are hereby amended and revised for specific Rules, or such subdivisions thereof as may be indicated.

[Note: Underlined text is proposed to be added. ~~Lined-through~~ text is proposed to be deleted.]

Rule 391-3-5-.25 Treatment Techniques, Lead and Copper Requirements

(1) **General Requirements**.
(a) These requirements constitute the primary drinking water rules for lead and copper. Unless otherwise indicated, each of these provisions applies to community water systems and non-transient, non-community water systems (hereinafter referred to as "water systems" or "systems").
(b) These rules establish a treatment technique that includes requirements for corrosion control treatment, source water treatment, lead service line replacement, and public education. These requirements are triggered, in some cases, by lead and copper action levels measured in samples collected at consumers' taps.
(c) Lead and copper action levels:
1. The lead action level is exceeded if the concentration of lead in more than 10 percent of tap water samples collected during any monitoring period conducted in accordance with paragraph (7) is greater than 0.015 mg/L.
2. The copper action level is exceeded if the concentration of copper in more than 10 percent of tap water samples collected during any monitoring period conducted in accordance with paragraph (7) is greater than 1.3 mg/L.
3. Calculation of the lead and copper action levels shall be based on the "90th percentile" rule in accordance with 40 CFR~~, Part~~ § 141.80(c)(3).
(d) Corrosion control treatment requirements:
1. All water systems shall install and operate optimal corrosion control treatment as defined in Rule 391-3-5-.02(73).
2. Any water system that complies with the applicable corrosion control treatment requirements specified by the Division under paragraphs (2) and (3) shall be deemed in compliance with the treatment requirement contained in paragraph (d)(1).
(e) Source water treatment requirements; Any system exceeding the lead or copper action level shall implement all applicable source water treatment requirements specified by the "Division" under paragraph (4).
(f) Lead service line replacement requirements; Any system exceeding the lead action level after implementation of applicable corrosion control and source water treatment requirements shall complete the lead service replacement requirements contained in paragraph (5).
(g) Public education requirements; Pursuant to 40 CFR~~, Part~~ § 141.85, all water systems must provide a consumer notice of lead tap water monitoring results to persons served at the sites/taps

that are tested. Any system exceeding the lead action level shall implement the public education requirements contained in paragraph (6).
(h) Monitoring and analytical requirements; Tap water monitoring for lead and copper, monitoring for water quality parameters, source water monitoring for lead and copper, and analyses of the monitoring results under this subpart shall be completed in compliance with paragraphs (7) - (10).
(i) Reporting requirements; Systems shall report to the Division any information required by the treatment provisions of this subpart and Rule 391-3-5-.30(7).
(j) Record keeping requirements; Systems shall maintain records in accordance with Rule 391-3-5-.15.
(k) Violation of national primary drinking water regulations; Failure to comply with the applicable requirements of paragraphs (1) - (10), including requirements established by the Division pursuant to the provisions, shall constitute a violation of the national primary drinking water regulations for lead and/or copper.
(l) The maximum contaminant level goals (MCLGs) for lead and copper are as follows:

Contaminant	**MCLG (mg/L)**
Copper	1.3
Lead	0 (zero)

(2) **Applicability of Corrosion Control Treatment Steps to Small, Medium and Large Water Systems**.
(a) Systems shall complete the applicable corrosion control treatment requirements described in paragraph (3) by the deadlines established in this paragraph.
1. A large system (serving more than 50,000 persons) shall complete the corrosion control treatment steps specified in paragraph (2)(d), unless it is deemed to have optimized corrosion control under paragraphs (2)(b)2. or (2)(b)3..
2. A small system (serving less than 3,301 persons) and a medium-size system (serving more than 3,300 and less than 50,001 persons) shall complete the corrosion control treatment steps specified in paragraph (2)(d), unless it is deemed to have optimized corrosion control under paragraphs (2)(b)1., (2)(b)2., or (2)(b)3..
(b) A system is deemed to have optimized corrosion control and is not required to complete the applicable control treatment steps identified in this section if the system satisfies one of the criteria specified in paragraphs (2)(b)1. through (2)(b)3.. Any such system deemed to have optimized corrosion control under this paragraph, and which has treatment in place, shall continue to operate and maintain optimal corrosion control treatment and meet any requirements that the State determines appropriate to ensure optimal corrosion control treatment is maintained.
1. A small or medium-size water system is deemed to have optimized corrosion control if the system meets the lead and copper action levels during each of two consecutive six-month monitoring periods conducted in accordance with paragraph (7).
2. Any water system may be deemed by the Division to have optimized corrosion control treatment if the system demonstrates to the satisfaction of the Division that it has conducted activities equivalent to the corrosion control steps applicable to such system under this rule. If the Division makes this determination, it shall provide the system with written notice explaining the basis for its decision and shall specify the water quality control parameters representing optimal corrosion control in accordance with paragraph (3). Water systems deemed to have optimized corrosion control under this paragraph shall operate in compliance with the Division

designated optimal water quality control parameters in accordance with paragraph (3) and continue to conduct lead and copper tap water quality parameter sampling in accordance with paragraphs (7)(d) 3. and (8)(d). A system shall provide the Division with the following information in order to support a determination under this paragraph.
(i) the results of all test samples collected for each of the water quality parameters in paragraph (3).
(ii) a report explaining the test methods used by the water system to evaluate the corrosion control treatments listed in paragraph (3), the results of all tests conducted, and the basis for the system's selection of optimal corrosion control treatment.
(iii) a report explaining how corrosion control has been installed and how it is being maintained to insure minimal lead and copper concentrations at consumers' taps.
(iv) the results of tap water samples collected in accordance with paragraph (7) at least once every six months for one year after corrosion control has been installed.
3. Any water system is deemed to have optimized corrosion control if it submits results of tap water monitoring conducted in accordance with paragraph (7) and source water monitoring conducted in accordance with paragraph (9) that demonstrates for two consecutive six-month monitoring periods that the difference between the 90th percentile tap water lead level computed under paragraph (1)(c) 3., and the highest source water lead concentration, is less than the Practical Quantitation Level for lead specified in paragraph (10).
(i) Those systems whose highest source water lead level is below the Method Detection Limit may also be deemed to have optimized corrosion control under this paragraph if the 90th percentile tap water lead levels is less than or equal to the Practical Quantitation Level for the lead for two consecutive 6-month monitoring periods.
(ii) Any water system deemed to have optimized corrosion control in accordance with this paragraph shall continue monitoring for lead and copper at the tap no less frequently than once every three calendar years using the reduced number of sites specified in Rule 391-3-5-.25(7)(c) and collecting samples at times and locations specified in Rule 391-3-5- .25(7)(d) 4.
(iii) Any water system deemed to have optimized corrosion control pursuant to this paragraph shall notify the Division in writing pursuant to Rule 391-3-5-.25(11) of any upcoming long-term change in treatment or addition of a new source. The Division must review and approve the addition of a new source or long-term change in water treatment before it is implemented by the water system. The Division may require any system to conduct additional monitoring or to take other action the Division deems appropriate to ensure that such systems maintain minimal levels of corrosion in the distribution system.
(iv) As of July 12, 2001, a system is not deemed to have optimized corrosion control under this paragraph, and shall implement corrosion control treatment pursuant to paragraph (2)(b)3.(v) unless it meets the copper action level.
(v) Any system triggered into corrosion control because it is no longer deemed to have optimized corrosion control under this paragraph shall implement corrosion control treatment in accordance with the deadlines in paragraph (2)(d). Any such large system shall adhere to schedule specified in that paragraph for medium-size systems, with the time periods for completing each step being triggered by the date the system is no longer deemed to have optimized corrosion control under this paragraph.
(c) Any small or medium-size water system that is required to complete the corrosion control steps due to its exceedance of the lead or copper action level may request approval from the Division to cease completing the treatment steps if the system meets both lead and copper action

levels during each of two consecutive monitoring periods conducted pursuant to paragraph (7) and submits the results to the Division. If approval is granted, any such water system thereafter exceeds the lead or copper action level during any monitoring period, the system (or the Division, as the case may be) shall recommence completion of the applicable treatment steps, beginning with the first treatment step which was not previously completed in its entirety. The Division may require a system to repeat treatment steps previously completed by the system where the Division determines that this is necessary to implement properly the treatment requirements of this rule. The Division shall notify the water system in writing of such a determination and explain the basis for its decision. The requirement for any small- or medium-size water system to implement corrosion control treatment steps in accordance with paragraph (2)(d) (including, water systems deemed to have optimized corrosion control under paragraph (2)(b)1.) is triggered whenever any small- or medium-size water system exceeds the lead or copper action level.

(d) Treatment steps and deadlines for all systems affected by this rule shall be in accordance with 40 CFR~~, Part~~ § 141.81(d) and (e).

(3) **Description of Corrosion Control Treatment Requirements**. Each system shall complete the corrosion control treatment requirements as described and in accordance with 40 CFR ~~Part~~ § 141.82 and as approved by the Division.

(4) **Source Water Treatment Requirements**. Systems shall complete the applicable source water monitoring and treatment requirements, described in the referenced portions of paragraph (4)(b), and in paragraphs (7) and (9) by the following deadlines.

(a) Deadlines for Completing Source Water Treatment Steps.

1. Step 1: A system exceeding the lead or copper action level shall complete lead and copper source water monitoring (paragraph (9)(b)) and make a treatment recommendation to the Division (paragraph (4)(b) 1.) no later than 180 days after the end of the monitoring period in which the lead or copper action level was exceeded.
2. Step 2: The Division shall make a determination regarding source water treatment (paragraph (4)(b) 2.) within 6 months after submission of monitoring results under Step 1.
3. Step 3: If the Division requires installation of source water treatment, the system shall install the treatment (paragraph (4)(b) 3.) within 24 months after completion of Step 2.
4. Step 4: The system shall complete follow-up tap water monitoring for lead and copper (paragraph (7)(d) 2.) and source water monitoring for lead and copper (paragraph (9)(c)) within 36 months after completion of Step 2.
5. Step 5: The Division shall review the system's installation and operation of source water treatment and specify maximum permissible source water levels (paragraph (4)(b) 4.) within 6 months after completion of Step 4.
6. Step 6: The system shall operate in compliance with the Division specified maximum permissible lead and copper source water levels (paragraph (4)(b) 4.) and continue source water monitoring for lead and copper (paragraph (9)(d)).

(b) Description of Source Water Treatment Requirements:

1. System treatment recommendation. Any system which exceeds the lead or copper action level shall recommend in writing to the Division the installation and operation of one of the source water treatments listed in paragraph (4)(b)2.. A system may recommend that no treatment be installed based upon a demonstration that source water treatment is not necessary to minimize lead and copper levels at users' taps.

2. Division determination regarding source water treatment. The Division shall complete an evaluation of the results of all source water samples submitted by the water system to determine whether source water treatment is necessary to minimize lead or copper levels in water delivered to users' taps. If the Division determines that treatment is needed, the Division shall either require installation and operation of the source water treatment recommended by the system (if any) or require the installation and operation of another source water treatment such as: ion exchange, reverse osmosis, lime softening or coagulation/filtration. If the Division requests additional information to aid in its review, the water system shall provide the information by the date specified by the Division in its request. The Division shall notify the system in writing of its determination and set forth the basis for its decision.
3. Installation of source water treatment. Each system shall properly install and operate the source water treatment designated by the Division under paragraph (4)(b)2..
4. Division review of source water treatment and specification of maximum permissible source water levels. The Division shall review the source water samples taken by the water system both before and after the system installs source water treatment, and determine whether the system has properly installed and operated the source water treatment designated by the Division. Based upon its review, the Division shall designate the maximum permissible lead and copper concentrations for finished water entering the distribution system. Such levels shall reflect the contaminant removal capability of the treatment properly operated and maintained. The Division shall notify the system in writing and explain the basis for its decision.
5. Continued operation and maintenance. Each water system shall maintain lead and copper levels below the maximum permissible concentrations designated by the Division at each sampling point monitored in accordance with paragraph (9). The system is out of compliance with this paragraph if the level of lead and/or copper at any sampling point is greater than the maximum permissible concentration designated by the Division.
6. Modification of Division treatment decisions. Upon its own initiative or in response to a request by a water system or other interested party, the Division may modify its determination of the source water treatment under paragraph (2), or maximum permissible lead and copper concentrations for finished water entering the distribution system under paragraph (4. A request for modification by a system or other interested party shall be in writing, explain why the modification is appropriate, and provide supporting documentation. The Division may modify its determination where it concludes that such change is necessary to ensure that the system continues to minimize lead and copper concentrations in source water. A revised determination shall be made in writing, set forth the new treatment requirements, explain the basis for the Division's decision, and provide an implementation schedule for completing the treatment modifications.
7. EPA may review treatment determinations made by the Division and issue federal treatment determinations as outlined in 40 CFR~~, Part~~ § 141.83(b)(7).
(5) **Lead Service Line Replacement Requirements**. Systems may be required to replace lead service lines in accordance with 40 CFR ~~Parts~~ §§ 141.84 and 141.90(e) when they fail to meet the lead action level in tap samples. 40 CFR ~~Part~~ § 141.84 describes the conditions that will require lead service line replacement.
(6) **Public Educational and Supplemental Monitoring Requirements**. All water systems must deliver a consumer notice of lead tap water monitoring results to persons served by the water system at the sites/taps that are tested. A water system that exceeds the lead action level based on

tap water samples collected in accordance with paragraph (7) shall carry out a public education program as described in 40 CFR~~, Part~~ § 141.85.

(7) **Monitoring Requirements for Lead and Copper in Tap Water**.

(a) Sample site location.

1. By the applicable date for commencement of monitoring under paragraph (7)(d)1., each water system shall complete a materials evaluation of its distribution system. In order to identify a pool of targeted sampling sites that meets the requirements of this rule, and which is sufficiently large to ensure that the water system can collect the number of lead and copper tap samples required in paragraph (7)(c). All sites from which first draw samples are collected shall be selected from this pool of targeted sampling sites. Sampling sites may not include faucets that have point-of-use or point-of-entry treatment devices.

2. A water system shall use the information on lead, copper, and galvanized steel that it is required to collect under Rule 391-3-5--.26(4) of this part [special monitoring for corrosivity characteristics] when conducting a materials evaluation. When an evaluation of the information collected pursuant to Rule 391-3-5-.26(4) is insufficient to locate the requisite number of lead and copper sampling sites that meet the targeting criteria in paragraph (7)(a)1., the water system shall review the sources of information listed below in order to identify a sufficient number of sampling sites. In addition, the system shall seek to collect such information where possible in the course of its normal operations (e.g., checking service line materials when reading water meters or performing maintenance activities):

(i) all plumbing codes, permits, and records in the files of the building department(s) which indicate the plumbing materials that are installed within publicly and privately owned structures connected to the distribution system;

(ii) all inspections and records of the distribution system that indicate the material composition of the service connections that connect a structure to the distribution system; and

(iii) all existing water quality information, which includes the results of all prior analyses of the system or individual structures connected to the system, indicating locations that may be particularly susceptible to high lead or copper concentrations.

3. The sampling sites selected for a community water system's sampling pool ("tier 1 sampling sites") shall consist of single family structures that:

(i) contain copper pipes with lead solder installed after 1982 or contain lead pipes; and/or

(ii) are served by a lead service line. When multiple-family residences comprise at least 20 percent of the structures served by a water system, the system may include these types of structures in its sampling pool.

4. Any community water system with insufficient tier 1 sampling sites shall complete its sampling pool with "tier 2 sampling sites", consisting of buildings, including multiple-family residences that:

(i) contain copper pipes with lead solder installed after 1982 or contain lead pipes; and/or

(ii) are served by a lead service line.

5. Any community water system with insufficient tier 1 and tier 2 sampling sites shall complete its sampling pool with "tier 3 sampling sites", consisting of single family structures that contain copper pipes with lead solder installed before 1983. A community water system with insufficient tier 1, tier 2, and tier 3 sampling sites shall complete its sampling pool with representative sites throughout the distribution system. For the purpose of this paragraph, a representative site is a site in which the plumbing materials used at that site would be commonly found at other sites served by the water system.

6. The sampling sites selected for a non-transient non-community water system ("tier 1 sampling sites") shall consist of buildings that:
(i) contain copper pipes with lead solder installed after 1982 or contain lead pipes; and/or
(ii) are served by a lead service line.
7. A non-transient non-community water system with insufficient tier 1 sites that meet the targeting criteria in paragraph (7)(a)6 shall complete its sampling pool with sampling sites that contain copper pipes with lead solder installed before 1983. If additional sites are needed to complete the sampling pool, the nontransient non-community water system shall use representative sites throughout the distribution system. For the purpose of this paragraph, a representative site is a site in which the plumbing materials used at that site would be commonly found at other sites served by the water system.
8. Any water system whose sampling pool does not consist exclusively of tier 1 sites shall demonstrate to the Division under paragraph (11) why a review of the information listed in paragraph (7)(a)2. was inadequate to locate a sufficient number of tier 1 sites. Any community water system which includes tier 3 or other representative sampling sites in its sampling pool shall demonstrate why it was unable to locate a sufficient number of tier 1 and tier 2 sampling sites.
9. Any water system whose distribution system contains lead service lines shall draw 50 percent of the samples it collects during each monitoring period from sites that contain lead pipes, or copper pipes with lead solder, and 50 percent of those samples from sites served by a lead service line. A water system that cannot identify a sufficient number of sampling sites served by lead service line shall collect first draw samples from all of the sites identified as being served by such lines.
(b) Sample collection methods.
1. All tap samples for lead and copper collected in accordance with this subpart, with the exception of lead service line samples collected under paragraph (5), shall be first draw samples.
2. Each first-draw tap sample for lead and copper shall be one liter in volume and must have stood motionless in the plumbing system of each sampling site for at least six hours. First draw samples from residential housing shall be collected from the cold-water kitchen or bathroom sink tap. First-draw samples from a non-residential building shall be one liter in volume and shall be collected at an interior tap from which is typically drawn for consumption. First draw samples may be collected by the system or the system may allow residents to collect first draw samples after instructing the residents of the sampling procedures specified in this paragraph. To avoid problems of residents handling nitric acid, acidification of first-draw samples may be done up to fourteen (14) days after the sample is collected. After acidification to resolubilize the metals, the sample must stand in the original container for the time specified in the approved EPA method before the sample can be analyzed. If a system allows residents to perform sampling, the system may not challenge, based on alleged errors in sample collection, the accuracy of sampling results.
3. Each service line sample shall be one liter in volume and have stood motionless in the lead service line for at least six hours. Lead service line samples shall be collected in one of the following three ways:
(i) at the tap after flushing the volume of water between the tap and the lead service line. The volume of water shall be calculated based on the interior diameter and length of the pipe between the tap and the lead service line;
(ii) tapping directly into the lead service line; or

(iii) if the sampling site is a building constructed as a single-family residence, allowing the water to run until there is a significant change in temperature which would be indicative of water that has been standing in the lead service line.
4. A water system shall collect each first draw tap sample from the same sampling site from which it collected a previous sample. If, for any reason, the water system cannot gain entry to a sampling site in order to collect a follow-up tap sample or a particular site is no longer available, the system may collect the follow-up tap sample from another sampling site in its sampling pool as long as the new site meets the same targeting criteria, and is within reasonable proximity of the original site.
5. A non-transient non-community water system, or a community water system that meets the criteria of Rule 391-3-5-.25(7)(a) 3.- 7. that does not have enough taps that can supply first-draw samples, as defined in Rule 391-3-5-.25(7)(b) 2., must collect multiple samples from available sites/taps, provided the samples are collected at different times and/or on different days in order to meet the "first-draw"/6-hour minimum non-use time criteria.
(c) Number of samples.
Water systems shall collect at least one sample during each monitoring period specified in paragraph (7)(d) from the number of sites listed in the first column below ("# of Sites Standard Monitoring") of the table in this paragraph. A system conducting reduced monitoring under paragraph (7)(d)4. shall collect at least one sample from the number of sites specified in the second column ("# of Sites Reduced Monitoring") of the table in this paragraph during each monitoring period specified in paragraph (7)(d)4.. Such reduced monitoring sites shall be representative of the sites required for standard monitoring. States may specify sampling locations when a system is conducting reduced monitoring. The table is as follows:

System Size Population Served	**Number of Sites Standard Monitoring**	**Number of Sites Reduced Monitoring**
100,001 or more	100	50
10,001 to 100,000	60	30
3,301 to 10,000	40	20
501 to 3,300	20	10
101 to 500	10	5
100 or fewer	5	5

(d) Timing of monitoring.
1. Initial tap sampling: Two consecutive six-month periods, between January-June and between July-December.
(i) All large systems shall monitor at the required number of standard monitoring sites during two consecutive six-month periods.
(ii) All small and medium-size systems shall monitor at the required number of standard monitoring sites during each six-month monitoring period until:
(I) the system exceeds the lead or copper action level and is therefore required to implement the corrosion control treatment requirements under paragraph (2), in which case the system shall continue monitoring in accordance with paragraph (7)(d)2., or
(II) the system meets the lead or copper action levels during two consecutive six-month monitoring periods, in which case the system may reduce monitoring in accordance with paragraph (7)(d)4..
2. Monitoring after installation of corrosion control and source water treatment.

(i) Any large system which installs optimal corrosion control treatment pursuant to paragraph (2)(d) shall monitor during two consecutive six-month monitoring periods by the date specified in paragraph (2)(d).
(ii) Any small or medium-size system which installs optimal corrosion control treatment pursuant to paragraph (2) shall monitor during two consecutive six-month monitoring periods by the date specified in paragraph (2)(d).
(iii) Any system which installs source water treatment pursuant to paragraph (4)(a) 3. shall monitor during two consecutive six-month monitoring periods by the date specified in paragraph (4)(a) 4.
3. Monitoring after Division specifies water quality parameter values for optimal corrosion control. After the Division specifies the value for water quality control parameters under paragraph (3), the system shall monitor during each subsequent six-month monitoring period, with the first monitoring period to begin on the date the Division specifies the optimal values under paragraph (3).
4. Reduced monitoring.
(i) A small or medium-size water system that meets the lead and copper action levels during each of two consecutive six-month monitoring periods may reduce the number of samples in accordance with paragraph (7)(c), and reduce the frequency of sampling to once per year between the months of June and September of the calendar year immediately following the end of the second consecutive six-month monitoring period.
(ii) Any water system that meets the lead and copper action levels and maintains the range of values for the water quality control parameters reflecting optimal corrosion control treatment specified by the Division under paragraph (3) during each of two consecutive six-month monitoring periods may reduce the frequency of monitoring to once per year between the months of June and September and reduce the number of lead and copper samples in accordance with paragraph (7)(c) if it receives written approval from the division. This sampling shall begin during the calendar year immediately following the end of the second consecutive six-month monitoring period. The Division shall review monitoring, treatment, and other relevant information submitted by the water system in accordance with paragraph (11) and shall notify the water system in writing when the Division determines the water system is eligible to commence reduced monitoring to once every three (3) years pursuant to this paragraph. The Division shall review, and where appropriate, revise its determination when the system submits new monitoring or treatment data, or when other data relevant to the number and frequency of tap sampling becomes available.
(iii) A small or medium-size water system that meets the lead and copper action levels during three consecutive years of monitoring may reduce the frequency of monitoring for lead and copper from annually to once every three years. Sampling must still occur between the months of June and September of the year in which monitoring is required. Any water system that meets the lead and copper action levels and maintains the range of values for the water quality control parameters reflecting optimal corrosion control treatment specified by the Division under paragraph (3) during three consecutive years of monitoring may reduce the frequency from annually to once every three years if it receives written approval from the Division. Samples collected once every three years must be collected no later than every third calendar year. The Division shall review monitoring, treatment, and other relevant information submitted by the water system in accordance with paragraph (11) and shall notify the system in writing when it determines the system is eligible to reduce the frequency of monitoring to once every three years.

The Division shall review, and where appropriate, revise its determination when the system submits new monitoring or treatment data, or when other data relevant to the number and frequency of tap sampling becomes available.
(iv) A water system that reduces the number and frequency of sampling shall collect these samples from representative sites included in the original pool of targeted sampling sites identified in paragraph (7)(a)1. Systems sampling annually or less frequently shall conduct the lead and copper tap sampling during the months of June, July, August or September unless the Division has approved a different sampling period in accordance with paragraph (7)(d)4.(iv)(1).
(I) The Division, at its discretion, may approve a different period for conducting the lead and copper tap sampling for systems collecting a reduced number of samples. Such a period shall be no longer than four consecutive months and must represent a time of normal operation where the highest levels of lead are most likely to occur. For non-transient non-community water system that does not operate during the months of June, through September, and for which the period of normal operation where the highest levels of lead are most likely to occur is not known, the Division shall designate a period that represents a time of normal operation for the system. Any alternate reduced monitoring must meet criteria set forth in 40 CFR~~, part~~ § 141.86(d)(4)(iv)(A).
(II) Systems monitoring annually, that have been collecting samples during the months of June through September and that receive Division approval to alter their sample collection period under paragraph (7)(d)4.(iv)(I), must collect their next round of samples during a time period that ends no later than 21 months after the previous round of sampling. Systems monitoring triennially that have been collecting samples during the months of June through September, and receive Division approval to alter the sampling collection period per paragraph (7)(d)4.(iv)(I), must collect their next round of samples during a time period that ends no later than 45 months after the previous round of sampling. Subsequent rounds of sampling must be collected annually or triennially, as requested by this rule. Small systems with waivers, granted pursuant to paragraph (7)(g), that have been collecting samples during the months of June through September and receive Division approval to alter their sample collection period under paragraph (7)(d)4.(iv)(I) must collect their next round of samples before the end of the 9-year period.
(v) Any water system that demonstrates for two consecutive 6- month monitoring periods that the tap water lead level computed under paragraph (1)(c) 3. is less than or equal to 0.005 mg/L and the tap water copper level computed under paragraph (1)(c) 3. is less than or equal to 0.65 mg/L may reduce the number in accordance with paragraph (3) and reduce the frequency of sampling to once every three calendar years.
(vi) (I) A small or medium-size water system subject to reduced monitoring that exceeds the lead or copper action level shall resume sampling in accordance with paragraph (7)(d)3. and collect the number of samples for standard monitoring under paragraph (7)(c). Such a system shall also conduct water quality parameter monitoring in accordance with 40 CFR~~, Part~~ § 141.87(b), (c) or (d) (as appropriate) during the monitoring period in which it exceeded the action level. Any such system may resume annual monitoring for lead and copper at the tap at the reduced number of sites specified in paragraph (7)(c) after it has completed two consecutive six-month rounds of monitoring with no action level exceeded.
(II) Any water system subject to the reduced monitoring frequency that fails to meet the lead or copper action level during any four-month monitoring period or that fails to operate at or above the minimum value or within the range of values for the water quality parameters specified by the Division for more than nine days in any six-month monitoring period shall conduct tap water sampling for lead and copper at the frequency specified in paragraph (7)(d)3., collect the number

of samples specified for standard monitoring under paragraph (c), and shall resume monitoring for water quality parameters within the distribution system in accordance with 40 CFR~~, Part~~ § 141.87(d). This standard tap water sampling shall begin no later than the six-month period beginning January 1 of the calendar year following the lead or copper action level exceedance or water quality parameter excursion. Such a system may resume reduced monitoring for lead and copper at the tap and for water quality parameters within the distribution system under the following conditions:

I. The system may resume annual monitoring for lead and copper at the tap at the reduced number of sites specified in paragraph (7)(c) after it has completed two consecutive six-month rounds of monitoring that meet both lead and copper action levels and the system has received written approval from the Division that it is appropriate to resume reduced monitoring on an annual frequency. This sampling shall begin during the calendar year immediately following the end of the second consecutive six-month monitoring period.

II. The system may resume triennial monitoring for lead and copper at the tap at the reduced number of sites after it demonstrates through subsequent rounds of monitoring that it meets the action level criteria for lead and copper and has received approval from the Division that it is appropriate to resume triennial monitoring.

III. The system may reduce the number of water quality parameter tap water samples required and the frequency with which it collects such samples in accordance with 40 CFR~~, Part~~ § 141.87(e)(1) and (2). Such a system may not resume triennial monitoring for water quality parameters at the tap until it demonstrates that it has re-qualified for triennial monitoring, in accordance with 40 CFR~~, Part~~ § 141.87(e)(2).

(vii) Any water system subject to a reduced monitoring frequency under paragraph (7)(d)(4) shall notify the Division in writing of any upcoming long-term change in treatment or addition of a new source as described in 40 CFR~~, Part~~ § 141.90(a)(3). The Division must review and approve the addition of a new source or long-term change in water treatment before it is implemented by the water system. The Division may require the system to resume sampling in accordance with paragraph (7)(d)3. and collect the number of samples specified for standard monitoring under paragraph (7)(c)~~-~~or take other appropriate steps such as increased water quality parameter monitoring or re-evaluation of its corrosion control treatment given the potentially different water quality considerations.

(e) Additional monitoring by systems. The results of any monitoring conducted in addition to the minimum requirements of this section shall be considered by the system and the Division in making any determinations (i.e., calculating the 90th percentile lead or copper level) under this subpart or 40 CFR ~~Part~~ § 141.82.

(f) Invalidation of lead or copper tap water samples. A sample invalidated under this paragraph does not count toward determining lead or copper 90th percentile levels under paragraph (1)(c) or toward meeting the minimum monitoring requirements of paragraph (7)(c).

1. The Division may invalidate a lead or copper tap water sample if at least one of the following conditions is met.

(i) The laboratory establishes that improper sample analysis caused erroneous results.

(ii) The Division determines that the sample was taken from a site that did not meet the site selection criteria of this rule.

(iii) The sample container was damaged in transit.

(iv) There is substantial reason to believe that the sample was subject to tampering.

2. The system must report the results of all samples to the Division and all supporting documentation for samples the system believes should be invalidated.
3. To invalidate a sample under paragraph (7)(f)1., the decision and the rationale for the decision must be documented in writing. The Division may not invalidate a sample solely on the grounds that a follow-up sample result is higher or lower than that of the original sample.
4. The water system must collect replacement samples for any samples invalidated under this section if, after the invalidation of one or more samples, the system has too few samples to meet the minimum requirements of paragraph (7)(c). Any such replacement samples must be taken as soon as possible, but no later than 20 days after the date the Division invalidates the sample or by the end of the applicable monitoring period, whichever occurs later. Replacement samples taken after the end of the applicable monitoring period shall not be used to meet the monitoring requirements of a subsequent monitoring period. The replacement samples shall be taken at the same locations as the invalidated samples or, if that is not possible, at locations other than those already used for sampling during the monitoring period.
(g) Monitoring waivers for small systems. Any small system that meets the criteria of 40 CFR, ~~Section~~ § 141.86(g) may apply to the Division to reduce the frequency of monitoring for lead and copper in accordance with the requirements of 40 CFR ~~Section~~ § 141.86 (g).
(8) **Monitoring Requirements for Water Quality Parameters**. All large water systems and all small and medium-size systems that exceed the lead or copper action level shall monitor water quality parameters in addition to lead and copper in accordance with this paragraph. The requirements of this paragraph are summarized in a table at the end of 40 CFR~~, Part~~ § 141.87.
(a) Systems will have to monitor water quality parameters at different locations.
1. Representative taps throughout the distribution system (system can use total coliform sample sites). The system should take into account the number of persons served, the different sources of water, the different treatment methods employed by the system, and seasonal variability.
2. Samples are to be collected of the treated water from each source before entry point to the distribution system. If the system draws water from more than one source and the sources are combined before distribution, the system must sample at an entry point to the distribution system during periods of normal operating conditions (i.e., when water is representative of all sources being used).
3. Number of samples.
(i) Systems shall collect two tap samples for applicable water quality parameters during each monitoring period as described in paragraphs (8)(b) thru (8)(e). The following number of sites is required:
Distribution System Tap Sampling Requirements for Water Quality Parameters. (Other Than Lead and Copper)

System Size Population Served	**Number of Distribution Sampling Sites Base Monitoring**
100,001 or more	25
10,001 to 100,000	10
3,301 to 10,000	3
501 to 3,300	2
101 to 500	1
100 or fewer	1

(ii) Except as provided in paragraph (8)(c), systems shall collect two samples for each water quality parameter at each entry point to the distribution system during each monitoring period as described in paragraph (8)(b). During each monitoring period specified in paragraphs (8)(c)-(8)(e), systems shall collect one sample for each applicable water quality parameter at each entry point to the distribution system.
(b) Initial Sampling - All large water systems shall measure the water quality parameters listed below at distribution system taps and at each entry point to the distribution system during each six-month monitoring period (specified in paragraph (7)(d) 1.).
1. pH;
2. alkalinity;
3. calcium;
4. conductivity;
5. orthophosphate, when an inhibitor containing phosphate is used;
6. silica, when an inhibitor containing silica is used;
7. Water temperature.
(c) Monitoring after installation of corrosion control. All large systems which install optimal corrosion control treatment according to paragraph (7)(d) 2.(i) shall measure water quality parameters at the locations and frequencies listed below during each six month monitoring period. All small or medium size systems which install optimal corrosion treatment shall conduct such monitoring during each six-month monitoring period specified in paragraph (7)(d) 2.(ii) only when the system exceeds the lead and copper action level.
1. At the required number of distribution system sites/taps, two samples every six months for:
(i) pH;
(ii) alkalinity;
(iii) orthophosphate, when an inhibitor containing phosphate is used;
(iv) silica, when an inhibitor containing silica is used;
(v) calcium;
2. At each entry point to the distribution system, one sample every two weeks for:
(i) pH;
(ii) when alkalinity is adjusted as part of optimal corrosion control, a reading of the dosage rate of the chemical used to adjust alkalinity, and the alkalinity concentration.
(iii) when a corrosion inhibitor is used as part of optimal corrosion control, a reading of the dosage rate of the inhibitor used, and the concentration of orthophosphate or silica.
(d) Monitoring after the Division specifies water quality parameter values for optimal corrosion control will be as follows. The Division will specify the values for applicable water quality control parameters reflecting optimal corrosion control treatment in accordance with 40 CFR ~~Part,~~ § 141.82(f). All large systems shall measure the applicable water quality parameters in accordance with paragraph (8)(c) and determine compliance with the requirements of paragraph (7)(d) 3. every six months with the first six-month period to begin on January 1 or July 1, whichever comes first, after the Division specifies optimal values under 40 CFR~~, Part~~ § 141.82(f). Any small or medium-size system shall conduct such monitoring during each six-month period specified in this paragraph in which the system exceeds the lead and/or copper action level(s). For any such small and medium-size system that is subject to a reduced monitoring frequency pursuant to 391-3-5-.25(7)(d) 4. at the time of the action level exceedance, the start of the applicable six-month period under this paragraph shall coincide with the start of the applicable monitoring period under paragraph (7)(d) 4. Compliance with the division-

designated optimal water quality parameter values shall be determined as specified under paragraph (7)(d) 3.

(e) Reduced monitoring for water quality parameters.

1. Any water system that maintains the range of values for the water quality parameters reflecting optimal corrosion control treatment during each of two consecutive six-month monitoring periods under paragraph (8)(d) shall continue monitoring at the entry point(s) to the distribution system as specified in paragraph (8)(c)2.. Such system may collect two tap samples for applicable water quality parameters from the following reduced number of sites during each six-month monitoring period.

System Size Population Served	**Number of Distribution Sampling Sites Reduced Monitoring**
100,001 or more	10
10,001 to 100,000	7
3,301 to 10,000	3
501 to 3,300	2
101 to 500	1
100 or fewer	1

2. (i) Any water system that maintains the range of values for the water quality parameters reflecting optimal corrosion control treatment specified by the Division during three consecutive years of monitoring may reduce the frequency with which it collects the number of tap samples for applicable water quality parameters specified in paragraph (8)(e)1. from every six months to annually. This sampling begins during the calendar year immediately following the end of the monitoring period in which the third consecutive year of six-month monitoring occurs. Any water system that maintains the range of values for the water quality parameters reflecting optimal corrosion control treatment specified by the Division under 40 CFR ~~Part~~ § 141.82(f) or Rule 391-3-5-.25(3) during three consecutive years of annual monitoring under this paragraph may reduce the frequency with which it collects the number of tap samples for applicable water quality parameters from annually to every three years. This sampling begins no later than the third calendar year following the end of the monitoring period in which the third consecutive year of monitoring occurs.

(ii) A water system may reduce the frequency with which it collects tap samples for applicable water quality parameters specified in paragraph (8)(e)1. to every three years if it demonstrates during two consecutive monitoring periods that its tap water lead level at the 90th percentile is less than or equal to the practical quantitation limit (PQL) for lead specified in paragraph (10), that its tap water copper level is less than or equal to 0.65 mg/L for copper in paragraph (2)(c), and that it also has maintained the range of values for the water quality parameters reflecting optimal corrosion control treatment specified by the division under paragraph (2)(d). Monitoring conducted every three years must be done no later than every third calendar year.

3. A water system that conducts sampling annually shall collect these samples evenly throughout the year so as to reflect seasonal variability.

4. Any water system subject to reduced monitoring frequency that fails to operate at or above the minimum value within the range of values for the water quality parameters specified by the Division under paragraph (3) shall resume distribution system tap water sampling in accordance with the number and frequency requirements in paragraph (8)(d). Such a water system may resume annual monitoring for water quality parameters at the tap at the reduced number of sites

specified under paragraph (8)(e) 1. after it has completed two subsequent consecutive six-month rounds of monitoring that meet the criteria of that paragraph or may resume triennial monitoring for water quality parameters at the tap at the reduced number of sites after the water system demonstrates through subsequent rounds of monitoring that the water system meets the criteria of either paragraphs (8)(e)2.(i) or (e)2.(ii) or both.
(f) Additional monitoring by systems must be approved by the Division.
(9) **Monitoring Requirements for Lead and Copper in Source Water**.
(a) Sample location, collection methods, and number of samples.
1. A water system that fails to meet the lead or copper action level on the basis of routine tap samples collected in accordance with paragraph (7) shall collect lead and copper source water samples in accordance with the requirements regarding sample location, number of samples, and collection methods specified in 40 CFR~~, Part~~ § 141.88(a)(1)(i)-(iv) and (A)-(B).
2. Where the results of sampling indicate an exceedance of maximum permissible source water levels established under paragraph (4)(b) 4., the Division may require that one additional sample be collected as soon as possible after the initial sample was taken (but not to exceed two weeks) at the same sampling point. If a Division-required confirmation sample is taken for lead or copper, then the results of the initial and confirmation sample shall be averaged in determining compliance with the Division-specified maximum permissible levels. Any sample value below the detection limit shall be considered to be zero. Any value above the detection limit but below the PQL shall either be considered as the measured value or be considered one-half the PQL.
(b) Monitoring frequency after system exceeds tap water action level. Any system that exceeds the lead or copper action level during routine tap water monitoring shall collect one source water sample from each entry point to the distribution system no later than six months after the end of the monitoring period during which the action level was exceeded. For monitoring periods that are annual or less frequent, the end of the monitoring period is September 30 of the calendar year in which sampling occurs, or if the Division has established an alternate monitoring period, the last day of that period.
(c) Monitoring frequency after installation of source water treatment. Any system which installs source water treatment pursuant to paragraph (4)(a) 2. shall collect an additional source water sample from each entry point to the distribution system during two consecutive six-month monitoring periods by the deadline specified in paragraph (4)(a) 4.
(d) Monitoring frequency after Division specifies maximum permissible source water levels or determines that source water treatment is not needed.
1. A system shall monitor at the frequency specified below in cases where the Division specifies maximum permissible source water levels under paragraph (4)(b) 4. or determines that the system is not required to install source water treatment under paragraph (4)(b) 2.
(i) A water system using only groundwater shall collect samples once during the three-year compliance period (as that term is defined in Rule 391-3-5-.02) in effect when the applicable Division determination under paragraph (9)(d)1. is made. Such systems shall collect samples once during each subsequent compliance period. Triennial samples shall be collected every third year.
(ii) A water system using surface water (or a combination of surface and groundwater) shall collect samples once during each year, the first annual monitoring period to begin during the year in which the applicable Division determination is made under paragraph (9)(d)1. of this.

2. A system is not required to conduct source water sampling for lead and/or copper if the system meets the action level for the specific contaminant in tap water samples during the entire source water sampling period applicable to the system under paragraphs (9)(d)1.(i) or (ii).
(e) Reduced monitoring frequency.
1. A water system using only ground water may reduce the monitoring frequency for lead and copper in source water to once during each nine-year compliance cycle, as is defined in 40 CFR~~,~~ ~~Part~~ § 141.2, provided the samples are collected no later than every ninth calendar year and if the system meets one of the following:
(i) The system demonstrates that finished drinking water entering the distribution system has been maintained below the maximum permissible lead and copper concentrations specified by the Division under Rule 391-3-5-.25(1)(c) during at least three consecutive compliance periods under paragraph (9)(d)1.; or
(ii) The Division has determined that source water treatment is not needed and the system demonstrates that, at least three consecutive compliance periods in which sampling was conducted under paragraph (9)(d)1., the concentration of lead in source water was less than or equal to 0.005 mg/L and the concentration of copper in source water was less than or equal to 0.65 mg/L.
2. A water system using surface water or a combination of surface and groundwater may reduce the monitoring frequency in paragraph (9)(d)1. to once during each nine-year compliance cycle, as is defined in 40 CFR~~, Part~~ § 141.2, provided the samples are collected no later than every ninth calendar year and if the system meets one of the following:
(i) The system demonstrates that finished drinking water entering the distribution system has been maintained below the maximum permissible lead and copper concentrations specified by the Division under paragraph (1)(c) during at least three consecutive years; or
(ii) The Division has determined that source water treatment is not needed and the system demonstrates that, for at least three consecutive years, the concentration of lead in source water was less than or equal to 0.005 mg/L and the concentration of copper in source water was less than or equal to 0.65 mg/L.
3. A water system that uses a new source of water is not eligible for reduced monitoring for lead and/or copper until concentrations in samples collected from the new source during three consecutive monitoring periods are below the maximum permissible lead and copper concentrations specified in paragraph (4)(a) 5.
(10) **Analytical Methods**. Analyses for lead, copper, pH, conductivity, calcium, alkalinity, orthophosphate, silica, and temperature shall be conducted in accordance with 40 CFR~~, Part~~ § 141.89.
(11) **Reporting Requirements**. All water systems shall report all information to the Division in accordance with 40 CFR~~, Part~~ § 141.90.
(12) **Record Keeping Requirements**. All systems subject to the requirements of this rule shall retain on its premises original records of all sampling data and analyses, reports, surveys, letters, evaluations, schedules, Division determinations, and any other information required in accordance with 40 CFR~~, Part~~ § 141.91.
(13) **Treatment Techniques**.
(a) These regulations establish treatment techniques in lieu of maximum contaminant levels for acrylamide and epichlorohydrin.
(b) Each public water system must certify annually in writing to the Division (using third party or manufacturer's certification) that when acrylamide and epichlorohydrin are used in drinking

water systems, the combination (or product) of dose and monomer level does not exceed the levels specified as follows:
1. Acrylamide = 0.05% dosed at 1 ppm (or equivalent);
2. Epichlorohydrin = 0.01% dosed at 20 ppm (or equivalent); certifications can rely on manufacturers or third parties, as approved by the Division.
(14) All water systems must develop an initial lead service line inventory by October 16, 2024 in accordance with 40 CFR § 141.84(a), and submit it to the Division in accordance with 40 CFR § 141.90(e) in an electronic format prescribed by the Director.

Authority: O.C.G.A. Sec. 12-5-170 *et seq*.