

333-061-0034

Treatment Requirements and Performance Standards for Corrosion Control

- (1) General requirements:
 - (a) All Community and Non-Transient Non-Community water systems required to provide corrosion control shall install and operate optimal corrosion control treatment.
 - (b) Any water system that complies with the applicable corrosion control treatment requirements specified by the Authority under sections (2) and (3) of this rule shall be deemed in compliance with the treatment requirement contained in subsection (1)(a) of this rule.
 - (c) Any system exceeding the lead or copper action level shall implement all applicable source water treatment requirements specified by the Authority under section (4) of this rule.
 - (d) Any system exceeding the lead action level shall implement the public education requirements contained in section (5) of this rule.
 - (e) 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 shall be completed in accordance with OAR 333-061-0036(1)(a) and 333-061-0036(2)(c).
 - (f) Systems shall report to the Authority all required treatment provision information and maintain appropriate records as prescribed in OAR 333-061-0034 and 0040.
 - (g) Failure to comply with the applicable requirements prescribed in these rules, shall constitute a violation of the national primary drinking water regulations for lead and/or copper.
- (2) Systems shall complete the corrosion control treatment requirements as prescribed in section (3) of this rule as follows:
 - (a) Large systems (serving >50,000 persons) shall complete the following corrosion control treatment steps, unless it is deemed to have optimized corrosion control as prescribed in paragraphs (d)(B) or (d)(C) of this section:
 - (A) Systems shall conduct initial tap and water quality parameter monitoring for two consecutive six-month periods as prescribed in OAR 333-061-0036(2)(c)(D)(i) and (2)(c)(F) beginning January 1, 1992;
 - (B) Systems shall complete corrosion control studies prescribed in subsection (3)(c) of this rule by July 1, 1994;
 - (C) The Authority shall designate optimal corrosion control treatment as prescribed in subsection (3)(i) of this rule by January 1, 1995;
 - (D) Systems shall install optimal corrosion control treatment as prescribed in subsection (3)(k) of this rule by January 1, 1997;
 - (E) Systems shall complete follow-up sampling as prescribed in OAR 333-061-0036(2)(c)(D)(ii) and (2)(c)(F)(iv) by January 1, 1998;

- (F) The Authority shall review installation of treatment and designate optimal water quality control parameters as prescribed in subsection (3)(l) of this rule by July 1, 1998.
 - (G) Systems shall operate in compliance with the Authority-specified optimal water quality control parameters as prescribed in subsection (3)(m) of this rule and continue to conduct tap sampling.
- (b) Medium systems (serving 3,301 to 50,000 persons) shall complete the following corrosion control treatment steps, unless it is deemed to have optimized corrosion control under paragraph (d)(A),(d)(B), or (d)(C) of this section:
- (A) Systems shall conduct initial tap sampling beginning July 1,1992 until the system either exceeds the lead or copper action level or becomes eligible for reduced monitoring under OAR 333-061-0036(2)(c)(D)(iv). A system exceeding the lead or copper action level shall recommend optimal corrosion control treatment within six months after the end of the monitoring period during which it exceeds one of the action levels.
 - (B) Within 12 months after the end of the monitoring period during which a system exceeds the lead or copper action level, the Authority may require the system to perform corrosion control studies. If the Authority does not require the system to perform such studies, the Authority shall specify optimal corrosion control treatment within the following time frames:
 - (i) For medium systems, within 18 months after the end of the monitoring period during which such system exceeds the lead or copper action level;
 - (ii) For small systems, within 24 months after the end of the monitoring period during which such system exceeds the lead or copper action level.
 - (C) If the Authority requires a system to perform corrosion control studies under paragraph (2)(b)(B) of this rule, the system shall complete the studies within 18 months after the Authority requires that such studies be conducted.
 - (D) If the system has performed corrosion control studies under paragraph (2)(b)(B) of this rule, the Authority shall designate optimal corrosion control treatment within 6 months after completion of paragraph (2)(b)(C) of this rule.
 - (E) Systems shall install optimal corrosion control treatment within 24 months after the Authority designates such treatment.
 - (F) Systems shall complete follow-up sampling within 36 months after the Authority designates optimal corrosion control treatment.

- (G) The Authority shall review the system's installation of treatment and designate optimal water quality control parameters within 6 months after completion of follow-up sampling.
- (H) Systems shall operate in compliance with the Authority-designated optimal water quality control parameters and continue to conduct tap sampling.
- (c) Small systems (serving 3,300 or less persons) shall complete the corrosion control treatment steps prescribed in subsection (2)(b) of this rule, unless it is deemed to have optimized corrosion control under paragraphs (d)(A), (d)(B), or (d)(C) of this section. Small systems shall conduct initial tap sampling beginning July 1, 1993.
- (d) A system is deemed to have optimized corrosion control and is not required to complete the applicable corrosion control treatment steps identified in this section if the system satisfies one of the following criteria. Any system deemed to have optimized corrosion control under this rule, and which has treatment in place, shall continue to operate and maintain optimal corrosion control treatment and meet any requirements that the Authority determines appropriate to ensure optimal corrosion control treatment is maintained:
 - (A) A small or medium-size water system meets the lead and copper action levels during each of two consecutive six-month monitoring periods conducted in accordance with OAR 333-061-0036(2)(c)(A) through (E).
 - (B) Any water system that demonstrates to the satisfaction of the Authority that it has conducted activities equivalent to the corrosion control steps applicable to such system under this section. If the Authority 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 subsection (3)(l) of this rule. Water systems deemed to have optimized corrosion control under this paragraph shall operate in compliance with the Authority-designated optimal water quality control parameters in accordance with subsection (3)(m) of this rule and continue to conduct lead and copper tap and water quality parameter sampling in accordance with OAR 333-061-0036(2)(c)(D)(iii) and OAR 333-061-0036(2)(c)(F)(v), respectively. A system shall provide the Authority 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 subsection (3)(d) of this rule;
 - (ii) A report explaining the test methods used by the water system to evaluate the corrosion control treatments listed in subsection (3)(c) of this rule, 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; and
 - (iv) The results of tap water samples collected in accordance with OAR 333-061-0036(2)(c)(A) through (E) at least once every six months for one year after corrosion control has been installed.
- (C) Any water system is deemed to have optimized corrosion control if it submits results of tap water monitoring and source water monitoring conducted in accordance with OAR 333-061-0036(2)(c)(A) through (E), (G) and (H) that demonstrates for two consecutive six-month monitoring periods that the difference between the 90th percentile tap water lead level computed under OAR 333-061-0030(1)(c)(A) and the highest source water lead concentration, is less than 0.005 mg/l:
- (i) Those systems whose highest source water lead level is below the MDL may also be deemed to have optimized corrosion control if the 90th percentile tap water lead level is less than or equal to the PQL for lead for two consecutive 6-month monitoring periods;
 - (ii) Any water system deemed to have optimized corrosion control shall continue monitoring for lead and copper at the tap no less frequently than once every three years using the reduced number of sampling sites and collecting the samples at the specified times and locations. Any such system that has not conducted a round of monitoring since September 30, 1997, shall complete a round of monitoring no later than September 30, 2000;
 - (iii) Any water system deemed to have optimized corrosion control shall notify the Authority in writing of any upcoming long-term change in treatment (eg. changing disinfectants or corrosion control chemicals) or the addition of a new source. The Authority 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 Authority may require any such system to conduct additional monitoring or to take other action the Authority deems appropriate to ensure that such systems maintain minimal levels of corrosion in the distribution system;
 - (iv) As of July 2001, a system is not deemed to have optimized corrosion control 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 shall implement corrosion control treatment in accordance with the deadlines prescribed in subsections (b) and (c) of this rule. Any such large system shall adhere to the schedule specified 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.
 - (e) 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 cease completing the treatment steps whenever the system meets both action levels during each of two consecutive monitoring periods conducted pursuant to OAR 333-061-0036(2)(c)(A) through (E) and submits the results to the Authority. If any such water system thereafter exceeds the lead or copper action level during any monitoring period, the system (or the Authority, 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 Authority may require a system to repeat treatment steps previously completed by the system where the Authority determines that this is necessary to implement properly the treatment requirements of this section. The Authority shall notify the system in writing of such a determination and explain the basis for its decision. The requirement for any small- or medium- size system to implement corrosion control treatment steps in accordance with subsection (2)(b) of this rule (including systems deemed to have optimized corrosion control under paragraph (2)(d)(A) of this rule) is triggered whenever any small- or medium- size system exceeds the lead or copper action level.
- (3) Each system shall complete the corrosion control treatment requirements described below which are applicable to such system under section (2) of this rule:
- (a) Based upon the results of lead and copper tap monitoring and water quality parameter monitoring, small and medium-size water systems exceeding the lead or copper action level shall recommend installation of one or more of the corrosion control treatments listed in subsection (3)(c) of this rule which the system believes constitutes optimal corrosion control for that system. The Authority may require the system to conduct additional water quality parameter monitoring in accordance with OAR 333-061-0036(2)(c)(F)(iii) to assist the Authority in reviewing the system's recommendation.
 - (b) The Authority may require any small or medium-size system that exceeds the lead or copper action level to perform corrosion control studies under subsection (3)(c) of this rule to identify optimal corrosion control treatment for the system.

- (c) Any public water system performing corrosion control studies shall evaluate the effectiveness of each of the treatments which follow, and, if appropriate, combinations of the treatments which follow to identify the optimal corrosion control treatment for that system. The water system shall evaluate each of the corrosion control treatments using either pipe rig/loop tests, metal coupon tests, partial-system tests, or analyses based on documented analogous treatments with other systems of similar size, water chemistry and distribution system configuration:
 - (A) Alkalinity and pH adjustment;
 - (B) Calcium hardness adjustment; and
 - (C) The addition of a phosphate or silicate based corrosion inhibitor at a concentration sufficient to maintain an effective residual concentration in all test tap samples.
- (d) The water system shall measure the following water quality parameters in any tests conducted under this subsection before and after evaluating the corrosion control treatments listed in subsection (3)(c) of this rule:
 - (A) Lead;
 - (B) Copper;
 - (C) pH;
 - (D) Alkalinity;
 - (E) Calcium;
 - (F) Conductivity;
 - (G) Orthophosphate (when an inhibitor containing a phosphate compound is used);
 - (H) Silicate (when an inhibitor containing a silicate compound is used);
 - (I) Water temperature.
- (e) Any additional chemical treatment approaches considered by the water system shall be evaluated by the water system by conducting appropriate studies and analyses approved by the Authority that are equivalent in scope to the studies and analyses required in this section.
- (f) The water system shall identify all chemical or physical constraints that limit or prohibit the use of a particular corrosion control treatment and document such constraints with at least one of the following:
 - (A) Data and documentation showing that a particular corrosion control treatment has adversely affected other water treatment processes when used by another water system with comparable water quality characteristics; and/or
 - (B) Data and documentation demonstrating that the water system has previously attempted to evaluate a particular corrosion control treatment and has found that the treatment is ineffective or adversely affects other water quality treatment processes.

- (g) The water system shall evaluate the effect of the chemicals used for corrosion control treatment on other water quality treatment processes.
- (h) On the basis of an analysis of the data generated during each evaluation, the water system shall recommend to the Authority in writing the treatment option that the corrosion control studies indicate constitutes optimal corrosion control treatment for that system. The water system shall provide a rationale for its recommendation along with all supporting documentation specified in subsections (3)(c) through (g) of this rule.
- (i) Based upon consideration of available information including, where applicable, studies performed under subsection (3)(c) through (g) of this rule and a system's recommended treatment alternative, the Authority shall either approve the corrosion control treatment option recommended by the system, or designate alternative corrosion control treatment(s) from among those listed in subsection (3)(c) of this rule. When designating optimal treatment the Authority shall consider the effects that additional corrosion control treatment will have on water quality parameters and on other water quality treatment processes.
- (j) The Authority shall notify the system of its decision on optimal corrosion control treatment in writing and explain the basis for this determination. If the Authority requests additional information to aid its review, the water system shall provide the information.
- (k) Each system shall properly install and operate throughout its distribution system the optimal corrosion control treatment designated by the Authority under subsection (3)(i) of this rule.
- (l) The Authority shall evaluate the results of all lead and copper tap samples and water quality parameter samples submitted by the water system and determine whether the system has properly installed and operated the optimal corrosion control treatment designated by the Authority in subsection (3)(i) of this rule. Upon reviewing the results of tap water and water quality parameter monitoring by the system, both before and after the system installs optimal corrosion control treatment, the Authority shall designate values for the applicable water quality control parameters as listed below and shall be those that the Authority determines to reflect optimal corrosion control treatment for the system. The Authority may designate values for additional water quality control parameters determined by the Authority to reflect optimal corrosion control for the system. The Authority shall notify the system in writing of these determinations and explain the basis for its decisions.
 - (A) A minimum value or a range of values for pH measured at each entry point to the distribution system;
 - (B) A minimum pH value, measured in all tap samples. Such value shall be 7.0, unless the Authority determines that meeting a pH level of 7.0

- is not technologically feasible or is not necessary for the system to optimize corrosion control;
- (C) If a corrosion inhibitor is used, a minimum concentration or a range of concentrations for the inhibitor, measured at each entry point to the distribution system and in all tap samples, that the Authority determines is necessary to form a passivating film on the interior walls of the pipes of the distribution system;
 - (D) If alkalinity is adjusted as part of optimal corrosion control treatment, a minimum concentration or a range of concentrations for alkalinity, measured at each entry point to the distribution system and in all tap samples;
 - (E) If calcium carbonate stabilization is used as part of corrosion control, a minimum concentration or a range of concentrations for calcium, measured in all tap samples.
- (m) All systems that have installed treatment optimizing corrosion control shall continue to operate and maintain optimal corrosion control treatment, including maintaining water quality parameters at or above minimum values or within ranges designated by the Authority under subsection (3)(1) of this rule for all samples collected under OAR 333-061-0036(2)(c)(F)(v)-(vii). Compliance shall be determined every six months, as specified under OAR 333-061-0036(2)(c)(F)(v). A water system is out of compliance for a six-month period if it has excursions for any Authority-designated water quality parameter on more than nine days during the period. An excursion occurs whenever the daily value for one or more of the water quality parameters measured at a sampling location is below the minimum value or outside the range designated by the Authority. Daily values are calculated as follows:
- (A) On days when more than one measurement for the water quality parameter is collected at the sampling location, the daily value shall be the average of all results collected during the day regardless of whether they are collected through continuous monitoring, grab sampling or a combination of both;
 - (B) On days when only one measurement for the water quality parameter is collected at the sampling location, the daily value shall be the result of that measurement.
 - (C) On days when no measurement is collected for the water quality parameter at the sampling location, the daily value shall be the daily value calculated on the most recent day on which the water quality parameter was measured at the sample site;
- (n) Upon its own initiative or in response to a request by a water system or other interested party, the Authority may modify its determination of the optimal corrosion control treatment under subsection (3)(i) of this rule or optimal water quality control parameters under subsection (3)(1) of this rule. 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 Authority may modify its determination where it concludes that such change is necessary to ensure that the system continues to optimize corrosion control treatment. A revised determination shall be made in writing, set forth the new treatment requirements, explain the basis for the Authority's decision, and provide an implementation schedule for completing the treatment modifications.

- (4) Source water treatment requirements:
- (a) Systems shall complete the applicable source water monitoring and treatment requirements prescribed in subsection (4)(b) of this rule and OAR 333-061-0036(2)(c)(A) through (E), (G) and (H) by the following deadlines:
 - (A) A system exceeding the lead or copper action level shall complete lead and copper source water monitoring as prescribed in OAR 333-061-0036(2)(c)(G) and (H) and make a treatment recommendation to the Authority as prescribed in paragraph (4)(b)(A) of this rule no later than 180 days after the end of the monitoring period during which the lead or copper action level was exceeded.
 - (B) The Authority shall make a determination regarding source water treatment as prescribed in paragraph (4)(b)(B) of this rule within 6 months after submission of monitoring results required under paragraph (4)(a)(A) of this rule.
 - (C) If the Authority requires installation of source water treatment, the system shall install the treatment as prescribed in paragraph (4)(b)(C) of this rule within 24 months after completion of requirements prescribed in paragraph (4)(a)(B) of this rule.
 - (D) The system shall complete follow-up tap water monitoring as prescribed in OAR 333-061-0036(2)(c)(D)(ii) and source water monitoring as prescribed in OAR 333-061-0036(2)(c)(I) within 36 months after completion of requirements prescribed in paragraph (4)(a)(B) of this rule.
 - (E) The Authority shall review the system's installation and operation of source water treatment and specify maximum permissible source water levels as prescribed in paragraph (4)(b)(D) of this rule within 6 months after completion of requirements prescribed in paragraph (4)(a)(D) of this rule.
 - (F) The system shall operate in compliance with the Authority-specified maximum permissible lead and copper source water levels as prescribed in paragraph (4)(b)(D) of this rule and continue source water monitoring as prescribed in OAR 333-061-0036(2)(c)(J).
 - (b) Source water treatment description:
 - (A) Any system which exceeds the lead or copper action level shall recommend in writing to the Authority the installation and operation

of one of the source water treatments listed in paragraph (4)(b)(B) of this rule. 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.

- (B) The Authority 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 Authority determines that treatment is needed, the Authority 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 from among the following: ion exchange, reverse osmosis, lime softening or coagulation/filtration. If the Authority requests additional information to aid in its review, the water system shall provide the information by the date specified by the Authority in its request. The Authority shall notify the system in writing of its determination and set forth the basis for its decision.
- (C) Each system shall properly install and operate the source water treatment designated by the Authority under paragraph (4)(b)(B) of this rule.
- (D) The Authority 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 Authority. Based upon its review, the Authority 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 Authority shall notify the system in writing and explain the basis for its decision.
- (E) Each water system shall maintain lead and copper levels below the maximum permissible concentrations designated by the Authority at each sampling point monitored in accordance with OAR 333-061-0036(2)(c)(G) through (K). The system is out of compliance with this paragraph if the level of lead or copper at any sampling point is greater than the maximum permissible concentration designated by the Authority.
- (F) Upon its own initiative or in response to a request by a water system or other interested party, the Authority may modify its determination of the source water treatment under paragraph (4)(b)(B) of this rule, or maximum permissible lead and copper concentrations for finished water entering the distribution system under paragraph (4)(b)(D) of this rule. 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 Authority 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 Authority's decision, and provide an implementation schedule for completing the treatment modifications.

- (5) All water systems must deliver a consumer notice of lead tap water monitoring results to persons served by the water system at sites that are tested, as specified in subsection (5)(e) of this rule. Water systems that exceed the lead action level must sample the tap water of any customer who requests it in accordance with subsection (5)(d) of this rule. A water system that exceeds the lead action level based on tap water samples collected in accordance with OAR 333-061-0036(2)(c)(A) through (E) shall deliver the public education materials contained in subsections (5)(a) and (b) of this rule in accordance with the requirements in subsection (5)(c) of this rule.
- (a) Content of written materials. Community and non-transient non-community water system(s) shall include the following elements in all of the printed materials it distributes through its lead public education program in the same order listed below. Paragraphs (5)(a)(A), (B) and (F) of this rule must be included in the materials exactly as written except for the text in braces in these paragraphs for which the system must include system-specific information. Any additional information presented by a system shall be consistent with the information below and be in plain language that can be understood by the general public. Water systems must submit all written public education materials to the Authority prior to delivery.
- (A) **IMPORTANT INFORMATION ABOUT LEAD IN YOUR DRINKING WATER.** {INSERT NAME OF WATER SYSTEM} found elevated levels of lead in drinking water in some homes/buildings. Lead can cause serious health problems, especially for pregnant women and young children. Please read this information closely to see what you can do to reduce lead in your drinking water.
- (B) **HEALTH EFFECTS OF LEAD:** Lead can cause serious health problems if too much enters your body from drinking water or other sources. It can cause damage to the brain and kidneys, and can interfere with the production of red blood cells that carry oxygen to all parts of the body. The greatest risk of lead exposure is to infants, young children and pregnant women. Scientists have linked the effects of lead on the brain with lowered IQ in children. Adults with kidney problems and high blood pressure can be affected by low levels of lead more than healthy adults. Lead is stored in the bones, and it can

be released later in life. During pregnancy, the child receives lead from the mother's bones, which may affect brain development.

(C) SOURCES OF LEAD:

- (i) Explain what lead is.
- (ii) Explain the possible sources of lead in drinking water and how lead enters drinking water. Include information on home/building plumbing materials and service lines that contain lead.
- (iii) Discuss other important sources of lead exposure in addition to drinking water (e.g., paint).

(D) STEPS THE CONSUMER CAN TAKE TO REDUCE THEIR EXPOSURE TO LEAD IN DRINKING WATER:

- (i) Encourage running the water to flush out the lead.
- (ii) Explain concerns with using hot water from the tap and specifically caution against the use of hot water for preparing baby formula.
- (iii) Explain that boiling water does not reduce lead levels.
- (iv) Discuss other options consumers can take to reduce exposure to lead in drinking water, such as alternative sources or treatment of water.
- (v) Suggest that parents have their child's blood tested for lead.

(E) Explain why there are elevated levels of lead in the system's drinking water (if known) and what the water system is doing to reduce the lead levels in homes/buildings in this area.

(F) For more information, call us at {INSERT YOUR NUMBER}, {(if applicable include the following) or visit our web site at {INSERT YOUR WEB SITE HERE}}. For more information on reducing lead exposure around your home/building and the health effects of lead, visit EPA's web site at <http://www.epa.gov/lead> or contact your health care provider.

(b) Community water systems must also:

- (A) Tell consumers how to get their water tested;
- (B) Discuss lead in plumbing components and the difference between low lead and lead free.

(c) Delivery of public education materials.

- (A) For public water systems serving a large proportion of non-English speaking consumers, as determined by the Authority, the public education materials must contain information in the appropriate language(s) regarding the importance of the notice or contain a telephone number or address where persons served may contact the water system to obtain a translated copy of the public education materials or to request assistance in the appropriate language.

- (B) A community water system that exceeds the lead action level on the basis of tap water samples collected in accordance with tap water monitoring requirements of these rules and that is not already conducting public education tasks under this rule must conduct the public education tasks under this section within 60 days after the end of the monitoring period in which the exceedance occurred.
- (i) Deliver printed materials meeting the content requirements of subsections (5)(a) and (5)(b) of this rule to all bill paying customers;
 - (ii) Contact customers who are most at risk by delivering education materials that meet the content requirements of subsections (5)(a) and (5)(b) of this rule to local public health agencies even if they are not located within the water system's service area, along with an informational notice that encourages distribution to all the organization's potentially affected customers or community water system's users. The water system must contact the local public health agencies directly by phone or in person. The local public health agencies may provide a specific list of additional community based organizations serving target populations, which may include organizations outside the service area of the water system. If such lists are provided, systems must deliver education materials that meet the content requirements of subsections (5)(a) and (5)(b) of this rule to all organizations on the provided lists.
 - (iii) Contact customers who are most at risk by delivering materials that meet the content requirements of subsections (5)(a) and (5)(b) of this rule to public and private schools or school boards; Women, Infants and children (WIC), and Head Start programs; public and private hospitals and medical clinics; Pediatricians; family planning clinics; and local welfare agencies located within the water system's service area along with an informational notice that encourages distribution to all of the organization's potentially affected customers or community water system's users.
 - (iv) Make a good faith effort to locate licensed childcare centers; public and private preschools; and Obstetricians-Gynecologists and Midwives within the service area and deliver materials that meet the content requirements of subsections (5)(a) and (5)(b) of this rule to them, along with an informational notice that encourages distribution to all potentially affected customers or users. The good faith effort to contact at-risk customers may include requesting a specific contact list of these organizations

from the local public health agencies, even if the agencies are not located within the water system's service area.

- (v) No less often than quarterly, provide information on or in each water bill as long as the system exceeds the action level for lead. The message on the water bill must include the following statement exactly as written except for the text in braces for which the water system must include system-specific information: {INSERT NAME OF WATER SYSTEM} found high levels of lead in drinking water in some homes. Lead can cause serious health problems. For more information please call {INSERT NAME OF WATER SYSTEM}, {(if applicable include the following) or visit our web site at {INSERT YOUR WEB SITE HERE}}. The message or delivery mechanisms can be modified in consultation with the Authority; specifically the Authority may allow a separate mailing of public education materials to customers if the water system cannot place the information on water bills.
 - (vi) Post material meeting the content requirements of subsection (5)(a) and (5)(b) of this rule on the water system's web site if the system serves a population greater than 100,000.
 - (vii) Submit a press release to newspaper, television and radio stations.
 - (viii) In addition to (5)(c)(B)(i) through (vii) of this rule systems must implement at least three activities from the following: public service announcements; paid advertisements; public area information displays; emails to customers; public meetings; household deliveries, targeted individual customer contact; direct material distribution to all multi-family homes and institutions or other methods approved by the Authority. The educational content and selection of these activities must be determined in consultation with the Authority.
 - (ix) For systems that are required to conduct monitoring annually or less frequently, the end of the monitoring period is September 30 of the calendar year in which the sampling occurs, or, if the Authority has established an alternate monitoring period, the last day of that period.
- (C) As long as a community water system exceeds the action level, it must repeat the activities in subsection (5)(c) of this rule as follows:
- (i) A community water system shall repeat the tasks contained in (5)(c)(B)(i),(ii),(iii),(iv) and (viii) of this rule every 12 months.
 - (ii) A community water system shall repeat tasks contained in (5)(c)(B)(v) of this rule with each billing cycle.

- (iii) A community water system serving a population greater than 100,000 shall post and retain material on a publicly accessible web site pursuant to (5)(c)(B)(vi) of this rule.
 - (iv) The community water system shall repeat the task in (5)(c)(B)(vii) of this rule twice every 12 months on a schedule agreed upon with the Authority. The Authority can allow activities in (5)(c)(B) of this rule to extend beyond the 60-day requirement if needed for implementation purposes on a case-by-case basis; however, this extension must be approved in writing by the Authority in advance of the 60-day deadline.
- (D) Within 60 days after the end of the monitoring period in which the exceedance occurred (unless it already is repeating public education tasks), a non-transient non-community water system shall deliver the public education materials specified by (5)(a) of this rule as follows:
 - (i) Post informational posters on lead in drinking water in a public place or common area in each of the buildings served by the system; and
 - (ii) Distribute informational pamphlets and/or brochures on lead in drinking water to each person served by the non-transient non-community water system. The Authority may allow the system to utilize electronic transmission in lieu of or combined with printed materials as long as it achieves at least the same coverage.
 - (iii) For systems that are required to conduct monitoring annually or less frequently, the end of the monitoring period is September 30 of the calendar year in which the sampling occurs, or, if the Authority has established an alternate monitoring period, the last day of that period.
- (E) A non-transient non-community water system shall repeat the tasks contained in (5)(c)(D) at least once during each calendar year in which the system exceeds the action level. The Authority can allow activities to extend beyond the 60-day requirement if needed for implementation purposes on a case-by-case basis, however, this extension must be approved in writing by the Authority in advance of the 60-day deadline.
- (F) A water system may discontinue delivery of public education materials if the system has met the lead action level during the most recent six-month monitoring period conducted pursuant to the monitoring requirements of these rules. Such a system shall recommence public education requirements if it subsequently exceeds the lead action level during any monitoring period.
- (G) A community water system may apply to the Authority, in writing to use only the text specified in (5)(a) of this rule in lieu of the text in

(5)(a) and (5)(b) of this rule and to perform the tasks listed in (5)(c)(D) and (E) in lieu of the tasks in (5)(c)(B) and (C) of this rule if:

- (i) The system is a facility, such as a prison or a hospital, where the population served is not capable of or is prevented from making improvements to plumbing or installing point of use treatment devices: and
 - (ii) The system provides water as part of the cost of services provided and does not separately charge for water consumption.
- (H) A community water system serving 3,300 or fewer people may limit certain aspects of their public education programs as follows:
- (i) With respect to the requirements of (5)(c)(B)(viii), a system serving 3,300 or fewer must implement at least one of the activities listed.
 - (ii) With respect to the requirements of (5)(c)(B)(ii), (iii) and (iv) of this rule, a system serving 3,300 or fewer people may limit the distribution of the public education materials required to facilities and organizations served by the system that are most likely to be visited regularly by pregnant women and children.
 - (iii) With respect to the requirements of (5)(c)(B)(vii) of this rule the Authority may waive this requirement for systems serving 3,300 or fewer persons as long as the system distributes notices to every household served by the system.
- (d) Supplemental monitoring and notification of results. A water system that fails to meet the lead action level on the basis of tap samples collected in accordance with OAR 333-061-0036(2)(c)(A) through (E) shall offer to sample the tap water of any customer who requests it. The system is not required to pay for collecting or analyzing the sample, nor is the system required to collect and analyze the sample itself.
- (e) Notification of results.
- (A) All water systems must provide a notice of the individual tap results from lead tap water monitoring carried out under the monitoring requirements of these rules to the persons served by the water system at the specific sampling site from which the sample was taken (e.g. the occupants of the residence where the tap was tested).
 - (B) A water system must provide the consumer notice as soon as practical, but no later than 30 days after the system learns of the tap monitoring results.
 - (C) The consumer notice must include the results of lead tap water monitoring for the tap that was tested, an explanation of the health effects of lead, list steps consumers can take to reduce exposure to lead in drinking water and contact information for the water utility.

- The notice must also provide the maximum contaminant level goal and the action level for lead and the definitions for these two terms.
- (D) The Consumer notice must be provided to persons served at the tap that was tested, either by mail or by another method approved by the Authority. For example, upon approval by the Authority, a non-transient, non-community water system could post the results on a bulletin board in the facility to allow users to review the information. The system must provide the notice to customers at sample taps tested, including consumers who do not receive water bills.

Stat. Auth.: ORS 448.131

Stats. Implemented: ORS 431.110, 431.150, 448.131, 448.150 & 448.273