status unknown service lines consistent with §141.85(g).

- (5) Community water systems serving 10,000 or fewer persons and Non-transient non-community water systems for which the state has approved or designated lead service line replacement as a compliance option must conduct lead service line replacement as described in §141.93(a)(1). Replacement of lead service lines must be conducted in accordance with the requirements of paragraphs (d) and (e) of this section.
- (6) A water system may cease mandatory lead service line replacement when it has conducted a cumulative percentage of replacements greater than or equal to 3%, or other percentage specified in paragraph (g)(9) of this section, of the service lines specified in paragraph (a)(7) of this section multiplied by the number of years that elapsed from when the system most recently began mandatory lead service line replacement and the date on which the system's 90th percentile lead level, in accordance with \$141.80(c)(4), has been calculated to be at or below the lead action level during each of four consecutive six-month tap sampling monitoring periods. If tap samples collected in any such system thereafter exceed the lead action level, the system shall recommence mandatory lead service line replacement at the same two-year rolling average rate, unless the State has designated an alternate replacement rate under paragraph (g)(9) of this section.
- (7) The water system may also cease mandatory lead service line replacement if the system has no remaining lead status unknown service lines in its inventory and obtains refusals to conduct full lead service line replacement or non-responses from every remaining customer in its distribution system served by either a full or partial lead service line, or a galvanized requiring replacement service line. For purposes of this paragraph (g)(7) and in accordance with §141.90(e), a water system must provide documentation to the State of customer refusals including a refusal signed by the customer, documentation of a verbal statement made by the customer refusing replacement, or documentation of no response from the customer after the water system

made a minimum of two good faith attempts to reach the customer regarding full lead service line replacement. If the water system's 90th percentile exceeds the lead action level again, it must contact all customers served by a full or partial lead service line or a galvanized requiring replacement service line with an offer to replace the customer-owned portion. Nothing in this paragraph (g)(7) requires the water system to bear the cost of replacement of the customer-owned lead service line.

- (8) The first year of lead service line replacement shall begin on the first day following the end of the tap sampling period in which lead action level was exceeded.
- (9) The State shall require a system to replace lead service lines on a shorter schedule than that required by this section, taking into account the number of lead service lines in the system, where the State determines a shorter replacement schedule is feasible. The State shall make this determination in writing and notify the system of its finding within six months after the system is required to begin lead service line replacement under paragraph (g) of this section.
- (h) Reporting to demonstrate compliance to State. To demonstrate compliance with paragraphs (a) through (g) of this section, a system shall report to the State the information specified in § 141.90(e).

[86 FR 4290, Jan. 15, 2021, as amended at 86 FR 31947, June 16, 2021]

§141.85 Public education and supplemental monitoring and mitigation requirements.

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 sampled, as specified in paragraph (d) of this section. A water system with lead, galvanized requiring replacement, or lead status unknown service lines must deliver public education materials to persons with a lead, galvanized requiring replacement, or lead status unknown service line as specified in paragraphs (e) through (g) of this section. All community water systems must conduct annual outreach to local and State

health agencies as outlined in paragraph (i) of this section. A community water system serving more than 10,000 persons that fails to meet its annual lead service line replacement goal as required under § 141.84(f) shall conduct outreach activities as specified in paragraph (h) of this section. A water system that exceeds the lead action level based on tap water samples collected in accordance with §141.86 shall deliver the public education materials contained in paragraph (a) of this section and in accordance with the requirements in paragraph (b) of this section. Water systems that exceed the lead action level shall offer to sample the tap water of any customer who requests it in accordance with paragraph (c) of this section. All small community water systems and non-transient noncommunity water systems that elect to implement POU devices under §141.93 must provide public education materials to inform users how to properly use POU devices in accordance with paragraph (j) of this section.

- (a) Content of written public education materials—
- (1) Community water systems and nontransient non-community water systems. Water systems must include the following elements in printed materials (e.g., brochures and pamphlets) in the same order as listed in paragraphs (a)(1)(i) through (vii) of this section. In addition, language in paragraphs (a)(1)(i), (ii), and (vi) of this section must be included in the materials, exactly as written, except for the text in brackets in paragraphs (a)(1)(i), (ii), and (vi) of this section for which the water system must include system-specific information. Any additional information presented by a water system must be consistent with the information in paragraphs (a)(1) through (vii) of this section and be in plain language that can be understood by the general public. Water systems must submit all written public education materials to the State prior to delivery. The State may require the system to obtain approval of the content of written public materials prior to delivery. Water systems may change the mandatory language in paragraphs (a)(1)(i) and (ii) of this section only with State approval.

- (i) 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.
- (ii) Health effects of lead. Exposure to lead in drinking water can cause serious health effects in all age groups. Infants and children can have decreases in IQ and attention span. Lead exposure can lead to new learning and behavior problems or exacerbate existing learning and behavior problems. The children of women who are exposed to lead before or during pregnancy can have increased risk of these adverse health effects. Adults can have increased risks of heart disease, high blood pressure, kidney or nervous system problems.
- (iii) Sources of lead. (A) Explain what lead is.
- (B) Explain possible sources of lead in drinking water and how lead enters drinking water. Include information on home/building plumbing materials and service lines that may contain lead.
- (C) Discuss other important sources of lead exposure in addition to drinking water (e.g., paint).
- (iv) Discuss the steps the consumer can take to reduce their exposure to lead in drinking water.
- (A) Encourage running the water to flush out the lead.
- (B) Explain concerns with using hot water from the tap and specifically caution against the use of hot water for preparing baby formula.
- (C) Explain that boiling water does not reduce lead levels.
- (D) Discuss other options consumers can take to reduce exposure to lead in drinking water, such as alternative sources or treatment of water.
- (E) Suggest that parents have their child's blood tested for lead.
- (v) 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.

- (vi) For more information, call us at [INSERT YOUR NUMBER] [(IF APPLICABLE), 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.
- (vii) Information on lead service lines. For systems with lead service lines, discuss opportunities to replace lead service lines and explain how to access the service line inventory so the consumer can find out if they have a lead service line. Include information on programs that provide financing solutions to assist property owners with replacement of their portion of a lead service line, and a statement that the water system is required to replace its portion of a lead service line when the property owner notifies them they are replacing their portion of the lead service line.
- (2) Community water systems. In addition to including the elements specified in paragraph (a)(1) of this section, community water systems must:
- (i) Tell consumers how to get their water tested.
- (ii) Discuss lead in plumbing components and the difference between low lead and lead free.
- (b) Delivery of public education materials. (1) For public water systems serving a large proportion of non-English speaking consumers, as determined by the State, 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.
- (2) A community water system that exceeds the lead action level on the basis of tap water samples collected in accordance with §141.86, and that is not already conducting public education tasks under this section, must conduct the public education tasks under this section within 60 days after the end of the tap sampling period in which the exceedance occurred:

- (i) Deliver printed materials meeting the content requirements of paragraph (a) of this section to all bill paying customers.
- (ii)(A) Contact customers who are most at risk by delivering education materials that meet the content requirements of paragraph (a) of this section 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 paragraph (a) of this section to all organizations on the provided lists.
- (B) Contact customers who are most at risk by delivering materials that meet the content requirements of paragraph (a) of this section to the following organizations listed in paragraphs (b)(2)(ii)(B)(I) through (7) of this section that are 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:
- (1) Schools, child care facilities, and school hoards.
- (2) Women, Infants and Children (WIC) and Head Start programs.
- (3) Public and private hospitals and medical clinics.
 - (4) Pediatricians.
 - (5) Family planning clinics.
 - (6) Local welfare agencies.
- (7) Obstetricians-Gynecologists and Midwives.
- (iii) 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 brackets

for which the water system must include system-specific information: [IN-SERT 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] [or visit (IN-SERT YOUR WEB SITE HERE)]. The message or delivery mechanism can be modified in consultation with the State; specifically, the State may allow a separate mailing of public education materials to customers if the water system cannot place the information on water bills.

- (iv) Post material meeting the content requirements of paragraph (a) of this section on the water system's Web site if the system serves a population greater than 100,000.
- (v) Submit a press release to newspaper, television and radio stations.
- (vi) In addition to paragraphs (b)(2)(i) through (v) of this section, systems must implement at least three activities from one or more categories listed below. The educational content and selection of these activities must be determined in consultation with the State.
 - (A) Public Service Announcements.
 - (B) Paid advertisements.
- (C) Public Area Information Displays.
 - (D) E-mails to customers.
 - (E) Public Meetings.
 - (F) Household Deliveries.
- (G) Targeted Individual Customer Contact.
- (H) Direct material distribution to all multi-family homes and institutions.
- (I) Other methods approved by the State.
- (vii) For systems that are required to conduct monitoring annually or less frequently, the end of the tap sampling period is September 30 of the calendar year in which the sampling occurs, or, if the State has established an alternate tap sampling period, the last day of that period.
- (3) As long as a community water system exceeds the action level, it must repeat the activities pursuant to paragraph (b)(2) of this section as described in paragraphs (b)(3)(i) through (iv) of this section.

- (i) A community water system shall repeat the tasks contained in paragraphs (b)(2)(i), (ii) and (vi) of this section every 12 months.
- (ii) A community water system shall repeat tasks contained in paragraph (b)(2)(iii) of this section 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 paragraph (b)(2)(iv) of this section.
- (iv) The community water system shall repeat the task in paragraph (b)(2)(v) of this section twice every 12 months on a schedule agreed upon with the State. The State can allow activities in paragraph (b)(2) of this section 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 State in advance of the 60-day deadline.
- (4) Within 60 days after the end of the tap sampling period in which the exceedance occurred (unless it already is repeating public education tasks pursuant to paragraph (b)(5) of this section), a non-transient non-community water system shall deliver the public education materials specified by paragraph (a) of this section 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 State 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 tap sampling period is September 30 of the calendar year in which the sampling occurs, or, if the State has established an alternate tap sampling period, the last day of that period.
- (5) A non-transient non-community water system shall repeat the tasks contained in paragraph (b)(4) of this

section at least once during each calendar year in which the system exceeds the lead action level. The State can allow activities in (b)(4) of this section 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 State in advance of the 60-day deadline.

- (6) A water system may discontinue delivery of public education materials if the system is at or below the lead action level during the most recent sixmonth tap sampling monitoring period conducted pursuant to §141.86. Such a system shall recommence public education in accordance with this section if it subsequently exceeds the lead action level during any tap sampling period.
- (7) A community water system may apply to the State, in writing (unless the State has waived the requirement for prior State approval), to use only the text specified in paragraph (a)(1) of this section in lieu of the text in paragraphs (a)(1) and (a)(2) of this section and to perform the tasks listed in paragraphs (b)(4) and (b)(5) of this section in lieu of the tasks in paragraphs (b)(2) and (b)(3) of this section 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.
- (8) 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 paragraph (b)(2)(vi) of this section, a system serving 3,300 or fewer must implement at least one of the activities listed in that paragraph.
- (ii) With respect to the requirements of paragraph (b)(2)(ii) of this section, a system serving 3,300 or fewer people may limit the distribution of the public education materials required under that paragraph 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 paragraph (b)(2)(v) of this section, the State may waive this requirement for systems serving 3,300 or fewer persons as long as system distributes notices to every household served by the system.
- (c) 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 §141.86 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.
- (d) Notification of results—(1) Reporting requirement. All water systems must provide a notice of the individual tap results from lead tap water monitoring carried out under the requirements of §141.86 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 building where the tap was sampled).
- (2) *Timing of notification*. A water system must provide the consumer notice as soon as practicable but no later than the following timeframes:
- (i) For individual samples that do not exceed 15 $\mu g/L$ of lead, no later than 30 days after the water system learns of the tap monitoring results.
- (ii) For individual samples that exceed 15 μ g/L of lead, as soon as practicable but no later than 3 calendar days after the water system learns of the tap monitoring results. Water systems that choose to mail the notification must assure those letters are postmarked within three days.
- (3) Content. 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 from §141.153(c).

- (4) Delivery. (i) For lead tap sample results that do not exceed 15 $\mu g/L$, the water systems must provide consumer notice to persons served at the tap that was sampled, by mail or by another method approved by the State. For example, upon approval by the State, 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.
- (ii) For lead tap sample results that exceed 15 $\mu g/L$, the water systems must provide consumer notice to persons served by the tap that was sampled; such notice must be provided electronically or by phone, hand delivery, by mail, or another method approved by the State.
- (e) Notification of known or potential service line containing lead—(1) Notification requirements. All water systems with lead, galvanized requiring replacement, or lead status unknown service lines in their inventory pursuant to §141.84(a) must inform all persons served by the water system at the service connection with a lead, galvanized requiring replacement, or lead status unknown service line.
- (2) Timing of notification. A water system must provide the initial notification within 30 days of completion of the lead service line inventory required under § 141.84 and repeat the notification on an annual basis until the entire service connection is no longer a lead, galvanized requiring replacement, or lead status unknown service line. For new customers, water systems shall also provide the notice at the time of service initiation.
- (3) Content—(i) Persons served by a confirmed lead service line. The notice must include a statement that the person's service line is lead, an explanation of the health effects of lead that meets the requirements of paragraph (a)(1)(ii) of this section, steps persons at the service connection can take to reduce exposure to lead in drinking water, information about opportunities to replace lead service lines as well as programs that provide financing solutions to assist property owners with replacement of their portion of a lead service line, and a statement that the water system is required to replace its portion of a lead service line when the

property owner notifies them they are replacing their portion of the lead service line.

- (ii) Persons served by a galvanized requiring replacement service line. The notice must include a statement that the person's service line is galvanized requiring replacement, an explanation of the health effects of lead, steps persons at the service connection can take to reduce exposure to lead in drinking water, and information about opportunities for replacement of the service line.
- (iii) Persons served by a lead status unknown service line. The notice must include a statement that the person's service line material is unknown but may be lead, an explanation of the health effects of lead that meets the requirements of paragraph (a)(1)(ii) of this section, steps persons at the service connection can take to reduce exposure to lead in drinking water, and information about opportunities to verify the material of the service line.
- (4) Delivery. The notice must be provided to persons served by the water system at the service connection with a lead, galvanized requiring replacement, or lead status unknown service line, by mail or by another method approved by the State.
- (f) Notification due to a disturbance to a known or potential service line containing lead. (1) Water systems that cause disturbance to a lead, galvanized requiring replacement, or lead status unknown service line that results in the water to an individual service line being shut off or bypassed, such as operating a valve on a service line or meter setter, and without conducting a partial or full lead service line replacement, must provide the persons served by the water system at the service connection with information about the potential for elevated lead levels in drinking water as a result of the disturbance as well as instructions for a flushing procedure to remove particulate lead. The water system must comply with the requirements in this paragraph (f)(1) before the affected service line is returned to service.
- (2) If the disturbance of a lead, galvanized requiring replacement, or lead status unknown service line results from the replacement of an inline

water meter, a water meter setter, or gooseneck, pigtail, or connector, the water system must provide the person served by the water system at the service connection with information about the potential for elevated lead levels in drinking water as a result of the disturbance, public education materials that meet the content requirements in paragraph (a) of this section, a pitcher filter or point-of-use device certified by an American National Standards Institute accredited certifier to reduce lead, instructions to use the filter, and six months of filter replacement cartridges. The water system must comply with the requirements of this paragraph (f)(2) before the affected service line is returned to service.

- (3) A water system that conducts a partial or full lead service line replacement must follow procedures in accordance with the requirements in §141.84(d)(1)(i) through (iv) and (e)(1)(i) through (iv), respectively.
- (g) Information for persons served by known or potential service lines containing lead when a system exceeds the lead trigger level—(1) Content. All water systems with lead service lines that exceed the lead trigger level of 10 µg/L must provide persons served by the water system at the service connection with a lead, galvanized requiring replacement, or lead status unknown service line information regarding the water system's lead service line replacement program and opportunities for replacement of the lead service line
- (2) Timing. Waters systems must send notification within 30 days of the end of the tap sampling period in which the trigger level exceedance occurred. Water systems must repeat the notification annually until the results of sampling conducted under §141.86 are at or below the lead trigger level.
- (3) Delivery. The notice must be provided to persons served at the service connection with a lead, galvanized requiring replacement, or lead status unknown service line, by mail or by another method approved by the State.
- (h) Outreach activities for failure to meet the lead service line replacement goal. (1) In the first year after a community water system that serves more than 10,000 persons does not meet its

- annual lead service line replacement goal as required under § 141.84(f), it must conduct one outreach activity from the following list in the following year until the water system meets its replacement goal or until tap sampling shows that the 90th percentile for lead is at or below the trigger level of 10 $\mu \rm g/L$ for two consecutive tap sampling monitoring periods:
- (i) Send certified mail to customers with a lead or galvanized requiring replacement service line to inform them about the water system's goal-based lead service line replacement program and opportunities for replacement of the service line.
 - (ii) Conduct a townhall meeting.
- (iii) Participate in a community event to provide information about its lead service line replacement program and distribute public education materials that meet the content requirements in paragraph (a) of this section.
- (iv) Contact customers by phone, text message, email, or door hanger.
- (v) Use another method approved by the State to discuss the lead service line replacement program and opportunities for lead service line replacement.
- (2) After the first year following a trigger level exceedance, any water system that thereafter continues to fail to meet its lead service line replacement goal must conduct one activity from paragraph (h)(1) of this section and two additional outreach activities per year from the following list:
 - (i) Conduct social media campaign.
- (ii) Conduct outreach via newspaper, television, or radio.
- (iii) Contact organizations representing plumbers and contractors by mail to provide information about lead in drinking water including health effects, sources of lead, and the importance of using lead free plumbing materials
- (iv) Visit targeted customers to discuss the lead service line replacement program and opportunities for replacement.
- (3) The water system may cease outreach activities when tap sampling shows that the 90th percentile for lead is at or below the trigger level of 10 μ g/L for two consecutive tap sampling

monitoring periods or when all customer-side lead or galvanized requiring replacement service line owners refuse to participate in the lead service line replacement program. For purposes of this paragraph (h)(3), a refusal includes a signed statement by the customer refusing lead service line replacement, or documentation by the water system of a verbal refusal or of no response after two good faith attempts to reach the customer.

- (i) Public education to local and State health agencies—(1) Find-and-fix results. All community water systems must provide information to local and State health agencies about find-and-fix activities conducted in accordance with §141.82(j) including the location of the tap sample site that exceeded 15 µg/L, the result of the initial tap sample, the result of the follow up tap sample, the result of water quality parameter monitoring, and any distribution system management actions or corrosion control treatment adjustments made.
- (2) Timing and content. Community water systems must annually send copies of the public education materials provided under paragraph (a) of this section, and of paragraph (h)(1) of this section for actions conducted in the previous calendar year no later than July 1 of the following year.
- (3) Delivery. Community water systems shall send public education materials and find-and-fix information to local and State health agencies by mail or by another method approved by the State.
- (j) Public education requirements for small water system compliance flexibility POU devices—(1) Content. All small community water systems and non-transient non-community water systems that elect to implement POU devices under §141.93 must provide public education materials to inform users how to properly use POU devices to maximize the units' effectiveness in reducing lead levels in drinking water.
- (2) *Timing*. Water systems shall provide the public education materials at the time of POU device delivery.
- (3) *Delivery*. Water systems shall provide the public education materials in person, by mail, or by another method approved by the State, to persons at lo-

cations where the system has delivered POU devices.

[72 FR 57815, Oct. 10, 2007, as amended at 86 FR 4294, Jan. 15, 2021]

§ 141.86 Monitoring requirements for lead and copper in tap water.

- (a) Sample site location. (1) By the applicable date for commencement of monitoring under paragraph (d)(1) of this section, each water system shall identify a pool of targeted sampling sites based on the service line inventory conducted in accordance with §141.84(a), that meet the requirements of this section, and which is sufficiently large enough to ensure that the water system can collect the number of lead and copper tap samples required in paragraph (c) of this section. Sampling sites may not include sites with installed point-of-entry (POE) treatment devices and taps used at sampling sites may not have point-of-use (POU) devices designed to remove inorganic contaminants, except for water systems monitoring under §141.93(a)(3)(iv) and water systems using these devices for the primary drinking water tap to meet other primary and secondary drinking water standards and all service connections have POEs or POUs to provide localized treatment for compliance with the other drinking water standards. Lead and copper sampling results for systems monitoring under §141.93(a)(3)(iv) may not be used for the purposes of meeting the criteria for reduced monitoring specified in paragraph (d)(4) of this section.
- (2) A water system must use the information on lead, copper, and galvanized iron or steel that is required to be identified under § 141.42(d) when conducting a materials evaluation and the information on lead service lines that is required to be collected under § 141.84(a) to identify potential lead service line sampling sites.
- (3) The sampling sites for a community water system's sampling pool must consist of single-family structures that are served by a lead service line ("Tier 1 sampling sites"). When multiple-family residences comprise at least 20 percent of the structures served by the water system, the system may include these types of structures in its Tier 1 sampling pool, if served by