



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5
77 WEST JACKSON BOULEVARD
CHICAGO, IL 60604-3590

REPLY TO THE ATTENTION OF:
WG-15J

September 15, 2023

Sanjay Sofat
Chief, Bureau of Water
Illinois Environmental Protection Agency
1021 North Grand Avenue East
P.O Box 19276
Springfield, Illinois 62794-9276

Gerrin Cheek Butler MPA, LEHP
Chief, Division of Environmental Health
Illinois Department of Public Health
525 West Jefferson Street
Springfield, Illinois 62761-0001

Dear Mr. Sofat and Ms. Cheek Butler:

The U.S. Environmental Protection Agency appreciates the actions initiated by the City of Elgin and State, as well as the information shared and our multiple discussions, since our November 2022 letter. In particular, EPA appreciates the City's efforts in enhanced testing and filter distribution, public education and outreach, accelerated lead service line replacement, and enhanced corrosion control treatment and related support from Illinois Environmental Protection Agency (IEPA). EPA also appreciates Illinois Department of Public Health (IDPH) programs to address lead exposure assessment and testing at school and childcare facilities. EPA's understanding of completed measures is summarized in Enclosure 2.

Elgin's website update dated August 1, 2023 shows 870 lead testing results in 2023, with over 40% of the 5-minute flushed samples containing lead levels above 5 parts per billion (ppb), of which 39 sites had lead levels above 15 ppb in the 5-minute flush samples. Meanwhile, during Elgin's most recent January-June 2023 tap sampling period, the lead 90th percentile (11.8 ppb) for compliance samples does not exceed the Action Level of 15 ppb. Given the overall lead levels in drinking water test results at lead service line (LSL) locations in Elgin, EPA remains concerned and recommends continued and additional measures outlined in Enclosure 1, to identify and reduce lead exposure in Elgin drinking water, including:

- Offer or deliver a water filter certified under NSF/ANSI-53 (lead reduction) and NSF/ANSI-42 (Class I particulate reduction) to each home with elevated lead in water;

- Continue and enhance outreach to customers about its lead testing and filter programs;
- Follow-up on lead in drinking water testing at Elgin schools and childcare facilities and expanded blood lead level (BLL) outreach and testing;
- Take steps to expedite design, permitting, and installation of optimized corrosion control treatment (CCT); and
- Fully utilize the WIIN Grant: Voluntary School and Child Care Lead Testing and Reduction Grant Program, including FY21-FY23 funding, which can support Elgin and other Illinois communities.

EPA requests your response within 30 days after the date of this letter with a description of the state's plans, including anticipated timing, to work with Elgin to address these recommendations. EPA requests that Elgin, IEPA, and IDPH begin working on these efforts as quickly as possible, and we would welcome quarterly updates on progress.

EPA looks forward to working with you to continue actions critical to protect public health. EPA Region 5 Water Division and EPA Office of Research and Development continue to be available to provide technical assistance to IEPA and Elgin, including regarding Elgin's plans for public outreach strategies, CCT optimization, and identification of LSLs. EPA also reserves its authorities to act as appropriate under the Safe Drinking Water Act.

Thank you for your attention to these matters. If you want to discuss this information further, please contact Candice Bauer at Bauer.Candice@epa.gov or at (312) 353-2106.

Sincerely,

9/15/2023

X 

Tera L. Fong

Director, Water Division

Signed by: Environmental Protection Agency

Enclosures

cc: Mike Brown, IEPA (via email)
David Cook, IEPA (via email)
Mike Roubitchek, IEPA (via email)
Brian Cox, Illinois Department of Public Health (via email)
Kert McAfee, Illinois Department of Public Health (via email)
Lead Poisoning Prevention Program, Kane County Health Department (via email)
Lead Poisoning Prevention Program, Cook County Health Department (via email)

Enclosure 1 – Questions and Considerations for Additional Measures to Reduce Lead Exposure in Drinking Water in Elgin

Enhanced lead in water testing and water filter distribution

- As discussed on May 30, 2023, EPA strongly encourages that Elgin undertake additional follow-up with lead testing locations with elevated lead in water, including targeted offer or delivery of a water filter certified under NSF/ANSI-53 (lead reduction) and NSF/ANSI-42 (Class I particulate reduction). For example, this could include delivering a filter to all lead testing locations serving pregnant women and/or young children, those with 5-minute flushed sample results exceeding 5 ppb¹, and/or those with any results exceeding 15 ppb.²
- EPA also strongly encourages continued and periodic outreach to customers about Elgin’s lead testing and filter programs, preferably at least on a quarterly basis, as long as the testing and filter programs continue.
 - EPA recognizes Elgin’s protective recommendation (Lead Service Line Replacement FAQs | City of Elgin, Illinois - Official Website), “If your house was built before 1986 and members of the household drink water from the tap, especially the potentially vulnerable portion of the population (young children, pregnant women, etc.), a lead test is advised.”
 - However, we note that many of the ~11,000 LSL homes in Elgin have not requested testing and/or filters. In addition to repeating Elgin’s existing contact methods (e.g., emails, newsletter, social media), Elgin could mention its filter and testing programs in bill statements; the annual Customer Confidence Report; and future annual service line notifications to customers with LSLs, galvanized requiring replacement (GRR) service lines, and lead-status unknown service lines.
- For as long as the testing and filter programs continue, EPA would like to receive quarterly updates providing the numbers of customers served by Elgin’s testing and filter program, including a summary of recent outreach about the programs as well as the lead results from the testing program.

Enhanced public outreach and education

- As discussed with IEPA and Elgin on May 30, 2023 and IEPA on January 10, 2023, EPA strongly encourages Elgin to include the service line material type (especially if known) on the lead testing data tables Elgin has made available. For example, we recommend Elgin share a data summary of the 3-bottle test results, by service line material type, with Elgin customers (for example, via website, handouts with filters and individual test results, other water outreach materials). Raising awareness about generally higher lead levels at LSL homes would be expected to help highlight the importance of LSL homes participating in Elgin’s lead testing, water filter, and LSL replacement programs.
- EPA strongly encourages Elgin to share with customers education materials about proper installation and maintenance of water filters, such as on its website and on handouts when

¹ 5 ppb is the allowable lead level in filtered water during ANSI/NSF 53 certification testing for lead reduction, and 5ppb is also the maximum allowable in bottled water (Lead in Food, Foodwares, and Dietary Supplements | FDA).

² 15 ppb is EPA’s lead action level under the Lead and Copper Rule.

filters are distributed. An example is as a copy of 120Water filter education resources described in the February 2, 2023 Elgin letter to IEPA. Reach out to EPA if IEPA or Elgin need assistance with filter education. Further, see [EPA materials on Lead Public Outreach](#) and Enclosure 3, an EPA Region 5 compilation of Considerations for Improving Lead Drinking Water Filter Educational Materials.

Accelerated LSL replacement

- As communicated in a March 29, 2023 EPA email to IEPA, Elgin is subject to the 7% LSL replacement requirement under the Lead and Copper Rule (LCR) for the period January-December 2023.
- Even if not subject to mandatory LSL replacement under LCR after 2023, EPA recommends Elgin continue to seek out additional funding to further accelerate full LSL replacement and fully replace all LSLs in Elgin well in advance of the 34 years allowed under [Illinois's Lead Service Line Replacement and Notification Act](#).
- EPA encourages Elgin to consider additional outreach to homeowners/residents in the 2023 LSL replacement project areas, beyond the fall 2022 letters/meetings, to encourage them to fill out the required access "TCE" form. According to the [November 28, 2022 public information meeting](#), homeowners are required to submit an access form online. Elgin should also consider different and additional outreach methods for low-income households and renters.

Timely enhanced corrosion control treatment (CCT)

- EPA recommends that Elgin expedite, to the maximum extent feasible, steps needed to construct and begin feeding orthophosphate. While these steps, such as design and permitting, are underway, testing can continue to further optimize the target pH and orthophosphate dose, such as evaluation of the impact on distribution system LSL pipe scales of dropping to pH 7.8 and/or testing the increased pH condition (pH 9.1-9.2) in a pipe loop fed by an Airlite water. EPA supports measures, including lead testing and flushing in the distribution system mentioned on the May 30, 2023 call, to mitigate any impact from water quality changes during the CCT transition(s).

Follow-up on lead in drinking water testing at Elgin schools and childcare facilities

- EPA requests that IDPH, in coordination with Cook and Kane County health departments as appropriate, review available data regarding lead in drinking water exposure at Elgin schools and childcare facilities and ensure any necessary mitigation actions have been completed.
- EPA strongly encourages Illinois apply for FY21, FY22, and FY23 WIIN 2107 [Lead Testing in School and Child Care Program Drinking Water Tribal Grant Program](#) funding from EPA and consider how it may be used to support testing and mitigation of lead in drinking water in schools and childcares, including in Elgin and other communities with lead Action Level Exceedances (ALEs). EPA's July 2023 [Voluntary School and Child Care Lead Testing & Reduction Grant Program Implementation Document Updated for FY2023. Appendix C](#), provides lead remediation actions and funding eligibility details, and EPA Region 5 has

provided IDPH an example approved work plan from another Region 5 state that incorporates funding for mitigation actions for schools and childcares.

- As recommended to IDPH on an April 6, 2023 call, EPA strongly encourages IDPH, in coordination with Cook and Kane county health departments as appropriate, to complete additional outreach to all schools/daycares in Elgin to reshare IDPH recommendation of mitigation actions for any results >2 ppb and re-testing to confirm those mitigation actions were effective and, as appropriate, to follow up regarding lead testing results and any mitigation actions taken.

Expanded BLL outreach and testing: consider offering BLL testing at community events and for vulnerable populations in Elgin.

- EPA encourages IDPH to consider updating lead sources flyers to reflect that drinking water is a source of lead exposure. As noted in EPA's email to IDPH on April 7, 2023, several studies document the contribution of lead in drinking water to blood lead levels, especially of importance to formula-fed infants. We understand based on the July 19, 2023 call that IDPH is currently conducting studies to evaluate the contribution of drinking water to lead exposure.

Report Actions Taken to EPA

- EPA requests IEPA and IDPH to provide regular (e.g., quarterly) updates to EPA regarding actions the state agencies and Elgin has taken, known outcomes and issues, and any significant changes in circumstances. This should continue for one year, and EPA will reassess whether such reports should continue.

Enclosure 2 – Status updates

Major Communication Touchpoints:

- November 23, 2022 EPA letter to IEPA
- December 8, 2022 IEPA letter to EPA
- December 15 and 16, 2022 IEPA letters to Elgin
- January 10, 2023 EPA-IEPA call
- March 23, 2023 IDPH email to EPA
- April 6, 2023 EPA-IDPH call
- April 7, 2023 EPA-IEPA call
- May 30, 2023 Elgin-IEPA-EPA call
- July 19, 2023 EPA-IEPA call

Summary of Actions:

Enhanced lead in water testing and water filter distribution

- Elgin expanded its free lead in water testing program, and filter distribution program to offer free NSF/ANSI-53 and 42 certified filters as announced in a March 31, 2023 press release, to Elgin residents (tenant or property owner) or business owners with an active water account in single-family residential, small multi-family residential or businesses with a water service diameter of two-inches or smaller and schools, or childcare facilities built before 1988. Based on Elgin's Committee of the Whole and Regular City Council meeting - February 8, 2023 (cityofelgin.org), contracting with 120Water was approved up to \$500,000 for these funding testing/filter programs (e.g., ~3,900 test kits and ~3,900 filter kits).
- During the May 30, 2023 call, Elgin reported that lead testing kits had been delivered for all 1,540 non-duplicate lead testing requests, and 517 lead testing kits had been returned and analyzed, 418 pitcher filters had been delivered, and Elgin was working to fulfill 59 filter additional requests. Elgin described its city-wide outreach for these programs, including an Elgin newsletter, emails, and social media postings, as well as flyers available at community buildings and City Hall.
- As of August 1, 2023, approximately 870 Elgin lead testing kits have been submitted and analyzed in 2023. Among them, the 5-minute flushed sample result was missing for one location. Over 40% of the 5-minute flushed samples were reported to contain lead levels above 5 ppb, of which 39 sites had lead levels above 15 ppb in the 5-minute flush samples. Approximately 38% of these 5-minute flush samples had lead levels below the laboratory reporting limit. However, because sample data are not linked to the service line materials for these sites, these low results may represent non-LSL sites (including multi-family and businesses).

Enhanced public outreach and education

- Elgin posted its current service line material inventory on its website as announced in a November 17, 2022 press release. Elgin's public-facing map, available in

English and Spanish, shows properties as “lead,” “lead-free,” “public-side lead-free,” or “unknown” based on available information. Filters and flushing instructions have been provided in recommendations to customers participating in the LSL replacement projects since 2021.

- For the July-December 2022 lead ALE, Elgin provided public notice on December 27, 2022 and certified completion of LCR Public Education on January 26, 2023. Public education materials recommend flushing for at least 5 minutes when water has not been used for several hours and using an NSF/ANSI-53 and 42 certified water filter for customers with “lead plumbing, particularly for formula-fed infants.” EPA reviewed these materials before dissemination.
- Elgin posted a summary of Elgin’s lead testing results as of early January 2023, including LCR compliance sampling results, 2020 sequential results, and 3-bottle test results and has subsequently updated the summary at least 6 times (early Feb, mid-April, early May, mid-June, late June) and most recently on August 1.
- Elgin completed notifications to over 10,800 addresses with known LSLs on January 3, 2023 and over 1,600 addresses with lead-status unknown service lines with by January 18, 2023.

Accelerated LSL replacement

- As announced in a November 17, 2022 press release, Elgin posted an online dashboard of LSL replacement status. Based on Elgin’s LSL Replacement project presentation on November 28, 2022, Elgin planned to fully replace approximately 500 LSLs in 2022, and fully replace 850 LSLs in 2023. According to the March 22, 2023 city meeting agenda, Elgin plans for “a total of 962 additional residential lead service line replacements in 2023.”
- In April 2023, Elgin submitted an updated service line inventory summary to the state, which included 11,216 LSLs, 0 GRR service lines, and 850 lead status unknown service lines.
- IEPA’s Drinking Water State Revolving Fund (DWSRF) program awarded \$4M to Elgin on April 23, 2023 for LSL replacement, and Illinois’ FY2024 Intended Use Plan shows Elgin has applied for an additional \$14.5M to replace 860 LSLs.

Enhanced corrosion control treatment (CCT)

- Based on updates on the CCT studies provided by Elgin and its consultants in the call on 5/30/2023, EPA understands Elgin intended to initiate design and permitting to construct the orthophosphate feed system at both plants with an estimated full-scale implementation in late 2024 or early 2025. On August 7, IEPA provided EPA a copy of the CCT study report submitted to the state on July 31, 2023.

Improved lead exposure assessment

- As of April 26, 2023, IDPH made a recommendation to Kane and Cook County health departments to incorporate water sampling into lead exposure assessments related to individuals with reported elevated BLLs.

- As of July 20, 2023, IDPH was circulating an updated state-wide Childhood Lead Risk Questionnaire encouraging BLL testing in updated high-risk zip codes determined based on CDC's recently updated blood lead reference level. IDPH estimated at least 80% of health care providers received this outreach in late June and that all Illinois health care providers would be using the new form by late September 2023.

Follow-up on lead in drinking water testing at Elgin schools and childcare facilities

- Based on IDPH's March 22, 2023 email and a [May 14, 2023 press article](#), IDPH sent follow up communications to approximately 400 schools across the state for which the state had not received sampling results required under state law. During the July 19, 2023 call with EPA, IDPH stated that no schools in Elgin were among the contacted schools because the state had received the lead in drinking water data expected under state law for all schools in Elgin.

Also, EPA appreciates Elgin's and IEPA's cooperation during the October 2022 inspection, which is documented in EPA Enforcement and Compliance Assistance Division (ECAD's January 2023 inspection report, as well as additional information provided by Elgin to EPA ECAD staff on February 8, 2023.

Enclosure 3 - EPA Region 5 Considerations for Improving Lead Drinking Water Filter Educational Materials

Summary

Water filters can be an effective way to reduce lead in water if the filters are certified, properly installed and maintained. EPA community interactions in multiple communities indicate that people, including those who live in communities with environmental justice concerns such as ongoing lead action level exceedances and/or extensive Lead Service Line inventories, face obstacles with proper use of water filters.

States and other stakeholders can consider the recommendations below, along with input from their internal communications and health experts, when developing water filter education materials.

EPA Observations in a community offering free filters to all residents
25% of homes visited had a filter but had not installed it
10% of homes reported running hot water through the filter

Communication Best Practices for Water Filter Education Materials

EPA Region 5 compiled the following best practices based on conversations with EPA communications experts, recent state and federal experience with proper water filter usage, as well as available communications resources. Accessibility and communications best practices references are listed below.

Put important messages and critical actions at the front and top of the material – Tell your audience why the material is important to them.ⁱ

- Include health messages, ideally at the front/top (e.g., removing lead is important; lead exposure health effects). A summary of lead health effects can be found on EPA’s website, www.epa.gov/ground-water-and-drinking-water/basic-information-about-lead-drinking-water.
- Include meaningful and achievable action steps to mitigate health concerns.
- Focus on a limited number (e.g., three) of key messages.ⁱⁱ More technical details and background can be added, if needed, on the back or later in the communication material to amplify and explain the key messages. Then, key messages can be restated again at the end.

Example:

Denver Water’s video, How to use a pitcher water filter to reduce the risk of lead getting into drinking water (available <https://youtu.be/i0PNWQYgaAc>), begins with a key message: “Protecting families from the health risks from lead in drinking water is why Denver Water is providing a free pitcher and water filters in its lead reduction program.”ⁱⁱⁱ

Example:

The State of Michigan’s brief video “Lead in Drinking Water Safety Tips” (<https://youtu.be/3xnviclYtZs>) begins with the following key message, “Protect your loved ones. Use these lead in drinking water safety tips.”

Example:

State of Michigan's How to Use Your Faucet Filter Certified to Reduce Lead in Drinking Water (https://www.michigan.gov/documents/mileadsafe/PUR_Filter_English_661087_7.pdf) factsheet (also available in Spanish) begins with stating, "A certified filter can be used as a temporary way to reduce lead in drinking water. Filters are made to reduce lead, but do not guarantee that all lead will be removed from your drinking water. It is important to follow manufacturer's directions."

Tailor material to your specific audience.^{i,iv}

- **Readability** – A rule of thumb is to aim for 6th to 8th grade reading level for general audiences.ⁱⁱ Communities with low literacy rates may need lower reading level. More technical audiences benefit from more detailed materials.
 - Word processing programs can calculate reading grade level and readability scores (e.g., see [Microsoft Word instructions](#)).
- **Translations** for non-English speakers may be needed. The Census Bureau has information regarding languages spoken, which may serve as a useful starting point. (Geographic analysis of demographic data can be carried out using [EISCREEN](#).)
- **Platform** (e.g., billboards, website, social media, radio/streaming ads, public meeting) – Effective communication platforms vary by community/audience and by strategic goals and objectives

Example:

EPA's brief video [Water Filter Installation and Maintenance English V 2 - YouTube](#) (also available at <https://www.epa.gov/flint/advice-flint-residents?web=1&wdLOR=cDC0BA5DC-A8AA-4850-85DE-408A04F61F06>) is translated into Spanish and American Sign Language.

Ask the community or intended audience who they trust and what they need.

- Once you know who a community trusts, work with the trusted organization or individuals to create a vehicle for getting your information and resources out to the public.^{iv} Do not overlook non-English media outlets that community members may trust.
- Focus on what your audience wants to knowⁱ – Review common questions/concerns, check web analytics, and hold conversations to determine practical questions the intended audiences are likely to have. [Minnesota Department of Health's common question list](#) includes "What actions should someone take to reduce risk?" and "What are the health risks for specific populations?"

Example:

Based on community feedback that a very brief set of reminders would be useful to locate near the kitchen faucet or other key locations, one community group in Flint, Michigan, developed a laminated card with water filter use instructions.

Make assistance available

EPA observations in Flint and Benton Harbor, MI, support that many individuals benefit from in-person and local hotline assistance with proper water filter installation and use.

- Provide person-to-person assistance (e.g., participatory learning, demonstrations community ambassador programs, and Lead/Health Homes inspectors).
- Meet people where they are – Distribute materials at community events and locations frequented by women and young children (e.g., pediatricians, prenatal health centers, and childcares).
- Reference and, if possible, link to manufacturer guidance manual(s) for individuals who have questions or want more technical detail.
- List who to contact for more information. Note individuals may not answer phone calls from outside their local area code(s).
- QR codes can help facilitate quicker access to videos or other references; also include the spelled-out link in case users do not use the QR code.

Example:

A Train-the-Trainer program, centered around a reference handout [Point-of-use \(POU\) water filter installation, use, and maintenance](#), was developed and implemented in Flint, Michigan, by Greater Flint Health Coalition, Community Foundation for Greater Flint, EPA, Flint Neighborhoods United, Genesee Health System, Wayne State University, and the University of Michigan. This program intended to train community trainers, who will go into their communities and train others. See also [Point of Use Water Filters: A Grassroots Train-the-Trainer Program - Urban Collaboratory at the University of Michigan \(umich.edu\)](#).

Example:

Newark's Water Filter and Replacement Cartridge Distribution Program website (<https://www.newarkleadsviceline.com/filters>) both provided the utility's phone and web contact information as well as links to useful references (e.g., water filter manufacturer videos and reference manuals).

Create well-organized, clear materials

Consider federal plain language guidelines (<https://www.plainlanguage.gov/guidelines/>). Audience-focused materials are visually attractive and easy-to-navigate to draw in the audience.

- Organize the information to guide users through what (else) they need to know.
- Choose your words carefully – Use simple words and phrases, use active verbs, clarify noun strings, minimize abbreviations and definitions, and use the same terms consistently.
- Be concise - Avoid non-essential descriptors, use positive language, use short paragraphs and short sentences each limited to one topic.
- Keep it conversational – Use active verbs, present tense, contractions, and examples, and do not use slashes.
- Minimize cross-references.

Example:

Newark uses section headers to help users locate information about its Water Filter and Replacement Cartridge Distribution Program. <https://www.newarkleadsviceline.com/filters>

Include visuals to support understanding.ⁱ

- Visually attractive materials can help gain attention; real photos may be more useful than graphics.
- Video or live demonstrations can improve understanding beyond the written instructions in the manufacturer manual.

Example:

Newark's information on "How to Use Your Filter" embeds helpful images and videos about how to install and operate water filters, <https://www.newarkleadservice.com/filters>.

Include sufficient explanations to be useful.ⁱ

- Appropriate level of detail depends on the audience. Some individuals may feel overwhelmed by multiple or lengthy communication materials.
- For general audiences, typically keep material short (e.g., ideally 1 page; 2 to 4 pages).
- Explain technical terms like "certification"; for example, link to EPA [short-guide, A Consumer Tool for Identifying Point of Use \(POU\) Drinking Water Filters Certified to Reduce Lead,](#) especially if resident would need to purchase a filter themselves.

Example:

Milwaukee's factsheet, Be Lead Safe: TAP WATER FILTERS, provides concise key messages with visuals to help gain attention. [UsingyourwaterfilterEngSpan12-3-19.pdf \(milwaukee.gov\)](#)

Think about making material accessible to all

Accessible materials give people with disabilities comparable access to important information, using assistive technology such as screen readers, transcripts, and closed captioning. Under Section 508 of the Rehabilitation Act, federal government websites are required to be safe and accessible for people with disabilities (i.e., "508 compliant"). For more information, see <https://www.section508.gov>.

Example:

EPA's brief video [Water Filter Installation and Maintenance English V 2 - YouTube](#) had closed captions complete and accurate to the audio information. (*audio description of visuals not assessed; video was created prior to latest 508 guidance)

Communicate proactively and transparently

Share information with the community, media/journalists, and other key stakeholders (e.g., pediatricians, community organizations) to develop trust-based relationships, prior to a crisis situation. Honesty and accuracy are critical for risk communication. Limit your responses to your expertise and be mindful of your organization's role; refer questions to other appropriate parties.^{iv}

Key topics to include in water filter education materials for reducing lead exposure

Where should filters be installed

Taps that are used for drinking/cooking, including kitchen taps as well as refrigerators with water lines or icemakers. Noting that plumbed in or whole house water filters will not reduce lead from downstream sources (i.e., lead-containing interior plumbing) and may have other water quality impacts (e.g., many remove chlorine).

Example:

Michigan State University Extension [Water filters and lead website](#) states, “Water filters can also be used to reduce levels of lead, but make sure that the filter is certified and that you are regularly replacing the filters. Water filters should be used at points in the home where you will be consuming the water. If water in your home contains high levels of lead, this will also include water from the refrigerator or ice makers in which case you should use filtered water in ice cube trays or keep cold water from a filtered tap in the refrigerator.”

How to select a water filter

Look for certification for lead reduction (e.g., NSF/ANSI-53 for lead reduction). Filters that are also certified under NSF/ANSI-42 to remove fine particulate provide additional confidence in removal of total lead (including lead bound to particulates).

Example:

[EPA’s A Consumer Tool for Identifying Point of Use \(POU\) Drinking Water Filters Certified to Reduce Lead](#) is intended to help residents select a water filter for lead in drinking water.

How to install /set-up a water filter – Describe or demonstrate installation and set-up steps from manufacturer instructions common to the water filters expected to be used by the target audience. Describe how to use bypass mode for faucet filters (e.g., for cleaning or handwashing, or to flush stagnated water).

Example:

EPA’s video [Water Filter Installation and Maintenance English V 2 - YouTube](#) demonstrates how to install a faucet-mounted filter, including initial flush through the filter, as well as how to bypass the filter for unfiltered water. Also discusses timely cartridge replacement.

How to operate the water filter

Include reminders about manufacturer operational instructions common to the water filters expected to be used by the target audience, such as:

- Use cold water only because hot water can damage the carbon block media found in most available water filters.

- Per carbon block faucet filter manufacturer instructions, run water through filter (e.g., 5 seconds) prior to each use period.
- For pitcher filters, be careful to fill the pitcher by directing the flow into the top portion, avoiding the spout or the filter itself. Do not overfill the pitcher filter or allow tap water to run directly into the bottom without passing through the filter. Avoid storing pitcher filters in direct sunlight. Allow the water to pass through the filter before tipping the pitcher to pour.

Example:

EPA's February 2022 factsheet, Properly Used Filters Protect Benton Harbor Residents from Lead in Drinking Water, reminds users to only use cold water and to run faucet-mounted filters for 5 seconds prior to each use.

Example:

Denver Water's video, How to use a pitcher water filter to reduce the risk of lead getting into drinking water, includes information on installation, operation, and maintenance including "Remember to always use cold water and don't go over the max fill line. Also make sure to let the water flow all the way through the filter."

Water filter maintenance reminders – Include reminders about manufacturer maintenance instructions common to the water filters expected to be used by the target audience, such as cartridge replacement frequency and indicator lights, and replacement and flushing procedure.

Example:

EPA's video Water Filter Installation and Maintenance English V 2 - YouTube demonstrates indicator lights for a faucet-mounted filter, and indicates the importance of timely cartridge replacement.

Cited References

ⁱ Federal plain language guidelines, <https://www.plainlanguage.gov/guidelines/>

ⁱⁱ Lin, I. H. and D. Peterson. Risk Communication in Action: The Tools of Message Mapping. U.S. Environmental Protection Agency, Washington, DC, EPA/625/R-06/012 (NTIS PB2008-103883), 2008. https://cfpub.epa.gov/si/si_public_record_report.cfm?Lab=NRMRL&dirEntryId=156207

ⁱⁱⁱ Denver's encouraging Filter Performance in the Field testing results, as well as increasing filter adoption rate during 2020-2022, are summarized in EPA-R08-OW-2019-0404-0030 (Denver Water Variance Appendix - 2022 Proposal, 8/31/2022) available through [regulations.gov](https://www.regulations.gov).

^{iv} EPA SALT Framework (Strategy, Action, and Learning, Tools): A Process Framework to Guide Risk Communication), <https://www.epa.gov/risk-communication/salt-framework>

Additional references for accessibility and communications best practices

- <https://www.section508.gov> including Developing Synchronized Media (visuals and audio); Developing Videos, Developing Word Documents, Developing PDF, and Developing Websites
- Clear Communication Index | Centers for Disease Control and Prevention
<https://www.cdc.gov/ccindex/index.html>

- [Minnesota Department of Health. Drinking Water Risk Communication Toolkit](https://www.health.state.mn.us/communities/environment/water/toolkit/index.html) <https://www.health.state.mn.us/communities/environment/water/toolkit/index.html>
- [Lead Service Line Replacement Collaborative](https://www.lslr-collaborative.org/resources) <https://www.lslr-collaborative.org/resources>, including [Communicating for Multiple Audiences](#) and [Effectiveness of Anticipated Communications Options](#)
- [Lead Communications | American Water Works Association](https://www.awwa.org/Resources-Tools/Resource-Topics/Contaminants-of-Concern/Lead/Lead-Communications) <https://www.awwa.org/Resources-Tools/Resource-Topics/Contaminants-of-Concern/Lead/Lead-Communications>
- [EJScreen: Environmental Justice Screening and Mapping Tool | US EPA](https://www.epa.gov/ejscreen) <https://www.epa.gov/ejscreen>

Example Water Filter Use Education Materials

Federal and Region 5 State Agencies

- Michigan "Lead in Drinking Water Safety Tips" video. May 13, 2021 <https://youtu.be/3xnviclYtZs>
- Michigan. [PUR Faucet Filter Installation 2022 - YouTube](https://www.youtube.com/watch?v=MUP9GgWu2r0) video, <https://www.youtube.com/watch?v=MUP9GgWu2r0>
- Michigan. How to Use Your PUR® Faucet Filter Certified to Reduce Lead in Drinking Water. (also in Spanish: [Filtro de agua para grifo PUR](#)) (factsheet), https://www.michigan.gov/documents/mileadsafe/PUR_Filter__English_661087_7.pdf
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Local Governments

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