



Department of Environmental Protection

One Winter Street Boston, MA 02108 • 617-292-5500

Charles D. Baker
Governor

Karyn E. Polito
Lieutenant Governor

Matthew A. Beaton
Secretary

Martin Suuberg
Commissioner

July 22, 2016

Re: Lead and Copper Rule (LCR) updates

Dear Community and Non-Transient Non-Community Public Water Suppliers:

On February 29, 2016, Deputy Assistant Commissioner Joel Beauvais of the US Environmental Protection Agency (EPA) Office of Groundwater & Drinking Water issued a letter to Governors and heads of Drinking Water Programs, including the Massachusetts Department of Environmental Protection (MassDEP) Commissioner Martin Suuberg, requesting that states take near-term action to address risks from lead in drinking water.

EPA specifically asked states to take the following actions:

- Confirm that the state's protocols and procedures for implementing the Lead and Copper Rule (LCR) are fully consistent with the LCR and applicable EPA guidance.
- Use relevant EPA guidance on LCR sampling protocols and procedures for optimizing corrosion control.
- Post on the state's website all state LCR sampling protocols and guidance for proper sample site selection (at which LCR sampling is required to be conducted).
- Work with public water systems (PWS) - prioritizing large PWSs - to increase transparency in implementation of the LCR by posting information on lead service lines, criteria for site selection and sample results/invalidation on PWSs' public websites and/or on your state agency's website.
- Enhance efforts to ensure that residents promptly receive lead sample results from their homes with clear information on lead risks and how to abate them, and that the general public receives prompt information on high lead levels in drinking water systems.

On March 29, 2016, Commissioner Suuberg responded to EPA and assured them that "the Commonwealth of Massachusetts shares EPA's extremely high priority to protect public health and ensure the safety of our state's drinking water." (See copy of letter at <http://www.mass.gov/eea/docs/dep/water/drinking/alpha/a-thru-h/commissionerresponse.pdf>).

To ensure that Massachusetts is maximizing public health protection measures in the implementation of the LCR, MassDEP requests that all PWSs take the actions described in the attached document which go beyond actions currently required by state and federal rules, including responding to an LCR electronic survey. To further strengthen health protection, Governor Charles D. Baker has approved a statewide "Assistance Program for Lead in School Drinking Water." MassDEP encourages you to assist your local schools and childcare facilities who are

participating in this program. More information on this program is available at:

<http://www.mass.gov/eea/agencies/massdep/water/drinking/testing-assistance-for-lead-in-school-drinking-water.html>.

Thank you for your continued work to provide safe drinking water, protect public health, and to provide transparent water quality information. I look forward to your response to this public health challenge and receiving your input on the LCR survey.

Sincerely,

A handwritten signature in black ink, appearing to read "Yvette DePeiza". The signature is fluid and cursive, with a large initial "Y" and "D".

Yvette DePeiza
Program Director
MassDEP/BWR Drinking Water Program

CC: USEPA, DPH, BOH
Attachment

Y:\DWPWQA\LCR\LSLR\Letter to Public Water Systems-2016-06-24

Attachment to LCR Letter July 22, 2016

In response to the EPA request to improve implementation of the LCR, provide transparency and public access to LCR information, and to ensure that Massachusetts is maximizing the public health protection measures in the implementation of the LCR, MassDEP requests that all PWSs take these actions in addition to the actions currently required by regulation:

LCR Survey

By August 30, 2016, complete the LCR e-survey at <https://www.surveymonkey.com/r/FMGFBJ2>.

The results of this survey will be summarized and used to identify, develop, and provide LCR technical assistance, best management practices, and Lead Service Line Replacement (LSLR) funding mechanisms to Massachusetts PWSs and consumers.

- You may also respond to the survey by downloading a copy of the survey from <http://www.mass.gov/eea/docs/dep/water/drinking/alpha/i-thru-z/lcrsurv.pdf>, completing the form and saving the form as a PDF and emailing the completed form to program.director-dwp@state.ma.us, Subject line: "LCR."
- You may also download a hard copy of the survey from <http://www.mass.gov/eea/docs/dep/water/drinking/alpha/i-thru-z/lcrsurv.pdf>, completing the form and mailing it to MassDEP Drinking Water Program, One Winter Street, Boston, MA 02108; Attention: LCR.

Sampling

Use the revised Sample Collection protocols for sample collection, as required by the EPA. These changes are fully incorporated into the "Home Sampling Instructions and Chain of Custody (COC)" Form as of 03/09/2016. For a copy of the revised form see <http://www.mass.gov/eea/docs/dep/water/approvals/year-thru-alpha/e-thru-l/lcroc.doc>.

For information on preparing for sampling see: <http://www.mass.gov/eea/docs/dep/water/drinking/alpha/i-thru-z/lcrsamplchk1st.pdf>.

Please also be reminded of the following:

- a) PWSs must review all sampling sites to determine that they are the highest LCR Tier possible and that they have been approved by MassDEP. Only MassDEP approved sites may be used for sample collection. If you have any questions or planned changes to your sampling plans please contact your regional contact listed below.
- b) MassDEP strongly recommends that PWSs identify as many Tier 1 sites as possible and obtain MassDEP's written approval. 310 CMR 22.06B(7)(a) requires "Any water system whose distribution system contains lead service lines shall draw 50% of the samples it collects during each monitoring period from sites that contain lead pipes, or copper pipes with lead solder, and 50% of the samples from sites served by a lead service line. A water system that cannot identify a sufficient number of sampling sites served by a lead service line shall collect first-draw samples from all of the sites identified as being served by such lines."
- c) To ensure timely sampling, MassDEP strongly recommends that PWSs identify additional alternate LCR sampling sites.

- A good practice is to identify at least 50% more alternate sampling sites than the required number of primary sites. The additional alternate sites must be included in a revised “Lead and Copper Sampling Plan” (Form LCR-A). A copy of the Lead and Copper Sampling Plan Form (LCR-A) is located at <http://www.mass.gov/eea/docs/dep/water/approvals/year-thru-alpha/m-thru-s/pbcusamp.doc> . The PWS must seek and receive MassDEP written approval of the revised sampling plan prior to sampling.
 - After approval of the overall sampling plan (LCR-A) by MassDEP, alternative LCR sites may be used without additional prior approval if: (1) the primary site was not above the LCR action level during the previous sampling round (if previously sampled) and (2) the alternate site is at the same or higher tier than the primary site. Alternately, if these two criteria cannot be met then prior written approval from MassDEP is required prior to using the alternate site.
 - The use of alternate sites requires completion of the “Lead and Copper Sampling Plan Change in Sampling Site” form for each alternate site used and submittal of the form(s) to MassDEP with the lead and copper results for the round. A copy of the Lead and Copper Sampling Plan Change in Sampling Site Form is located at <http://www.mass.gov/eea/docs/dep/water/approvals/year-thru-alpha/m-thru-s/pbcuchng.doc> .
- d) MassDEP strongly recommends that PWSs notify consumers at all LCR participating home sampling sites promptly (e.g., within three days) of their sample results rather than waiting to notify until the maximum timeframe allowed under LCR. MassDEP urges PWSs to provide accompanying information (and/or directions for accessing information) sufficient for the participant to understand the results and what actions, if any, should be taken to protect the health of the residents at that sampling site. Participating consumers need this information promptly so that they can begin to address any concerns they may have. For example, consumers may use this information to evaluate the plumbing in their property, replace lead service lines, and use the recommended tips for collecting water for drinking and cooking after the water has been in use for some time and the water is coming from the distribution line in the street. The MassDEP templates for reporting results to consumers at homes or schools participating in sample collection participating is available :
- Participating Homeowners: <http://www.mass.gov/eea/docs/dep/water/approvals/year-thru-alpha/e-thru-l/lcrhn.doc> .
- Participating School: <http://www.mass.gov/eea/docs/dep/water/approvals/year-thru-alpha/e-thru-l/lcrsn.doc>.
- e) MassDEP strongly recommends that PWSs with lead 90th percentile results that are close to or trending towards the 15 parts per billion (ppb) Lead Action Level (AL) take proactive measures to reduce lead levels below the AL. Proactive measures may include evaluating treatment changes to ensure treatment stabilization and increased lead service line removal. MassDEP is available to assist PWSs with proactive measures.
- f) MassDEP strongly encourages PWSs to submit their individual sample results electronically through eDEP **so that the information is readily available and MassDEP can assist you with ensuring transparency of your LCR results.**

Reporting Results

- a) PWSs may report hard copy results to MassDEP by using the following forms:
- LCR-C -“Lead and Copper Analysis Report Form” located at <http://www.mass.gov/eea/docs/dep/water/approvals/year-thru-alpha/e-thru-l/lcrc.doc>, and

- LCR- D - “Lead and Copper 90th percentile calculation LCR compliance Form” (for systems required to collect more than five samples) located at <http://www.mass.gov/eea/docs/dep/water/approvals/year-thru-alpha/e-thru-l/lcrd.doc>, or
 - LCR E - (for systems required to collect 5 samples) located at <http://www.mass.gov/eea/docs/dep/water/approvals/year-thru-alpha/e-thru-l/lcre.doc>.
- b) PWS may also submit results electronically by using eDEP and MassDEP strongly encourages PWS to use eDEP. If a PWS submits results via eDEP it must also submit a hard copy of the 90th percentile calculation LCR compliance Form LCR- D (for systems required to collect more than five samples) or LCR-E (for systems required to collect 5 samples).

Optimal Corrosion Control

For PWSs that currently use corrosion control treatment, MassDEP strongly encourages them to use the new EPA “Optimal Corrosion Control Treatment Evaluation Technical Recommendations” when evaluating corrosion control treatment issues. This document provides technical recommendations to primacy agencies and PWSs in determining the most appropriate treatment for controlling lead and copper and complying with the corrosion control treatment (CCT) requirements of the LCR that are in place at the time of document publication. The document is available at <https://www.epa.gov/dwreginfo/optimal-corrosion-control-treatment-evaluation-technical-recommendations>.

Addition of a New Source/Treatment or the Addition or Modification of a Source/Treatment

As a reminder and clarification, in accordance with 310 CMR 22.04 (1) and to ensure that all changes are adequately evaluated for simultaneous compliance issues, these changes will be considered substantial modifications and PWS will be required to contact the MassDEP Drinking Water Program prior to such changes. MassDEP requirements will generally include treatment evaluation, monitoring and reporting, public notification, emergency response planning and MassDEP approval.

Transparency (Public Access) and Consumer Information

Transparency is the term used for ensuring that there is real-time public access to your system’s information. Your consumers should be able to quickly access information in real time so that they can make an informed decision regarding their drinking water. It is strongly recommended that PWSs take the following actions in addition to those required by regulation:

- a) Take action to ensure that consumers have access to lead sampling results in a timely manner via all of available communication mechanisms (including social media) in a consumer accessible format and translated as appropriate for the languages in your service area.
- b) Show on your PWS or community website your current inventory of lead service lines or other information which will assist residents in determining if their home has a lead service line. This could take the form of the materials evaluation or a more up to date inventory if one is available, or information on what type or age of buildings are most likely to have had lead services if no other information is currently available. A map of lead service lines would also provide good information for your consumers. Communities should strive to update and improve their inventories, and to make them as easily and publicly available as possible. If you need examples of a nationally recognized lead service map please see the Boston Water and Sewer Commission (BWSC) website at http://www.bwsc.org/community/lead/leadmaps.asp#TOP_PAGE .

- c) If your PWS exceeds the 90th percentile value of the LCR, post the LCR results to your website, via social media, and other consumer accessible formats. **To assist PWSs and consumers, MassDEP has posted all 90th values for PWS at <http://www.mass.gov/eea/agencies/massdep/water/drinking/public-water-systems-lead-90th-lead-sampling-results.html> .**
- d) Provide any additional updates, warning notifications, and educational information on lead to your consumers. This information can be posted on your website, social media, and consumer accessible formats, mailed, or communicated in an alternative method that provides timely information to your consumers. Examples of additional updates, warnings, and education can include pipe replacement notices that may impact lead service lines, informational meeting on lead programs in local schools, Tips for homeowners and consumers to address lead leaching from home plumbing, etc. MassDEP strongly recommends that PWSs keep consumers updated on lead education including the need to wait to use water for drinking and cooking until the water is coming from the distribution line in the street. Consumers can manage their water use, without wasting water, by collecting water for drinking and cooking after water has been used for other purposes and the water has not been stagnant in the internal plumbing for 6 hours or more. A website and social media posting would help to keep information current.
- e) Provide consumer information and advice about lead in drinking water and its possible effect on sensitive populations, in particular pregnant women, infants, and young children on your website, social media, and other consumer accessible formats; and direct pregnant women and parents of infants or young children to their health professionals, the Massachusetts Department of Public Health (Mass DPH) and the Center for Disease Control (CDC) for health related information.

See MassDEP information for consumers at:

<http://www.mass.gov/eea/agencies/massdep/water/drinking/is-there-lead-in-my-tap-water.html>.

See Mass DPH information for consumers at:

www.mass.gov/dph/lead-sources

See CDC information for consumers at:

<http://www.cdc.gov/nceh/lead/default.htm>.

Lead Service Line Replacement (LSLR):

All PWSs that have lead service lines (full or partial) are strongly encouraged to take the following actions:

- a) Implement a program for full LSLR. EPA’s “Science Advisory Board Drinking Water Committee Augmented for the Review of the Effectiveness of Partial Lead Service Line Replacements” analyzed the impact of partial LSLR (PLSLR) and concluded that, “The weight of evidence indicates that PLSLR often causes tap water lead levels to increase significantly for a period of days to weeks, or even several months.” Please note: when a PWS is required by MassDEP to perform LSLR and partial lead service line replacement is the only option the PWS must take steps 1, 2, 4, 5 and 6 below. **However, in the interest of public health protection, MassDEP strongly recommends that whenever a partial lead service line is removed, all PWS take all of the following actions:**
 - 1) Notify the homeowner/addressees and provide them with an opportunity to replace their portion of the line. Provide the homeowners/addressees with information on lead health risk. See consumer information above in item e) of the “Transparency (Public Access) and Consumer Information” section.
 - 2) Copy MassDEP Regional Office on all homeowner/addressees notices.
 - 3) Copy your local Board of Health (BOH) on all homeowner/addressees notices.

- 4) Sample for lead after the partial removal in accordance with 310 CMR 22.06B (5) (d). For partial LSLR notification and reporting use the appropriate forms found under “Lead Service Line Replacement Program Forms” at:
<http://www.mass.gov/eea/agencies/massdep/water/approvals/drinking-water-forms.html#23>.
 - 5) Report all results of the analysis to the owner and the resident served by the partial lead service line to the consumer within three business days of receiving the lead sample results from the laboratory.
 - 6) Report all results to MassDEP within 10 days after the end of month.
- b) MassDEP strongly recommends that PWSs provide LSLR incentive programs to help motivate homeowners to have their portion of the lead service line removed at the time of the removal of the city/town’s portion. PWSs should be aware of funding mechanisms available to them, including the State Revolving Loan Fund and other sources. **Please note: Lead service connection removal (to the meter) is eligible for financing under the Drinking Water State Revolving Fund program, and is a high priority of the MassDEP.** Visit our website at:
<http://www.mass.gov/eea/agencies/massdep/water/approvals/state-revolving-fund-srf-forms.html> to obtain information and application instructions.
- c) You are encouraged to work with your local BOH to develop an education and outreach program for homeowners and other facility owners with lead service line or internal lead plumbing. The goal of this program should be to encourage homeowners to remove all lead service lines and plumbing owned by them as soon as possible.

Schools

- a) MassDEP strongly encourages you to continue to educate the local schools and childcare facilities on your distribution system to follow the USEPA and MassDEP Lead Contamination Control Act (LCCA) programs. For more information on these programs see:
<http://www.mass.gov/eea/agencies/massdep/water/drinking/lead-and-other-contaminants-in-drinking-water.html#8>.
- b) Assist your local schools and childcare facilities to participate in “Assistance Program for Lead in School Drinking Water” program. More information on this program is available at:
<http://www.mass.gov/eea/agencies/massdep/water/drinking/testing-assistance-for-lead-in-school-drinking-water.html>.
- c) Have your MassDEP Certified Laboratory report all of your school results through MassDEP eDEP system or on the new school results reporting form¹.

Training & Other Resources

MassDEP will continue to notify you by email of any upcoming training and the USEPA has provided the following training opportunities:

¹ NEW FORM MAY 2016! - Governor Baker and MassDEP Commissioner Suuberg kicked off the Assistance Program for Lead in School Drinking Water (Program) which is designed to assess the status of lead and copper in the drinking water at public schools and public Early Education and Childcare Facilities (EECFs). This Program mandates that all lead and copper analysis performed as part of this project is reported using the eDEP Bulk Upload. A new LCCA report format has been developed to accommodate Schools on Public Water Supplies (schools not considered PWS that have their own sources of water). To use the new LCCA form you will need to substitute the School's "Org Code" in place of the PWSID. Mass DEP is requesting that all School Lead and Copper sampling be reported using the new electronic LCCA form from this point on. For more detailed information please reference the "Special LCCA Column Explanation" worksheet in this version of the Electronic Bulk Upload Instructions.

- <https://www.epa.gov/dwreginfo/drinking-water-trainings>
- <https://www.epa.gov/sites/production/files/2016-03/documents/occtmarch2016.pdf>

Technical Assistance

MassDEP shares your goal of providing safe water to all users and remains available for technical assistance. MassDEP Drinking Water Program Lead and Copper contacts are listed below.

Location	Name	Phone #	Email Address
CERO	Andrea Lemerise	508-767-2723	Andrea.lemerise@state.ma.us
	Josephine Yemoh-Ndi	508-849-4030	Josephine.Yemoh-Ndi@state.ma.us
NERO	Tatyana Karpenko	978-694-3233	Tatyana.Karpenko@state.ma.us
	Melissa Privetera	978- 694-3403	Melissa.Privetera@state.ma.us
SERO	Giliane Tardieu	508-946 -2789	Giliane.Tardieu@state.ma.us
WERO	Dan Laprade	413-755.2289	Daniel.laprade@state.ma.us
	Cathy Wanat	413-755-2216	Catherine.Wanat@state.ma.us
Boston	Frank Niles	617-574-6871	Frank.R.Niles@state.ma.us

If you wish to be contacted by a technical assistance provider please contact Michael Maynard at 508-767-2735 or Michael.Maynard@state.ma.us.

You may also contact the Drinking Water Program at Program.Director-dwp@state.ma.us or 617-292-5770.

Information on Lead

MassDEP: <http://www.mass.gov/eea/agencies/massdep/water/drinking/lead-and-other-contaminants-in-drinking-water.html#9>

EPA: <https://www.epa.gov/dwreginfo/lead-and-copper-rule>

DPH: <http://www.mass.gov/eohhs/gov/departments/dph/programs/environmental-health/exposure-topics/lead/>

CDC: <http://www.cdc.gov/nceh/lead/leadinwater/>

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