



RICK SNYDER  
GOVERNOR

STATE OF MICHIGAN  
DEPARTMENT OF ENVIRONMENTAL QUALITY  
LANSING



KEITH CREAUGH  
DIRECTOR

April 4, 2016

VIA E-MAIL

Mr. Joel Beauvais  
Deputy Assistant Administrator  
United States Environmental Protection Agency  
1200 Pennsylvania Avenue, NW (4101M)  
Washington, DC 20460

Dear Deputy Assistant Administrator Beauvais:

Thank you for your letter of February 29, 2016, requesting information on actions the Michigan Department of Environmental Quality (MDEQ) has taken to strengthen implementation of the Lead and Copper Rule (LCR). Above all, the MDEQ is committed to protecting the public health of its citizens and visitors. Over the last few months, the MDEQ has worked together with the United States Environmental Protection Agency (USEPA) to improve the city of Flint's (Flint) drinking water quality. Some of the actions we are taking go beyond the requirements of the LCR.

Michigan has dedicated significant resources in Flint by providing bottled water and filters, sampling residences and schools for lead, returning Flint to water supplied by the Great Lakes Water Authority, and assisting in the replacement of lead service lines. The MDEQ is committed to continue this work until confidence is restored with the residents of Flint in the government's ability to protect their public health. Each day, we learn more about the behavior of lead within the distribution system and customer piping; and scientific assumptions have not always turned out as predicted. Our experience with lead in drinking water distribution systems is being tested in the real world rather than in a laboratory, and we continue to learn more about lead control and reduction each day that we work in Flint.

On March 14, 2016, Mr. Jim Sygo, Chief Deputy Director, MDEQ, sent a memo to all of Michigan's community public water supplies requiring them to conform to the LCR and associated guidelines and protocols; asking them to enhance proactive measures to provide lead and copper monitoring results and public educational information; and asking them to increase their transparency and assistance to the public. A copy of the memo is enclosed. Many of the items in your letter are addressed in the memo. The following responses are provided in addition to the memo:

**(1) Confirm that the state's protocols and procedures for implementing the LCR are fully consistent with the LCR and applicable USEPA guidance**

*We continue to work with the USEPA on the ground in Flint to ensure that this is the case and assume that staff would tell us if the USEPA saw any inconsistent protocols or procedures. We believe, therefore, that the MDEQ's protocols and procedures are consistent with the LCR and applicable USEPA guidance as we currently understand them. We will be incorporating best management practices and technical knowledge gained from our work in Flint, as well as the work the USEPA is conducting, into our policies and procedures. We will also continue to incorporate guidance from the USEPA*

*with regard to the LCR when released. As an example, the MDEQ has recently updated our lead sampling procedure to remove the pre-stagnation flush step the day prior to collection of lead sample(s) and to require the use of wide-mouth sample bottles.*

**(2) Use relevant USEPA guidance on LCR sampling protocols and procedures for optimizing corrosion control**

*The MDEQ is hiring a drinking water corrosion control specialist in the near future. The specialist will apply the guidance developed by the USEPA, attend all pertinent trainings offered, and consult with the USEPA specialists on corrosion control, as needed. Because of our experiences with Flint, if there is a public water supply that is undergoing challenging corrosion control implementation, MDEQ staff will contact technical staff at the USEPA for assistance.*

**(3) Post on your agency's public website all state LCR sampling protocols and guidance for identification of Tier 1 sites**

*All sampling procedures, including instructions on selecting Tier 1 sites, are currently posted on the MDEQ's public Web site. Our procedures will be revised to reflect items covered in Dr. Peter Grevatt's guidance memo of February 29, 2016. Historically, the MDEQ has accepted certification from community water supplies that the Tier 1 sites were selected appropriately. Because of what we have learned from the Flint experience, MDEQ staff will be asking for additional documentation from the community water supplies to support their selection and certification of Tier 1 sites.*

**(4) Work with public water systems – with a priority emphasis on large systems – to increase transparency in implementation of the LCR by posting on their public website and/or on your agency's website:**

- o **the materials inventory that systems were required to complete under the LCR, including the locations of lead service lines, together with any more updated inventory or map of lead service lines and lead plumbing in the system; and**
- o **LCR compliance sampling results collected by the system, as well as justifications for invalidation of LCR samples**

*The MDEQ asked community water supplies to review and update their materials inventory to ensure a sufficient pool of sample sites meeting proper tier criteria. The MDEQ does not receive copies of the full inventories. In the enclosed March 14, 2016, memo, the MDEQ asked the community public water supplies to widely distribute information about the location of lead service lines, sampling results, and educational materials, including posting of the information on the supply's Web site, if applicable.*

*The enclosed memo recommended water supplies explore options for making sampling information accessible to the public. The MDEQ will post available 90th percentile values on our Web site. The MDEQ will also evaluate options to make additional lead information available to the public. This evaluation will require a resource assessment, including personnel and technology needs.*

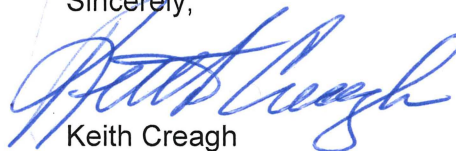
*Publishing of individual compliance sampling results collected by the system will be controversial. It is already difficult for a community water supply to maintain a stable Tier 1 sampling pool due the reluctance of residents to volunteer for sampling and a high level of turnover among participants in the sampling pool. If addresses and results of residential sampling are posted on a public Web site, it will cause privacy and confidentiality concerns and may result in further difficulty getting residents to participate in the sampling. In addition, several communities in Michigan have a policy of replacing lead service lines when identified, meaning that such a list will be misleading regarding the status of lines in many cases.*

- (5) Enhance efforts to ensure that residents promptly receive lead sampling results from their homes, together 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.**

*In the enclosed March 14, 2016, memo, the MDEQ asked the community public water supplies to provide results and educational materials more quickly than what is required by the LCR.*

We encourage the USEPA to make revisions to the LCR a priority. We look forward to working cooperatively with the USEPA to strengthen the LCR now and in the future. If you have any questions regarding this matter, please contact Ms. Mary Ann Dolehanty, Interim Chief, Office of Drinking Water and Municipal Assistance, at 517-284-6544; dolehantym@michigan.gov; or MDEQ, P.O. Box 30241, Lansing, Michigan 48909-7741; or you may contact me.

Sincerely,



Keith Creagh  
Director  
517-284-6700

Enclosure

cc/enc: Mr. Robert Kaplan, Acting Regional Administrator, USEPA, Region 5  
Dr. Peter Grevatt, USEPA  
Mr. Jim Sygo, Chief Deputy Director, MDEQ  
Ms. Maggie Pallone, Deputy Director, MDEQ  
Ms. Mary Ann Dolehanty, MDEQ  
Ms. Carrie Monosmith, MDEQ

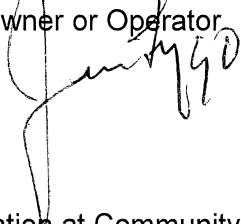


RICK SNYDER  
GOVERNOR

STATE OF MICHIGAN  
DEPARTMENT OF ENVIRONMENTAL QUALITY  
LANSING



KEITH CREAGH  
DIRECTOR

TO: Community Public Water Supply Owner or Operator  
FROM: Jim Sygo, Chief Deputy Director   
DATE: March 14, 2016  
SUBJECT: Lead and Copper Rule Implementation at Community Public Water Supplies

This mailing is to notify you of changes that the Department of Environmental Quality (DEQ), Office of Drinking Water and Municipal Assistance (ODWMA), is recommending be implemented by each Community Public Water Supply (Supply) in the state of Michigan. The DEQ believes these actions will aid in the protection of public health by encouraging Supplies to confirm compliance with the Lead and Copper Rule and to be proactive and transparent in their approach to further reduce lead and copper concentrations in drinking water.

Supplies subject to lead and copper monitoring requirements should:

1. *Confirm that lead and copper monitoring practices conform to the Lead and Copper Rule and associated guidance and protocols.*
  - a. **Review and update the Supply's distribution system material inventory to ensure accuracy.** This should include as much information as possible about not only what is owned by the Supply, but also the privately-owned portion of the service lines.
  - b. **Review the Supply's lead and copper sampling pool to ensure that sampling sites are appropriate and meet the required Tier criteria prior to future sampling events.** Keep appropriate documentation to justify sample site, including any additions to or deletions from the sampling pool. Review past documentation of sample sites that have been discontinued to determine if adequate justification exists.
  - c. **Incorporate updated sampling collection procedures into future sampling events.** Current procedures no longer include a "pre-stagnation flush" the day prior to collection and require the use of wide-mouth sample bottles. A separate DEQ mailing will be sent to supplies that are due for lead and copper sampling during the summer of 2016, with updated instructions, educational materials, forms, and other details. Also, please be aware that related documents are available online.
  - d. **Be advised that partial lead service line replacements should be avoided** since these activities may result in a lead level increase in the water of associated homes. Additionally, if lines are disturbed during construction, this information should be provided to affected occupants along with information about decreasing risk of lead exposure.
  - e. **If the Supply is optimizing corrosion control utilizing chemical addition, review the treatment strategy to ensure efficacy.** Review all water quality parameters and monitoring results for adequacy and regulatory compliance, including proper tracking and reporting.

March 14, 2016

- f. **Prior to any change to source and treatment, examine potential effects on water chemistry.** Ensure that regulatory requirements, including notification to the DEQ as well as possible increased monitoring, are met and methods to reduce parameters of concern are explored.
2. *Enhance proactive measures to provide lead and copper monitoring results and public educational information directly to all residents as soon as possible after it is received.*
    - a. **Set goals for the Supply to provide results and educational information directly to impacted residents more quickly than required by the regulations,** particularly to homes where lead results exceed 15 parts per billion (ppb).
    - b. **In the event that future lead and copper sampling results in an action level exceedance (ALE) for the Supply, ensure that results and educational materials are widely distributed within the community** through a press release and/or other means, and consult with the DEQ on regulatory requirements.
  3. *Increase the Supply's transparency and assistance to the public.*
    - a. **Widely distribute information about the location of lead service lines within your community, as well as all sampling results and educational materials,** including posting this material on the Supply's Web site, if applicable. General information about lead exposure reduction can be found at:  
<http://nepis.epa.gov/Exe/ZyPDF.cgi?Dockey=500025PW.txt>.
    - b. **Be aware that all lead monitoring results above 15 ppb will be provided to the Department of Health and Human Services (DHHS) and will inform them of ALEs in communities.** This may result in additional public education, health screenings, testing of blood lead levels, and/or other recommendations for action.
    - c. **Provide expertise and assistance to those in your community with questions about lead and copper and those interested in supplemental sampling to determine water lead and copper levels at locations not included in the sampling pool for Lead and Copper Rule compliance, such as**-schools, medical facilities, day cares, nursing homes, as well as private residents.

Finally, it is recommended that each Supply begin developing a plan to identify and replace **all** lead components in the Supply's distribution system, including the privately-owned portion of the service lines. It is recognized that this will require significant time and capital outlay and cause many logistical issues, but a plan should be started and potential funding and tools should be explored.

It is likely that there will be new guidance and regulations coming in the near future. The DEQ is committed to working with you to address risks from lead and copper in drinking water. Thank you for your cooperation in implementing these actions. Please contact your DEQ district office (see attachment) if you have questions about the contents of this memorandum.

Attachment

cc: Nick Lyon, Director, DHHS  
Keith Creagh, Director, DEQ

# MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY DISTRICT OFFICE MAP

