

STATE OF CONNECTICUT

DEPARTMENT OF PUBLIC HEALTH



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Drinking Water Section

DWS Circular Letter #2016-26

TO: Non-Transient, Non Community (NTNC) School & Child Care Water Systems
L. Mathieu

FROM: Lori Mathieu, Public Health Section Chief, Drinking Water Section

DATE: October 14, 2016

RE: School & Child Care Public Water Systems Lead & Copper Compliance

The Department of Public Health (DPH) requests that public water systems follow the below measures to maintain compliance with the LCR's requirements:

- Revise sample site plan
- Review sample procedures
- Proper maintenance of treatment equipment

Schools and child care facilities that have their own water supply and are considered non-transient, non-community water systems (NTNCs) are subject to the Lead and Copper Rule (LCR) requirements. The LCR was developed to protect public health by minimizing lead and copper levels in drinking water. The most common source of lead and copper in drinking water is corrosion of plumbing materials. Plumbing materials that can be made with lead and copper include pipes, solder, fixtures, and faucets. Children are especially susceptible to lead and copper exposure because their bodies are still undergoing development, therefore, absorb these metals at higher rates than the average adult.

When lead and copper are found in tap water it is typically due to leaching from internal plumbing materials. If the water is too corrosive, it can cause lead or copper to leach out of the plumbing materials and enter the drinking water. The potential for leaching increases the longer the water is in contact with the plumbing components. School and child care facilities water supplies tend to have extended periods of no water use (e.g., overnight, weekends, holidays, summer) that increase the likelihood of elevated lead or copper levels at the tap.¹

1. Revise Sample Site Plan

It is essential that sample site plans stay updated and revised to prevent lead exposure and to gain a better understanding of the water quality throughout your water distribution. The materials inventory must be reevaluated to locate as many Tier 1 sites as possible. An effective sampling site plan for a



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school should contain at least 10-20 sample sites, depending on the size of the school. For NTNC water systems, Tier 1 locations include samples from structures with lead service lines, sites with lead pipes, or sites with copper pipes with lead solder installed after 1982 and before 1987.

Non-Tier locations include sample sites from copper pipes with lead solder installed before 1983. In addition, please be sure to update sample site plan inventory form with the designated sample tier types and submit the completed form to the Department using the following link:

http://www.ct.gov/dph/lib/dph/drinking_water/excel/SSP_Sampling_Point_Inventory.xlsx

For more information on sampling site selection and the LCR, please refer to the following link:

<https://nepis.epa.gov/Exe/ZyPDF.cgi?Dockey=60001N8P.txt>

2. Review Sample Procedures

Proper sampling procedures should be taken to ensure that lead and/or copper is accurately measured within the system's drinking water. Recent guidance from EPA on proper sampling procedures include:

- No preflushing prior to sample collection,
- Samples must be collected after the water has had time to sit in the pipes for at least 6 hours,
- No removal of aerator prior to or during sample collection,
- Sample collection must be from the cold water tap only,
- The use of a wide-mouth one liter sample bottle for sample collection.
- Do not collect the sample when the water is not routinely used (i.e. during summer break and immediately after weekends or holidays)

For more information on sample collection, please review this link:

http://www.ct.gov/dph/lib/dph/drinking_water/pdf/DPH_Cir_ltr_2016-07.pdf

3. Maintenance of Treatment Equipment

Optimal Corrosion Control Treatment can help prevent lead and/or copper exposure in drinking water, as long as treatment is well-maintained. Routine maintenance of treatment equipment will help ensure that the technology is in proper operation, such as supplying the correct dosage of corrosion control chemicals and maintaining the correct target pH range. Other important maintenance measures include routine replenishment and/or replacement of media in calcite filters, if applicable, to ensure that water is maintaining the correct pH and is not corrosive. A maintenance plan should be developed with the certified operator.

The department greatly appreciates your efforts in prevention of lead contamination in drinking water systems throughout the state, and hopes for continued success through following the above measures.

For additional information, please refer to: Lead and Copper Rule: A Quick Reference Guide for Schools and Child Care Facilities that are Regulated Under the Safe Drinking Water Act

<https://nepis.epa.gov/Exe/ZyPDF.cgi?Dockey=P10058C5.txt>

Additionally, public water systems should discuss these measures with their certified operator and utilize their certified operators as resources in maintaining compliance with the Lead and Copper Rule.

If you have any additional questions regarding the Lead and Copper Rule, please contact Carissa Madonna at (860) 509-7333.