

Massachusetts Department of Environmental Protection Drinking Water Program One Winter Street – Boston, MA 02108 617-292-5770 email: Program.Director-DWP@state.ma.us Web: http://www.mass.gov/eea/agencies/massdep/water/drinking/

Fact Sheet – Assistance Program for Lead in School Drinking Water Follow-up Steps for Schools and Early Education and Child Care Facilities Based on Lead and Copper Sampling Results above the Action Level

Steps you should take if lead or copper results are *above* the Action Level of 0.015 milligrams per liter

(mg/L) for lead or 1.3 milligrams per liter (mg/L) for copper.

1. Shut Off Problem Fixtures

Immediately shut off or disconnect any tap with sample results exceeding the applicable Action Level. Place a placard on the tap indicating that it has been shut off due to high lead or copper levels and will remain out of service until the problem has been corrected. Other interim measures may include:

- Flush¹ the piping system in your building every morning and especially after vacations.
- Provide bottled water if necessary.
- $\circ~$ Use only cold water for food and beverage preparation.

2. Contact the Local Public Water System (PWS) and the MassDEP Drinking Water Program

If the sampling was conducted by you or on your behalf, make your public water supplier aware of any results that exceed the applicable Action Level. You should also notify the MassDEP Drinking Water Program of any sampling result that exceeds the applicable Action Level. Notification should be sent to MassDEP Drinking Water Program at (617) 292-5770 or Director-DWP@state.ma.us.

3. Conduct Outreach to Staff and Parents

Provide staff, students, and parents with a letter informing them of the lab results and describing your plans to address the problem. Sample letters are attached.

4. Follow-up Sampling

Conduct follow-up sampling to determine if the source of the contamination is the fixture or the connecting plumbing. (See Fact Sheet – Assistance Program for Lead in School Drinking Water – Sampling for Lead and Copper).

5. Permanent Measures

Permanently reduce or eliminate the sources of lead that originate in your building's plumbing. All measures must be conducted by a licensed plumber. Permanent measures to address long-term health concerns may include:

- $\circ~$ Shut off and remove or replace problem taps or components.
- Check ground wires and eliminate any that may accelerate corrosion.
- Check and replace all Lead Service lines. *Contact local PWS to check status of lead service line.*

- Replace lead pipes within the school or reconfigure plumbing to bypass sources of lead contamination.
- $\circ~$ Install time-operated solenoid valves to automatically flush problem outlets.
- $\circ~$ Use lead-free materials to repair or replace the facility's plumbing system.
- Use only cold water for food and beverage preparation.
- Clean aerators in accordance with regular maintenance schedule.
- 6. Complete New or Updated MassDEP Lead and Copper in Schools Checklist and LCCA Action Table The information included on the Checklist and LCCA Action Table allows MassDEP and its Lead Contamination Control Act partners to assist schools. The LCCA Action Table should be completed and submitted to MassDEP as soon as possible to document immediate actions. The Checklist should be completed (electronically if possible) and submitted to MassDEP following any repairs or remediation of taps due to the exceedance of Action Levels. The LCCA Action Table and Checklist results will be evaluated by MassDEP and shared with the U.S. Environmental Protection Agency, the Massachusetts Department of Elementary and Secondary Education, the Massachusetts Department of Early Education and Care and the Massachusetts Department of Public Health to allow for appropriate follow-up action. An electronic version of the Checklist is available at https://docs.google.com/forms/d/1egmurK9IRsmPXGYf_T-plcbWv93tV2VOvUXRoVLEaNE/viewform

7. Seek Assistance from Others

Schools, school districts and early education and child care facilities should research opportunities for assistance from local officials including the public water supplier, Board of Health, Plumbing Inspector, and elected officials; as well as from certified water testing laboratories.

Modified from EPA's "3T's for Reducing Lead in Drinking Water in Schools: Revised Technical Guidance"

¹ If you select flushing as a short term measure use your building's plumbing profile and first draw and flushed sample results to determine the appropriate flushing program to maintain levels below the action level when the facility is in session. See EPA's "3T's for Reducing Lead in Drinking Water in Schools: Revised Technical Guidance" for more information on flushing.

Template for Lead Results over the Action Level

(NOTE: This is a sample letter to students, families, and staff from a school or early education or child care facility with laboratory results that exceed the Massachusetts Action Level for lead in drinking water. Delete or replace all items in red including this paragraph and add your school letterhead here.)

(Insert date)

To the Students, Families, and Staff of *(insert school/early education or child care facility name)*:

During recent sampling for lead and copper, some water taps at our school had lead levels that exceed the Massachusetts Action Level for lead in drinking water at schools and early education and child care facilities. See sample results below. The Massachusetts Action Level for lead in drinking water is 0.015 milligrams per liter (also known as parts per million).

We would like to inform you about our plans to reduce potential exposure to lead in drinking water at our school. Lead is not believed to be in our water source but plumbing and fixtures in our buildings may contain lead, resulting in an increase in the lead content in tap water. Exposure to lead is a concern because lead is a toxic metal that has a range of adverse health effects.

Sampling Results						
Date Sample Collected	Collected Location Lead resul					
		mg/L				

The administration takes these results very seriously and is moving immediately to safeguard the health of the students, faculty and staff. The following information describes steps we are taking to address the issue of lead in the water.

To safeguard our students and other sensitive individuals (including woman who are pregnant or nursing), our school is working closely and cooperatively with MassDEP and taking actions as follows:

Only include applicable items

What we are doing:

- 1. While exceeding the Action Level does not require provision of alternative drinking water sources, beginning XXXX we will be /are providing bottled water and will be shutting down all bubblers.
- 2. We have removed from service all taps with lead levels over the Action Level.
- 3. We are implementing a public information process that will include distribution of outreach material to all students, parents, teachers, staff and local officials.
- 4. We have developed a sampling plan to conduct testing at outlets (faucets, water fountains, etc.) where students and staff get water for drinking, beverage preparation and cooking.
- 5. We are implementing a flushing and water usage plan to safeguard against lead exposure from drinking water in the school at outlets that are found to be above the MassDEP Action Level for lead. This includes the daily flushing of water fountains and/or faucets at sinks and the limitation of water consumption to cold-water faucets for food and beverage preparation.
- 6. We will undertake efforts to determine the cause of this lead Action Level exceedance and evaluate the adequacy of our existing corrosion control system. We will develop and put into place a corrective action plan as quickly as possible following additional testing and consultation.
- Through periodic reports, we will keep you informed as to the progress of our efforts. These reports will serve to let you know what has been done and what is being done to safeguard against lead exposure from drinking water at our school(s)/child care facility(ies).
- 8. Optional information can be included that announces an information display at the school on Lead in Drinking Water at Schools and/or an announcement about a workshop that will provide further information and will provide an opportunity for Q&A.
- A Reminder: The water system at the school is not unlike water systems found in other buildings. Older plumbing systems and fixtures, especially, can contain lead pipes or solder that can allow lead to enter tap water. If you have questions about lead in your home's water supply, and are using a private well, you can have your water tested. If you are receiving water from a public water system (i.e., if you pay a water bill) you can call your local water department for information or check the Consumer Confidence Report sent out by the public water supplier annually.

If you have any questions on this information please contact ______ at _____.

Sincerely,

(Insert signature and title)

Modified from EPA's "3T's for Reducing Lead in Drinking Water in Schools: Revised Technical Guidance"

Template for Copper Results over the Action Level

(NOTE: This is a sample letter to students, families, and staff from a school or early education or child care facility with laboratory results that exceed the Action Level for copper in drinking water. Delete or replace all items in red including this paragraph and add your school letterhead here.)

(Insert date)

To the Students, Families, and Staff of *(insert school/early education or child care facility name)*:

During recent sampling for lead and copper, some water taps at our school had copper levels that exceed the Massachusetts and federal Action Level for copper in drinking water at schools and early education and child care facilities. See sample results below. The Action Level for copper in drinking water is 1.3 milligrams per liter (also known as parts per million).

We would like to inform you about our plans to reduce potential exposure to copper in drinking water at our school. Copper is not believed to be in our water source but plumbing and fixtures in our buildings may contain copper, resulting in an increase in the copper content in tap water.

Sampling Results							
Date Sample Collected Location Copper results in mg/L							

Copper is a necessary micronutrient and is needed in small "trace" amounts for good health but too much copper in the diet or in drinking water may cause adverse health effects. Some people who consume drinking water with copper in excess of the EPA action level may experience nausea, vomiting, diarrhea, and stomach cramps. However, most people are unlikely to experience health problems from exposure to modestly elevated copper levels in drinking water because the human body has a natural mechanism for maintaining the proper level of copper in it. People with Wilson's disease, children less than one year old, and individuals with liver disease cannot eliminate excess copper from their bodies as well and are more likely to experience negative health effects on the liver and kidney from short-term exposure to copper levels that exceed the EPA's action level. See the MassDEP Fact Sheet on copper and your health at http://www.mass.gov/eea/docs/dep/water/drinking/alpha/a-thru-h/copperfs.pdf.

The administration takes these results very seriously and is moving immediately to safeguard the health of the students, faculty and staff. The following information describes steps we are taking to address the issue of copper in the water.

To safeguard our students and other sensitive individuals (including woman who are pregnant or nursing), our school is working closely and cooperatively with MassDEP and others and taking actions as follows:

What we are doing:

- 1. While exceeding the Action Level does not require provision of alternative drinking water sources, beginning XXXX we will be /are providing bottled water and will be shutting down all bubblers.
- 2. We have removed from service all taps with copper levels over the Action Level.
- 3. We are implementing a public information process that will include distribution of outreach material to all students, parents, teachers, staff and local officials.
- 4. We have developed a sampling plan to conduct testing at outlets (faucets, water fountains, etc.) where students and staff get water for drinking, beverage preparation and cooking.
- 5. We are implementing a flushing and water usage plan to safeguard against copper exposure from drinking water in the school at outlets that are found to be above the Action Level for copper. This includes the daily flushing of water fountains and/or faucets at sinks and the limitation of water consumption to cold-water faucets for food and beverage preparation.
- 6. We will undertake efforts to determine the cause of this copper Action Level exceedance and evaluate the adequacy of our existing corrosion control system. We will develop and put into place a corrective action plan as quickly as possible following additional testing and consultation.
- 7. Through periodic reports, we will keep you informed as to the progress of our efforts. These reports will serve to let you know what has been done and what is being done to safeguard against copper exposure from drinking water at our school(s)/child care facility (ies).
- 8. Optional information can be included that announces an information display at the school on Copper in Drinking Water at Schools and/or an announcement about a workshop that will provide further information and will provide an opportunity for Q&A.

A Reminder: The water system at the school is not unlike water systems found in other buildings. Older plumbing systems and fixtures, especially, can contain lead pipes or solder that can allow lead to enter tap water. Plumbing systems also contain copper. If you have questions about lead or copper in your home's water supply, and are using a private well, you can have your water tested. If you are receiving water from a public water system (i.e., if you pay a water bill) you can call your local water department for information or check the Consumer Confidence Report sent out by the public water supplier annually.

If you have any questions on this information please contact ______ at _____.

Sincerely,

(Insert signature and title)

Modified from EPA's "3T's for Reducing Lead in Drinking Water in Schools: Revised Technical Guidance"

Template for Lead and Copper Results over the Action Levels

(NOTE: This is a sample letter to students, families, and staff from a school or early education or child care facility with laboratory results that exceed the Action Levels for lead and copper in drinking water. Delete or replace all items in red including this paragraph and add your school letterhead here.)

(Insert date)

To the Students, Families, and Staff of *(insert school/early education or child care facility name)*:

During recent lead and copper sampling, some water taps at our school had lead and copper levels that exceed the Massachusetts Action Level for lead and the Massachusetts and federal Action Level for copper in drinking water at schools and early education and child care facilities. See sample results below. The Massachusetts Action Level for lead in drinking water is 0.015 milligrams per liter (also known as parts per million). The Massachusetts and federal Action Level for copper in drinking water is 1.3 milligrams per liter (also known as parts per million).

We would like to inform you about our plans to reduce potential exposure to lead and copper in drinking water at our school.

Lead is not believed to be in our water source but plumbing and fixtures in our buildings may contain lead, resulting in an increase in the lead content in tap water. Exposure to lead is a concern because lead is a toxic metal that has a range of adverse health effects.

Copper is also not believed to be in our water source but plumbing and fixtures in our buildings may contain copper, resulting in an increase in the copper content in tap water. The same mechanisms that cause plumbing to contribute lead to drinking water may also contribute copper.

Copper is a necessary micronutrient and is needed in small "trace" amounts for good health but too much copper in the diet or in drinking water may cause adverse health effects. Some people who consume drinking water with copper in excess of the EPA action level may experience nausea, vomiting, diarrhea, and stomach cramps. However, most people are unlikely to experience health problems from exposure to modestly elevated copper levels in drinking water because the human body has a natural mechanism for maintaining the proper level of copper in it. People with Wilson's disease, children less than one year old, and individuals with liver disease cannot eliminate excess copper from their bodies as well and are more likely to experience negative health effects on the liver and kidney from short-term exposure to copper levels that exceed the EPA's action level. See the MassDEP Fact Sheet on copper and your health at http://www.mass.gov/eea/docs/dep/water/drinking/alpha/a-thru-h/copperfs.pdf.

Sampling Results										
Date Sample Collected	Location	Location Lead result in mg/L Copper results in mg								

The administration takes these results very seriously and is moving immediately to safeguard the health of the students, faculty and staff. The following information describes steps we are taking to address the issue of lead and copper in the water.

To safeguard our students and other sensitive individuals (including woman who are pregnant or nursing), our school is working closely and cooperatively with MassDEP and others and taking actions as follows:

Only include applicable items

What we are doing:

- 1. While exceeding the Action Level does not require provision of alternative drinking water sources, beginning XXXX we will be /are providing bottled water and will be shutting down all bubblers.
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- 5. We are implementing a flushing and water usage plan to safeguard against lead and copper exposure from drinking water in the school at outlets that are found to be above the Action Levels for lead and copper. This includes the daily flushing of water fountains and/or faucets at sinks and the limitation of water consumption to cold-water faucets for food and beverage preparation.
- 6. We will undertake efforts to determine the cause of this lead and copper Action Level exceedance and evaluate the adequacy of our existing corrosion control system. We will develop and put into place a corrective action plan as quickly as possible following additional testing and consultation.

7.

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8.

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A Reminder: The water system at the school is not unlike water systems found in other buildings. Older plumbing systems and fixtures, especially, can contain lead pipes or solder that can allow lead to enter tap water. Plumbing systems also contain copper. If you have questions about lead or copper in your home's water supply, and are using a private well, you can have your water tested. If you are receiving water from a public water system (i.e., if you pay a water bill) you can call your local water department for information or check the Consumer Confidence Report sent out by the public water supplier annually.

If you have any questions on this information please contact ______ at _____.

Sincerely,

(Insert signature and title)

Modified from EPA's "3T's for Reducing Lead in Drinking Water in Schools: Revised Technical Guidance"

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LCCA Action Table Please complete and return this table to MassDEP Drinking Water Program One Winter Street - 5th floor, Boston, MA 02108 Attention: School Lead and Copper Or <u>Program.Director-dwp@state.ma.us</u> Subject line: School Lead and copper

Summary of results and actions taken by the school/facility

City/Town: _____, MA School District or Owner: _____

Name of school	Location of sample and	Lead results in	Copper Results in	ACTIONS TAKEN BY SCHOOL Check () all applicable actions for each location in the columns below							
	sample #	mg/L	mg/L	Notice provided to Students, Parents and Teachers (Provide date(s) of notice(s) and attach a copy)	Daily Flushing	Re- sample date	Re-sampled location. location is now below action level (Attach results)	Physically disconnected faucet from plumbing	Replaced plumbing and/or fixture	Posted notice on faucet to prevent drinking/cooking	Other Actions (Please specify below)

Prepar	ed by: I	Name:				
Title:						
Date:	/	/				

Principal Name:		
Superintendent N	Vame:	

Signature:		
Phone #:		
E-mail Add	ress:	