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Drinking Water Program
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Fact Sheet – Assistance Program for Lead in School Drinking Water

Plumbing Profile

A plumbing profile is a profile of a building's plumbing system. The purpose of a plumbing profile is to identify potential sources of lead and copper that could leach into a facility's water, which will enable you to develop your lead and copper sampling plan. A separate plumbing profile needs to be completed for each building, and existing plumbing profiles need to be revised to reflect any new construction or modifications to the facility following completion of the original plumbing profile for the facility.

The Plumbing Profile Questionnaire (Part A – see next page) explains how to interpret the answers on the Plumbing Profile Questionnaire Answer Sheet (Part B). In addition to developing a plumbing profile for each facility, Parts A and B will assist in creating a Map of Lead Contamination Control Act (LCCA) Taps for each facility. Each LCCA tap in the facility must be identified on a Map of LCCA Taps indicating the type, location, and unique identifier for each LCCA tap within the building.

Plumbing Profile Questionnaire – Part A-

Use the following questions to develop a plumbing profile.

	Plumbing Profile Questions	What Your Answers to the Plumbing Profile Questions Mean
	The questions in this column will help you determine whether lead is likely to be a problem in your facility, and will enable you to prioritize your sampling effort.	This column discusses the significance of possible answers to the plumbing profile questions.
1	When was the original building constructed? Were any buildings or additions added to the original facility? If so, complete a separate plumbing profile for each building, addition, or wing.	Older Buildings – Through the early 1900s, lead pipes were commonly used for interior plumbing in certain parts of the country in public buildings and private homes. Plumbing installed before 1930 is more likely to contain lead than newer pipes. Between 1920 and 1950, galvanized pipes were also used for plumbing. After 1930, copper generally replaced lead as the most commonly used material for water pipes. Up until the mid- to late-1980s (until the lead-free requirements of the 1986 Safe Drinking Water Act Amendments took effect), lead solder was typically used to join copper pipes. The efforts of your public water supplier over the years to minimize the corrosiveness of the water may have resulted in mineral deposits forming a coating on the inside of the water pipes (passivation). This coating insulates the water from the plumbing and results in decreased lead levels in water. If the coating does not exist or is disturbed, the water is in direct contact with any lead in the plumbing system. Newer Buildings – New buildings are not likely to have lead pipes in their plumbing systems, but they are likely to have copper pipes with solder joints. Buildings constructed prior to the late 1980s, before the lead-free requirements of the 1986 Safe Drinking Water Act Amendments, may have joints made of lead solder. Buildings constructed after this period should have joints made of lead-free solders. Even if "lead-free" materials were used in new construction and/or plumbing repairs, lead leaching may occur.

	Plumbing Profile Questions	What Your Answers to the Plumbing Profile Questions Mean
2	If built or repaired since 1986, were lead-free plumbing and solder used in accordance with the lead-free requirements of the 1986 Safe Drinking Water Act Amendments? What type of solder has been used? In some areas of the country, it is possible that high-lead materials were used until 1988 or perhaps even later. Your local plumbing code authority or building inspector may be able to provide guidance regarding when high-lead materials were last used on a regular basis in your area.	The 1986 Safe Drinking Water Act Amendments banned plumbing components that contained elevated levels of lead. Lead-free solder and flux (not more than 0.2% lead) and pipe, pipe fittings, and fixtures (not more than 8% lead) must now be used. The leaching potential of lead-free (i.e., tin-antimony) solder is much less than lead solder. The leaching potential of lead-free pipe, pipe fittings, and fixtures is also less, but leaching is still possible. If lead-free materials were not used in new construction and/or plumbing repairs, elevated lead levels can be produced. If the film resulting from passivation does not exist or has not yet adequately formed, any lead that is present is in direct contact with the water.
3	When the most recent plumbing repairs were made (note locations)?	Corrosion occurs (1) as a reaction between the water and the pipes and (2) as a reaction between the copper and solder (metal-to-metal). This latter reaction is known as galvanic corrosion, which can be vigorous in new piping. If lead solders were used in the piping or if brass faucets, valves, and fittings containing alloys of lead were installed *(see response to Question 8 below for further discussion of brass)*, lead levels in the water may be high. After about 5 years, however, galvanic corrosion slows down and lead gets into water mainly as a result of water being corrosive. If the water is non-corrosive, passivation is likely to have occurred and to have reduced opportunities for lead to get into the water system. For these reasons, if the building (or an addition, new plumbing, or repair) is less than 5 years old and lead solder or other materials (e.g., brass faucets containing lead alloys) were used, you may have elevated lead levels. If water supplied to the building is corrosive, lead can remain a problem regardless of the plumbing's age.
4	With what materials is the service connection (the pipe that carries water to the school from the public water system's main in the street) made? Note the location where the service connection enters the building and connects to the interior plumbing.	Lead piping was often used for the service connections that join buildings to public water systems. The service connection is the pipe that carries drinking water from a public water main to a building. Some localities actually required the use of lead service connections up until the lead-free requirements of the 1986 Safe Drinking Water Act Amendments took effect. Although a protective layering of minerals may have formed on these pipes, vibrations can cause flaking of any protective build-up and, thus, allow lead contamination to occur.

	Plumbing Profile Questions	What Your Answers to the Plumbing Profile Questions Mean
5	Specifically, what are the potable water pipes made of in your facility (note the locations)? • Lead • Plastic • Galvanized Metal • Cast Iron • Copper • Other Note the location of the different types of pipe, if applicable, and the direction of water flow through the building. Note the areas of the building that receive water first, and which areas receive water last.	Survey your building for exposed pipes, preferably accompanied by an experienced plumber who should be able to readily identify the composition of pipes on site. Most buildings have a combination of different plumbing materials: • Lead pipes are dull gray in color and may be easily scratched by an object such as a knife or key. Lead pipes are a major source of lead contamination in drinking water. • Galvanized metal pipes are gray or silver-gray in color and are usually fitted together with threaded joints. In some instances, compounds containing lead have been used to seal the threads joining the pipes. Debris from this material, which has fallen inside the pipes, may be a source of contamination. • Copper pipes are red-brown in color. Corroded portions may show green deposits. Copper pipe joints were typically joined together with lead solders until the lead-free requirements of the 1986 Safe Drinking Water Act Amendments took effect. • Plastic pipes, especially those manufactured abroad, may contain lead. If plastic pipes are used, be sure they meet NSF International standard. (Note: NSF International is an independent, third-party testing organization. Product listings can be viewed at: http://www.nsf.org/business/search_listings/index/asp.)
6	Do you have tanks in your plumbing system (pressure tanks, gravity storage tanks)? Note the location of any tanks, and any available information about the tank; e.g., manufacturer, date of installation.	Some older tanks may contain coatings that are high in lead content. Tanks may accumulate sediment that could be flushed back into the plumbing system under certain circumstances. You may wish to contact the supplier or manufacturer to obtain information about coatings. You may also wish to hire a plumber or tank service contractor to inspect your tanks, especially gravity storage tanks that are located outside of the building.
7	Was lead solder used in your plumbing system? Note the locations of lead solder.	The 1986 Amendments to the Safe Drinking Water Act banned plumbing components that contained high levels of lead. Lead-free solder and flux (not more than 0.2% lead) must now be used. The leaching potential of lead-free (i.e. tin-antimony) solder is much less than lead solder. It is likely that high-lead solder and fluxes continued to be used until 1988 and even later in some areas of the country. Your local plumbing code authority or building inspector may be able to provide guidance regarding when high-lead solder was last used on a regular basis in your area.

	Plumbing Profile Questions	What Your Answers to the Plumbing Profile Questions Mean
8	Are brass fittings, faucets, or valves used in your drinking water system? (Note: Most faucets are brass on the inside.) Note the locations of brass fittings, faucets, or valves.	Brass fittings, faucets, and valves are golden yellow in color, similar to copper in appearance, or are plated with chrome. Most brasses contain lead ranging from 2 percent to 8 percent. After 1996, brass fittings installed in drinking water outlets such as faucets and water coolers must meet NSF standards for lead content. While this percentage is considered lead-free under the 1986 Safe Drinking Water Act Amendments, some contamination problems still may occur. Older brass faucets may contain higher percentages of lead and lead solder in their interior construction and pose contamination problems. Note that your state or local government may have imposed this standard prior to 1988. The degree to which lead will leach from brass products containing alloys with less than 8 percent lead is dependent upon the corrosiveness of the water and the manufacturing process used to develop the product. A study revealed that fabricated faucets tend to contribute less lead to the water than faucets manufactured by the permanent mold process, regardless of the amount of lead in the alloy. EPA has worked with the plumbing industry and NSF International to develop a voluntary industry standard that is designed to minimize the amounts of lead being leached from these brass products. This standard is NSF/ANSI Standard 61, Section 9. Since 1998, all plumbing fixtures for use as drinking water supply must meet this standard. You should require NSF/ ANSI 61 certification on all drinking water system products purchased. Include a copy of the NSF/ ANSI 61 certificate as a requirement on your purchase orders. The distributor or manufacturer can provide you with a list of certified products. You should require NSF/ANSI 61 certification on all drinking water system products used in new construction and inform your architects and revise your building specifications.
9	Which of the following outlets provide water for consumption? Note the locations. • Water Coolers • Bubblers • Ice Makers • Kitchen Taps • Kitchen Kettles • Drinking Fountains or Taps	In addition to lead components in the plumbing system, lead solders or lead in the brass fittings and valves used in some taps, bubblers, and refrigerated water coolers may be sources of lead. It is important to identify the locations of all such drinking water outlets. Faucets in restrooms should not be used to obtain water for drinking. Although they may be adequate for washing hands, they may not be appropriate for drinking purposes. It is recommended that you post “Hand Washing Only” signs in restrooms.

	Plumbing Profile Questions	What Your Answers to the Plumbing Profile Questions Mean
10	Check the brands and models of water coolers and compare them to the attached listing of banned water coolers. The list is also available at http://www.mass.gov/eea/agencies/massdep/water/drinking/lcca-banned-water-coolers-appendix-e-3ts.html. Note the locations of any banned coolers.	Water coolers may be a major source of lead contamination. The Federal Consumer Product Safety Commission negotiated an agreement with Halsey Taylor through a consent order agreement published in June 1990 to provide a replacement or refund program that addresses all the water coolers listed by EPA as having lead-lined tanks. Halsey Taylor was the only company identified by EPA as manufacturing some water coolers with lead-lined tanks. Additionally, some coolers manufactured by EBCO had a bubbler valve and one soldered joint that contained lead. See attached list of banned water coolers. The list is also listed at http://www.mass.gov/eea/agencies/massdep/water/drinking/lcca-banned-water-coolers-appendix-e-3ts.html. Use the list to help prioritize your sampling. If your water cooler is listed as having a lead-lined tank, you should not use the water for drinking, and you should remove the cooler immediately as these coolers pose the highest risk of contamination.
11	Do outlets that provide drinking water have accessible screens or aerators? (Standard faucets usually have screens. Many coolers and bubblers also have screens.) Note the locations.	Lead-containing sediments that are trapped on screens can be a significant source of lead contamination. Sediments should be tested for the presence of lead, and your facility should create a routine maintenance program to clean the screens frequently. If sediment has been a reoccurring problem, regular cleaning of the screens and investigation into why the debris is accumulating is appropriate.
12	Have these screens been cleaned? Note the locations.	
13	Can you detect signs of corrosion, such as frequent leaks, rust-colored water, or stained dishes or laundry? Note the locations.	Frequent leaks, rust-colored water, and stains on fixtures, dishes, and laundry are signs of corrosive water. Blue-green deposits on pipes and sinks indicate copper corrosion; brown stains result from the corrosion of iron. Where such symptoms occur, high levels of lead, copper, and iron may be present in the water. Lead can accumulate with iron, which can form sediments that are hard to remove.
14	Is any electrical equipment grounded to water pipes? Note the locations.	If electrical equipment, such as telephones, has been installed using water pipes as a ground, the electric current traveling through the ground wire will accelerate the corrosion of any interior plumbing containing lead. The practice should be avoided, if possible. However, if existing wires are already grounded to water pipes, the wires *should not be removed* from the pipes unless a qualified electrician installs an alternative grounding system. Check with your local building inspector on this matter. Your state or local building code may require grounding of the wires to the water pipes. Improper grounding of electrical equipment may cause severe shock.
15	15. Have there been any complaints about water taste (metallic, etc.) or rusty appearance? Note the locations.	Although you cannot see, taste, or smell lead dissolved in water, the presence of a metallic taste or rusty appearance may indicate corrosion and possible lead contamination.

	Plumbing Profile Questions	What Your Answers to the Plumbing Profile Questions Mean
16	Check building files to determine whether any water samples have been taken from your building for any contaminants (also check with your public water supplier). • Name of contaminant(s)? •What concentrations of these contaminants were found? •What was the pH level of the water? •Is testing done regularly at your facility?	As discussed previously, lead testing may have previously been done voluntarily under the Lead Contamination Control Act. Results of analyses of general water quality, such as measures of pH, calcium hardness, and carbonate alkalinity, can provide important clues about the corrosiveness of the water. Generally, the higher the values of these parameters, the less likely it is that your water is corrosive. If you have no data from your school, your public water system should at least be able to provide information about the general water quality.
17	Other plumbing questions: • Are blueprints of the building available? • Are there known plumbing "dead- ends," low use areas, existing leaks or other "problem areas"? • Are renovations being planned for part or all of the plumbing system?	You should incorporate this information into decisions regarding sample locations and sampling protocol. You may wish to note the direction of water flow and the location of fixtures, valves, tanks, areas of sediment accumulation, areas of corrosion, etc., on a sketch or blueprint of the plumbing.

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

Plumbing Profile Questionnaire Answer Sheet- Part B

This questionnaire is designed to assist with the determination of whether or not lead is likely to be a problem in your facility, and will enable you to prioritize your sampling effort. A separate plumbing profile may be needed for each building, addition, or wing of your facility, especially if the construction took place at different times. Some of the questions in this questionnaire may not apply to your facility for various reasons. Skip those questions that do not apply.

	Plumbing Profile Questions	Answers
1.	When was the original building constructed? Were any buildings or additions added to the original facility? If so, complete a separate plumbing profile for each building, addition, or wing.	
2.	If built or repaired since 1986, were lead-free plumbing and solder used in accordance with the lead-free requirements of the 1986 Safe Drinking Water Act Amendments? What type of solder has been used?	
3.	When the most recent plumbing repairs were made (note locations)?	
4.	With what materials is the service connection (the pipe that carries water to the school from the public water system's main in the street) made? Note the location where the service connection enters the building and connects to the interior plumbing.	
5.	Specifically, what are the potable water pipes made of in your facility (note the locations)? • Lead • Plastic • Galvanized Metal • Cast Iron • Copper • Other Note the location of the different types of pipe, if applicable, and the direction of water flow through the building. Note the areas of the building that receive water first, and which areas receive water last.	
6.	Do you have tanks in your plumbing system (pressure tanks, gravity storage tanks)? Note the location of any tanks, and any available information about the tank; e.g., manufacturer, date of installation.	

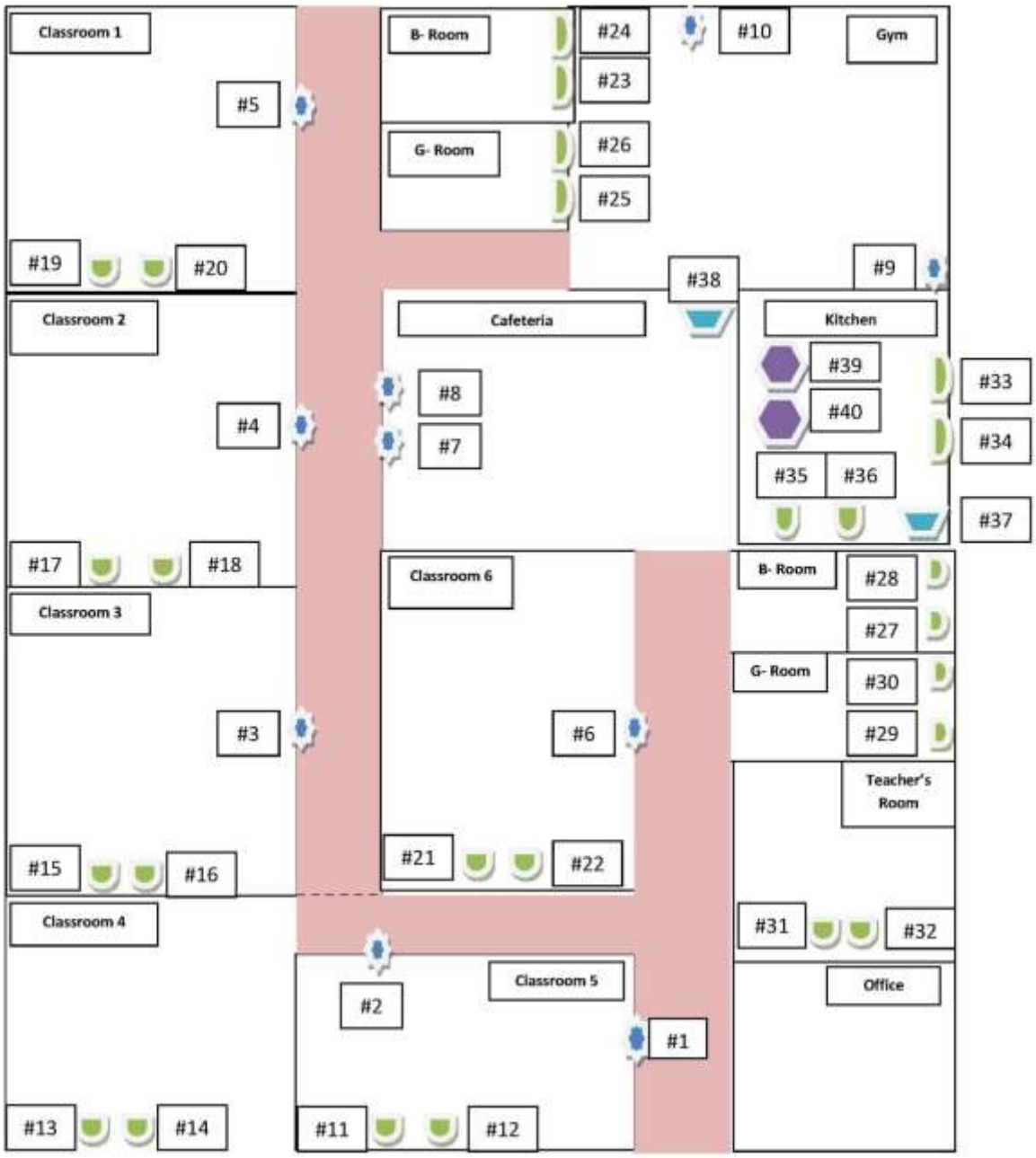
	Plumbing Profile Questions	Answers
7.	Was lead solder used in your plumbing system? Note the locations with lead solder.	
8.	Are brass fittings, faucets, or valves used in your drinking water system? (Note: Most faucets are brass on the inside.) Note the locations of brass fittings, faucets, or valves	
9.	Which of the following outlets provide water for consumption? Note the locations. • Water Coolers • Bubblers • Ice Makers • Kitchen Taps • Drinking Fountains or Taps	
10.	Has your school checked the brands and models of water coolers and compared them to the attached listing of banned water coolers. The list is also available at http://www.mass.gov/eea/agencies/massdep/water/drinking/lcca-banned-water-coolers-appendix-e-3ts.html. Note the locations of any banned coolers.	
11.	Do outlets that provide drinking water have accessible screens or aerators? (Standard faucets usually have screens. Many coolers and bubblers also have screens.) Note the locations.	
12.	Have these screens been cleaned? Note the locations.	
13.	Can you detect signs of corrosion, such as frequent leaks, rust-colored water, or stained dishes or laundry? Note the locations.	
14.	Is any electrical equipment grounded to water pipes? Note the locations.	

	Plumbing Profile Questions	Answers
15.	Have there been any complaints about bad (metallic) taste or rusty appearance? Note the locations.	
16.	Check building files to determine whether any water samples have been taken from your building for any contaminants (also check with your public water supplier). • Name of contaminant(s)? • What concentrations of these contaminants were found? • What was the pH level of the water? • Is testing done regularly at your facility?	
17.	Other plumbing questions: • Are blueprints of the building available? • Are there known plumbing "dead-ends," low use areas, existing leaks or other "problem areas"? • Are renovations being planned for part or all of the plumbing system?	

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

Example Map of LCCA Taps at a School

The purpose of the Map of LCCA Taps (see next page) is to indicate the type, location, and unique identifier for each tap within the building used for drinking or food preparation. Each LCCA tap must be assigned a unique identification number. Taps in bathrooms and classrooms need not be included as an LCCA tap if the area is posted with a “For Hand Washing Only” sign. The Example Map on the next page assumes that no such signs have been posted and therefore includes sinks in bathrooms and classrooms as LCCA taps.


Classroom 1
#5
#19
#20
B- Room
#24
#23
G- Room
#26
#25
#10
Gym
#38
#9
Classroom 2
#4
#17
#18
Cafeteria
#8
#7
Kitchen
#39
#40
#33
#34
#35
#36
#37
Classroom 3
#3
#15
#16
Classroom 6
#6
#21
#22
B- Room
#28
#27
G- Room
#30
#29
Teacher's Room
#31
#32
Classroom 4
#13
#14
#2
Classroom 5
#1
#11
#12
Office

List of Drinking Water LCCA Sampling Taps for Lead & Copper

(See map on previous page)

Tap ID #	Tap Type	Tap Location	Tap ID #	Tap Type	Tap Location
School Name #1	Bubbler	Across from Office	School Name #21	Sink (R)	C-Room 6 (R)
School Name #2	Bubbler	C-Room 5	School Name #22	Sink (L)	C-Room 1 (L)
School Name #3	Bubbler	C-Room 3	School Name #23	Sink (R)	B-Room Gym (R)
School Name #4	Bubbler	C-Room 2	School Name #24	Sink (L)	B-Room Gym (L)
School Name #5	Bubbler	C-Room 1	School Name #25	Sink (R)	G-Room Gym (R)
School Name #6	Bubbler	C-Room 6	School Name #26	Sink (L)	G-Room Gym (L)
School Name #7	Bubbler	Cafeteria (L)	School Name #27	Sink (R)	B-Room Outside Cafe (R)
School Name #8	Bubbler	Cafeteria (R)	School Name #28	Sink (L)	B-Room Outside Cafe (L)
School Name #9	Bubbler	Gym (R)	School Name #29	Sink (R)	G-Room Outside Cafe (R)
School Name #10	Bubbler	Gym (L)	School Name #30	Sink (L)	G-Room Outside Cafe (L)
School Name #11	Sink (R)	C-Room 5 (R)	School Name #31	Sink (R)	Teacher's Room (R)
School Name #12	Sink (L)	C-Room 5 (L)	School Name #32	Sink (L)	Teacher's Room (L)
School Name #13	Sink (R)	C-Room 4 (R)	School Name #33	Sink (R)	Kitchen Large (R)
School Name #14	Sink (L)	C-Room 4 (L)	School Name #34	Sink (L)	Kitchen Large (L)
School Name #15	Sink (R)	C-Room 3 (R)	School Name #35	Sink (R)	Kitchen Small (R)
School Name #16	Sink (L)	C-Room 3 (L)	School Name #36	Sink (L)	Kitchen Small (L)
School Name #17	Sink (R)	C-Room 2 (R)	School Name #37	Ice Machine	Kitchen
School Name #18	Sink (L)	C-Room 2 (L)	School Name #38	Ice Machine	Cafeteria
School Name #19	Sink (R)	C-Room 1 (R)	School Name #39	Kettle (Large)	Kitchen
School Name #20	Sink (L)	C-Room 1 (L)	School Name #40	Kettle (Small)	Kitchen

(See map above)

Sampling Log for LCCA Taps

Tap ID #	Tap Type	Tap Location	Last Sampled	Above/Below AL	Remediation (S/L term)	Next Sample Due
School Name #1	Bubbler	Across from Office				
School Name #2	Bubbler	C-Room 5				
School Name #3	Bubbler	C-Room 3				
School Name #4	Bubbler	C-Room 2				
School Name #5	Bubbler	C-Room 1				
School Name #6	Bubbler	C-Room 6				
School Name #7	Bubbler	Cafeteria (L)				
School Name #8	Bubbler	Cafeteria (R)				
School Name #9	Bubbler	Gym (R)				
School Name #10	Bubbler	Gym (L)				
School Name #11	Sink (R)	C-Room 5 (R)				
School Name #12	Sink (L)	C-Room 5 (L)				
School Name #13	Sink (R)	C-Room 4 (R)				
School Name #14	Sink (L)	C-Room 4 (L)				
School Name #15	Sink (R)	C-Room 3 (R)				
School Name #16	Sink (L)	C-Room 3 (L)				
School Name #17	Sink (R)	C-Room 2 (R)				
School Name #18	Sink (L)	C-Room 2 (L)				
School Name #19	Sink (R)	C-Room 1 (R)				
School Name #20	Sink (L)	C-Room 1 (L)				
School Name #21	Sink (R)	C-Room 6 (R)				

Tap ID #	Tap Type	Tap Location	Last Sampled	Above/Below AL	Remediation (S/L term)	Next Sample Due
School Name #22	Sink (L)	C-Room 1 (L)				
School Name #23	Sink (R}	B-Room Gym (R)				
School Name #24	Sink (L)	B-Room Gym (L)				
School Name #25	Sink (R)	G-Room Gym (R)				
School Name #26	Sink (L)	G-Room Gym (L)				
School Name #27	Sink (R)	B-Room Outside Cafe (R)				
School Name #28	Sink (L)	B-Room Outside Cafe (L)				
School Name #29	Sink (R)	G-Room Outside Cafe (R)				
School Name #30	Sink (L)	G-Room Outside Cafe (L)				
School Name #31	Sink (R)	Teacher's Room (R)				
School Name #32	Sink (L)	Teacher's Room (L)				
School Name #33	Sink (R)	Kitchen Large (R)				
School Name #34	Sink (L)	Kitchen Large (L)				
School Name #35	Sink (R)	Kitchen Small (R)				
School Name #36	Sink (L)	Kitchen Small (L)				
School Name #37	Ice Machine	Kitchen				
School Name #38	Ice Machine	Cafeteria				
School Name #39	Kitchen (Large)	Kettle				
School Name #40	Kitchen (Small)	Kettle				

Labeling LCCA Taps

Schools must include the School Organization Code, assigned by Massachusetts Department of Elementary and Secondary Education, in their sampling code and sample collection chain of custody form. (See Fact Sheet – Assistance Program for Lead in School Drinking Water – Sampling for Lead and Copper for Chain of Custody form).

Code each outlet using a system that will allow you to identify each unique outlet by:

- Location Code
- Location Type
- Location Name

Location Code

Within a School Organization Code, assigned by Massachusetts Department of Elementary and Secondary Education, each fixture to be sampled must be assigned a unique Location Code. These codes should be assigned sequentially.

Location Type

Each fixture to be sampled must be assigned a location type from the list below:
DW= drinking water bubbler
WC = water cooler (chiller unit)
CF = classroom faucet
KC = kitchen faucet, cold
KK = kitchen kettle
KI = kitchen ice maker
EC = home economics room, cold
BF = bathroom faucet
NS = nurse's office sink
SC = service connector

Location Name

Each fixture to be sampled must be assigned a location name.

Example of a coding system

A drinking water bubbler (DW) on the 2nd floor of the Abby Kelley Foster Charter Public School is identified as the 10th sample location in the building, which happens to be the only building for this Organization Code. First determine the Organization Code from the List of Schools located at:
http://www.mass.gov/eea/agencies/massdep/service/online/water-quality-monitoring-reports-edep-faqs.html#InstructionseDEPlink
The numbering scheme would look like this:
Org Code-Location Code- Location Type – Location Name
00450105-10-DW-Second Floor Bubbler near RM 210

If a school has multiple buildings with the same Org Code, it will be necessary to add specific building information to the label code. For example: 00450105-10-DW-Second Floor Bubbler near RM 210 - Abbott building

Add Code to map and fixture location

Once the ID number has been assigned, label its location on the Map of LCCA Taps and label the actual physical fixture. Once each fixture has been labeled, school personnel should ensure that the labels are not removed or damaged. A digital photograph of the location would help to maintain a record of the labeled fixture.

LCCA Banned Water Coolers

Excerpt from EPA document "3T's for Reducing Lead in Drinking Water in Schools: Revised Technical Guidance" (Appendix E)

Table 1

Halsey Taylor Water Coolers With Lead-Lined Tanks

The following six model numbers have one or more units in the model series with lead-lined tanks:

WM8A	WT8A	GC10ACR	GC10A	GC5A	RWM13A

The following models and serial numbers contain lead-lined tanks:

WM14A Serial No. 843034	WM14A Serial No. 843006	WT11A Serial No. 222650
WT21A Serial No. 64309550	WT21A Serial No. 64309542	LL14A Serial No. 64346908

Table 2

Water Coolers With Other Lead Components

EBCO Manufacturing

All pressure bubbler water coolers with shipping dates from 1962 through 1977 have a bubbler valve containing lead. The units contain a single, 50-50 tin-lead solder joint on the bubbler valve. Model numbers for coolers in this category are not available.

The following models of pressure bubbler coolers produced from 1978 through 1981 contain one 50-50 tin-lead solder joint each.

CP3	DP15W	DPM8	7P	13P	DPM8H	DP15M	DP3R	DP8A
DP16M	DP5S	C10E	PX-10	DP7S	DP13SM	DP7M	DP7MH	DP7WMD

WTC10	DP13M-60	DP14M	CP10-50	CP5	CP5M	DP15MW	DP3R	DP14S
DP20-50	DP7SM	DP10X	DP13A	DP13A-50	EP10F	DP5M	DP10F	CP3H
CP3-50	DP13M	DP3RH	DP5F	CP3M	EP5F	13PL	DP8AH	DP13S
CP10	DP20	DP12N	DP7WM	DP14A-50/60				

Halsey Taylor

1. Lead solder was used in these models of water coolers manufactured between 1978 and the last week of 1987:

WMA-1	SCWT/SCWT-A	SWA-1	DC/DHC-1
S3/5/10D	BFC-4F/7F/4FS/7FS	S300/500/100D	

2. The following coolers manufactured for Haws Drinking Faucet Company (Haws) by Halsey Taylor from November 1984 through December 18, 1987, are not lead-free because they contain 2 tin-lead solder joints. The model designations for these units are as follows:

HC8WT	HC14F	HC6W	HWC7D	HC8WTH	HC14FH	HC8W	HC2F	HC14WT
HC14FL	HC14W	HC2FH	HC14WTH	HC8FL	HC4F	HC5F	HC14WL	HCBF7D
HC4FH	HC10F	HC16WT	HCBF7HO	HC8F	HC8FH	HC4W	HWC7	

If you have one of the Halsey Taylor water coolers noted in Table 2, to learn more about the requirements surrounding their replacement and rebate program contact:

Scotsman Ice Systems Scotsman Ice Systems
775 Corporate Woods Parkway
Vernon Hills, IL 60061
PH: (800) SCOTSMAN or 800-726-8762
PH: (847) 215-4500

Note: Based upon an analysis of 22 water coolers at a US Navy facility and subsequent data obtained by EPA, EPA believes the most serious cooler contamination problems are associated with water coolers that have lead-lined tanks.