# More Than Just Assessments. **Solutions.**

# LEAD IN DRINKING WATER TESTING SAMPLING PLAN

# Union County Vocational Technical High Schools

1776 Raritan Road Scotch Plains, New Jersey 07076

#### Report Date

September 13, 2024

#### Partner Project No.

24-456892.1

#### Prepared for:

Union County Vocational Technical Schools









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Attachment B: Plumbing Profile and Instructions

Atachement C: Drinking Water Outlets Inventory

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Attachment E: Flushing Log

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#### 1.0 INTRODUCTION

This Lead Drinking Water Testing Sampling Plan (Sampling Plan) was developed by the Union County Vocational Technical Schools, (District), based on guidance developed by the New Jersey Department of Environmental Protection (NJDEP) and the United States Environmental Protection Agency (USEPA), to establish a plan for sampling lead at drinking water outlets used for consumption or food preparation in every school within the District (See Attachment A for full school listing). The data collected through the execution of this Sampling Plan will determine if immediate remedial measures are necessary and will assist in the prioritization of future water testing for lead in accordance with this Sampling Plan.

This Sampling Plan is based on the USEPA publication, "The 3Ts for Reducing Lead in Drinking Water in Schools" and NJDEP guidance.

The District has also developed a Quality Assurance Project Plan (QAPP) for the sampling program which is available under separate cover.



#### 2.0 OBJECTIVE

The 1988 Lead Contamination Control Act (LCCA) is aimed at identifying and reducing lead (Pb) in drinking water in schools and child care facilities. In response, the USEPA prepared guidance documents to assist school districts in meeting the requirements of the LCCA. The guidance documents were used as a resource in developing this Sampling Plan.

It should be noted, for the purpose of determining immediate remedial measures (i.e. taking drinking water outlets out of service and notifying parents/guardians of results), the District is required to utilize the lead action level established in the SDWA rules by the USEPA at 40 CFR 141.80 for lead in drinking water. At the time of development of this Sampling Plan, the lead action level is 15  $\mu$ g/L, which is more stringent than the guidance provided by USEPA in their Lead in Schools Guidance which recommends action be taken at drinking water outlets greater than 20  $\mu$ g/L. Schools in New Jersey that are served by their own well (not public water), which are regulated pursuant to the Federal and New Jersey SDWA, must adhere to the 15  $\mu$ g/L value for determining compliance.



#### 3.0 SAMPLING PROJECT COORDINATION

Testing for lead in schools requires a coordinated effort especially when multiple schools are to be included in the testing effort. Designated personnel and set protocols are essential to ensuring a coordinated effort.

#### 3.1 School District Program Manager (Program Manager)

Union County Vocational Technical Schools Program Manager:

Eric Larson (908) 233-9317

The School District Program Manager (Program Manager) is the overall authority in the execution of the District's lead sampling project. He/she is responsible for the initial notification to the District of the testing program, obtaining funds for testing, assigning the Sampling Project Manager, requesting/enlisting the assistance from other District departments if needed, approving the District's QAPP(s), approving the Final Report for each school and coordinating with other District officials to make the results of the testing available to the public.

#### 3.2 Sampling Project Manager (Project Manager)

Union County Vocational Technical Schools Sampling Project Manager:

Angelica Rosaperez, Partner Engineering and Science, Inc. (732) 403-5869

The Sampling Plan Project Manager (Project Manager) is responsible for overseeing the execution of lead sampling at each of the district's schools. This involves the prioritization of schools to be sampled, and adherence with the District's Sampling Plan and QAPP. He/she serves as the liaison between the District, State agencies, local Health Departments, laboratories and public water systems (if applicable). He/she reports to the Program Manager.

#### Project Manager Responsibilities

- Prepare the District's Specific Quality Assurance Project Plan (QAPP) and Sampling Plan;
- Manage the Sampling Plan and QAPP;
- > Oversight of Individual School Project Officers (Project Officers) to ensure that they adhere to the Sampling Plan procedures and the QAPP;
- Purchase of equipment needed for district lead sampling;
- Coordinate with New Jersey laboratories certified for lead testing in drinking water;
- Coordinate with Project Officers to establish sampling schedules;
- Ensure properly signed QAPPs are in place prior to initiation of sampling;
- Verify that officials from each school are aware when sampling is scheduled and the expected duration;
- Review of the School Field Sampling Summary Reports prepared by Project Officers;
- Review of Laboratory Data Reports (LDR) from Laboratory Managers;
- Review of Final Project Reports prepared by Project Officers;



- ➤ Identify limitations in the use of any laboratory data due to information provided in the accompanying School Field Sampling Summary Report;
- ➤ Maintain the original signed QAPP(s);
- Maintain documents, reports and records listed in QAPP, including:
  - Laboratory Data Reports (LDR)
  - o Copy of Field Sampling Summary Report with copies of field logbooks,
  - o Field Walk-Through reports including Attachments B, C, D E and F of this Sampling Plan,
  - o Chain of custody forms and flush tags.
  - Copy of Final Project Report
- Maintenance of other relevant records, such as:
  - o Purchase orders for analytical costs (copy).
  - o Agreement with laboratory to sample, analyze, and report with details for payment
  - o Receipts (originals or copies)

#### 3.3 Indiviudal School Sampling Project Officers (Project Officers)

#### Project Officer Responsibilities

- > General project oversight for assigned school(s).
- ➤ Generate field log book for each assigned school. Document field activities including any changes to procedures outlined in the Sampling Plan or QAPP.
- Ensure proper completion of the Plumbing Profile Form for assigned school(s) See Attachment B.
- Oversight of completion of the following reports found in the Sampling Plan which require signoff by Project Officer:
  - o Water Outlet Inventory (Attachment C)
  - o Filter Inventory (Attachment D)
  - o Flushing Log (Attachment E)
  - o Pre Sampling Water Use Certification (Attachment F).
- > Prepare labels for outlets to be sampled.
- > Prepare for Walk-Through including acquisition of School Floor Plan.
- > Attend school Walk-Through.
- ➤ Ensure proper completion of Walk-Through documentation including identification of outlets on Floor Plan, and Sampling Location Inventory with coding according to the Sampling Plan (Attachment C).
- > Supervision of field activities such as Walk- Through, flushing (if required), locking school prior to sampling, and sample collection.
- ldentify low use water outlets requiring flushing and attach flush tag (Attachment G).
- ➤ Ensure that Field Sampling Team has all relevant sampling supplies including sampling bottles, labels, proper reagent water and chain of custody forms prior to collection of samples.
- Ensure that all water outlets to be sampled prior to sampling event are labeled.
- > Ensure that all low use outlets identified for sampling had been flushed.
- > Remove flush tags from outlet once sampling is completed.
- Responsible for ensuring water remains motionless for a minimum of eight hours (last to leave the school) prior to sampling event by following procedures in Section 8.
- ➤ Verify that the Sampling Plan was followed prior to initiating sampling by completing the Pre-Sampling Water Use Certification (Attachment F).
- > Provide supervision of sampling event.
- Document issues during sampling event in field log book.



- ➤ Prepare Field Walk-Through Report, School Field Sampling Summary Report and Final Project Report for assigned school(s).
- Maintain field log books for each school.
- Prepare samples for shipment and delivery to laboratory per certified laboratory instructions.
- > Ensure that samples are delivered to laboratory within the time period specified by the certified laboratory

#### 3.4 Individual School Protocols

A separate log book and supporting documentation shall be kept for each school. The contents of the log book are to include the Attachments A through F found at the end of this plan. A field log book should include but not be limited to: a material evaluation, filter log, drinking water outlet inventory, flushing log, and label identification codes.



#### 4.0 SCHOOL SAMPLING PRIORITY

The District developed a list of all school facilities scheduled for sampling. See Attachment A for the school sampling listing. Please note that the list may be updated based on conditions at the school, which prevent sampling from occurring or scheduling issues. Accordingly, the list should include a revision date.



#### 5.0 PLUMBING SURVEY

Prior to a sampling event, documentation of various aspects of each school's water system needs to be completed. This following information needs to be compiled and the attachments completed including:

#### 5.1 Plumbing Profile

The purpose of a Plumbing Profile (Attachment B) is to identify and categorize plumbing and infrastructure in order to prioritize schools/outlets for testing, and to identify potential sources of lead (i.e. lead service lines, or lead piping or solder). The results of the Plumbing Profile determine the sampling locations and priority within the individual school facilities.

A Plumbing Profile should include all of the following:

- Year school built and dates of any additions
- > Building blue prints and floor diagrams
- Service line material;
- Material of internal plumbing, this is an important part of a plumbing profile, and whether it meets the current New Jersey "lead-free" plumbing code;
- Point-of-entry or point-of-use treatment being used;
- > All drinking water outlets including fountains that are permanently out of service;
- ➤ All drinking water outlets including fountains that are temporarily out of service;
- All drinking water outlets including drinking water fountains that are leaking or evidence of staining and in need of repair;
- Type (make and model) and location of all drinking water fountains, including detailed description that identifies of whether they are lead-lined or if they have been involved in any recalls, (See USEPA Fact Sheet at <a href="http://nepis.epa.gov/Exe/ZyPDF.cgi?Dockey=30005UPU.txt">http://nepis.epa.gov/Exe/ZyPDF.cgi?Dockey=30005UPU.txt</a>);
- > Locations of all drinking water outlets including fountains;
- > All plumbing repairs and replacements needed for internal plumbing;
- ➤ All plumbing repairs and replacements conducted within the past year;
- > Locations of any electrical wires grounded to water pipes

#### 5.2 Filter Inventory (If Applicable)

A Filter Inventory (Attachment D) shall be prepared, including the following information:

- Location (school and outlet);
- Make and model;
- Installation date (last replaced);
- Replacement frequency;
- Documentation of repairs; and

Contaminants the filter is capable of and/or NSF-certified for the removing e.g. lead and others



#### 6.0 PLANNING

#### 6.1 Walk-Through

A Walk-Through must be conducted by the Project Officer prior to sampling as part of the planning process. The Walk-Through must include every room (including but not limited to classrooms, offices, bathrooms, kitchens and recreational areas) in the facility. During the Walk- Through, all drinking water and food preparation outlets to be sampled will be labeled by the Project Officer on the Floor Diagram (6.2).

The Project Officer will also conduct an onsite assessment of each sample outlet to document (using Attachment C) specific characteristics of the outlet (e.g. leaking outlets; staining). During this assessment, the water should be turned on to determine the spray pattern, whether there is adequate flow to collect samples or if any odor or color differences are present and whether the cold water faucet is functioning properly. Only cold water faucets are to be sampled. For motion sensor and metered sinks, the hot water valve will be shut off on the day of sampling. All outlets in need of repair must be repaired prior to sampling or documented on the temporary out of service list in the Plumbing Profile (Attachment B).

#### 6.2 Floor Diagram

Each drinking water outlet shall be identified on the school schematic (floor diagram). The floor diagram should have the classroom numbers and the following locations labeled:

- Service Line = SL
- Point of Entry (The closest water outlet to the entrance of the service line into the school)
- Food preparation outlets (i.e. cafeteria, kitchen and home economics class faucets);
- Drinking Water Fountains; and
- ➤ Other drinking water outlets to be sampled (i.e. nurse's office, teacher's lounge, home economics, etc.), and any other room or outside facility used for water consumption.

The Project Officer must date and sign the floor diagram.



#### 7.0 SAMPLE LOCATIONS

#### 7.1 Sample Locations

The following locations shall be identified and labeled for each school:

- > Kitchen outlets
- Food Preparation outlets
- > Teacher Lounge outlets
- Nurse's Office outlets
- ➤ Home Economic Sink outlets
- Drinking Water Fountains Bubblers and Water Coolers
- Outside drinking water fountains and food preparation areas
- Ice Machines
- > Other drinking water outlets used for consumption

Examples of outlets that do not need to be sampled include utility sinks, outside spigots, bathroom sinks and classroom sinks, unless any of these sinks are used routinely for consumption.

#### 7.2 Sample Location Codes

Each sampling location shall be identified by its location and type using the following coding system (Note additional codes as needed):

KC = Kitchen Outlet, Cold

CT= Cafeteria Outlet

FP= Food Preparation Sink

TL= Teacher Lounge Sink

NS = Nurse's Office Sink

EC = Home Economics Outlet, Cold

DW= Drinking Water Bubbler

WC = Water Cooler (Chiller Unit)

IM = Ice Machine

**BF-Bottle Fillers** 

WF-Water Fountains

#### 7.3 Sampling Location Inventory

Attachment C shall be used to develop a detailed inventory of each drinking water outlet in the school to be sampled. The inventory must be completed and signed by the Project Officer.

The Drinking Water Outlet Inventory shall include the following information:

- ➤ All drinking water outlets in the school
- > The type, location, and sample location code of each drinking water outlet
- > If the drinking water outlet has a chiller unit
- ➤ If the drinking water outlet has an aerator/screen



- > If the drinking water outlet is motion activated, in which the hot water at the outlet must be turned off prior to sampling
- > If the drinking water outlet is operational
- > If the drinking water outlet has not been used frequently
- > If the drinking water outlet is leaking
- ➤ If the drinking water outlet has a filter
- > The make and model of all drinking water fountains and water coolers



#### 8.1 Timeline

Samples should be collected before the facility opens in the morning and before any water is used in the building. The water shall sit in the pipes unused for at least 8 hours, but no more than 48 hours, before a sample is collected.

At no time should filters, aerators and screens be removed prior to or during the sampling event.

#### Prior to Sampling

- For buildings that have not been used for more than 48 hours, the District will perform systematic flushing 48 hours prior to the sampling event, as described in the USEPA's "3Ts For Reducing Lead in Drinking Water in Schools" (revised October 2006, see page 56). This flushing event and locations shall be documented in a log (Attachment E).
  - o The flushing log must be completed and signed by the Project Officer.
- > The Project Officer will contact the laboratory to confirm sample bottles, weatherproof labels, chain of custody forms and coolers are available and ready for the sampling event.
- > Every drinking water outlet to be sampled (previously identified in Attachment C) will be labeled with a specific Sample Location Code in indelible marker on the underside of the sampling fixture in the event the District has to re-visit the sample location.
- > A communication will be sent out to all staff in schools being sampled explaining what time all staff must exit the building.
- After this time, signs shall be posted to indicate that water should not be used and access to the building shall be restricted to ensure that water sits undisturbed for a minimum of 8 hours.
- > Turn off all irrigation and outdoor water features.

#### Day of Sampling

The Project Officer will use Attachment F to document when the water was last used and when sampling began.

#### 8.2 Sample Collection

#### Sample Collection Highlights

- ➤ All samples shall be collected in a pre-cleaned HDPE 250mL wide mouth single use rigid sample container.
- ➤ Identify on the Sampling Plan the outlet closest to the water service line(s) entry point to be collected first, then identify the next closest outlet as second, and move away from the water service line(s) entry point until the outlet farthest away is identified to be sampled last on the sampling plan. This will minimize the chance that a sampling location will be flushed by an upstream fixture. Sampling will begin at the outlet closest to the point of entry and continue to the furthest outlet to ensure the water remains motionless in the plumbing.



#### Sample Collection Method

USEPA recommends a two-step sampling process to be followed for identifying lead contamination. Lead in a water sample taken from an outlet can originate from the outlet fixture (the faucet, bubbler etc.), plumbing upstream of the outlet fixture (pipe, joints, valves, fittings etc.), or it can already be in the water that is entering the facility. The two-step sampling process helps to identify the actual source(s) of lead.

All sampling must be conducted in accordance with this Sampling Plan and the District's QAPP.

- 1. For each drinking water outlet sampled, a new pair of non-colored latex or nitrile gloves shall be used to collect both the first draw and flush follow-up samples. This is to minimize the potential for cross contamination of outlets by sampling personnel.
- 2. First draw samples (i.e. samples collected from outlets where water sat undisturbed for a minimum of 8 hours) will be collected from a cold water outlet at each location identified in 7.3 above. The sample must be collected by placing the bottle under the outlet before turning the cold water on. No water should be allowed to run prior to collecting a sample. For motion-activated faucets, the hot water valve must be turned off prior to sampling.
- 3. Immediately after the first draw sample is collected, the sampler will collect a follow-up flush sample.
- 4. When collecting the follow-up flush sample, the outlet will be turned on and allowed to run for 30 seconds then the water will be captured in a pre-cleaned 250 mL container.
- 5. If the drinking water outlet is a water cooler with a cooler unit, DO NOT COLLECT A FOLLOW-UP FLUSH SAMPLE UNTIL ALL FIRST DRAW SAMPLES ARE COLLECTED IN THE SCHOOL.
- 6. After all sampling is completed, return to the water coolers to collect a follow-up flush sample, again starting at the water cooler located in closest proximity to the POE and then move outward. Allow the water to run for 15 minutes, then sample the drinking water outlet utilizing a pre-cleaned 250 mL container.
- 7. Each sample collected shall be properly identified on the sample bottle and chain of custody using the Sample Location Code previously identified by the District (as identified on the label on the outlet and on the floor diagram). In addition, follow-up flush samples shall be identified by noting "FLUSH" after the Sample Location Code on the sample bottle and on the chain of custody (e.g. MM-2F-DW-01 and MM-2F-DW-01 FLUSH).

#### Additional Sampling Event

Upon receiving the results of the initial and follow-up flush samples at all outlets, the District will conduct additional sampling events for the following situations: any location required to be sampled previously but was not sampled (not operational during initial sampling event), where there was a possible lab error or sample collection error, and any location that was not sampled but could help pinpoint the source of lead in a sampled outlet.



#### 8.3 New Jersey Certified Laboratories

#### Laboratory Responsibilities

Certify to the District that they have received, and will follow, the Sampling Plan and QAPP.

- Each laboratory must document that laboratory personnel have previous experience sampling for lead and have been properly trained to conduct USEPA Method 200.8 or other methods that are approved sampling methods. Approved sampling methods are USEPA methods for the analysis of lead in drinking water (USEPA Method 200.9, USEPA Method 200.5, SM3113B, ASTM3559-D) provided that the reporting limit used by the laboratory for that method is less than or equal to 2 μg/L.
- > The laboratory will conduct analysis of a laboratory fortified blank (Field Blank) to assess the accuracy. The acceptance criteria for accuracy for the results will be within plus or minus 15% recovery of the known value.
- ➤ Laboratories must provide the results to the District within timeframe required under contract (14 day is average).
- Laboratories will report in μg/L (ppb) and to at least three significant figures.

#### Sampling Personnel Responsibilities

Each sampler will be responsible for the following:

- Preparation of pre-printed waterproof labels, which will include, the sampler's name, the school name, the Sample Location Code, parameter to be analyzed (lead), date of collection and any preservation technique used;
- Preparation of a chain of custody to include the field sample information;
- ➤ Obtaining from the laboratory, prior to the sampling event, ASTM Type I reagent-grade water (RGW) to be used as Field Reagent Blanks (FRB). The sampler will transport this RGW to the school to be sampled. Before the first sample is collected the RGW collected at the Laboratory will be transferred to a sample container near the first sample location inside the school building. This FRB sample will be stored and transported in the same cooler, handled and preserved in the same manner as samples collected at that school.
- > Documentation of any and all observations such as automatic sensors, odors, change in water color, low water flow, water outlet leaks (i.e. 1 second drip), irregular water spray, attached filter(s), if the screen/aerator is on/off the water outlet or if the water becomes warm/hot.
- ➤ Minimizing the potential for cross contamination of sample outlets by sampling personnel. The water will be collected from the outlet directly into each container.
- > Following all of the sampling procedures outlined in the Sampling Plan and QAPP.



#### 8.4 Sampling Results

The laboratories will provide the lead sample results to the District in electronic format within the timeframe required under the contract. A spreadsheet of all results, the analytical results report, and the chain of custody forms must be included.

Within 24 hours after the District has reviewed and verified the final laboratory results, the District will make the results publically available and if any results exceed the action level provide written notification to the parents/guardians of all students as well as to the Department of Education.

#### 8.5 Intermediate Remedial Measures

Upon receiving sample results, the District will turn off all outlets with results that exceed 15  $\mu$ g/L (as defined as greater than or equal to 15.5  $\mu$ g/L). If these locations must remain on for non-drinking purposes, a "DO NOT DRINK – SAFE FOR HANDWASHING ONLY" sign will be posted (Attachment H.v).



Drinking Water Outlet- an outlet that can be used for the consumption of water, such as, water fountains, water coolers, bubblers, kitchen sinks and food preparation sinks; however, classroom, bathroom, and outlets used for washing dishes are not drinking water outlets.

Action Level (AL)- The lead level established by the USEPA at 40 CFR 141.80 for lead in drinking water.

Bottled Water- includes sealed purchased water from an external company (individual bottles or dispensers). Drinking water dispensers that utilize purchased water are not required to be sampled. First Draw Sample – a sample that is collected from outlets where water sat undisturbed for a minimum of 8 hours.

Follow-up Flush Sample - sample that is collected from outlets after they have been manually flushed.

Low-Use Outlets- outlets that are not used routinely and may sit for periods of time with minimal or no use. Examples include those outlets in a wing of a school that is temporarily closed off and are not being used, or fountains and food preparation outlets that are only used during sporting or other events.

Out of Service Outlets- drinking water outlets as identified on Attachment C that are not operational.

- a. Permanently Out of Service Outlets- outlets that are not being used and the District plans to decommission.
- b. Temporarily Out of Service Outlets- outlets that require repair or replacement and will be put back in service once they are repaired. For example, an outlet with a broken handle.

Point of entry (POE)- The point at which the service line enters the building. For the purposes of sample collection, the POE sample location is the closest water outlet to the entrance of the service line into the school.

Quality Assurance Project Plan (QAPP) Template- describes the planning, implementation, and evaluation steps that will be consistently applied by those involved in a School District's Sampling Plan. The QAPP will provide a high level of confidence in the results of this sampling and aide in meeting the overall goal of ensuring any appropriate remediation measures are quickly identified and implemented.

Sampler- personnel responsible for collecting the drinking water outlet samples for a school. The individual is required to review and understand their roles and responsibilities under the District's Quality Assurance Program Plan and be able to collect samples in accordance with the District's Sampling Plan.

Service Line- the pipe that carries water to the school from the public water system's main in the street.



School Wide Systematic Flush- system flushing is required if the school has been dormant for greater than 48 hours (holiday or seasonal break). A Flushing Log (Attachment E) needs to be completed for each school flushed.

Water Cooler- any mechanical device affixed to drinking water supply plumbing that actively cools water for human consumption. The reservoir can consist of a small tank or a pipe coil.



# ATTACHMENT A: LIST OF SCHOOL(S)



### Attachment A - List of Union County Vocational Technical Schools Priority for Sampling

	DATE OF	CERTIFIED	NOTES
SCHOOL NAME/FACILITY NAME	SAMPLING	LABORATORY	
Administration Building	08/06/2024	EMSL Analytical	
Academy of Performing Arts	08/06/2024	EMSL Analytical	
Baxel Hall	08/27/2024	EMSL Analytical	
Bistocci Hall	08/06/2024	EMSL Analytical	
Mancuso/Magnet Hall	08/06/2024	EMSL Analytical	
West Hall	09/03/2024	EMSL Analytical	

# ATTACHMENT B: PLUMBING FILE



#### Attachment B - Plumbing Profile

Note: Complete for each school. For additional information see the USEPA publication, "The 3Ts for Reducing Lead in Drinking Water in Schools" Name of School: Union County Vo-Tech, Academy for Performing Arts Hall Grade Levels: Address: 1776 Raritan Road, Scotch Plains, New Jersey Wark Individual school project officer Signature: Date: Questions Answers **Background Information** 1. What year was the original building constructed? 2009 Were any buildings or additions added to the original NO facility? 2. If the building was constructed or repaired after 1986, was lead-free plumbing and solder utilized? What type of solder was used? Document all locations where lead solder was used. 3. Where are the most recent plumbing repairs and Location: Description: replacements? NONE 4. With what materials is the service connection (the pipe Material: COOPER that carries water to the school from the public water system's main in the street) made? Location: MECH-RM IST FL Where is the Service Line located? (This is the POE location.) Y / (N) 5. Is there point of entry (POE) or point of use (POU) treatment in use? Type: Location:

Questions	Answers
6. Are there tanks in your plumbing system (pressure tanks,	Y /(N)
gravity storage tanks)?	
7. Does the school have a filter maintenance and operation	110
program?	NO
If so, who is responsible for this program?	
What is the process for adding filters?	
Have accessible screens or aerators on outlets that	Y / (N)
provide drinking water been cleaned?	
Does the school have a screen or aerator maintenance	
program?  9. Have there been any complaints about bad (metallic)	Y / (N)
taste?	Y / (N)
Note location(s).	Location:
10. Review records and consult with the public water	
supplier to determine whether any water samples have been	NO
taken in the building for any contaminants. If so, identify:	
<ul> <li>Name of contaminant(s)</li> </ul>	
Concentrations found	
pH level	
Is testing done regularly at the building?	
11. Other plumbing background questions include:	YES
Are blueprints of the building available?  Are the are less as the second of the building available?	
Are there known plumbing "dead-ends", low use  areas evicting leaks or other "problem areas"?	YES NO DEAD ENDS
areas, existing leaks or other "problem areas"?  Are renovations planned for any of the plumbing system?	NO PEADS
The removations planned for any of the planning system?	

Questions	Answers
Walk-Through These questions should be addressed during the walk-through of the facilities.	lity, while Attachment C- Drinking Water Outlet Inventory is being completed.
Confirm the material of Service Line visually.	COOPER
2. Confirm the presence of POE or POU treatment.	UNKNOWN
3. What are the potable water pipes made of in your facility?	
Lead	
Plastic	
Galvanized Metal	
Cast Iron	
Copper	CMADED
Other	COPPER
Note the water flow through the building and the areas that	
receive water first, and which areas receive water last.	
4. Are electrical wires grounded to Water Pipes?	(Y) / N
Note location(s).	MECH
	Location: RM
5. Are brass fittings, faucets, or valves used in your drinking	Complete in "Brass" Column in Attachment C- Water Outlet Inventory.
water system?	
Note that most faucets are brass on the inside.	UNKNOWN
Document the locations of any brass water outlet to be	0/4/NUENO
sampled.	
6. Locate all drinking water outlets (i.e. water coolers,	Complete in Attachment C-Water Outlet Inventory.
bubblers, ice machines, kitchen/ food prep sinks, etc.) in the facility.	

Questions	Answers	
7. Have the brands and models of the water coolers in the	Y)/ N	
school been compared to the list of recalled water coolers in		
the Toolkit?		
Recalled Drinking Water Fountains	NONE	
Make and Model	Туре	
8. Have signs of corrosion, such as frequent leaks, rust-	Complete in "Signs of Corrosion"	column in Attachment C- Drinking
colored water, or stained fixtures, dishes, or laundry been	Water Outlet Inventory.	
detected?	NO	
Note the locations of water outlets.	2	
9. Are there any outlets that are not operational and	Y / N	
therefore out of service? Permanently? Temporarily?	Complete "Operational	
	Column" in Attachment C-	
	Drinking Water Outlet Inventory.	>-
	inventory.	
	Type/ Location	Description
Permanently	Type, Zeedlen	
Temporarily		

## Attachment B – Plumbing Profile

Note: Complete for each school. For additional information see the USEPA publication, "The 3Ts for Reducing Lead in Drinking Water in Schools"			
Name of School: Union County Vo-Tech, Administration E	Grade Levels: _////		
Address:1776 Raritan Road, Scotch Plains, New Jersey			
Individual school project officer Signature:	Date:		
Marks Leans			
Questions	Answers		
Background Information			
1. What year was the original building constructed?	2009		
Were any buildings or additions added to the original			
facility?	NO		
2. If the building was constructed or repaired after 1986,	YES		
was lead-free plumbing and solder utilized?			
What type of solder was used?			
Document all locations where lead solder was used.			
3. Where are the most recent plumbing repairs and	Location:	Description:	
replacements?	KIONE		
4. With what materials is the service connection (the pipe	Material:		
that carries water to the school from the public water	COPPER		
system's main in the street) made?	Location:		
Where is the Service Line located? (This is the POE	Location:  WAINTENCE  ROOM BY FRONT	- 0	
location.)		POOR	
5. Is there point of entry (POE) or point of use (POU)	Y / (N)		
treatment in use?	Type:	Location:	

Questions	Answers
6. Are there tanks in your plumbing system (pressure tanks, gravity storage tanks)?	YIN
7. Does the school have a filter maintenance and operation program?  If so, who is responsible for this program?  What is the process for adding filters?	NO
8. Have accessible screens or aerators on outlets that provide drinking water been cleaned?  Does the school have a screen or aerator maintenance program?	Y / N
<ol> <li>Have there been any complaints about bad (metallic) taste?</li> <li>Note location(s).</li> </ol>	Y / N Location:
<ul> <li>10. Review records and consult with the public water supplier to determine whether any water samples have been taken in the building for any contaminants. If so, identify: <ul> <li>Name of contaminant(s)</li> <li>Concentrations found</li> <li>pH level</li> </ul> </li> <li>Is testing done regularly at the building?</li> </ul>	NO
<ul> <li>Other plumbing background questions include:</li> <li>Are blueprints of the building available?</li> <li>Are there known plumbing "dead-ends", low use areas, existing leaks or other "problem areas"?</li> <li>Are renovations planned for any of the plumbing system?</li> </ul>	YES NO

Questions	Answers
Walk-Through These questions should be addressed during the walk-through of the facility	ity, while Attachment C- Drinking Water Outlet Inventory is being completed.
Confirm the material of Service Line visually.	UNKNOWN
<ol><li>Confirm the presence of POE or POU treatment.</li></ol>	UNKNOWN
3. What are the potable water pipes made of in your facility?	
Lead	
Plastic	
Galvanized Metal	
Cast Iron	
Copper	COPPER
Other	
Note the water flow through the building and the areas that	
receive water first, and which areas receive water last.	
4. Are electrical wires grounded to Water Pipes?	(Y) / N
Note location(s).	MECH
	Location: ROOM
5. Are brass fittings, faucets, or valves used in your drinking	Complete in "Brass" Column in Attachment C- Water Outlet Inventory.
water system?	YES
Note that most faucets are brass on the inside.	
Document the locations of any brass water outlet to be	
sampled.	
6. Locate all drinking water outlets (i.e. water coolers,	Complete in Attachment C-Water Outlet Inventory.
bubblers, ice machines, kitchen/ food prep sinks, etc.) in the	
facility.	

Questions		
1910-9 (1996) - 1919 (1996) - 1910 (1996) - 1919 (1996) - 1919 (1996) - 1919 (1996) - 1919 (1996) - 1919 (1996)	Answers	
7. Have the brands and models of the water coolers in the	Y /(N)	
school been compared to the list of recalled water coolers in		
the Toolkit?		
Recalled Drinking Water Fountains		
Make and Model	Type	
8. Have signs of corrosion, such as frequent leaks, rust-	Complete in "Signs of Corrosion	" column in Attachment C- Drinking
colored water, or stained fixtures, dishes, or laundry been	Water Outlet Inventory.	osianin in / mashment or Brinking
detected?		
Note the locations of water outlets.	NO	
Are there any outlets that are not operational and	Y / (Ñ)	
therefore out of service? Permanently? Temporarily?	Complete "Operational	
	Column" in Attachment C-	
	Drinking Water Outlet	
	Inventory.	
	,	
	Type/ Location	Description
Permanently	Typo/ Location	Description
1 cimanently		
Temporarily		

## Attachment B - Plumbing Profile

Note: Complete for each school. For additional information see the USEPA publication, "The 3Ts for Reducing Lead in Drinking Water in Schools"					
Name of School: Union County Vo-Tech, Baxel Hall	(	Grade Levels: 9-12			
Address: 1776 Raritan Road, Scotch Plains, New Jerse	ddress: 1776 Raritan Road, Scotch Plains, New Jersey				
dividual school project officer Signature: Mark Leary Date: \$12					
Questions // aux > 2	Answers				
Background Information	Background Information				
<ol> <li>What year was the original building constructed? Were any buildings or additions added to the original facility?</li> <li>If the building was constructed or repaired after 1986, was lead-free plumbing and solder utilized? What type of solder was used? Document all locations where lead solder was used.</li> <li>Where are the most recent plumbing repairs and</li> </ol>	1964 YES UNKNOWN UNKNOWN Location:	Description:			
replacements?	NEW PLUMBING IN 2007	Description.			
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?  Where is the Service Line located? (This is the POE location.)	Material:  UN SURE  Location:  CLOSET 131 0	OFF MAIN			
5. Is there point of entry (POE) or point of use (POU) treatment in use?	Y / N Type:	Location:			

Questions	Answers
6. Are there tanks in your plumbing system (pressure tanks, gravity storage tanks)?	Y/N
7. Does the school have a filter maintenance and operation program?  If so, who is responsible for this program?  What is the process for adding filters?	NO
8. Have accessible screens or aerators on outlets that provide drinking water been cleaned?  Does the school have a screen or aerator maintenance program?	Y / (N)
<ul><li>9. Have there been any complaints about bad (metallic) taste?</li><li>Note location(s).</li></ul>	Y / N Location:
10. Review records and consult with the public water supplier to determine whether any water samples have been taken in the building for any contaminants. If so, identify:  Name of contaminant(s)  Concentrations found  pH level Is testing done regularly at the building?	NO
<ul> <li>Other plumbing background questions include:</li> <li>Are blueprints of the building available?</li> <li>Are there known plumbing "dead-ends", low use areas, existing leaks or other "problem areas"?</li> <li>Are renovations planned for any of the plumbing system?</li> </ul>	NO

Questions	Answers
Walk-Through These questions should be addressed during the walk-through of the facility	ity, while Attachment C- Drinking Water Outlet Inventory is being completed.
Confirm the material of Service Line visually.	COOPER
2. Confirm the presence of POE or POU treatment.	
3. What are the potable water pipes made of in your facility?	
Lead	
Plastic	
Galvanized Metal	
Cast Iron	
Copper	COOPER
Other	
Note the water flow through the building and the areas that	
receive water first, and which areas receive water last.	
4. Are electrical wires grounded to Water Pipes?	(Y) / N
Note location(s).	MECH. Location: ROOMS
	Location: ROOMS
5. Are brass fittings, faucets, or valves used in your drinking	Complete in "Brass" Column in Attachment C- Water Outlet Inventory.
water system?	
Note that most faucets are brass on the inside.	UNKNOWKI
Document the locations of any brass water outlet to be sampled.	
6. Locate all drinking water outlets (i.e. water coolers,	Complete in Attachment C-Water Outlet Inventory.
bubblers, ice machines, kitchen/ food prep sinks, etc.) in the	
facility.	

Questions	Answers	
7. Have the brands and models of the water coolers in the school been compared to the list of recalled water coolers in the Toolkit?	YIN UNIKNOWN	
Recalled Drinking Water Fountains	UNKNOWN	
Make and Model	Туре	
8. Have signs of corrosion, such as frequent leaks, rust-	Complete in "Signs of Corrosion" column in Attachment C- Drinking	
colored water, or stained fixtures, dishes, or laundry been	Water Outlet Inventory.	
detected?	$\Lambda IO$	
Note the locations of water outlets.		
9. Are there any outlets that are not operational and	Y / N	
therefore out of service? Permanently? Temporarily?	Complete "Operational Column" in Attachment C-	
	Drinking Water Outlet	
	Inventory.	
	Type/ Location De	escription
Permanently		
Temporarily		

## Attachment B - Plumbing Profile

Note: Complete for each school. For additional information see the USEPA publication, "The 3Ts for Reducing Lead in Drinking Water in Schools"				
Name of School: Union County Vo-Tech, Bistocci Ha	all	Grade Levels:		
Address: 1776 Raritan Road, Scotch Plains, New	Jersey			
Individual school project officer Signature: Mark Leary Date: 8/12				
Questions	Answers			
	Alisweis			
Background Information				
What year was the original building constructed?	3004	3004		
Were any buildings or additions added to the original	NO	N/O		
facility?	740			
2. If the building was constructed or repaired after 1986,	YES			
was lead-free plumbing and solder utilized?	, -			
What type of solder was used?				
Document all locations where lead solder was used.		<u> </u>		
3. Where are the most recent plumbing repairs and	Location:	Description:		
replacements?	NONE			
4. With what materials is the service connection (the pipe	e Material:			
that carries water to the school from the public water	COPPER			
system's main in the street) made?	Location:			
Where is the Service Line located? (This is the POE	WEST H	1916		
location.)	BOILER	RM		
5. Is there point of entry (POE) or point of use (POU)	Y / (N)			
treatment in use?	Type:	Location:		
*				

Questions	Answers
6. Are there tanks in your plumbing system (pressure tanks, gravity storage tanks)?	YIN
7. Does the school have a filter maintenance and operation program?  If so, who is responsible for this program?  What is the process for adding filters?	NO
8. Have accessible screens or aerators on outlets that provide drinking water been cleaned?  Does the school have a screen or aerator maintenance program?	Y / M
9. Have there been any complaints about bad (metallic) taste?  Note location(s).	Y / N Location:
10. Review records and consult with the public water supplier to determine whether any water samples have been taken in the building for any contaminants. If so, identify:  Name of contaminant(s)  Concentrations found  pH level  Is testing done regularly at the building?	NO
<ul> <li>Other plumbing background questions include:</li> <li>Are blueprints of the building available?</li> <li>Are there known plumbing "dead-ends", low use areas, existing leaks or other "problem areas"?</li> <li>Are renovations planned for any of the plumbing system?</li> </ul>	NO

Questions	Answers
Walk-Through These questions should be addressed during the walk-through of the facilities.	lity, while Attachment C- Drinking Water Outlet Inventory is being completed.
Confirm the material of Service Line visually.	
<ol><li>Confirm the presence of POE or POU treatment.</li></ol>	COPPER
3. What are the potable water pipes made of in your facility?	
• Lead	
Plastic	
Galvanized Metal	
Cast Iron	
<ul> <li>Copper</li> </ul>	COROCA
Other	COPPER
Note the water flow through the building and the areas that	
receive water first, and which areas receive water last.	
4. Are electrical wires grounded to Water Pipes?	(Y) / N
Note location(s).	MECH RM
	Location: MAIN PLOOR
5. Are brass fittings, faucets, or valves used in your drinking water system?	Complete in "Brass" Column in Attachment C- Water Outlet Inventory.
Note that most faucets are brass on the inside.	UNKNOWN
Document the locations of any brass water outlet to be	
sampled.	
6. Locate all drinking water outlets (i.e. water coolers,	Complete in Attachment C-Water Outlet Inventory.
pubblers, ice machines, kitchen/ food prep sinks, etc.) in the	, and an annual of tracer outlet inventory.
acility.	

Questions	Answers	
7. Have the brands and models of the water coolers in the	Y / (N)	
school been compared to the list of recalled water coolers in	. 7(1)	
the Toolkit?		
Recalled Drinking Water Fountains		
Make and Model		
	Туре	
8. Have signs of corrosion, such as frequent leaks, rust-	Complete in "Signs of Corrosion"	" column in Attachment C- Drinking
colored water, or stained fixtures, dishes, or laundry been	Water Outlet Inventory.	Ç
detected?	NB	
Note the locations of water outlets.	140	
Are there any outlets that are not operational and	Y / (N)	
therefore out of service? Permanently? Temporarily?	Complete "Operational	
	Column" in Attachment C-	
	Drinking Water Outlet	
	Inventory.	
	Type/ Location	Description
Permanently		
Temporarily		

#### Attachment B - Plumbing Profile

Note: Complete for each school. For additional information see the USEPA publication, "The 3Ts for Reducing Lead in Drinking Water in Schools" Grade Levels: Name of School: Union County Vo-Tech, Mancuso Hall Address: 1776 Raritan Road, Scotch Plains, New Jersey Date: Individual school project officer Signature: Answers Questions **Background Information** 1964 1. What year was the original building constructed? Were any buildings or additions added to the original facility? 2. If the building was constructed or repaired after 1986, NON-PLUMBING RENO IN 1996 was lead-free plumbing and solder utilized? What type of solder was used? Document all locations where lead solder was used. Description: 3. Where are the most recent plumbing repairs and Location: NONE replacements? 4. With what materials is the service connection (the pipe Material: COPPER that carries water to the school from the public water system's main in the street) made? Location: WEST HALL Where is the Service Line located? (This is the POE BULLER RM location.) Y / (N) 5. Is there point of entry (POE) or point of use (POU) Location: treatment in use? Type:

Questions	Answers
6. Are there tanks in your plumbing system (pressure tanks,	Y /(N)
gravity storage tanks)?	
7. Does the school have a filter maintenance and operation	A / O
program?	NO
If so, who is responsible for this program?	
What is the process for adding filters?	
8. Have accessible screens or aerators on outlets that	Y / (N)
provide drinking water been cleaned?	
Does the school have a screen or aerator maintenance	
program?	
9. Have there been any complaints about bad (metallic)	Y / (N)
taste?	
Note location(s).	Location:
10. Review records and consult with the public water	NO
supplier to determine whether any water samples have been	
taken in the building for any contaminants. If so, identify:	
Name of contaminant(s)	
Concentrations found	
pH level     to sting done regularly at the hydrigan?	
Is testing done regularly at the building?  11. Other plumbing background questions include:	
	NO
<ul> <li>Are there known plumbing "dead-ends", low use areas, existing leaks or other "problem areas"?</li> </ul>	NO I
Are renovations planned for any of the plumbing system?	
7 to removations planned for any of the planning system:	

Questions	Answers
Walk-Through These questions should be addressed during the walk-through of the facilities.	lity, while Attachment C- Drinking Water Outlet Inventory is being completed.
Confirm the material of Service Line visually.	COPPER
2. Confirm the presence of POE or POU treatment.	UNKNOWN
3. What are the potable water pipes made of in your facility?	
Lead	
Plastic	
Galvanized Metal	
Cast Iron	
Copper	COPPER
Other	COFFER
Note the water flow through the building and the areas that	
receive water first, and which areas receive water last.	
4. Are electrical wires grounded to Water Pipes?	
Note location(s).	ELECTRICAL
	Location: ROOM
5. Are brass fittings, faucets, or valves used in your drinking	Complete in "Brass" Column in Attachment C- Water Outlet Inventory.
water system?	1 10 112
Note that most faucets are brass on the inside.	UNKNOWN
Document the locations of any brass water outlet to be	
sampled.	
6. Locate all drinking water outlets (i.e. water coolers,	Complete in Attachment C-Water Outlet Inventory.
bubblers, ice machines, kitchen/ food prep sinks, etc.) in the	
facility.	

Questions	Answers	
7. Have the brands and models of the water coolers in the	Y / (N)	
school been compared to the list of recalled water coolers in		
the Toolkit?		
Recalled Drinking Water Fountains		
Make and Model	Туре	
8. Have signs of corrosion, such as frequent leaks, rust-	Complete in "Signs of Corrosion"	column in Attachment C- Drinking
colored water, or stained fixtures, dishes, or laundry been	Water Outlet Inventory.	
detected?	NO	
Note the locations of water outlets.	740	
9. Are there any outlets that are not operational and	Y / (N)	
therefore out of service? Permanently? Temporarily?	Complete "Operational	
	Column" in Attachment C-	
	Drinking Water Outlet	
	Inventory.	
	Type/ Location	Description
Permanently		
Temporarily		

#### Attachment B - Plumbing Profile

Note: Complete for each school. For additional information see the USEPA publication, "The 3Ts for Reducing Lead in Drinking Water in Schools" Grade Levels: Union County Vo-Tech, West Hall Name of School: Address: 1776 Raritan Road, Scotch Plains, New Jersey Date: Individual school project officer Signature: Answers Questions **Background Information** 1. What year was the original building constructed? Were any buildings or additions added to the original facility? 2. If the building was constructed or repaired after 1986, was lead-free plumbing and solder utilized? What type of solder was used? UNKNOWN Document all locations where lead solder was used. Description: 3. Where are the most recent plumbing repairs and Location: replacements? West Hall New water fountains were replaced and installed two new locations in the trainers room 4. With what materials is the service connection (the pipe Material: COPPER that carries water to the school from the public water Location: system's main in the street) made? Where is the Service Line located? (This is the POE location.) 5. Is there point of entry (POE) or point of use (POU) treatment in use? Location: Type:

Questions	Answers
6. Are there tanks in your plumbing system (pressure tanks, gravity storage tanks)?	Y/N
7. Does the school have a filter maintenance and operation program?  If so, who is responsible for this program?  What is the process for adding filters?	NO
8. Have accessible screens or aerators on outlets that provide drinking water been cleaned?  Does the school have a screen or aerator maintenance program?	Y / N
9. Have there been any complaints about bad (metallic) taste?  Note location(s).	Y / N
<ul> <li>10. Review records and consult with the public water supplier to determine whether any water samples have been taken in the building for any contaminants. If so, identify: <ul> <li>Name of contaminant(s)</li> <li>Concentrations found</li> <li>pH level</li> </ul> </li> <li>Is testing done regularly at the building?</li> </ul>	Location:
<ul> <li>Other plumbing background questions include:</li> <li>Are blueprints of the building available?</li> <li>Are there known plumbing "dead-ends", low use areas, existing leaks or other "problem areas"?</li> <li>Are renovations planned for any of the plumbing system?</li> </ul>	NO RMS. 311, 318, 325, 326, 335 334 388; 345, 365

Questions	Answers
Walk-Through These questions should be addressed during the walk-through of the fac	ility, while Attachment C- Drinking Water Outlet Inventory is being completed.
Confirm the material of Service Line visually.	
Confirm the presence of POE or POU treatment.	COPPER
3. What are the potable water pipes made of in your facility?	O TO KITCHER
• Lead	
Plastic	
Galvanized Metal	
Cast Iron	2 4 62 - 5
Copper	COPPER
Other	
Note the water flow through the building and the areas that	
receive water first, and which areas receive water last.	
4. Are electrical wires grounded to Water Pipes?	(Ý) / N
Note location(s).	IN UARIOUS
	Location: FILE PRINTER PM
5. Are brass fittings, faucets, or valves used in your drinking	Complete in "Brass" Column in Attachment C- Water Outlet Inventory.
water system?	
Note that most faucets are brass on the inside.	UNKNOWN
Document the locations of any brass water outlet to be	
sampled.	
5. Locate all drinking water outlets (i.e. water coolers,	Complete in Attachment C-Water Outlet Inventory.
pubblers, ice machines, kitchen/ food prep sinks, etc.) in the	James III Madorinoni O-VValor Odder Inventory.
facility.	

Questions	Answers	
7. Have the brands and models of the water coolers in the	Y / N	
school been compared to the list of recalled water coolers in the Toolkit?	UNKNOWN	
Recalled Drinking Water Fountains		
Make and Model	Туре	
8. Have signs of corrosion, such as frequent leaks, rust-	Complete in "Signs of Corrosion"	column in Attachment C- Drinking
colored water, or stained fixtures, dishes, or laundry been	Water Outlet Inventory.	
detected?	1/0	
Note the locations of water outlets.	NO	
9. Are there any outlets that are not operational and	Y / N	
therefore out of service? Permanently? Temporarily?	Complete "Operational	
	Column" in Attachment C-	
	Drinking Water Outlet	
	Inventory.	
	Type/ Location	Description
Permanently	338 NON-	
	338 NOW- OPERATIONAL PERMANENTES	
	DEDMINITERITY	t
Temporarily		

### Attachment B.i: Plumbing Profile Instructions

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.
Background Information	
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 these 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 very 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 after 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?	The 1986 Amendments to the Safe Drinking Water Act 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., tinantimony) 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.
Was lead solder used in your plumbing system? Note the locations of lead solder.	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.
	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.
3. When were the most recent plumbing repairs and replacements 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 Walk Through Question 5 below for further discussion of brass), lead levels in the water may be high. After about 5 years, however, this type of reaction (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.
location where the service connection enters the building and connects to the interior plumbing. (This	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, allowing lead contamination to occur.

Plumbing Profile Questions	What Your Answers to the Plumbing Profile Questions Mean
5. Is there point of entry (POE) or point of use (POU) treatment in use?	Are there water treatment units in your plumbing system? Treatment units could be, but are not limited to, ion exchange units, filter cartridge, reserve osmosis, etc.
6. Do you have tanks in your plumbing system (pressure tanks, gravity storage tanks)?	Some older tanks may contain coatings that are high in lead content.
Note the location of any tanks, and any available information about the tank; e.g., manufacturer, date of installation.	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. Does the school have a filter maintenance and operation program?  If so, who is responsible for this program?  What is the process for adding filters?	A program for the maintenance and the upkeep of filters on drinking water outlets is necessary to ensure the effectiveness of the filters. Most filters recommend replacement after six months. If the filters need replacement every six months, the program will include a procedure for ensuring that every six month old filter is replaced. An individual should be responsible for ensuring that this filter maintenance program is followed.
	If the school would like to add a filter to a water outlet, what is the process? Does a request form have to be completed and submitted to the individual in charge of maintenance? Do all filters need to be added at a certain time of year to follow the maintenance program?
8. 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.  Have these screens been cleaned? 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 additional investigating into why the debris is accumulating is appropriate. However, the manufacturer or water service provider should be contacted to obtain instructions.
9. 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
10. 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).	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
<ul> <li>Name of contaminant(s)?</li> <li>What concentrations of these contaminants were found?</li> </ul>	quality.
<ul> <li>What was the pH level of the water?</li> <li>Is testing done regularly at your facility?</li> </ul>	
11. Other plumbing questions:	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
<ul> <li>Are blueprints of the building available?</li> <li>Are there known plumbing "dead• ends," low use areas, existing leaks or other "problem areas"?</li> </ul>	accumulation, areas of corrosion, etc., on a sketch or blueprint of the plumbing.
<ul> <li>Are renovations being planned for part or all of the plumbing system?</li> </ul>	
Walk-Through	
Confirm the material that the service line is made of visually	See Background Information Question #4.
Confirm the presence of POE or POU treatment.	See Background Information Question #5

Plumbing Profile Questions	What Your Answers to the Plumbing Profile Questions Mean
3. Specifically, what are the potable water pipes made of in your facility (note the locations)?	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:
<ul> <li>Lead</li> <li>Plastic</li> <li>Galvanized Metal</li> <li>Cast Iron</li> </ul>	<ul> <li>Lead pipes are dull gray in color and may be easily scratched by an object such as a knife or key.</li> <li>Lead pipes are a major source of lead contamination in drinking water.</li> </ul>
<ul> <li>Copper</li> <li>Other</li> </ul> Note the location of the different types of pipe, if applicable, and the direction of water flow through	<ul> <li>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.</li> </ul>
the building. Note the areas of the building that receive water first, and which areas receive water last.	<ul> <li>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.</li> </ul>
	<ul> <li>Plastic pipes, especially those manufactured abroad, may contain lead. If plastic pipes are used, be sure they meet NSF International standards. (Note: NSF International is an independent, third- party testing organization. Product listings can be obtained by visiting their Web site at <a href="http://www.nsf.org/business/search_listings/index/asp.">http://www.nsf.org/business/search_listings/index/asp.</a>)</li> </ul>
4. 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 <i>should not be removed</i> 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.

Plumbing	Profile	Questions
I IUIIIDIIIQ	LIOINE	Questions

5. Are brass fittings, faucets, or valves used in your drinking water system? (Note: Most faucets are brass on the inside.)

You may want to note the locations on a map or diagram of your facility and make extensive notes that would facilitate future analysis of lead sample results.

#### What Your Answers to the Plumbing Profile Questions Mean

Brass fittings, faucets, and valves are golden yellow in color, similar to copper in appearance, or are plated with chrome. Brass is composed primarily of two metals, copper and zinc. Most brasses contain lead ranging from 2 percent to 8 percent. That lead can contaminate the water contact surface when it is smeared on the machined surfaces during production. 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.

In response to a requirement of the 1996 SDWA, EPA 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 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.

- How many of the following outlets provide water for consumption? Note the locations.
  - Water Coolers
  - Bubblers
  - Ice Makers
  - Kitchen Taps
  - 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. You may consider posting "do not drink" signs.

Plumbing Profile Questions	What Your Answers to the Plumbing Profile Questions Mean
7. Has your school checked the brands and models of water coolers and compared them to the list of recalled water coolers in Appendix H.i Note the locations of any recalled 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 Attachment H.i of this document for a summary of EPA's list of water coolers found to contain lead. 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.
8. Are there any 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 signs 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.
9. Are there any outlets that are not operational and therefore out of service? Permanently? Temporarily?	Permanently out of service water outlets are outlets that are no longer being used and the facility plans to decommission in the future.  Temporarily out of service water outlets are outlets that require repair or replacement and will be put back in service once they are operational.

# ATTACHMENT C: DRINKING WATER OUTLET INVENTORY



Name of School: <u>Administration Building</u>	Address: 1776 Raritan Road, Scotch Plains, NJ
Grade Levels: _9-12 Year School Constructed: Renovated	d/Additions:
Individual school project officer Name/Signature:	Date Completed: 8/1/24

Operational<sup>2</sup> Filter<sup>4</sup> Chiller Water Cooler Type Location Code Signs of Brass Aerator/ Motion Comments (Y/N) (Y/N) Fittings, (Y/N)Corrosion Screen Activated Make Model Faucets (Y/N)(Y/N)(Y/N)or valves? (Y/N)POE Electrical Adm-POE Υ Ν Ν Ν Ν Ν Ν Room Υ LZSTL8WSSP Elkay WF Hallway Adm-WF-01 Ν Ν Ν Ν Ν Ν WF Υ Ν Ν Ν Elkay LZSTL8WSSP Adm-WF-02 Ν Ν Ν Hallway Υ Υ Υ Elkay LZSTL8WSSP BF Hallway Adm-BF-03 Ν Ν Ν Υ S Υ Kitchen Adm-S-04 Ν Ν Ν Ν Ν Ν

<sup>&</sup>lt;sup>1</sup> Number outlets starting at the closest outlet to the Point of Entry (POE).

<sup>&</sup>lt;sup>2</sup> Document if permanently or temporarily out of service on the Attachment B- Plumbing Profile.

<sup>&</sup>lt;sup>3</sup> Signs of corrosion detected, such as but not limited to frequent leaks, rust-colored water, or stained fixtures, dishes, or laundry.

<sup>&</sup>lt;sup>4</sup> Document on Attachment D- Filter Inventory.

Name of School: <u>Academy for Performing Arts Hall</u>	Address: <u>1776 Raritan Road, Scotch Plains, NJ</u>
Grade Levels: _9-12_ Year School Constructed:	Renovated/Additions:
Individual school project officer Name/Signature:	Date Completed:

#1	Туре	Location	Code	Operational <sup>2</sup>	Signs of	Filter <sup>4</sup>	Brass	Aerator/	Motion	Chiller	W	ater Cooler	Comments
				(Y/N)	Corrosion	(Y/N)	Fittings,	Screen	Activated	(Y/N)	Make	Model	
					3		Faucets	(Y/N)	(Y/N)				
					(Y/N)		or						
							valves?						
							(Y/N)						
1	POE	Bathroom	APA-POE	Y	N	N	N	N	N	N			Right BR
2	WF	Across116	APA-WF-1	Υ	N	Υ	N	Υ	N	Υ	Elkay	LZS8WSSP	
3	BF	Across 116	APA-BF-2	Υ	N	Υ	N	Υ	Υ	Υ	Elkay	LZS8WSSP	
4	WF	Near entrance	APA-WF-3	Υ	N	Υ	N	Υ	N	Υ	Elkay	LZS8WSSP	
5	BF	Near entrance	APA-BF-4	Υ	N	Υ	N	Υ	Υ	Υ	Elkay	LZS8WSSP	
6	WF	2 <sup>nd</sup> floor	APA-WF-5	Υ	N	Υ	N	Υ	N	Υ	Elkay	LZS8WSSP	
7	BF	2 <sup>nd</sup> floor	APA-BF-6	Υ	N	Υ	N	Υ	Υ	Υ	Elkay	LZS8WSSP	

<sup>&</sup>lt;sup>1</sup> Number outlets starting at the closest outlet to the Point of Entry (POE).
<sup>2</sup> Document if permanently or temporarily out of service on the Attachment B- Plumbing Profile.

<sup>&</sup>lt;sup>3</sup> Signs of corrosion detected, such as but not limited to frequent leaks, rust-colored water, or stained fixtures, dishes, or laundry.

<sup>&</sup>lt;sup>4</sup> Document on Attachment D- Filter Inventory.

Name of School: Bistocci Hall	Address: <u>1776 Raritan Road, Scotch Plains, NJ</u>					
Grade Levels: _9-12 Year School Constructed:	Renovated/Additions:					
Individual school project officer Name/Signature:	Date Completed: 8/1/24					

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#1	Type	Location	Code	Operational <sup>2</sup>	Signs of	Filter <sup>4</sup>	Brass	Aerator/	Motion	Chiller	Wat	er Cooler	Comment
				(Y/N)	Corrosion	(Y/N)	Fittings,	Screen	Activated	(Y/N)	Make	Model	S
					3		Faucets	(Y/N)	(Y/N)				
					(Y/N)		or						
							valves?						
							(Y/N)						
1		Outside MO	BIS-POE	Υ	N	N	N	N	N	N			
2	WF	Near lobby	BIS-WF-1	Υ	N	Υ	N	Υ	N	Υ	Elkay	LZSTL8WSSP	
3	WF	Near lobby	BIS-WF-2	Υ	N	Υ	N	Υ	N	Υ	Elkay	LZSTL8WSSP	
4	BF	Near lobby	BIS-BF-3	Υ	N	Υ	N	Υ	Υ	Υ	Elkay	LZSTL8WSSP	
5	S	Nurse	BIS-S-4	Υ	N	N	N	N	N	N			
6	S	Faculty	BIS-S-5	Υ	N	N	N	N	N	N			
7	WF	2 <sup>nd</sup> floor	BIS-WF-6	Υ	N	Υ	N	Υ	N	Υ	Elkay	LZSTL8WSSP	
8	WF	2 <sup>nd</sup> floor	BIS-WF-7	Υ	N	Υ	N	Υ	N	Υ	Elkay	LZSTL8WSSP	
9	BF	2 <sup>nd</sup> floor	BIS-BF-8	Υ	N	Υ	N	Υ	Υ	Υ	Elkay	LZSTL8WSSP	
10	S	Faculty	BIS-S-9	Υ	N	N	N	N	N	N			
11	WF	Girls Locker Rm	BIS-WF-10	Υ	N	Υ	N	Υ	N	Υ	Elkay	LZSTL8WSSP	
12	WF	Girls Locker Rm	BIS-WF-11	Υ	N	Υ	N	Υ	N	Υ	Elkay	LZSTL8WSSP	
13	BF	Girls Locker Rm	BIS-BF-12	Υ	N	Υ	N	Υ	Υ	Υ	Elkay	LZSTL8WSSP	

<sup>&</sup>lt;sup>1</sup> Number outlets starting at the closest outlet to the Point of Entry (POE).
<sup>2</sup> Document if permanently or temporarily out of service on the Attachment B- Plumbing Profile.

<sup>&</sup>lt;sup>3</sup> Signs of corrosion detected, such as but not limited to frequent leaks, rust-colored water, or stained fixtures, dishes, or laundry.

<sup>&</sup>lt;sup>4</sup> Document on Attachment D- Filter Inventory.

Name of School: <u>Baxel Hall</u> Allied Health <u>NJ</u>	Address: <u>1776 Raritan Road, Scotch Plains,</u>
Grade Levels: _9-12 Year School Constructed:	Renovated/Additions:
Individual school project officer Name/Signature:	Date Completed: _8/1/24

# <sup>1</sup>	Type	Location	Code	Operational <sup>2</sup>	Signs of	Filter <sup>4</sup>	Brass	Aerator/	Motion	Chiller	7	Water Cooler	Comment
				(Y/N)	Corrosion 3	(Y/N)	Fittings, Faucets	Screen (Y/N)	Activated (Y/N)	(Y/N)	Make	Model	s
					(Y/N)		or						
							valves?						
							(Y/N)						
1	POE	Girls Bathroom	BAX-POE	Υ	N	N	N	N	N	N			Sink to
													the Right
2	S	Faculty Room	BAX-S-1	Υ	N	N	N	N	N	N			
3	WF	Across auditorium	BAX-WF-2	Υ	N	Υ	N	Υ	N	Υ	Elkay	LZSTL8WSSP	
4	WF	Across auditorium	BAX-WF-3	Υ	N	Υ	N	Υ	N	Υ	Elkay	LZSTL8WSSP	
5	BF	Across auditorium	BAX-BF-4	Υ	N	Υ	N	Υ	Υ	Υ	Elkay	LZSTL8WSSP	
6	WF	In between	BAX-WF-5	Υ	N	Υ	N	Υ	N	Υ	Elkay	LZSTL8WSSP	
		bathrooms											
7	WF	In between	BAX-WF-6	Υ	N	Υ	N	Υ	N	Υ	Elkay	LZSTL8WSSP	
		bathrooms											
8	BF	In between	BAX-BF-7	Υ	N	Υ	N	Υ	Υ	Υ	Elkay	LZSTL8WSSP	
		bathrooms											
9	WF	2 <sup>nd</sup> floor	BAX-WF-8	Υ	N	Υ	N	Υ	N	Υ	Elkay	LZSTL8WSSP	

<sup>&</sup>lt;sup>1</sup> Number outlets starting at the closest outlet to the Point of Entry (POE).
<sup>2</sup> Document if permanently or temporarily out of service on the Attachment B- Plumbing Profile.

<sup>&</sup>lt;sup>3</sup> Signs of corrosion detected, such as but not limited to frequent leaks, rust-colored water, or stained fixtures, dishes, or laundry.

<sup>&</sup>lt;sup>4</sup> Document on Attachment D- Filter Inventory.

10	WF	2 <sup>nd</sup> floor	BAX-WF-9	Υ	N	Υ	N	Υ	N	Υ	Elkay	LZSTL8WSSP	
11	BF	2 <sup>nd</sup> floor	BAX-BF-10	Υ	N	Υ	N	Υ	Υ	Υ	Elkay	LZSTL8WSSP	

Name of School: Mancusco Hall	Address:1776 Raritan Road, Scotch Plains, NJ
Grade Levels: _9-12 Year School Constructed:	_ Renovated/Additions:
Individual school project officer Name/Signature:	Date Completed: 8/1/24

#1	Тур	Location	Code	Operational <sup>2</sup>	Signs of	Filter <sup>4</sup>	Brass	Aerator/	Motion	Chiller	W	ater Cooler	Comments
	е			(Y/N)	Corrosion <sup>3</sup> (Y/N)	(Y/N)	Fittings, Faucets or valves? (Y/N)	Screen (Y/N)	Activated (Y/N)	(Y/N)	Make	Model	
1	WF	Outside men bathroom	MAG-WF-1	Y	N	Υ	N	Y	N	Y	Elkay	LZSTL8WSSP	
2	WF	Outside men bathroom	MAG-WF-2	Y	N	Y	N	Y	N	Y	Elkay	LZSTL8WSSP	
3	S	Faculty	MAG-S-2										
4	BF	Outside men bathroom	MAG-BF-3	Y	N	Υ	N	Y	Υ	Y	Elkay	LZSTL8WSSP	
5	WF	Across 202	MAG-WF-4	Υ	N	Υ	N	Υ	N	Υ	Elkay	LZSTL8WSSP	
6	WF	Across 202	MAG-WF-5	Υ	N	Υ	N	Υ	N	Υ	Elkay	LZSTL8WSSP	
7	BF	Across 202	MAG-BF-6	Υ	N	Υ	N	Υ	Υ	Υ	Elkay	LZSTL8WSSP	
8	WF	1 <sup>st</sup> floor	MAG-WF-7	Υ	N	Υ	N	Υ	N	Υ	Elkay	LZSTL8WSSP	
9	WF	1 <sup>st</sup> floor	MAG-WF-8	Υ	N	Υ	N	Υ	N	Υ	Elkay	LZSTL8WSSP	
10	BF	1 <sup>st</sup> floor	MAG-BF-9	Υ	N	Υ	N	Υ	Υ	Υ	Elkay	LZSTL8WSSP	

<sup>&</sup>lt;sup>1</sup> Number outlets starting at the closest outlet to the Point of Entry (POE).
<sup>2</sup> Document if permanently or temporarily out of service on the Attachment B- Plumbing Profile.

<sup>&</sup>lt;sup>3</sup> Signs of corrosion detected, such as but not limited to frequent leaks, rust-colored water, or stained fixtures, dishes, or laundry.

<sup>&</sup>lt;sup>4</sup> Document on Attachment D- Filter Inventory.

11	WF	1 <sup>st</sup> Floor gym	MAG-WF-10	Υ	N	Υ	N	Υ	N	Υ	Elkay	LZSTL8WSSP	
12	WF	1 <sup>st</sup> Floor gym	MAG-WF-11	Υ	N	Υ	N	Υ	N	Υ	Elkay	LZSTL8WSSP	
13	BF	1 <sup>st</sup> Floor gym	MAG-BF-12	Υ	N	Υ	N	Υ	Υ	Υ	Elkay	LZSTL8WSSP	
14	S	Faculty rm	MAG-S-13	Υ	N	N	N	N	N	N			
15	WF	Outside mens br	MAG-WF-14	Υ	N	Υ	N	Υ	N	Υ	Elkay	LZSTL8WSSP	
16	WF	Outside mens br	MAG-WF-15	Υ	N	Υ	N	Υ	N	Υ	Elkay	LZSTL8WSSP	
17	BF	Outside mens br	MAG-BF-16	Υ	N	Υ	N	Υ	Υ	Υ	Elkay	LZSTL8WSSP	
·													

Name of School: <u>West Hall</u>	Address: <u>1776 Raritan Road, Scotch Plains, NJ</u>	
Grade Levels: _9-12 Year School Constructed: _	Renovated/Additions:	
Individual school project officer Name/Signature:	Date Completed:	

#1	Type	Location	Code	Operational <sup>2</sup>	Signs of	Filter <sup>4</sup>	Brass	Aerator/	Motion	Chiller	Water	Cooler	Comments
				(Y/N)	Corrosion <sup>3</sup> (Y/N)	(Y/N)	Fittings, Faucets or valves? (Y/N)	Screen (Y/N)	Activated (Y/N)	(Y/N)	Make	Model	
1	POE (1964 Main)	Sink in Boiler Room Office	WEST-POE	Υ	N	N	N	N	N	N			
2	WF	Outside 308A	WEST-WF-01	Υ	N	N	N	N	N	Y			
3	BF	Outside 308A	WEST-BF-02	Υ	N	Υ	N	N	Υ	Υ			Off
4	WF	Outside 307	WEST-WF-03	Υ	N	N	N	N	N	N			
5	WF	Outside 307	WEST-WF-04	Υ	N	N	N	N	N	N			
6	WF	Outside 314	WEST-WF-05	Υ	N	N	N	N	N	N			
7	WF	Rm 317	WEST-WF-06	Υ	N	N	N	N	N	N			Out of Service
8	WF	Outside Rm 319	WEST-WF-07	Υ	N	N	N	N	N	N			

<sup>&</sup>lt;sup>1</sup> Number outlets starting at the closest outlet to the Point of Entry (POE).
<sup>2</sup> Document if permanently or temporarily out of service on the Attachment B- Plumbing Profile.

<sup>&</sup>lt;sup>3</sup> Signs of corrosion detected, such as but not limited to frequent leaks, rust-colored water, or stained fixtures, dishes, or laundry.

<sup>&</sup>lt;sup>4</sup> Document on Attachment D- Filter Inventory.

9	WF	Outside Rm	WEST-WF-08	Υ	N	N	N	N	N	N			
10	WF	319 Rm 319	WEST-WF-09	Υ	N	N	N	N	N	N			
11	WF	Rm 312	WEST-WF-09	<u>Y</u>	N	N	N	N	N	N	Sunro	NSW	
' '	VVF	KIII 312	WES1-WF-10	ī	IN	IN	IN	IN .	IN	IN		14	
12	POE	Boiler Rm	WEST DOE	Υ	N	N	N	N	N	N	С	14	SINK
12	_		WEST-POE-	Y	IN	IN	IN	IN	IN	IN			SINK
	(1981	Bathroom	11										
40	Main)	Otaida 005	MEOT ME 40	\ <u>'</u>	N.I.	N.I.	N.I.	N.I.	N.	N.I.			
13	WF	Outside 325	WEST-WF-12	Υ	N	N	N	N	N	N			
14	WF	Outside 325	WEST-WF-13	Υ	N	N	N	N	N	N			
15	S	Rm 331	WEST-S-14	Υ	N	N	N	N	N	N			
16	S	Rm 331	WEST-S-25	Υ	N	N	N	N	N	N			
17	S	Rm 331	WEST-S-16	Υ	N	N	N	N	N	N			
18	S	Rm 330	WEST-S-17	Υ	N	N	N	N	N	N			
19	S	Rm 330	WEST-S-18	Υ	N	N	N	N	N	N			
20	S	Rm 330	WEST-S-19	Υ	N	N	N	N	N	N			
21	S	Rm 330	WEST-S-20	Υ	N	N	N	N	N	N			
22	WF	Cafeteria	WEST-WF-21	Υ	N	N	N	N	N	N			
23	WF	Cafeteria	WEST-WF-22	Υ	N	N	N	N	N	N			
24	S	Kitchen	WEST-S-23	Υ	N	N	N	N	N	N			
25	S	Kitchen	WEST-S-24	Υ	N	N	N	N	N	N			
26	S	Kitchen	WEST-S-25	Υ	N	N	N	N	N	N			
27	S	Room 004	WEST-S-26	Υ	N	N	N	N	N	N			Downstairs
28	S	Room 004	WEST-S-27	Υ	N	N	N	N	N	N			Downstairs
29	WF	Outside 002	WEST-WF-28	Υ	N	N	N	N	N	N			Downstairs
30	WF	Outside 002	WEST-WF-29	Υ	N	N	N	N	N	N			Downstairs
31	WF	Across	WEST-WF-30	Υ	N	N	N	N	N	N			Near Boys
		Cafeteria											

32	WF	Across Cafeteria	WEST-WF-31	Υ	N	N	N	N	N	N		Nears Girls
33	WF	Outside 341	WEST-WF-32	Υ	N	N	N	N	N	N		
34	WF	Outside 341	WEST-WF-33	Υ	N	N	N	N	N	N		
35	WF	Rm 342	WEST-WF-34	Υ	N	N	N	N	N	N		
36	S	Rm 343	WEST-S-35	Υ	N	N	N	N	N	N		
37	BF	Rm 344	WEST-BF-36	Υ	N	Y	N	N	N	N	Brita	
38	WF	Room 345	WEST-WF-37	Υ	N	N	N	N	N	N		
39	WF	Room 366	WEST-WF-38	Υ	N	Y	N	N	N	N		
40	WF	Outside 363	WEST-WF-39	Υ	N	N	N	N	N	N		Out of Service
41	WF	Outside 363	WEST-WF-40	Υ	N	N	N	N	N	N		Out of Service
42	WF	Outside 346	WEST-WF-41	Υ	N	N	N	N	N	N		
43	WF	Outside 346	WEST-WF-42	Υ	N	N	N	N	N	N		
44	S	Faculty	WEST-POE-	Υ	N	N	N	N	N	N		1 <sup>st</sup> Addition
		Lounge	43									
45	WF	Outside 707	WEST-WF-44	Υ	N	N	N	N	N	N		1 <sup>st</sup> Addition
46	WF	Outside 707	WEST-WF-45	Υ	N	N	N	N	N	N		1 <sup>st</sup> Addition
47	BF	Room 707	WEST-BF-46	Υ	N	N	N	N	Υ	Y	Brita	1 <sup>st</sup> Addition
48	WF	Outside 710	WEST-WF-47	Υ	N	N	N	N	N	N		1 <sup>st</sup> Addition
49	WF	Outside 710	WEST-WF-48	Υ	N	N	N	N	N	N		1 <sup>st</sup> Addition
50	WF	Outside L18	WEST-WF-49	Υ	N	N	N	N	N	N		2 <sup>nd</sup> Addition
51	WF	Outside L18	WEST-WF-50	Υ	N	N	N	N	N	N		2 <sup>nd</sup> Addition
52	WF	Outside 808	WEST-WF-51	Υ	N	N	N	N	N	N		2 <sup>nd</sup> Addition
53	WF	Outside 808	WEST-WF-52	Υ	N	N	N	N	N	N		2 <sup>nd</sup> Addition

### ATTACHMENT D: FILTER INVENTORY



## Attachment D - Filter Inventory (Complete for each school)

Name of School:Union County Vocational Technical School Grade Levels:						
Address:1776 Raritan Road, Scotch Plains, NJ						
Individual School Project Officer Signature:	Date: 08/06/24					

Sample Location / Code	Brand	Type (Make & Model)	Date Installed or Replaced	Replacement Frequency	NSF Certified for Lead Reduction
					Y/N
T	A		1		
HAIT		101	711	09	h
TACL				LVC	
			_		

### ATTACHMENT E: FLUSHING LOG



## Attachment E – Flushing Log (Complete for each school as applicable)

Name of School: <u>Union County Vocational Technical School</u>	Grade Levels:
Address: 1776 Raritan Road, Scotch Plains, NJ	
Individual School Project Officer Signature:	Date: 08/06/24

Sample Location Description	Sample Location Code	Date	Time	Duration of Flushing	Reason for Flushing
					7
		A ^			
	,				

# ATTACHMENT F: PRE-SAMPLING WATER USE CERTIFICATION



## Attachment F - Pre - Sampling Water Use Certification (Complete for each school)

TO BE COMPLETED BY THE PVRHS DISTRICT REPRESENTATIVE:							
School Name: Union County Vocational Technical Schools							
Sample collection address:	2						
Water was last used:	Time:	5:00pm	Date:	07/05/2024			
Sample commencement:	Time:	9:00 Am	Date:	07/06/2024			
I have read the Union County Vocational Technical Schools Lead Drinking Water Testing Sampling Plan and Quality Assurance Project Plan and I am certifying that samples were collected in accordance with these plans.							
1 mar							
Signature / //ww/			Date				

# ATTACHMENT G: EXAMPLE OF SAMPLE FLUSH TAG



#### **Attachment G - Example of a Sample Flush Tag**

FLUSH TAG								
Water outlet sampling in progress. Please do not use water								
School District Name: Union County Vocational Technic	ical Schools Date Flushed:							
School Name:	Flushing Process							
School Address:	Start Time:							
Location of flushed outlet:	End Time:							
Is the fountain front cover removed for the sampler to dete YES / NO	ermine the reservoir type (circle one):							
	2)							
Person responsible for the flushing process (print name):	IN A							
Signature: Mush								
* Water within the school distribution system should sit in	n the pipes unused for at least eight (8)							
hours after flushing but not more than 48 hour								

Note to the person responsible for the flushing process:

- A. Turn-off lawn sprinkler outlet(s) until water sampling is complete.

  B. Make sure sampling outlets are accessible.

### ATTACHMENT H: SAMPLING TOOL KIT



#### Attachment H - Sampling Toolkit

#### H.i: Recalled Water Cooler List

#### **USEPA's Water Cooler Recall List**

Tables from EPA's 3Ts for Reducing Lead in Drinking Water in Schools Revised Technical Guidance

#### <u>Table E-1</u> Halsey Taylor Water Coolers With Lead-Lined Tanks<sup>2</sup>

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

WM8A WT8A GC10ACR GC10A GC5A RWM13A

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

WM14A Serial No. WM14A Serial No. WT11A Serial No. 222650

<u>843034</u> <u>843006</u>

WT21A Serial No. WT21A Serial No. LL14A Serial No. 64346908

<u>64309550</u> <u>64309542</u>

<sup>&</sup>lt;sup>2</sup>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.

#### <u>Table E-2</u> 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	<u>7P</u>	<u>13P</u>	DPM8H	DP15M	DP3R	DP8A
DP16M	DP5S	C10E	PX-10	DP7S	DP13SM	<u>DP7M</u>	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	<u>13PL</u>	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

\$3/5/10D BFC-4F/7F/4F\$/7F\$ \$300/500/100D

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	<u>HC14F</u> <u>H</u>	HC8W	HC2F	HC14WT
HC14FL	HC14W	HC2FH	HC14WTH	HC8FL	HC4F	HC5F	HC14WL	HCBF7D
HC4FH	HC10F	HC16WT	HCBF7HO	HC8F	HC8FH	HC4W	HWC7	

#### Sample Collection Procedures:

#### • Initial Screening Sample 1E

Fill a suitable container (250 mL or larger, wide-mouthed bottle or other container) provided by the laboratory at least three- quarters full of ice. Do not touch the ice with your hands. Use the non-metal scoop or disposable plastic gloves provided by the laboratory to place the ice in the container.

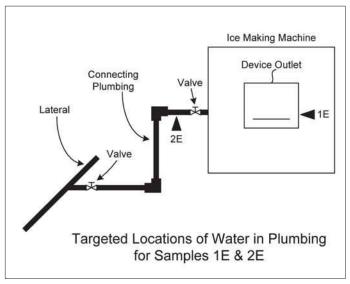
If the lead level in Sample 1E exceeds 15  $\mu$ g/L (ppb), collect a follow-up sample to determine if the source of the lead is the plumbing or the ice machine itself.

#### • Follow-Up Sample 2E

Disconnect the ice machine from the plumbing and look for a screen at the inlet. Remove the screen. If debris is present, forward a sample of the debris to the laboratory for analysis and clean out the remaining debris. The laboratory will determine whether lead solder is present. Clean the screen routinely to avoid accumulations of debris.

Collect the sample from the disconnected plumbing as close to the ice machine as possible. Fill the sample container with 250 mL of water. If no outlet is available, contact the ice machine manufacturer for recommendations that will minimize disruption of existing plumbing. Adding outlets or valves could add new sources of lead to the plumbing, even if the new devices are lead-free and meet NSF Standard 61, section 8. If a sample outlet or valve is available, collect the sample immediately after opening the outlet or valve.

I



#### H.iii: School Wide Flushing Procedure

Each drinking water outlet should be flushed individually; flushing a toilet will not flush your water fountains. All flushing should be recorded in the Flushing Log (Attachment E) for each school and completed prior to sampling.

- Locate the faucet furthest away from the service line on each wing and floor of the building, open the faucets wide, and let the water run for 10 minutes. This 10-minute time frame is considered adequate for most buildings.
- Open valves at all drinking water fountains without refrigeration units and let the water run for roughly 30 seconds to one minute, or until cold.
- Let the water run on all refrigerated water fountains for 15 minutes.
- Open all kitchen faucets (and other faucets where water will be used for drinking and/or food preparation) and let the water run for 30 seconds to one minute, or until cold.

#### H.iv: Sampling Event Checklist

Complete on the day of sampling

#### Before Beginning Sampling:

- Review and Sign QAPP.
- ➤ Review School packet prior to sampling- including floor plan with sample locations, outlet inventory including all outlets to be sampled, filter inventory including which water coolers & drinking water fountains have filters, and if applicable pre-sampling event flushing schedule [includes which outlets were flushed, the duration of flushing, and when they were flushed].
- ➤ Perform a walk-through of the facility prior to sampling. Identify all outlets to be sampled, and label each outlet with its unique sample location code as it is found in the water outlet inventory.
- Verify that the water has been stagnant for at least 8 hours, but no longer than 48 hours.

#### Sampling:

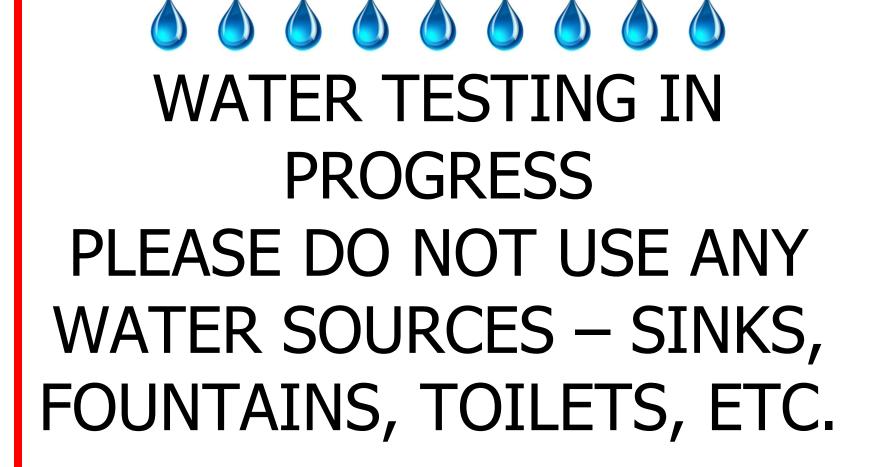
- Field Blank.
- > Start sampling at the outlet closest to the point of entry.
- For each sampling location record the time that sampling begins.
- ➤ Wearing gloves, collect samples into a 250 ml pre-cleaned bottle.
- > Record the time all samples are collected.
- > AFTER all other samples have been collected, for follow-up flush sampling, collect fifteen minute flushed samples from water coolers.
- Indicate on the Chain of Custody (COC) if the outlet is leaking, the water is discolored, the outlet is turned on, the outlet is not working, or the outlet has a filter.
- Label all Follow-Up Flush Samples with "FLUSH" after their unique sample location code. (e.g. WHS- and WHS ---FLUSH).

#### After Sampling:

- Record the time that sampling ends.
- > Count sampling bottles to make sure all water outlets on the inventory were sampled.

Project Officer: —			
,	Print Name	Signature	Date
Sampler:			
	Print Name	Signature	Date

H.v: Sample Signs



## DO NOT DRINK



# SAFE FOR HANDWASHING



#### H.vi: School Sampling Package Review Checklist

Review performe	ed by:Angelica Rosaperesz Date:09/30/2024 Name/Title: Project Manager
Name of NJ Certi	fied Laboratory who performed the analytical testing and certification number:
Name:EN	1SL Analytical Inc Certification Number:03036
_	ned by all parties involved in sampling (Program Manager, Project Manager, I School Project Officers, Laboratory Manager, Laboratory QA Officer): in.
Y or N If N, prov If Y, shoul i. M	ed Plumbing Profile (Attachment B):  ide details on what is missing.  Id include:  laterial of Service line: <b>Y</b> or N  a. Is the school served by a lead service line? Y, N, or <b>Unknown</b> i. Must provide documentation for either Y or N answer. If Unknown  need to provide a plan for getting this information.  laterial of potable water pipes: Y, N, or Unknown

- a. Was lead solder used in the plumbing system? Y, N, or Unknown If Unknown, need to provide a plan for getting this information.
- b. Are brass fittings, faucets, or valves used in the drinking water system? **Unknown**
- iii. Make and Model of Drinking Water Fountains/ Water Coolers: Y or N
  - a. Checked all the drinking water fountains and coolers against the EPA list of recalled fountains: **Y** or N
    - i. If Y, any fountains that were on the list were taken out of service and the information was recorded in the school file.
- iv. 'Low use' areas in the drinking water system: Y or N
  - a. If Y, identify where. Verify that these areas were flushed properly.
- v. Out-of-Service Outlets: Y or N
  - a. If Y, identify where. Verify that these areas are still out of service.
- vi. Plumbing repairs and replacements performed within the last year: Y or N
  - a. If Y, identify where. Please refer to Attachment B
- 3. Is Water Outlet Inventory (Attachment C) for the school completed with all information filled in? Y or N

If N, provide details on what is missing.

- Completed Filter Inventory (Attachment D): N/A
  If N, provide details on what is missing.
- 5. Completed Flushing Log (Attachment E): **NA (Client was informed to flush all tested outlets for a minimum of 1 minutes the day before)**

Only applicable for facilities or specific locations in a facility that are not routinely used e.g. concession stands.

If Y, does it include duration and location of flushes? **NA** If N, provide details.

 Completed data packages for each sampling event including Chain of Custody sheets, field notes, results report and Excel spreadsheet: Y or N
 If N, provide details on what is missing.

#### **Data Package Review**

- 1. Is the data package complete: Y or N
  - a. If N, provide details on what is missing and contact lab if necessary.
- 2. Does the number of samples on the results report from the laboratory match the number of samples on the Chain of Custody? **Y** or N
  - a. If N, identify which sample(s) are missing. Add these sampling locations to the Follow-Up Sampling list.
- 3. Is there a field blank? Y or N
- 4. Are results reported in μg/l? Y or N
  - a. If N, remind lab to report in  $\mu g/l$ .
- 5. Any results not reported to at least 3 significant figures? Y or N
  - a. If Y, contact lab.
- 6. Any results above 100 μg/l? Y or N
  - a. If Y, have lab verify the results.
- 7. Compared field notes/ Chain of Custody notes with sampling results? Y or N
  - a. If Y, are there any notes and sampling results that appear to need re-sampling? Add those sampling locations to the Follow-Up Sampling list. (i.e. notes indicate outlet was leaking or water was discolored)
- 8. Are there outlets that could not be sampled because they were not operational? Y or N

- a. If Y, outlets will be need to be sampled as part of follow-up sampling. Add these outlets on the Follow-Up Sampling list.
- 9. Are there sample codes not identified on the Key Code? Y or N
  - a. If Y, contact sampler and individual school coordinator to identify.
- 10. Verify that water outlets requiring flushing were properly flushed: Y or N
  - a. Are there outlets that were sampled and after reviewing the field notes it is apparent they were not operational prior to sampling and/or were not flushed? Y or N
  - b. If Y, these outlets need to be resampled as part of follow-up sampling. Add these outlets on the Follow-up sampling list.
- 11. Compared first draw samples with follow-up flush samples (if collected): N/A
- 12. Are there outlets where the follow-up flush sample is required but was not collected? Y or **N** 
  - a. If Y, these outlets need to be sampled as part of the follow-up sampling. Add these outlets to the Follow-up Sampling list.
- 13. Are there any follow-up flush sample outlets higher than the first draw? NA
  - a. If Y, identify the internal plumbing material.
- 14. Match up the filters with the exact locations they are installed. Determine the following:
  - a. Exact date installed: Y, N, or Unknown
  - b. If N, return to location and identify.
  - c. If Unknown, assume the filter will need to be replaced.