

a safe, caring, literacy rich learning environment

# LEAD DRINKING WATER TESTING SAMPLING PLAN

FOR:

Hope Community Charter School

836 South 4<sup>th</sup> Street Camden, NJ 08103

**2021-2022 SCHOOL YEAR** 

REPORT COMPILED BY:

ENVIRONMENTAL DESIGN INC.

5434 King Avenue, Suite 101

Pennsauken, NJ 08109

# Lead in Water Sampling Plan

#### Schools/Facilities covered by this plan:

1. Hope Community Charter School

# Approvals & Signatures

School District Representatives					
Progran	n Manager				
		Print	Signature	Date	
Projec	t Manager				
		Print	Signature	Date	
Third Party Sampling Firm/Field Sampling Team					
Name of Firm Environmental Design Inc. (856-616-9516)					
			$\mathcal{A}$		
Company Repre	esentative	Tom Prunc	, Charmas frum		
		Print	Signature	Date	
Individual Sc	hool Projec	t Officers (IS	SPO)		
Hope Community	Charter Scho	ool			
Name of ISPO	Title	Phone #	Signature	Date	

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#### 1. INTRODUCTION

This Lead Drinking Water Testing Sampling Plan was developed by the Hope Community Charter School based on guidance developed by the New Jersey Department of Environmental Protection (NJDEP) and the United States Environmental Protection Agency (USEPA), and is based in part on the USEPA publication "The 3Ts for Reducing Lead in Drinking Water in Schools" and other NJDEP guidance. The purpose of this document is to establish a plan for sampling lead at drinking water outlets used for consumption or food preparation within the District. The data collected through the execution of this Sampling Plan will determine if remedial measures are necessary and will assist in the prioritization of future water testing for lead.

Drinking water outlets include faucets, ice machines, water fountains/bubblers, and water coolers in classrooms, restroom, kitchens, food preparation areas, snack stands, and athletic fields. In other words, drinking water outlets are those locations from which water is consumed, either directly (i.e. water fountain) or indirectly (i.e. kitchen sink used for cooking).

The testing of drinking water outlets will be conducted in accordance with this Sampling Plan and the corresponding Quality Assurance Project Plan (QAPP). Corrective actions may be implemented at any drinking water outlets found to exceed the US Environmental Protection Agency (USEPA) drinking water lead Action Level of 15 micrograms per liter ( $\mu$ g/L). For the purposes of compliance, the Action Level is defined as greater than or equal to 15.5  $\mu$ g/L.

The District's Quality Assurance Project Plan (QAPP) is available under a separate cover.

#### 2. 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.

For determining immediate remedial measures, 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.

#### 3. SAMPLING PROJECT COORDINATION

#### 3.1 List of Names

The names of the individuals fulfilling these roles for the Hope Community Charter School are included at the beginning of this Sampling Plan.

#### 3.2 Program Manager

The Program Manager is the overall authority in the execution of the district's lead sampling project. The Program Manager is responsible for the initial notification to the district of the testing program, obtaining funds for testing, assigning the Project Manager, requesting/enlisting the assistance from other district departments if needed, approving the district's QAPP, approving the Final Report for each school, and coordinating with other district officials to make the results of the testing available to the public. The Program Manager coordinates the activities of the third party Environmental Consultant, Environmental Design Inc. (856-616-9516), hired by the district to assist with compliance and implementation of the Lead in Drinking Water Sampling Program.

#### 3.3 Project Manager

The Project Manager is responsible for overseeing the execution of lead sampling at each school/facility covered by the QAPP and this Sampling Plan. The Project Manager serves as the liaison between the school district, state agencies, local Health Departments, third party laboratories and public water systems (if applicable). The Project Manager reports to the Program Manager. The Project Manager will work closely with the district's Environmental Consultant, Environmental Design Inc., to ensure compliance and implementation of the QAPP and Sampling Plan. The Project Manager's responsibilities include:

- Ensure the Sampling Plan and QAPP are complete
- Oversee Individual School Project Officers
- Ensure laboratory is NJ certified for performing lead in drinking water analysis
- Verify that each school is aware of sampling scheduled and the expected duration
- Coordinate and schedule sampling events at each school/facility
- Review of the Field Sampling Summary Report(s)
- Review of Laboratory Data Reports (LDR)
- Review of Final Project Reports
- Maintain documents, reports, and records, as applicable
- Maintain other relevant records such as Purchase Orders and receipts

#### 3.4 Individual School Project Officer (ISPO)

A Project Officer is someone who is familiar with the building layout and plumbing system. An Individual School Sampling Project Officer (Project Officer) is assigned for each school/facility covered by the QAPP and Sampling Plan. The Project Officer will closely with the district's

Environmental Consultant, Environmental Design Inc., to ensure compliance and implementation of the program. The responsibilities of the Project Officer include:

- General project oversight for each assigned school/facility
- Ensure completion of the Plumbing Profile for each assigned school/facility
- Assist with completion of the following reports:
  - Drinking Water Outlet Inventory
  - Filter Inventory Report
  - Flushing Log
  - Pre-Sampling Water Use Certification
- Prepare for sampling event including preparation of Floor Plan
- Identify drinking water outlets to be flushed and attach flush tag, as applicable
- Ensure that Sampling Team has all relevant sampling supplies and access to facility
- Ensure that all drinking water outlets to be sampled are identified
- Ensure that any low-use drinking water outlets are flushed before sampling
- Remove flush tags from drinking water outlet once sampling is completed
- Verify water remains motionless for a minimum of eight hours prior to sampling event
- Complete the Pre-Sampling Water Use Certification

#### 3.5 Individual School Protocols

Separate supporting documentation will be kept for each school. The documentation will include the Attachments found at the end of this plan.

#### 4. SCHOOL/FACILITY SAMPLING PRIORITY

The Hope Community Charter School developed a list of all school facilities scheduled for sampling (see list at beginning of Sampling Plan). The list may be updated periodically.

#### 5. PLUMBING SURVEY

A plumbing survey will be conducted for each school/facility to be sampled. The plumbing survey will incorporate details listed below.

#### 5.1 Plumbing Profile

The purpose of the Plumbing Profile (see Attachment) is to identify and categorize plumbing and related infrastructure to prioritize facilities and drinking water outlets within the facility for testing, and to identify potential sources of lead (i.e. lead service lines, or lead piping or solder). The Plumbing Profile helps determine the sampling locations and priority within the individual school/facility.

The Plumbing Profile will include the following:

- Year school built and dates of any additions
- Service line material
- Material of internal plumbing 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 whether they are lead-lined or if they have been involved in any recalls (http://nepis.epa.gov/Exe/ZyPDF.cgi?Dockey=30005UPU.txt)
- Locations of any electrical wires grounded to water pipes
- Building blue prints and floor diagrams, as available

#### 5.2 Filter Inventory (If Applicable)

A Filter Inventory (see Attachment) will be prepared for any use of filters to control lead, which will include 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

#### 6. PLANNING

#### 6.1 Walk-Through/Pre-Sampling Review

As part of the planning process, a Walk-Through may be conducted prior to sampling event. The Walk-Through will include an assessment of every room where there is a drinking water outlet (including but not limited to classrooms, offices, bathrooms, kitchens and recreational areas) in the facility. The Walk-Through will identify all drinking water and food preparation outlets to be sampled, which will be marked on the corresponding floor plan/floor diagram.

The assessment will include recording the specific characteristics of each outlet, such as leaks or staining (see Attachment). During the assessment, the water will be turned on to determine the spray pattern, whether there is adequate flow to collect samples, if there any odor or color differences are present, and whether the cold-water faucet is functioning properly. Only cold water faucets will 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 will be repaired prior to sampling or documented on the temporary out of service list.

#### 6.2 Floor Diagram (floor plan)

Each drinking water outlet will be identified on floor plan/floor diagram. The floor plan will identify room numbers as well as the following features:

- Service Line
- Point of Entry (the closest water outlet to the entrance of the service line)
- Food preparation outlets (i.e. cafeteria, kitchen and home economics class faucets)
- Drinking Water Fountains
- Other types of drinking water outlets to be sampled, as applicable

#### 7. SAMPLE LOCATIONS

#### 7.1 Sample Locations

At a minimum the following types of water outlets will be sampled at each school/facility:

- 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 (i.e. snack stands)
- Ice Machines
- Other drinking water outlets used for consumption

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

#### 7.2 Sample Location Codes

Each drinking water outlet will be identified using a code such as those listed below (additional/different codes may be utilized):

Type/Location	Code
Sink	S
Water Fountain	WF
Water Cooler	WC

#### 7.3 Sampling Location Inventory

A Drinking Water Outlet Inventory detailing all the drinking water outlets to be sampled in each school/facility is included in Appendix C. The inventory includes the type, location, and sample code of each drinking water outlet. The make and model of all water fountains and water coolers is also noted. Additionally, the inventory notes the following conditions for each 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
- If the drinking water outlet is operational
- If the drinking water outlet has a filter

#### 8. SAMPLING PROCEDURES

#### 8.1 Timeline

Samples will be collected after the water sits undisturbed/unused in the pipes for at least 8 hours, but not more than 48 hours. The Sampling Team will ensure all irrigation and outdoor water features are turned off, as well.

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). Any flushing event will be documented in the log (see Attachment).

Prior to collecting samples the staff at each school/facility to be sampled will be notified of the event. The District will ensure that access to the building is restricted to ensure water sits undisturbed for a minimum of 8 hours.

Prior to collecting samples the Sampling Team will gather the necessary equipment and supplies (i.e. sample bottles, weatherproof labels, chain of custody forms, etc.) to conduct the sampling event.

The Sampling Team will identify every drinking water outlet which is sampled with a specific alpha-numeric Code in the event the District has to re-visit the sample location.

Filters, aerators or screens, if any are present, will not be removed prior to or during the sampling event.

#### 8.2 Sample Collection

#### Sample Collection Method

Sampling will begin at the outlet closest to the point of entry and continue to the outlet furthest from the entry point to ensure the water remains as motionless as possible in the plumbing lines. This will minimize the chance that an outlet will be inadvertently flushed by an upstream fixture.

The Hope Community Charter School will utilize the "First Draw and Follow-up Flush Sampling Conducted on Different Days" sampling method. The process is outline below:

- A new pair of non-colored latex or nitrile gloves will be used to sample each drinking water outlet. This is to minimize the potential for cross contamination of sample outlets by sampling personnel.
- First draw samples after the water has sat undisturbed for a minimum of 8 hours.
  - Samples will be collected from the cold-water outlet at each location
  - The sample will be collected by placing the bottle under the drinking water outlet before turning on the cold-water outlet.
  - For motion-activated faucets, the hot water valve must be turned off prior to sampling.
  - No water is allowed to run prior to collecting a sample.
- Each sample will be properly identified on the sample bottle and chain of custody.
- Samples will be delivered to the Laboratory by the Sampling Team.
- After receiving the testing results, the District may conduct a second sampling event by collecting a follow-up flush sample at any drinking water outlet reported with an initial result of greater than 15  $\mu$ g/L (as defined as greater than or equal to 15.5  $\mu$ g/L).
- Prior to the follow-up sampling event, the following preparations will take place:
  - The targeted outlets will be listed on a Follow-Up Sampling, labelled and identified on the floor plan/diagram.
  - The water will remain undisturbed for a minimum of 8 hours prior to sampling.
- The follow-up flush sampling will be conducted as described below:
  - The drinking water outlet will be turned on and allowed to run for 30 seconds
  - The water will be captured in a clean 250 mL container
  - If the drinking water outlet is a water cooler with a cooler unit, then allow the water to run for 15 minutes prior to collecting a flushed sample in a pre-cleaned 250 mL container

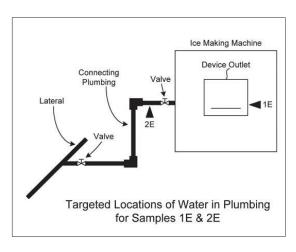
#### Sampling Personnel Responsibilities

- Preparation of labels, which will include a unique alpha-numeric sample ID number
- Preparation of a chain of custody to include the field sample information which will include the sampler's name, the school name, the Sample Location Code, a unique alpha-numeric sample ID number, parameter to be analyzed, date of collection, and any preservation technique used
- Documentation of all observations such as automatic sensors, odors, change in water color, low water flow, water outlet leaks, irregular water spray, attached filter(s), if the screen/aerator is on/off the water outlet, or if the water becomes warm/hot
- Proper handling techniques to minimize the potential for cross contamination of sample outlets
- Ensure the water is collected from the outlet directly into each container
- Follow all the sampling procedures outlined in the Sampling Plan and the QAPP

#### 8.3 Ice Machines Sample Collection Procedure

Ice Machine Initial Screening Sample

- Fill a suitable container (250 mL or larger, wide-mouthed bottle or other container) provided by the laboratory at least threequarters 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 exceeds 15 µg/L (ppb), collect a follow-up sample to determine if the source of the lead is the plumbing or the ice machine itself.



#### Ice Machine Follow-Up Sample

- 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.

#### Additional Sampling Event

Upon receiving the results of the initial samples and follow-up flush samples, if applicable, the District will conduct additional sampling events for the following situations:

- Any location required to be sampled initially, but that was not sampled (i.e. not operational during initial sampling event)
- Any location that was not sampled initially, but that by sampling could help pinpoint the source of lead in an outlet
- Where there was a possible lab error or sample collection error

#### 8.4 School-Wide Flushing Procedure

- 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.

#### 8.5 New Jersey Certified Laboratories

#### Laboratory Responsibilities

- The laboratory will document that its 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 Method 200.9, USEPA Method 200.5, SM3113B, and ASTM3559-D provided the reporting limit for the method is less than or equal to 2  $\mu g/L$
- 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 will provide the results within timeframe required under contract
- Laboratories will report in  $\mu g/L$  (micrograms per liter) or ppb (parts per billion) and to at least three significant figures

#### 8.6 Sampling Results

The laboratories will provide the lead sample results in electronic format within the timeframe required under the contract. The chain of custody forms will be included with the results report.

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

#### 8.7 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, then a "DO NOT DRINK - SAFE FOR HANDWASHING ONLY" sign will be posted.

#### Glossary of Terms

**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 inventory that are not operational.

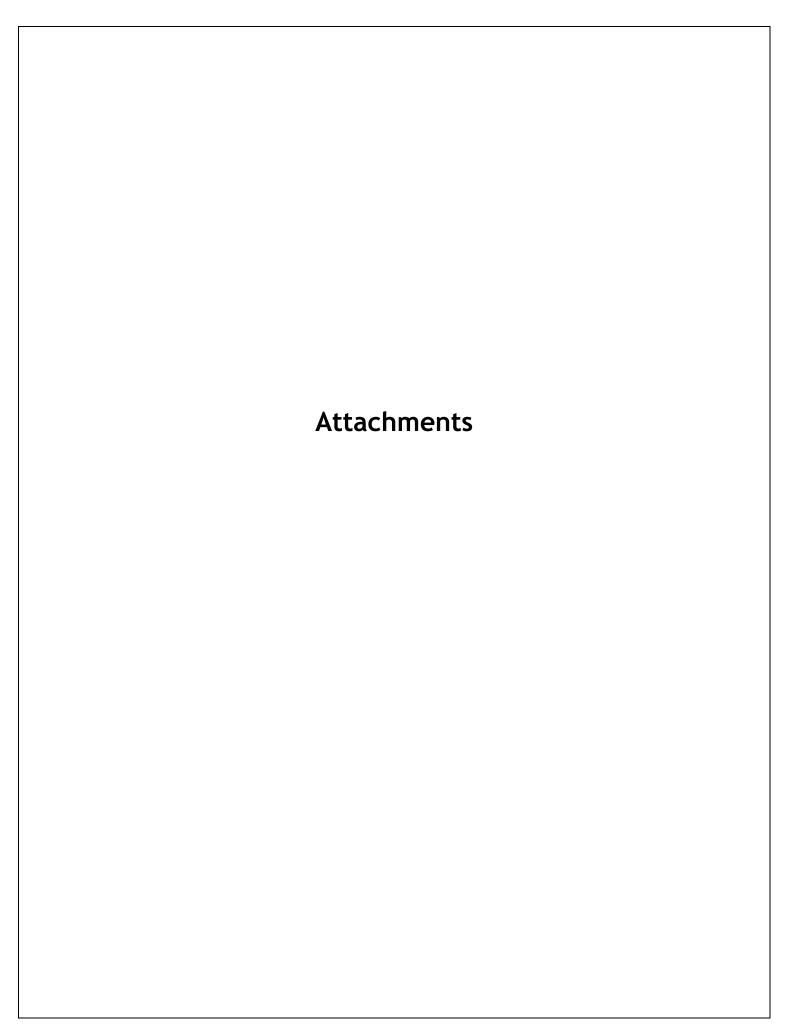
**Permanently Out of Service Outlets:** outlets that are not being used and the District plans to decommission.

**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 the is required 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 needs to be completed for each flushing event. **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 Equivalents

This table lists the attachments included in the district's Lead Sampling Plan & QAPP and the corresponding document(s) referenced in the NJ DEP model program. As noted below, some of the state documents have been eliminated, modified, or merged with other documents within the district's overall plan. This List of Equivalents is provided as reference for future reference.

NJ Model Plan Document	Sampling Plan Document
Attachment A - List of Schools	List of facilities included in Sampling Plan
Attachement B -Profile questionnaires Plumbing	Attachment B - form modified
Attachment C - Outlet Inventory	Attachment C - form modified
Attachment D - Filter Inventory	Renamed as Attachment F
Attachment E - Flushing Log	Renamed as Attachment G
Attachment F - Pre-Sampling Water Use Certification	Renamed as Attachment D
Attachment G - Sample Flush Tag	Renamed as Attachment H
Attachment H. i Recalled Water Cooler List	Renamed as Attachment J
Attachment H. ii Ice Machine Sample Collection Procedure	Incorporated into Sampling Plan procedures
Attachment H. iii School Wide Flushing Procedure	Incorporated into Sampling Plan procedures
Attachment H. iv Sampling Event Checklist	Incorporated into Sampling Plan procedures
Attachment H. v Sample Signs	Renamed as Attachment K
Attachment H. vi School Sampling Package Review Checklist	Incorporated into Sampling Plan procedures
Attachment H. vii Follow-up Sampling Inventory	Renamed as Attachment E
Attachment H. viii Water Coolers on EPA Recall List	Renamed as Attachment J
Attachment H. ix Outlets with Filters Installed	Renamed as Attachment F
Attachment H. x Data Review Summary	Incorporated into Sampling Plan procedures
None Provided	Attachment L - Results Summary
None Provided	Attachment M - Lead in water sampling chain of custody and analytical results report

Name of Facility:	Hope Community Charter School	Grade Levels: K-4						
Address:	836 South 4 <sup>th</sup> Street, Camden, NJ 0810	)3						
Project Officer:	Signature	Date						
	Questions - Background Information							
_	s the original building constructed? 190							
Date of Addition(s	5):							
2. If the building solder utilized?	was constructed or repaired after 198 □ Yes □ No ☑ Not Applicable	6, was lead-free plumbing and						
If no, location(s)	where lead solder used:							
3. Where are the	most recent plumbing repairs and rep	lacements?						
Location & Descri	ption: None							
	al (i.e. cast iron, copper) is the Service ter main into the school/building?	E Line connection from the						
Cast iron								
4 b. Where does location.	the Service Line enter the school? This	s is the Point of Entry (POE)						
Boiler room								
	of Entry (POE) treatment in use?	s ☑ No ☑ No						
If yes, Location/Type:								
6. Are there tank	cs in the plumbing system (pressure tar	nks, gravity storage tanks)?						
☐ Yes ☑ No L	ocation/Type:							

Name of Facility: Hope Community Charter School 7. Does the school have a filter maintenance and operation program?  $\square$  Yes If so, who is responsible for this program and what is the process for adding filters? 8. Have accessible screens or aerators on outlets been cleaned? 

Yes □ No Does the school have a screen or aerator maintenance program? ✓ Yes □ No 9. Have there been any complaints about bad (metallic) taste? Note location(s). ☐ Yes ☑ No Location(s): 10. Did the District review records and consult with the public water supplier to determine whether any water samples have been taken in the building for other **contaminants?**  $\square$  Yes ☑ No If yes, then complete below: Name of contaminant(s): Concentrations found: pH level: Is testing done regularly at the building?  $\square$  Yes  $\square$  No 11. Other plumbing background questions Are blueprints of the building available?  $\square$  Yes ✓ No Are there known plumbing "dead-ends", low use areas, existing leaks or other "problem areas"? ☐ Yes ☑ No If yes, describe below. Are renovations planned for any of the plumbing system?  $\square$  Yes ✓ No. 12. What are the potable water pipes made of in your facility? Check all that apply: Plastic Lead Galvanized Metal Copper  $\overline{\mathbf{V}}$ Other Cast Iron  $\overline{\mathbf{V}}$ If "other" explain:

Name of Facility: Hope Community Charter School

13. Are electrical wires grounded to water pipes? If yes, note location(s):				
☐ Yes ☑ No Location(s):				
14. Are brass fittings, faucets, or valves used in your drinking water system?				
☐ Yes ☑ No If yes, then list on appropriate Attachment form				
15. Have the brands and models of the water coolers in the school been compared to the list of recalled water coolers? ☑ Yes ☐ No  Any Recalled Drinking Water Fountains? ☐ Yes ☑ No				
If yes, then list on appropriate Attachment form				
16. Have signs of corrosion, such as frequent leaks, rust-colored water, or stained fixtures, dishes, or laundry been detected? ☐ Yes ☑ No				
If yes, then document on appropriate Attachment form				
17. Are there any outlets that are not operational and out of service? $\Box$ Yes $\Box$ No				
Permanently? ☐ Yes ☐ No ☑ Not Applicable				
Temporarily? □ Yes □ No ☑ Not Applicable				
If yes, explain:				

School: Hope Community	Charter School	Address: 836 South 4th Street, Camden, NJ 08103
Grade Levels: K-4	Year Constructed: 1900	Year of Renovations/Additions: NA

Outlet Code <sup>1</sup>	Location/Description	Sample #	Operating <sup>2</sup> (Y/N)	rosion <sup>3</sup> (Y/N)	Corrosion <sup>3</sup> (Y/N) Filter <sup>4</sup> (Y/N)	Brass <sup>5</sup> (Y/N)	Aerator/ Screen	Motion Activated	Chiller (Y/N)	Water Cooler	
			obo	S						Make	Model
S-01	Church; Cafeteria; Kitchen sink	58-0818-01	Y	N	N	N	N	N	N		
WF-01	Church; hallway to cafeteria; WF	OOS	N	N	N	Ν	N	N	Υ	ELKAY	
WC-06	Church; Cafeteria; WC	58-0818-02	Y	N	N	N	N	N	N		
S-02	Rectory; Kitchen; sink	58-0818-03	Υ	N	N	Ν	N	N	N		
WC-01	Rectory; Kitchen; water cooler; WC	58-0818-04	Υ	N	N	N	N	N	Υ	Cooler Smart	Infiniti
WC-02	School; 1st Floor; rear corridor; WC	OOS	N	N	N	Ν	N	N	Υ	Cooler Smart	Infiniti
WC-03	School; 1st Floor; outside Nurse; WC	58-0818-05	Υ	N	N	Ν	N	N	Υ	Cooler Smart	Infiniti
S-03	School; 1st Floor; Nurse restroom; sink	58-0818-06	Υ	N	N	N	N	N	N		
WC-04	School; 2nd Floor; rear corridor; WC	58-0818-07	Υ	N	N	N	N	N	Y	Cooler Smart	Infiniti
WC-05	School; 3rd Floor; rear corridor; WC	58-0818-08	Υ	N	N	N	N	N	Y	Cooler Smart	Infiniti
BLANK	DI Blank	58-0818-09	N	N	N	N	N	N	N		

Number outlets starting at the closest outlet to the Point of Entry (POE)
 Document if permanently or temporarily out of service on the Attachment B- Plumbing Profile
 Signs of corrosion detected, such as but not limited to leaks, rust-colored water, or stained fixtures
 Document on Attachment D- Filter Inventory
 Indicated if any fittings, faucets, or valves are brass

# **Attachment D - Pre-Sampling Water Use Certification**

TO BE COMPLETED BY THE DISTRICT REPRESENTATIVE					
School/Facility Name: Hope Con	mmunity	Charter School			
School/Facility Address: 836 Sou	th 4th St	treet, Camden,	NJ 08103	}	
Water was last used	Date:	08/17/2021	Time:	16:30	
Sample commencement	Date:	08/18/2021	Time:	07:32	

I have read the district's Lead Drinking Water Testing Sampling Plan and Quality Assurance Project Plan and I am certifying that samples were collected in accordance with these plans.

District Representative			
	Print	Signature	Date

# Attachment E - Follow-up Sampling Inventory

Name of School:	Hope Community Charter School	Grade Levels:	K-4
Address:	836 South 4th Street, Camden, NJ 0	8103	
Project Officer:			
	Signature	D	ate

SAMPLE ID/ LOCATION	REASON FOR FOLLOW-UP SAMPLING*	DATE RESAMPLED	RESULTS OF RESAMPLE

No samples require follow-up sampling.

# Attachment F - Filter Inventory

Name of School:	Hope Community Charter School	Grade Levels:	K-4
Address:	836 South 4th Street, Camden, NJ C	8103	
Project Officer:			
	Signature	D	ate

	Fili	ter	Date		NSF Certified
Sample Location / Code	Make	Model	Installed or Replaced	Replacement Frequency	for Lead Reduction Y/N

# Attachment G - Flushing Log

Name of School:	Hope Community Charter School	Grade Levels:	K-4
Address:	836 South 4th Street, Camden, NJ 0	8103	
Project Officer:			
-	Signature	D	ate

Sample Location Description	Sample Location Code	Date	Time	Duration of Flushing	Reason for Flushing

No samples require flushing.

## Attachment H - Example of a Sample Flush Tag

#### **FLUSH TAG**

# Water outlet sampling in progress. Please do not use water

School Name:	Hope Community Charter School				
School Address:	836 South 4th Street, Camden, NJ 08103				
Date Flushed:	:				
Flushing Process Start Time:					
Flushing Process End Time:					
Location of flushed outlet:					
Is the fountain front cover removed for the sampler to determine the reservoir type? (check one):   Yes  No  Person responsible for the flushing process (print & sign name):					
* Water within the school distribution system should sit in the pipes unused for at least eight (8) hours after flushing but not more than 48 hours before a sample is taken.					

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 I - Water Fountains/Coolers on EPA Recall List

Name of School:	Hope Community Charter School	Grade Levels:	K-4
Address:	836 South 4th Street, Camden, NJ (	08103	
Project Officer:			
	Signature		Date

SAMPLE ID/ LOCATION	MAKE	MODEL	TAKEN OUT OF SERVICE	INITIALS

No drinking water fountains/ water coolers are on the EPA Recall list.

#### Attachment J - 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:

<u>WM8A</u> <u>WT8A</u> <u>GC10ACR</u> <u>GC10A</u> <u>GC5A</u> <u>RWM13A</u>

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>

Hope Community Charter School Lead in Water 2021-2022 EDI-PR-210729-1785

<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.

#### USEPA's Water Cooler Recall List (cont.)

#### <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	<u>DP7WMD</u>
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	<u>DP20</u>	DP12N	DP7WM	DP14A-50/60				

#### Halsey Taylor

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

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

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

HC8WT	HC14F	HC6W	HWC7D	HC8WTH	<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	

#### Attachment K - Sample Signs

The following examples can be utilized by the District, as applicable

# WATER TESTING IN PROGRESS DO NOT USE ANY WATER SOURCES SINKS, FOUNTAINS, TOILETS, ETC.

# DO NOT DRINK



SAFE FOR HANDWASHING

# Attachment L - Results Summary for Lead in Water Samples

# School Name: Hope Community Charter School

Outlet Code	Sample ID	Location/Description	Result (ppb)	Above AL?
S-01	58-0818-01	Church; Cafeteria; Kitchen sink	2.66	No
WF-01	NA	Church; hallway to cafeteria; WF	NA	No
WC-06	58-0818-02	Church; Cafeteria; WC	ND	No
S-02	58-0818-03	Rectory; Kitchen; sink	5.04	No
WC-01	58-0818-04	Rectory; Kitchen; WC	ND	No
WC-02	NA	School; 1st Floor; rear corridor; WC	NA	No
WC-03	58-0818-05	School; 1st Floor; outside Nurse; WC	ND	No
S-03	58-0818-06	School; 1st Floor; Nurse restroom; sink	1.86	No
WC-04	58-0818-07	School; 2nd Floor; rear corridor; WC	ND	No
WC-05	58-0818-08	School; 3rd Floor; rear corridor; WC	ND	No
BLANK	58-0818-09	DI Blank	ND	No

Action Level (AL) ≥15.5 parts per billion (ppb)

ND = None Detected

NA = Not Tested - Out of Service

OrderID: 012109350

# Environmental Design Inc.



Professional Environmental Consultants

# Lead (Pb) in Water Sampling Chain of Custody

EMSL Order ID (Lab Use Only): 017109350

Company:	Environmental Design Inc. (EDI-50)	EMSL Bill To:	EDI-50
Street:	5434 King Avenue, Suite 101	Phone:	856-616-9516
City/State/Zip:	Pennsauken, NJ 08109	Fax:	856-616-9519
Send Report To:	Tim Gromen	Send Results To:	tg@editesting.com
State Samples Taken:	NJ	Turnaround Time (TAT):	2 Weeks

Matrix  Drinking Water (Preserved w/HNO₃ pH <2)		Method Instrument Reporting		orting Limit	Preservative	
		EPA 200.8	ICP-MS	0.001 mg/L (ppm)		Nitric acid
€D/Client/Site:	Hope Co	ommunity Charter Sch	ool – Camden, NJ	×	<i>EDI</i> Project #:	PR-210729-1785
5	Special In	structions: ** Please p	provide Excel Data File	as well as	Standard Report *	*

Sample #	Sample Description/Location	Volume	Temp/ RH	Date/Time Sampled
58-0818-01	Outlet Code: S-01 Church; Cafeteria; Kitchen sink	250 mL	71.4°F 48.5%	8/18/2023 7:32 AM
NA	Outlet Code: WF-01 Church; hallway to cafeteria; WF (OUT OF SERVICE)	250 mL	NA	NA
58-0818-02	Outlet Code: WC-06 Church; Cafeteria; water cooler (WC)	250 mL	69.2°F 50.1%	8/18/202 7:34 AM
58-0818-03	Outlet Code: S-02 Rectory; Kitchen; sink	250 mL	58.6°F 74.5%	8/18/202 7:38 AM
58-0818-04	Outlet Code: WC-01 Rectory; Kitchen; water cooler (WC)	250 mL	57.8°F 76.5%	8/18/202 7:40 AM
NA	Outlet Code: WC-02 School; 1st Floor; rear corridor; WC (OUT OF SERVICE)	250 mL	NA	NA
58-0818-05	Outlet Code: WC-03 School; 1st Floor; outside Nurse; WC	250 mL mL	79.3°F 54.8%	8/18/202 7:45 AM
58-0818-06	Outlet Code: S-03 School; 1st Floor; Nurse restroom; sink	250 mL	79.2°F 59.7%	8/18/202 7:47 AM
58-0818-07	Outlet Code: WC-04 School; 2nd Floor; rear corridor; WC	250 mL	66.5°F 66.0%	8/18/202 7:51 AM
58-0818-08	Outlet Code: WC-05 School; 3rd Floor; rear corridor; WC	250 mL	70.4°F 62.7%	8/18/202 7:54 AM
58-0818-09	DI Water Blank	250 mL	NA	NA



SI-8 received preserved Alash
ED/is a Service Disabled Veteran Owned Small Business!

HNUZ added 1200 BS

Hope Community Charter Spectrum I Lead in Water 2021-2022 EDI-PR-210729-1785

unjusuna Elis

(9) EL

#### Attachment M - Sample Results



EMSL Analytical, Inc.

200 Route 130 North, Cinnaminson, NJ 08077

Phone: (856) 303-2500 Fax: (856) 858-4571 Email: <u>EnvChemistry2@emsl.com</u>

Attn:

Tom Pruno Environmental Design, Inc. 5434 King Avenue Suite 101

Pennsauken, NJ 08109

Phone: (856) 616-9516 Fax: (586) 616-9517

The following analytical report covers the analysis performed on samples submitted to EMSL Analytical, Inc. on 8/18/2021. The results are tabulated on the attached data pages for the following client designated project:

#### Hope Community Charter School - Camden NJ/ PR-210729-1785

The reference number for these samples is EMSL Order #012109350. Please use this reference when calling about these samples. If you have any questions, please do not hesitate to contact me at (856) 303-2500.

Approved By:

Phillip Worby, Environmental Chemistry Laboratory Director



The test results contained within this report meet the requirements of NELAP and/or the specific certification program that is applicable, unless otherwise noted. NELAP Certifications: NJ 03036, NY 10872, PA 68-00367, CA ELAP 1877

The samples associated with this report were received in good condition unless otherwise noted. This report relates only to those items tested as received by the laboratory. The QC data associated with the sample results meet the recovery and precision requirements established by the NELAP, unless specifically indicated. All results for soil samples are reported on a dry weight basis, unless otherwise noted. This report may not be reproduced except in full and without written approval by EMSL Analytical, Inc.

9/8/2021

#### Attachment M - Sample Results



#### **EMSL Analytical, Inc.**

200 Route 130 North, Cinnaminson, NJ 08077 Phone/Fax: (856) 303-2500 / (856) 858-4571

http://www.EMSL.com EnvChemistry2@emsl.com EMSL Order: 012109350 CustomerID: EDI50

CustomerPO: ProjectID:

Attn: Tom Pruno **Environmental Design, Inc.** 5434 King Avenue Suite 101

Pennsauken, NJ 08109

Project: Hope Community Charter School - Camden NJ/ PR-210729-1785

Phone: (856) 616-9516 Fax: (586) 616-9517 Received: 8/18/2021 11:20 AM

#### **Analytical Results**

		Analytical Ite	704110					
Client Sample Description	58-0818-01 Outlet Code S-01 Churc	h Cafeteria Kitchen Sink	Collected:	8/18/2021 7:32:00 AM	La	b ID:	012109350-000	01
Method	Parameter	Result	RL Unit	s	Prep Date & A		Analysis Date & Analy	/st
METALS								
200.8	Lead	2.66	1.00 μg/L		9/3/2021	VD	9/3/2021 20:28	VD
Client Sample Description		ırch Cafeteria Water Cooler	Collected:	8/18/2021 7:34:00 AM	La	b ID:	012109350-000	02
Method	Parameter	Result	RL Unit	s	Prep Date & A		Analysis Date & Analy	/st
METALS								
200.8	Lead	ND	1.00 μg/L		9/3/2021	VD	9/3/2021 20:32	VD
Client Sample Description	58-0818-03 Outlet Code S-02 Recto	ry Kitchen Sink	Collected:	8/18/2021 7:38:00 AM	La	b ID:	012109350-000	03
Method	Parameter	Result	RL Unit	s	Prep Date & A		Analysis Date & Analy	/st
METALS								
200.8	Lead	5.04	1.00 μg/L		9/1/2021	KG	9/2/2021 22:33	JW
Client Sample Description		tory Kitchen Water Cooler	Collected:	8/18/2021 7:40:00 AM	La	b ID:	012109350-000	04
Method	Parameter	Result	RL Unit	s	Prep Date & A		Analysis Date & Analy	/st
METALS								
200.8	Lead	ND	1.00 μg/L		9/3/2021	VD	9/3/2021 20:36	VD
Client Sample Description	58-0818-05 Outlet Code WC-03 Sch Nurse WC	ool 1st Floor Outside	Collected:	8/18/2021 7:45:00 AM	La	b ID:	012109350-000	05
Method	Parameter	Result	RL Unit	s	Prep Date & A		Analysis Date & Analy	/st
METALS								
200.8	Lead	ND	1.00 µg/L		9/3/2021	VD	9/3/2021 20:38	VD

#### Attachment M - Sample Results

EMSL Order:

CustomerID:

CustomerPO:

ProjectID:

012109350

EDI50



#### **EMSL Analytical, Inc.**

200 Route 130 North, Cinnaminson, NJ 08077 Phone/Fax: (856) 303-2500 / (856) 858-4571

http://www.EMSL.com

EnvChemistry2@emsl.com

Attn: Tom Pruno Phone: (856) 616-9516 Fax: (586) 616-9517 **Environmental Design, Inc.** Received: 8/18/2021 11:20 AM 5434 King Avenue Suite 101

Project: Hope Community Charter School - Camden NJ/ PR-210729-1785

Pennsauken, NJ 08109

#### **Analytical Results**

Client Sample Description	on 58-0818-06 Outlet Code S-03 School 1s Restroom sink	st Floor Nurse		/18/2021 17:00 AM	Lab ID:	012109350-0006	
Method	Parameter	Result	RL Units		Prep & Analyst	Analysis Date & Analyst	
METALS							
200.8	Lead	1.86	1.00 μg/L	9/3/202	1 VD	9/3/2021 20:39 V	D
Client Sample Description	On 58-0818-07 Outlet Code WC-04 School WC	2nd Floor rear corridor		/18/2021 51:00 AM	Lab ID:	012109350-0007	
Method	Parameter	Result	RL Units		Prep & Analyst	Analysis Date & Analyst	
METALS							
200.8	Lead	ND	1.00 μg/L	9/3/202	1 VD	9/3/2021 20:40 V	D
			• "	/18/2021	Lab ID:	012100250 0000	
Client Sample Description	On 58-0818-08 Outlet code WC-0 5 School WC	3rd Floor rear corridor		54:00 AM	Lab ID:	012109350-0008	
Client Sample Description  Method	Outlet code WC-0 5 School	3rd Floor rear corridor  Result		54:00 AM	Prep & Analyst	Analysis Date & Analyst	
	Outlet code WC-0 5 School WC		7:5	54:00 AM	Prep	Analysis	
Method	Outlet code WC-0 5 School WC		7:5	54:00 AM	Prep & Analyst	Analysis	D
Method METALS	Outlet code WC-0 5 School WC  Parameter  Lead	Result	7:5 <i>RL Units</i> 1.00 µg/L	54:00 AM  Date	Prep & Analyst	Analysis Date & Analyst	D
Method  METALS  200.8	Outlet code WC-0 5 School WC  Parameter  Lead  on 58-0818-09	Result	7:5 <i>RL Units</i> 1.00 µg/L	9/3/202 /18/2021	Prep & Analyst	Analysis Date & Analyst 9/3/2021 20:42 V	D
Method  METALS  200.8  Client Sample Description	Outlet code WC-0 5 School WC  Parameter  Lead  on 58-0818-09 DI Water Blank	Result ND	7:5  RL Units  1.00 µg/L  Collected: 8	9/3/202 /18/2021	Prep & Analyst 21 VD Lab ID:	Analysis Date & Analyst  9/3/2021 20:42 V  012109350-0009  Analysis	D

#### **Definitions:**

MDL - method detection limit

J - Result was below the reporting limit, but at or above the MDL

ND - indicates that the analyte was not detected at the reporting limit

RL - Reporting Limit (Analytical)

D - Dilution Sample required a dilution which was used to calculate final results