

### HEALTH, SAFETY & RISK MANAGEMENT Christy Fischer

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# **Environmental Hygiene Report**

Attn: Dr. Charles Khoury
District Superintendent
Ulster Board of Cooperative Educational Services
175 Route 32N, New Paltz, NY 12561
Prepared by: Christy Fischer

Location(s)	Center for Innovative Teaching and
	Learning at Anna Devine
Project No.	003-2021
Site Visit(s)	March 10, 2021
Report Date	May 4, 2021
Investigator(s)	Christy Fischer

Ulster County BOCES *Health, Safety &Risk Management* does not assert that all potential health or safety hazards at this site were evaluated during this survey. This survey is strictly limited to that which is identified in the Project Scope of the report.

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**Author's Note:** Parenthetical numerals at the end of a sentence reference the work with the corresponding notation in the **References** section. *Please read this report in its entirety, including any attached appendices, to fully understand this investigation.* 

# **Executive Summary**

Per the requirements of Subpart 67-4: Lead Testing in School Drinking Water, water outlets at the Ulster BOCES Center for Innovative Teaching and Learning at Anna Devine were sampled on March 10, 2021. The regulation defines a water outlet as one that is currently or may potentially be used for cooking or drinking. We identified a total of 12 such water outlets in the building. Of these 12 locations, six exceeded the 15 parts per billion (ppb) action level. Signage has been posted at these outlets and where required the outlets have been taken out of service and remedial action is being taken. The outlets will be resampled as necessary once remediation is complete. A copy of the results has been forwarded to the Ulster County Health Department.

# **Project Scope**

Identify appropriate potable water sampling locations and collect samples from plumbing fixtures at the Ulster BOCES Career for Innovative Teaching and Learning at Anna Devine, for analysis for lead content. Review the data and information and prepare a written report for the Ulster BOCES administration.

## **Materials & Methods**

All samples were collected from the type of plumbing fixtures where potable water is commonly drawn using the NYSDOH protocol. First-draw samples for lead were collected after the water had sat in the pipes for at least eight hours. All samples were collected in 250 ml containers provided by EnviroTest Laboratories in Newburgh, NY. The samples were brought to

the laboratory for analysis. EnviroTest is NYS ELAP-approved (#10142) for potable and non-potable water analysis.

# **Results Summary**

All sample results and other data were reported to the administration of the local educational agency (LEA) via phone, fax, or e-mail as they became available to our department. See Appendix for full laboratory reports.

### **Water Samples that Exceeded Action Level**

**Career & Technical Center** 

Sample Location	Result (ppb)
Art Room Sink	24
Main Office Storage Room Sink	17
Nurse's Office Room on Right Sink	56
Nurse's Office Foot Operated Sink	230
Kitchen Sink 1	55
Kitchen Handwash Sink 2	21

## **Discussion**

In order to be used as healthful fluid for human consumption, water must be free from organisms that are capable of causing disease and from minerals and organic substances that could produce adverse physiological effects. (1) The Safe Drinking Water Act sets maximum contaminant levels (MCLs) for numerous contaminants. These include various inorganic, volatile organic, and synthetic organic compounds. Public water systems are required to do initial and periodic testing of their source water.

# **Comments & Recommendations**

Per the requirements of Subpart 67-4: Lead Testing in School Drinking Water, water outlets at the Ulster BOCES Center for Innovative Teaching and Learning at Anna Devine were sampled on March 10, 2021. The regulation defines a water outlet as one that is currently or may potentially be used

for cooking or drinking. We identified a total of 12 such water outlets in the building. Of these 12 locations, six exceeded the 15 parts per billion (ppb) action level. Signage has been posted at these outlets and where required the outlets have been taken out of service and remedial action is being taken. The outlets will be resampled as necessary once remediation is complete. A copy of the results has been forwarded to the Ulster County Health Department.

# **References**

- 1. **American Water Works Association:** *Water Quality and Treatment.* New York, NY: McGraw-Hill, 1990
- 2. Bailey, R.A. et. al.: Chemistry of the Environment. New York, NY: Academic Press, 1978.
- 3. USEPA: 3Ts for Reducing Lead in Drinking Water in Schools. Washington, DC: USEPA, 2006.



#### **ANALYTICAL REPORT**

Job Number: 420-193234-1

SDG Number: Anna Devine

Job Description: Ulster BOCES

For: Ulster BOCES 175 Route 32 North

New Paltz, NY 12561

Attention: Christy Fischer

Meredith Ruthven

Meredith W Ruthven
Customer Service Manager
mruthven@envirotestlaboratories.com
04/07/2021

NYSDOH ELAP does not certify for all parameters. EnviroTest Laboratories does hold certification for all analytes where certification is offered by ELAP unless otherwise specified in the Certification Information section of this report Pursuant to NELAP, this report may not be reproduced, except in full, without written approval of the laboratory. EnviroTest Laboratories LLC certifies that the analytical results contained herein apply only to the samples tested as received by our laboratory. All questions regarding this report should be directed to the EnviroTest Customer Service Representative. All services performed by EnviroTest Laboratories LLC are subject to our Terms and Conditions available at Envirotestlabs/terms.com. As of 12/23/19, EnviroTest Laboratories LLC acquired substantially all of the lab and testing assets of EnviroTest Laboratories Inc, including its name.

EnviroTest Laboratories, LLC. Certifications and Approvals: NYSDOH 10142, NJDEP NY015, CTDOPH PH-0554



#### **METHOD SUMMARY**

Client: Ulster BOCES Job Number: 420-193234-1

SDG Number: Anna Devine

Description	Lab Location	Method	Preparation Method
Matrix: Water			
ICPMS Metals by 200.8	EnvTest	EPA 200.8 Rev	2.5.4
200 Series Drinking Water Prep Determination Step	EnvTest		EPA 200.7/200.8

#### Lab References:

EnvTest = EnviroTest

#### **Method References:**

EPA = US Environmental Protection Agency

### METHOD / ANALYST SUMMARY

Client: Ulster BOCES Job Number: 420-193234-1

SDG Number: Anna Devine

Method	Analyst	Analyst ID
EPA 200.8 Rev.5.4	Luis, Carlos	CL

### **SAMPLE SUMMARY**

Client: Ulster BOCES

Job Number: 420-193234-1

SDG Number: Anna Devine

Lab Sample ID	Client Sample ID	Client Matrix	Date/Time Sampled	Date/Time Received
Lab Gample 15	Chefit Gample ID	Chefit Matrix	Sampled	Received
420-193234-1	Art Room Sink	Drinking Water	03/16/2021 0634	03/17/2021 1129
420-193234-2	Main Office Storage Room Sink	Drinking Water	03/16/2021 0636	03/17/2021 1129
420-193234-3	Teacher's Lounge Sink	Drinking Water	03/16/2021 0638	03/17/2021 1129
420-193234-4	Nurse's Office Room on Right Sink	Drinking Water	03/16/2021 0639	03/17/2021 1129
420-193234-5	Nurse's Office Foot Operated Sink	Drinking Water	03/16/2021 0640	03/17/2021 1129
420-193234-6	Kitchen Sink 1	Drinking Water	03/16/2021 0642	03/17/2021 1129
420-193234-7	Kitchen Handwash Sink 2	Drinking Water	03/16/2021 0643	03/17/2021 1129
420-193234-8	Kitchen Sink Sprayer on Left 3	Drinking Water	03/16/2021 0644	03/17/2021 1129
420-193234-9	Kitchen Sink 4	Drinking Water	03/16/2021 0645	03/17/2021 1129
420-193234-10	Kitchen Sink Sprayer on Right 5	Drinking Water	03/16/2021 0646	03/17/2021 1129
420-193234-11	Kitchen Sink 6	Drinking Water	03/16/2021 0646	03/17/2021 1129
420-193234-12	Adult Bath O/S 208 Sink	Drinking Water	03/16/2021 0650	03/17/2021 1129

Job Number: 420-193234-1 Sdg Number: Anna Devine

Client Sample ID: Art Room Sink Lab Sample ID: 420-193234-1

Date Sampled: 03/16/2021 0634
Date Received: 03/17/2021 1129
Client Matrix: Drinking Water

Analyte	Result/Qualifi	er	Unit	RL	RL	Dilution
Method: 200.8 Rev.5.4			Date An	•	04/02/2021 1850	
Prep Method: 200.7/200.8			Date Pro	epared:	04/01/2021 0900	
Pb	24	g	ug/L	1.0	1.0	1.0

Job Number: 420-193234-1 Sdg Number: Anna Devine

Client Sample ID: Main Office Storage Room Sink

Lab Sample ID: 420-193234-2

Date Sampled: 03/16/2021 0636
Date Received: 03/17/2021 1129
Client Matrix: Drinking Water

Analyte	Result/Qualifi	er	Unit	RL	RL	Dilution
Method: 200.8 Rev.5.4			Date Ar	alyzed:	04/02/2021 1859	
Prep Method: 200.7/200.8			Date Pr	epared:	04/01/2021 0900	
Pb	17	g	ug/L	1.0	1.0	1.0

Job Number: 420-193234-1 Sdg Number: Anna Devine

Client Sample ID: Teacher's Lounge Sink

Lab Sample ID: 420-193234-3

Date Sampled: 03/16/2021 0638
Date Received: 03/17/2021 1129
Client Matrix: Drinking Water

Analyte	Result/Qualifier	Unit	RL	RL	Dilution
Method: 200.8 Rev.5.4		Date An	alyzed:	04/02/2021 1906	
Prep Method: 200.7/200.8		Date Pro	epared:	04/01/2021 0900	
Pb	5.0	ug/L	1.0	1.0	1.0

Job Number: 420-193234-1 Sdg Number: Anna Devine

Client Sample ID: Nurse's Office Room on Right Sink

Lab Sample ID: 420-193234-4

Date Sampled: 03/16/2021 0639
Date Received: 03/17/2021 1129
Client Matrix: Drinking Water

Analyte	Result/Qualifi	er	Unit	RL	RL	Dilution
Method: 200.8 Rev.5.4			Date Ar	nalyzed:	04/02/2021 1908	
Prep Method: 200.7/200.8			Date Pr	epared:	04/01/2021 0900	
Pb	56	g	ug/L	1.0	1.0	1.0

Job Number: 420-193234-1 Sdg Number: Anna Devine

Client Sample ID: Nurse's Office Foot Operated Sink

Lab Sample ID: 420-193234-5

Date Sampled: 03/16/2021 0640
Date Received: 03/17/2021 1129
Client Matrix: Drinking Water

Analyte	Result/Qualifi	er	Unit	RL	RL	Dilution
Method: 200.8 Rev.5.4			Date Ar	nalyzed:	04/02/2021 1910	
Prep Method: 200.7/200.8			Date Pr	epared:	04/01/2021 0900	
Pb	230	g	ug/L	1.0	1.0	1.0

Job Number: 420-193234-1 Sdg Number: Anna Devine

Client Sample ID: Kitchen Sink 1 Lab Sample ID: 420-193234-6 Date Sampled: 03/16/2021 0642
Date Received: 03/17/2021 1129
Client Matrix: Drinking Water

Analyte	Result/Qualifier	Unit	RL	RL	Dilution
Method: 200.8 Rev.5.4		Date	Analyzed: 04	/02/2021 1912	
Prep Method: 200.7/200.8		Date	Prepared: 04	/01/2021 0900	
Pb	55 g	ug/L	1.0	1.0	1.0

Job Number: 420-193234-1 Sdg Number: Anna Devine

Client Sample ID: Kitchen Handwash Sink 2

Lab Sample ID: 420-193234-7

Date Sampled: 03/16/2021 0643
Date Received: 03/17/2021 1129
Client Matrix: Drinking Water

Analyte	Result/Qualifi	er	Unit	RL	RL	Dilution
Method: 200.8 Rev.5.4			Date Ar	nalyzed:	04/02/2021 1914	
Prep Method: 200.7/200.8			Date Pr	epared:	04/01/2021 0900	
Pb	21	g	ug/L	1.0	1.0	1.0

Job Number: 420-193234-1 Sdg Number: Anna Devine

Client Sample ID: Kitchen Sink Sprayer on Left 3

Lab Sample ID: 420-193234-8

Date Sampled: 03/16/2021 0644
Date Received: 03/17/2021 1129
Client Matrix: Drinking Water

Analyte	Result/Qualifier	Unit	RL	RL	Dilution
Method: 200.8 Rev.5.4		Date An	alyzed:	04/02/2021 1916	
Prep Method: 200.7/200.8		Date Pre	epared:	04/01/2021 0900	
Pb	3.5	ug/L	1.0	1.0	1.0

Job Number: 420-193234-1 Sdg Number: Anna Devine

Client Sample ID: Kitchen Sink 4 Lab Sample ID: 420-193234-9 Date Sampled: 03/16/2021 0645
Date Received: 03/17/2021 1129
Client Matrix: Drinking Water

Analyte	Result/Qualifier	Unit	RL	RL	Dilution
Method: 200.8 Rev.5.4		Date An	alyzed:	04/02/2021 1919	
Prep Method: 200.7/200.8		Date Pre	epared:	04/01/2021 0900	
Pb	5.1	ug/L	1.0	1.0	1.0

Job Number: 420-193234-1 Sdg Number: Anna Devine

Client Sample ID: Kitchen Sink Sprayer on Right 5

Lab Sample ID: 420-193234-10

Date Sampled: 03/16/2021 0646
Date Received: 03/17/2021 1129
Client Matrix: Drinking Water

Analyte	Result/Qualifier	Unit	RL	RL	Dilution
Method: 200.8 Rev.5.4		Date An	alyzed:	04/02/2021 1921	
Prep Method: 200.7/200.8		Date Pre	epared:	04/01/2021 0900	
Pb	2.9	ug/L	1.0	1.0	1.0

Job Number: 420-193234-1 Sdg Number: Anna Devine

Client Sample ID: Kitchen Sink 6 Lab Sample ID: 420-193234-11 Date Sampled: 03/16/2021 0646
Date Received: 03/17/2021 1129
Client Matrix: Drinking Water

Analyte	Result/Qualifier	Unit	RL	RL	Dilution
Method: 200.8 Rev.5.4		Date An	alyzed:	04/02/2021 1923	
Prep Method: 200.7/200.8		Date Pro	epared:	04/01/2021 0900	
Pb	2.9	ug/L	1.0	1.0	1.0

Job Number: 420-193234-1 Sdg Number: Anna Devine

Client Sample ID: Adult Bath O/S 208 Sink

Lab Sample ID: 420-193234-12

Date Sampled: 03/16/2021 0650
Date Received: 03/17/2021 1129
Client Matrix: Drinking Water

Analyte	Result/Qualifier	Unit	RL	RL	Dilution
Method: 200.8 Rev.5.4		Date An	alyzed:	04/02/2021 1932	
Prep Method: 200.7/200.8		Date Pre	epared:	04/01/2021 0900	
Pb	3.7	ug/L	1.0	1.0	1.0

### **DATA REPORTING QUALIFIERS**

Client: Ulster BOCES

Job Number:
Sdg Number: Anna Devine

Lab Section	Qualifier	Description	
Metals			
	g	Result fails applicable NYS drinking water standards	

#### **Certification Information**

Client: Ulster BOCES Job Number:

Sdg Number: Anna Devine

#### The following analytes are Not Part of the ELAP scope of accreditation:

Sulfur, Tungsten, Bicarbonate Alkalinity, 7 Day BOD 5210C, 28 Day BOD, Soluble BOD, Carbon Dioxide, Carbonate Alkalinity, CBOD Soluble, Chlorine, Cyanide (WAD), Ferrous Iron, Ferric Iron, Total Nitrogen, Total Organic Nitrogen, Dissolved Oxygen, pH, Solids (Fixed), Solids (Percent), Solids (Percent Moisture), Solids (Percent Volatile), Solids (Volatile Suspended), Temperature, TKN (Soluble), COD (Soluble), Total Inorganic Carbon, 2-Aminopyridine, 3-Picoline, 1-Methyl-2-pyrrilidinone, Aziridine, Dimethyl sulfoxide, 1-Chlorohexane, 1,2,4,5-Tetramethylbenzene, 4-Ethyl toluene, p-Diethylbenzene, Iron Bacteria, Salmonella, Sulfur Reducing Bacteria, & UOD (Ultimate Oxygen Demand).

#### The following analytes are Not Part of ELAP Potable Water scope of accreditation:

Ammonia (SM 4500NH3G), Biochemical Oxygen Demand (SM 5210B), Chemical Oxygen Demand (EPA 410.4), Dissolved Oxygen (SM 4500 O C), TKN (351.2), Phosphorus (365.3), Nitrate-Nitrite (353.2), Settable Solids (SM 2540F), Total Suspended Solids (SM 2540 C), m-Xylene & p-Xylene (502.2, 524), o-Xylene (502.2, 524), Sulfide (SM4500SD), Acenaphthene (525.2), Acenaphthylene (525.2), Fluoranthene (525.2), Fluorene (525.2), Pyrene (525.2), Benzo[a]anthracene (525.2), Benzo[b]fluoranthene (525.2), Benzo[g,h,i]perylene (525.2), Benzo[k]fluoranthene (525.2), Indeno[1,2,3-cd]pyrene (525.2), & Dibenz(a,h)anthracene (525.2). Pyridine

#### The following analytes are Not Part of ELAP Solid and Hazardous Waste scope of accreditation:

Ammonia (SM 4500NH3G), TKN (351.2), Phosphorus (365.3), 1,2-Dichloro-1,1,2-trifluoroethane (8260), & Chlorodifluoromethane (8260).

#### The following analytes are Not Part of ELAP Non Potable Water scope of accreditation:

Dissolved Organic Carbon (5310C), Mecoprop (8151A), MCPA (8151A).

### **Definitions and Glossary**

Client: Ulster BOCES Job Number:

Sdg Number: Anna Devine

Abbreviation	These commonly used abbreviations may or may not be present in this report.
%R	Percent Recovery
DL, RA, RE	Indicates a Dilution, Reanalysis or Reextraction.
EPA	United States Environmental Protection Agency
MDL	Method Detection Limit - an estimate of the minimum amount of a substance that an analytical process can reliably detect. A MDL is analyte- and matrix-specific and may be laboratory-dependent.
ND	Not detected at the reporting limit (or MDL if shown).
QC	Quality Control
RL	Reporting Limit - the minimum levels, concentrations, or quantities of a target variable (e.g., target analyte) that can be reported with a specified degree of confidence.
RPD	Relative Percent Difference - a measure of the relative difference between two points.

#### **EnviroTest Laboratories, LLC**

315 Fullerton Avenue

**Chain of Custody Record** Newburgh, NY 12550

## EnviroTest 2 Laboratories

Phone (845) 562-0890 Fax (845) 562-0841 Deliverable Type: Lab PM: Sampler: Level I, Level II, 193234 C Fischer Client Information NYS ASP Cat B F-Mail Phone: Client Contact: EDD (Specify): 845-255-1400 X1361 cfischer@ulsterboces.org Christy Fischer Company: **Analysis Requested** Page 1 of 1 Ulster BOCES Preservation Codes: Address: Due Date Requested: 175 North Chestnut Street A - HCL L- EDA TAT Requested (days): B - NaOH M - Sodium Sulfite C - Zn Acetate New paltz N - None D - Nitric Acid O - MCAA State, Zip: E - H2SO4 P - Other (specify) NY 12561 F - MeOH PO#: Phone: G - NH4CL 420-193234-B-1 H - Ascorbic Acid 845-255-1400 X1361 I - Ice Art Room Sink PWS#: J - DI Water Present (Yes or No) cfischer@ulsterboces.org K - Sodium 420-1646645 Project #: Date Sampled: 3/16/2021 Project Name: Thiosulfate **Uister BOCES** Other: Additional Contacts: Anna Devine Upon Receipt Preservation verified: Matrix (DW= drinking Y / NSample water, Chlorine Type W=water, (C=comp, Sample S=solid. Sample Date Time G=grab) O=waste/oil Sample Identification Client ID (Lab ID) Preservation Code: Special Instructions/Note: DW 1 Art Room Sink 3/16/21 634 DW 1 3/16/21 636 G Main Office Storage Room Sink 638 G DW 1 3/16/21 Teacher's Lounge Sink 1 DW 3/16/21 639 G 1 Nurse's Office Room on Right Sink DW 3/16/21 640 G 1 Nurse's Office Foot Operated Sink 1 3/16/21 642 G DW Kitchen Sink 1 G DW 1 643 Kitchen Handwash Sink 2 3/16/21 DW G 1 3/16/21 644 Kitchen Sink Sprayer on Left 3 G DW 1 Kitchen Sink 4 3/16/21 645 3/16/21 G DW 1 Kitchen Sink Sprayer on Right 5 646 1 DW 646 G Kitchen Sink 6 3/16/21 DW Adult Bath O/S 208 Sink 3/16/21 Container Code: P=Plastic, A=Amber, V=Vial, G=Glass, B=Bacteria, C=Cube, O=Other, T=Terracore, D=BOD Bottle Container Type D Container Size Size Code: 1=Liter, 2=250 mL, 3=125 mL, 4=40 mL, 5=Gallon, 6=Half Gallon, 7=Other Sample # (s): Date: Preservation Added Upon Receipt: Manufacturer/Lot #: Company Williams Relinguished by Company Relinquished by: Company Received by: Date/Time: Company Date/Time: Relinquished by: 04/07/2021 Custody See Infact: OL A Cooler Temperature(s) °C/ IR GUN #: Custody Seal No .: ICE Present: Yes ∆ No ∆ Yes ∆√No

### LOGIN SAMPLE RECEIPT CHECK LIST

Client: Ulster BOCES

Job Number: 420-193234-1

SDG Number: Anna Devine

Login Number: 193234

Question	T/F/NA	Comment
Samples were collected by ETL employee as per SOP-SAM-1	NA	
The cooler's custody seal, if present, is intact.	NA	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	False	
Cooler Temperature is recorded.	True	16.3 C
Cooler Temp. is within method specified range.(0-6 C PW, 0-8 C NPW, or BAC <10 C	False	
If false, was sample received on ice within 6 hours of collection.	False	
Based on above criteria cooler temperature is acceptable.	True	Method does not require cooling
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	NA	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	