Environmental and Safety Training, Inc.
1493 Butler Plank Road, Suite 7
Glenshaw, PA 15116
TEL: (412) 486-8971
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August 28, 2025

Mr. William Hoffman
Ringgold School District
46 Ginger Hill Road
Finleyville, Pennsylvania 15067

Re: Lead and Copper Water Testing at the Ringgold School District Buildings

The samples were submitted to the Pace Analytical Services located at 1638 Roseytown Road, Suites 2, 3, 4, Greensburg, Pennsylcvania 15601. Pace prepared the samples according to the EPA 200.8 Method. (Determination of Trace Elements in Waters and Wastes by Inductively Coupled Plasma – Mass Spectrometry). The analytical method is acceptable under the Clean Water Act (NPDES). Al values in bold are above the USEPA limits for copper and/or lead in drinking water

Should you have any further questions, please feel free to contact me at the number listed above.

Sincerely,

Joseph W. Grad
Director of Environmental Services

The buildings, sample locations, and analytical results are as follows:

July 30, 2025

Ringgold Administration Building

Sample Number	Story	Sample Location	Result
RAD01	1st Story	Kitchen sink	Copper – 49.8 PPB Lead – 0.88 PPB
RAD02	1st Story	Men's' restroom sink	Copper – 79.5 PPB Lead – 0.95 PPB

Ringgold South Elementary School

July 30, 2025

Sample Number	Story	Sample Location	Result
RS0-1	3rd Story	Fountain opposite Room 312	Copper – 360 PPB Lead - ND
RS0- 2	3rd Story	Faculty break room 301	Copper – 443 PPB Lead - ND
RS0-3	1st Story	Main entrance fountain	Copper – 257 PPB Lead - <1.0 PPB
RS0-4	2nd story	Faculty room 239	Copper – 279 PPB Lead - ND
RS0-5	1st Story	Kitchen kettle faucet	Copper – 225 PPB Lead – 0.67 PPB
RS0-6	Ground floor	Hallway outside cafeteria	Copper - 402 PPB Lead - <1.0 PPB
RS0-7	1st Story	Faculty 104	Copper – 416 PPB Lead - <1.0 PPB
RS0-8	1st Story	Gym faucet	Copper - 361 PPB Lead – <1.0 PPB

Ringgold Middle School

July 30, 2025

Sample Number	Story	Sample Location	Result
RM01	1st Story	Near room 146 by boys' Restroom 130 right side by door	Cooper –42.9 PPB Lead - ND
RM02	1st Story	Outside of gym opposite band room 130 left side	Copper – 49.8 PPB Lead - ND PPB
RM03	1st Story	Band room fountain	Copper – 475 PPB Lead - ND
RM04	1st Story	Chorus room 132	Copper -555 PPB Lead -ND
RM05	1st Story	Boys' locker room	Copper – 633 PPB **Lead –** ND
RM06	1st Story	Girls' locker room 126	Copper – 720 PPB Lead – ND
RM07	1st Story	Outside women's' restroom room 135	Copper -484 PPB Lead - ND
RM08	1st Story	Outside men's restroom 137	Copper – 644 PPB Lead - ND
RM09	2nd Story	F.L.S. Room Home economics by stove right side	Copper – 163 PPB Lead – ND
RM10	2nd Story	F.L.S. Room Home economics by stove left side	Copper - 195 PPB Lead – ND
RM11	2nd Story	Faculty room 225	Copper – 189 PPB Lead -ND
RM12	2nd Story	Girls' restroom 210A	Copper – 372 PPB Lead - ND
RM13	1st Story	Office fountain	Copper – 39.9 PPB Lead – ND
RM14	1st Story	Office break room 138A	Copper – 183 PPB Lead – ND

Ringgold High School Stadium

Not Sampled due ti construction

Sample Number	Story	Sample Location	Result
RTS-1		Trainer Room Sink Kitchen	**Under Renovation** **No Samples Collected**
RST-2		Concession Stand Sink	**Under Renovation** **No Samples Collected**

Conclusions

No water sample results were over USEPA Action Limit for copper (1,300 PPB) and/or for lead (20 PPB).

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Should you have any further questions, please feel free to contact me at the number listed above.

Sincerely,

Joseph W. Grad
Director of Environmental Services

Accreditation

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Sincerely,

Joseph W. Grad
Director of Environmental Services

Introduction

Lead can enter drinking water when service pipes that contain lead corrode, especially where the water has high acidity or low mineral content that corrodes pipes and fixtures. The most common problem is with brass or chrome-plated brass faucets and fixtures with lead solder, from which significant amounts of lead can enter into the water, especially hot water. Buildings built before 1986 are more likely to have lead pipes, fixtures and solder. The Safe Drinking Water Act (SDWA) (1974 and amended and reauthorized it in 1986 and 1996) is the main federal law that ensures the quality of Americans' drinking water. It has reduced the maximum allowable lead content to be a weighted average of 0.25 percent calculated across the wet surfaces of pipes, pipe fittings, plumbing fittings, and fixtures and 0.2 percent for solder and flux.

Corrosion is a dissolving or wearing away of metal caused by a chemical reaction between water and plumbing. A number of factors are involved in the extent to which lead enters the water, including:

- the chemistry of the water (acidity and alkalinity) and the types and amounts of minerals in the water,
- the amount of lead it comes into contact with,
- the temperature of the water,
- the amount of wear in the pipes,
- how long the water stays in pipes, and
the presence of protective scales or coatings inside the plumbing materials.

To address corrosion of lead and copper into drinking water, EPA issued the Lead and Copper Rule (LCR) under the authority of the SDWA. One requirement of the LCR is corrosion control treatment to prevent lead and copper from contaminating drinking water. Corrosion control treatment means utilities must make drinking water less corrosive to the materials it comes into contact with on its way to consumers' taps.

The Safe Drinking Water Act requires EPA to determine the level of contaminants in drinking water at which no adverse health effects are likely to occur with an adequate margin of safety. These non-enforceable health goals, based solely on possible health risks, are called maximum contaminant level goals (MCLGs). EPA has set the maximum contaminant level goal for lead in drinking water at zero because lead is a toxic metal that can be harmful to human health even at low exposure levels. Lead is persistent, and it can bio-accumulate in the body over time. The established action level for lead in drinking water is 20 PPB and the action limit for copper is 1300 PPB.

The buildings, sample locations, and analytical results are as follows:

July 30, 2025

Ringgold Administration Building

Sample Number	Story	Sample Location	Result
RAD01	1st Story	Kitchen sink	Copper – 49.8 PPB Lead – 0.88 PPB
RAD02	1st Story	Men's' restroom sink	Copper – 79.5 PPB Lead – 0.95 PPB

Ginger Hill Bus Garage

July 30, 2025

Sample Number	Story	Sample Location	Result
GH-01	Ground Floor	Boiler Room	**Void. Bottle cap came off**
GH-01	Ground Floor	kitchen Sink	Copper 95.7 PPB Lead 3.23 PPB

Ringgold South Elementary School

July 30, 2025

Sample Number	Story	Sample Location	Result
RS0-1	3rd Story	Fountain opposite Room 312	Copper – 360 PPB Lead - ND
RS0- 2	3rd Story	Faculty break room 301	Copper – 443 PPB Lead - ND
RS0-3	1st Story	Main entrance fountain	Copper – 257 PPB Lead - <1.0 PPB
RS0-4	2nd story	Faculty room 239	Copper – 279 PPB Lead - ND
RS0-5	1st Story	Kitchen kettle faucet	Copper – 225 PPB Lead – 0.67 PPB
RS0-6	Ground floor	Hallway outside cafeteria	Copper - 402 PPB Lead - <1.0 PPB
RS0-7	1st Story	Faculty 104	Copper – 416 PPB Lead - <1.0 PPB
RS0-8	1st Story	Gym faucet	Copper - 361 PPB Lead – <1.0 PPB

Ringgold North Elementary School

July 30, 2025

Sample Number	Story	Sample Location	Result
RN01	1ST Story	Kindergarten hall fountain	Copper – 2.9 PPB Lead - ND
RN02	1st Story	2nd grade classroom 207	Copper - 431 PPB Lead – ND
RN03	1st Story	Head start	Copper – 230 PPB Lead – ND
RN04	1st Story	Main hallway- outside library	Copper – 366 PPB Lead - ND
RN05	1st Story	Nurse's office	Copper – 459 PPB Lead – 1.0 PPB
RN06	1st Story	Hallway outside cafeteria by office 309	Copper – 164 PPB Lead - ND
RN07	1st Story	Kitchen kettle faucet	Copper – 466 PPB Lead – ND
RN08	1st Story	Faculty lounge sink	Copper – 265 PPB Lead - ND
RN09	1st Story	Old Main Hallway Fountain outside Girl's restroom	Copper – 474 PPB Lead –ND

Ringgold Middle School

July 30, 2025

Sample Number	Story	Sample Location	Result
RM01	1st Story	Near room 146 by boys' Restroom 130 right side by door	Cooper –42.9 PPB Lead - ND
RM02	1st Story	Outside of gym opposite band room 130 left side	Copper – 49.8 PPB Lead - ND PPB
RM03	1st Story	Band room fountain	Copper – 475 PPB Lead - ND
RM04	1st Story	Chorus room 132	Copper -555 PPB Lead -ND
RM05	1st Story	Boys' locker room	Copper – 633 PPB **Lead –** ND
RM06	1st Story	Girls' locker room 126	Copper – 720 PPB Lead – ND
RM07	1st Story	Outside women's' restroom room 135	Copper -484 PPB Lead - ND
RM08	1st Story	Outside men's restroom 137	Copper – 644 PPB Lead - ND
RM09	2nd Story	F.L.S. Room Home economics by stove right side	Copper – 163 PPB Lead – ND
RM10	2nd Story	F.L.S. Room Home economics by stove left side	Copper - 195 PPB Lead – ND
RM11	2nd Story	Faculty room 225	Copper – 189 PPB Lead -ND
RM12	2nd Story	Girls' restroom 210A	Copper – 372 PPB Lead - ND
RM13	1st Story	Office fountain	Copper – 39.9 PPB Lead – ND
RM14	1st Story	Office break room 138A	Copper – 183 PPB Lead – ND

Ringgold Middle School (continued)

Sample Number	Story	Sample Location	Result
RM15		**No sample. Skipped Number**	
RM16	1st Story	Home Economics Room	Copper – 16 PPB Lead - ND
RM17	1st Story	By girls' restroom 108A	Copper – 34.1PPB Lead – ND
RM18	1st Story	Faculty 156	Copper – 34.1 PPB Lead - ND
RM19	1st Story	Cafeteria Fountain	Copper 35.9 PPB Lead -
RM20	1st Story	Kitchen kettle faucet	Copper 138 PPB Lead - ND

Ringgold High School Stadium

Not Sampled due ti construction

Sample Number	Story	Sample Location	Result
RTS-1		Trainer Room Sink Kitchen	**Under Renovation No Samples Collected**
RST-2		Concession Stand Sink	**Under Renovation No Samples Collected**

Ringgold High School

July 30, 2025

Sample Number	Story	Sample Location	Result
RHS1	1st Story	Main hallway opposite room 109	Copper – 344 PPB Lead - ND
RHS2	2nd Story	Hallway by women's restroom	Copper – 287 PPB Lead – ND
RHS3	2nd Story	Hallway by stairwell A boys' side restroom	Copper – 224 PPB Lead - <1.0 PPB
RHS4	2nd Story	Staff lounge	Copper - 314 PPB Lead – 0.85 PPB
RHS5	1st Story	Home economics room sink	Copper - 167 PPB Lead – 0.54 PPB
RHS6	1st Story	Opposite cafeteria	Copper – 88.5PPB Lead – ND
RHS7	1st Story	Pool fountain	Copper – 207 PPB Lead - 1.6 PPB
RHS8	1st Story	Kitchen kettle faucet	Copper – 199 PPB Lead - ND
RHS10	1st Story	Custodial break room	Copper - 211 PPB Lead – ND

Conclusions

No water sample results were over USEPA Action Limit for copper (1,300 PPB) and/or for lead (20 PPB).

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Sincerely,

Joseph W. Grad
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