

Lead Levels in Drinking Water at Salisbury Community School, Salisbury, VT

Technical Summary

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This summary is not intended as a stand-alone document, but rather as a ready reference for the primary findings and recommendations. Outlets prioritized for remediation are listed in **Table 1** and their locations shown in **Figure 1**. A full report, including description of the study methods, complete data, and additional information, is available at sites.middlebury.edu/mcostanz/research/lead.

Table 1. Salisbury Community School outlets that exceeded the EPA action level (red) or the American Academy of Pediatrics safety level (blue) by outlet type, lead level, and remediation priority level.

Outlet Type	Exceedance Level ¹	Outlet ID	Outlet Location (see also Figure 1)	First Draw (ppb)	Flush (ppb)	Remediation Priority ²
Water fountain or bottle filler	n/a					
Kitchen sink or sprayer	First Draw exceeds AAP safety level	OR05	kitchen sprayer	7	3	Highest
		OR03	kitchen sink	4	1	Highest
		OR04	kitchen sink	4	1	Highest
		OR06	kitchen handwash sink	2	1	Highest
Classroom or office sink	First Draw exceeds AAP safety level	RD07	G2 classroom sink	>7*	1	High
		RD11	G2 classroom sink	2	1	High
		RD13	G1 classroom sink	2	1	High
		RD15	preK + K classroom sink	2	1	High
		GN01	health office sink	2	1	
		GN11	learning lab sink	2	1	High
		GN13	G5-6/Francescutti classroom sink	2	1	High
		OR01	art classroom sink	2	1	High
Bathroom sink	First Draw exceeds AAP safety level	RD04	bathroom sink (near conference room)	12	1	High
		GN03	health office bathroom sink	10	1	High
		RD03	bathroom sink (near conference room)	9	1	High
Other	First Draw exceeds EPA action level	GN02	health office shower	41	16	Medium

¹ Outlets/samples exceeded the U.S. Environmental Protection Agency (EPA) action level if water lead levels were ≥ 15 ppb; Outlets/samples exceeded the American Academy of Pediatrics (AAP) safety level if water lead levels were >1 ppb.

² Priority level is based on evaluation against the EPA and AAP levels and likelihood and frequency of use for consumption. See full report for more information.

Utility sink	First Draw	RD09	utility sink in custodial closet	5	1	Low
	exceeds AAP safety level	GN09	utility sink in custodial closet	5	1	Low

* provisional value, due to high particulate; concentration could be higher than measured

Low FL sample lead concentrations for outlets that delivered elevated FD samples suggest that the predominant source of lead is the fixtures or their immediate connections rather than more distal pipes or the incoming water supply, which may simplify potential remediation approaches.

We recommend that SCS pursue the following permanent remediation approaches for priority outlets:

- 1) replace existing outlet fixtures with “lead-free” fixtures/solder or remove the outlets entirely
- 2) if replaced, verify remediation efficacy via follow-up lead testing

Until priority outlets are permanently remediated, we suggest the following temporary approaches:

- 1) disconnect water supply to priority water fountains and kitchen sinks/sprayers
- 2) disconnect water supply to priority sinks in locations where water is not needed for non-consumption uses
- 3) for priority sinks/showers/sprayers in locations where water *is* needed for non-consumption uses,
 - a. establish school-wide policies for water consumption from outlets by outlet type (e.g., “only drink from water fountains and bottle fillers”), rather than location-specific policies
 - b. complement school-wide water consumption policy with age-appropriate signage at each priority outlet instructing against consumption and with educational outreach regarding the policy and its rationale

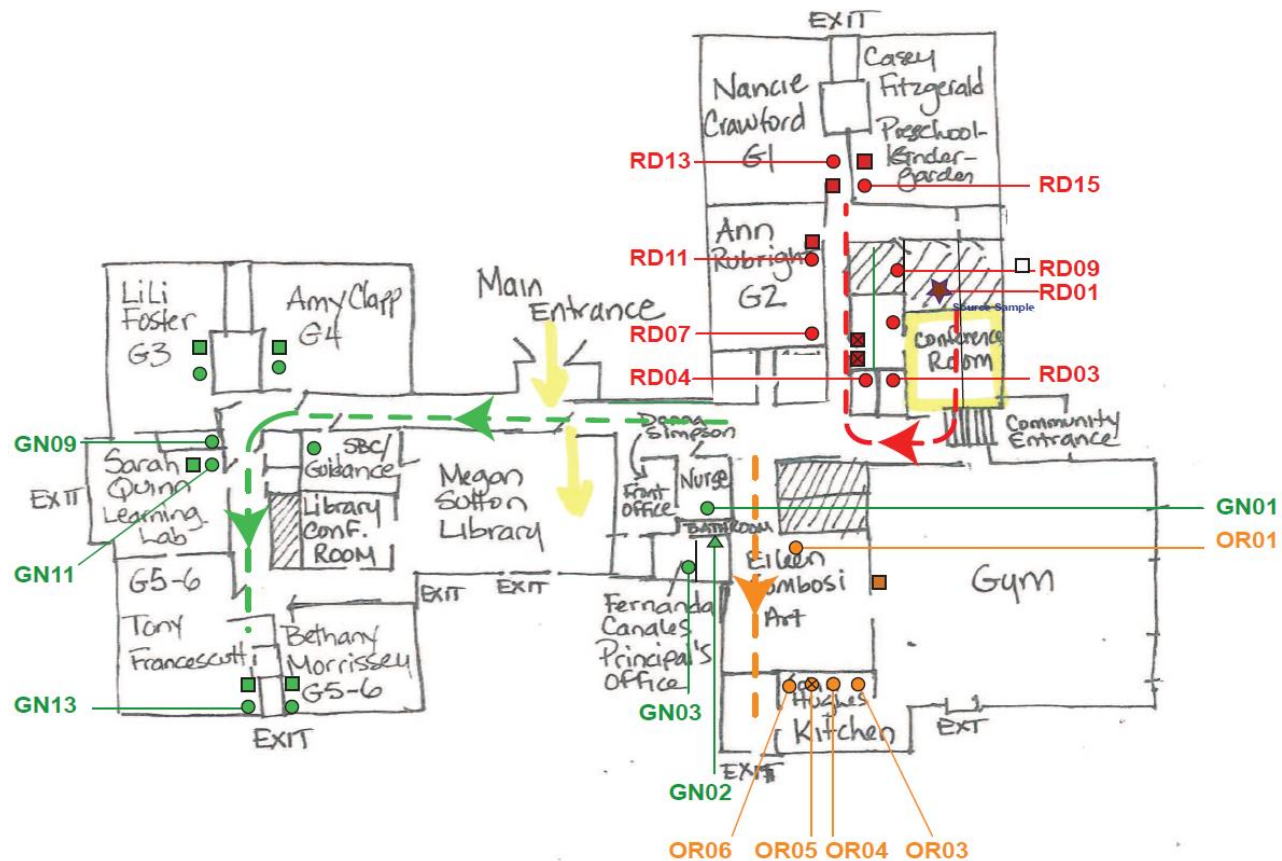


Figure 1. Floor plan showing locations of Salisbury Community School outlets that exceeded the EPA action level or the American Academy of Pediatrics safety level (see also **Table 1**).