



Large Facility Sampling Plan Guidance



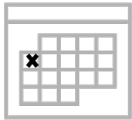
Scenarios to help develop a sampling plan for lead at facilities with many taps

This document is designed to assist schools that have received multiple sampling boxes and are looking for guidance in developing a sampling plan.



Best Option

Sampling Monday morning with 2 or more citizen scientists

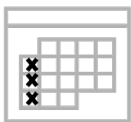


- Each trained participant can take a box and complete the sampling for their box.
- This can be done simultaneously with the other citizen scientists.
- Each citizen scientist should include their name on the appropriate Chain of Custody (COC) document for the box they complete.
- All sample bottles go back in the sampling box with COC document for UPS pick up.



Acceptable Options

Spreading sampling over a few weeks



- The Monday morning of each week, collect samples, one or more complete boxes at a time.
- Fill out the accompanying Chain of Custody document, pack up the box(es) for those samples, and ship back to RTI Laboratory the day you sample.
- DO NOT HOLD samples to send all at once. The laboratory *must* receive your samples within 10 days of filling the bottles.
- Repeat the following week.
- Results will only be posted after all samples for that facility have been analyzed.

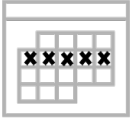
Important!

- Every citizen scientist should complete the **required training**, by attending a webinar or watching our training videos and reading more about the process. www.cleanwaterforUSkids.org/howto
- Collect samples in the morning **before anyone has used water** in the building.
- **Do not** collect samples if water was last used up to 8 hours or more than 4 days ago.



Sampling on other weekday mornings

The ideal sampling day is Monday, however other weekdays are acceptable. Water needs to sit in the pipes for at least 8 hours and no more than 4 days. If it has been less than 8 hours since it was used, sample on a different day.



- Each morning chosen for sampling, collect samples, one or more complete boxes at a time.
- After collecting samples, complete the accompanying Chain of Custody document, pack up UPS box, and send back to RTI Laboratory for analysis the same day.
- DO NOT HOLD samples to send all at once. The laboratory *must* receive your samples within 10 days of filling the bottles.
- Repeat the next day until you've sampled all locations.
- Results will only be posted after all samples for that facility have been analyzed.

Sampling during periods of extended closure

Schools may be closed due to holiday breaks or for the COVID-19 pandemic. Sampling can be done during this time however it requires a modified protocol to flush the building 3 days before sampling.

Flushing is the process of running water at each tap in your facility to make sure you clear out any dissolved chemicals from the pipes that accumulated in the water while it has been sitting unused. Note that this protocol to flush 3 days before sampling is not exactly the same as the full recommendations to re-open a building after an extended period of low or no use. U.S. EPA guidance for that situation can be found [here](#).

- Three days prior to sampling, conduct an extended closure flush protocol for the building:

Step 1. Only flush one floor of the building at a time. *Flushing too many taps at once could cause water pressure problems and/or cause abnormal flows through the pipes and increase the lead content.*

Step 2. Start with the top floor of the building. *For the best results, you should access to the plumbing diagram for your facility*

2A. Locate the tap farthest from where the water enters the building

- **Use the facility's plumbing diagram** to locate the tap furthest away from where the main water supply enters the building, **OR**
- **If you do not know where the water main enters the building**, identify the faucet furthest away from the main road. If it is a bathroom that is furthest away rather than a classroom with a single faucet, choose one of the faucets in that bathroom to flush.

Flushing Tip

- **Use signs** to indicate when and for how long flushing needs to occur at drinking and cooking tap.
- If **bathroom taps are sensor automated**, there may be an indoor hose bib and a drain in one of the bathrooms you can use.
- Identify options for collection and non-potable **re-use of flushed water** (e.g., plant watering).



2B. Flush the farthest tap on the top floor. Once you have identified the appropriate faucet, turn on the cold water and let it run for 10 minutes.

2C. If your building has multiple wings, flush the furthest tap in each wing at the same time.

While you are flushing the tap in step 2, locate and flush the farthest tap for each wing of that same floor. Turn the faucets off in the order that you turned them on after they have each flushed for 10 minutes.

Step 3. Flush the water fountains on the top floor. Once the water has been flushed from the farthest tap on the main floor and wings, flush the water fountains for 1 minute.

Step 4. Flush any additional taps used for drinking or cooking. After flushing water fountains move onto other cooking and drinking taps on that floor. Flush these taps for 1 minute one at a time.

Step 5. Repeat steps 2 through 4 for each remaining floor of the building, working from the top floor down. If your school only has one floor, you are done!

- Now let the taps sit unused for 2 full days (like a weekend) and take samples on the third day.

Note: For more details on the *Sampling during periods of extended closure* protocol please contact us <https://www.cleanwaterforuskids.org/contact> or at 1-855-997-2864 by voicemail or text with questions or comments.