

LEAD TESTING

In Schools & Child Care Facilities Drinking Water Program

Instructions for Sampling and Sample Return to DEQ

Samplers must watch the How to Sample and Chain of Custody videos on the DEQ website before collecting any samples.

Sample Collection: <https://go.usa.gov/xuftG>

COC: <https://go.usa.gov/xufzj>

Sampling Kit

You should have received the following items in your sample collection kit.

- Sample containers with lids, 250 ml plastic (two for each outlet on your final inventory)
- Labels for samples
- Chain of Custody
- Shipping Slip or Return Label for Courier
- Outlet Inventory/Sampling Plan
- Map (if applicable)
- Shipping boxes
 - keep these to store and return samples

If any supplies or paperwork are missing or damaged, please contact the laboratory at 702-1000 or email lwsc@deq.ok.gov.

When should samples be collected?

Collect all water samples before the facility opens and before any water is used. Water should sit in the pipes unused for at least 8 hours but not more than 18 hours before a sample is taken. However, water may be more than 18 hours old at some outlets that are infrequently used. If this is typical of normal use patterns, then these outlets should still be sampled. Make sure that no water is withdrawn from the outlets prior to their sampling. Remember not to use restrooms or sinks that morning prior to sampling. If your facility is closed for summer or holiday breaks, you may flush the faucets the day prior to collecting your samples. See the Flushing Directions by Outlet Type section of this document or on page 50 of the 3Ts Manual.



P

Primary/First-Draw Collection

The first-draw or primary sample is representative of the water that may be consumed at the beginning of the day or after infrequent use. This protocol maximizes the likelihood that the highest concentrations of lead will be found because the first 250-mL sample is collected after overnight stagnation (the water sat in the pipes for at least 8 hours). Turn on the tap and begin collecting the sample immediately, not allowing any water to spill. Do not overfill the container. Turn off the tap when done. Make sure to label the sample bottle as the primary (P) sample. Record the date and time on the Chain of Custody on the line matching the sample label and location.

F

Follow-up/Flush Collection

Follow-up flush samples can be taken immediately after the primary sample is collected. The sampler should be careful to maintain a consistent rate of water flow when collecting flush samples. Open up the tap and let the water run for at least 30 seconds. Then, fill a 250mL sample container. Make sure to label this sample bottle as the flush sample (F). Record the date and time on the Chain of Custody on the line matching the sample label and location.





Chain of Custody

The Chain of Custody (COC) lists all of the faucets/outlets on your final inventory. The sample descriptions are the code used to identify the outlet. Use your outlet inventory if needed to identify how outlets are listed on the COC. The outlet order on the COC should match your sampling plan. The outlets should start nearest the main line entering the building and then work away in order of connection. If a map was provided, it may be helpful for reference. Each outlet has a primary (P) sample listed first and then a flush (F) sample second. Make sure the label, sample and paperwork match. Record each date and time on the COC as the samples are collected. Complete all blank fields of the COC before returning the samples. Sign to relinquish the samples before packing the samples and mailing back to DEQ. The Chain of Custody is required to accept samples and the samples must be labeled properly.



Sample Storage

Samples may take several days to collect for larger schools or facilities. Sampling must stop when the school or facility opens for the day and water is in use. Ensure lids are secured, but not overtightened, and samples are stored upright. Place them back into the shipping boxes to store each day after collecting in a cool, dry and secure location. Do not freeze. Protect from sunlight. Samples may be stored for up to 5 days before shipping to allow for multiple collection days.

Sampling Dos and Don'ts



Do Follow the instructions provided by the laboratory for handling sample containers to ensure accurate results. Label each sample bottle. Collect all water samples before the facility opens and before any water is used. The water should sit in the pipes unused for at least 8 hours but not more than 18 hours before a sample is taken. Learn how water flows in your facility. Start sampling closest to the main line and work away.



Don't Remove aerators prior to sampling. Potential sources of lead may be missed if aerators are removed. Don't flush water prior to sampling, unless instructed to do so. Don't close the shut-off valves to prevent outlet use prior to sample collection.

Flushing Directions by Outlet Type

Remember that each drinking water outlet should be flushed individually; flushing a toilet will not flush the water fountains. 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 and let the water run for roughly 30 seconds to one minute. Open all kitchen faucets (and other faucets where water will be used for drinking and/or cooking) and let the water run for 30 seconds to one minute.



Returning Samples to DEQ State Environmental Laboratory

Return shipping forms or labels have been provided in the kit for your convenience. Apply the labels provided to the shipping boxes and DEQ will cover the return shipping costs. Make sure your return address is on all boxes being shipped. When multiple boxes are being shipped, make sure to label and indicate how many total boxes you are shipping to DEQ on the return label. If you lose your shipping label, please email the LWSC staff at lwsc@deq.ok.gov. Alternately, if you are located in the OKC metro area, you may deliver your samples to the laboratory in person. The laboratory sample receipt area is located on the first floor, northeast corner of the DEQ building at 707 N Robinson Ave, Oklahoma City.

QUESTIONS?

Contact us at lwsc@deq.ok.gov or visit <https://go.usa.gov/xpdUk>