

SCHOOL TESTING FOR LEAD IN DRINKING WATER SAMPLING PLAN AND SAMPLE COLLECTION INSTRUCTIONS

NORTH DAKOTA DEPARTMENT OF ENVIRONMENTAL QUALITY (5-2019)

Prior to developing a lead sampling plan and conducting testing each school should complete the School Lead Hazards Survey (<u>https://deq.nd.gov/forms/mf/SchoolLeadHazardsSurvey.pdf</u>) and return a copy to the North Dakota Department of Environmental Quality (NDDEQ).

## Step 1 – Develop a Lead Sampling Plan

Preparation prior to sampling is key to ensure that testing represents the water which students and staff consume under normal facility use. It is also important to be prepared to communicate to all stakeholders regarding the planned testing, results, and any remediation if elevated lead levels are found. Therefore, a lead sampling plan should be developed in writing and contain the following information prior to any sample collection. For additional guidance please also review the <u>3Ts for Reducing Lead in Drinking Water in Schools</u> document.

- Identify the individuals who will be involved and each person's responsibilities. Specifically, contact person(s) should be designated to handle communications with all interested parties. It is highly recommended that a communications plan also be in place prior to sample collection.
- Summarize any records of previous testing or known plumbing risks.
- Detail any collaboration or information from your water supplier, local health department, or other stakeholders.
- A diagram of all the water fixtures in the facility (include all taps, fountains, sinks, dispensers, etc.). The school's fire exit floor plan can be used for this purpose by marking all fixture locations.
- The appropriate number and location of fixtures to be tested. This should be determined by observing traffic patterns to determine and prioritize those fixtures most frequently used along with locations containing elevated risk plumbing components. Only fixtures used for drinking water and to prepare food should be included.
- Assign each fixture to be tested a site identification (ID) number (1, 2, 3, etc.). The sample ID should be included on the diagram of the facility water fixtures and should also be used to identify the fixtures on the laboratory sample recording form and on each sample container.

After the above information has been determined, a laboratory certified to perform the lead analysis should be selected and contacted for the appropriate number of sample bottles. **Make sure to inform the laboratory that the testing is for a school facility and 250 mL volume bottles are needed.** 

- Fixtures MUST be inactive for at least 8 hours but not longer than 18 hours before sampling. Make sure that <u>NO</u> water has been withdrawn from the fixture, or any adjacent fixtures, before you collect the sample. Early weekday mornings often work best for sample collection.
- **DO NOT** remove any aerator screens prior to sampling, however, if a fixture has anything else that is attached (e.g., hoses) they should be removed before sampling.
- **<u>DO NOT</u>** open containers until you are ready to collect the sample and only use the containers supplied by your certified lab (250 milliliter/wide-mouth bottles). Discard any sampling containers that have been damaged or opened.
- 1. Fill out the sample recording form with the school information and list all selected fixtures by site ID and location/description.
- 2. Fill out all sample labels with school number, site ID, and sampler name before starting. Date and time should be completed at the time of sample collection.
- 3. Attach a completed sample label to each container. Prior to collecting all samples, verify that the site ID on the container label matches the fixture as labeled from the facility diagram and the sample recording form.
- 4. Immediately before filling each bottle write the date and time of collection on both the bottle and sample recording form.
- 5. Collect the first water that comes out of the fixture by placing the opened sample container under it, then open the <u>cold water tap</u> as you would when filling a glass of water or getting a drink from a fountain. Once full, tightly cap the sample container.
- 6. Prepare the shipping kit according to your certified labs instructions. Ensure all containers are tightly capped, correctly labeled, and that the sample recording form is fully completed and enclosed with the samples.
- 7. Samples must arrive at the lab within 14 days of collection or they will be <u>rejected</u> and not analyzed.
- 8. A copy of the lead sampling plan and the sample recording form should be kept on file with your facility records.