Rule Governing Testing and Remediation of Lead in the Drinking Water of Schools and Child Care Facilities

1.0 Authority

This rule is adopted pursuant to 18 V.S.A. § 1247.

2.0 Purpose

The purpose of this rule is to set forth the requirements for the testing and remediation of lead in the drinking water of schools and child care facilities in Vermont.

3.0 Definitions

3.1 “Action level” means four parts per billion (ppb) of lead.

3.2 “Building” means any structure, facility, addition, or wing that may be occupied or used by children or students. This only includes buildings that are owned, controlled, or operated by the responsible entity.

3.3 “Child care provider” has the same meaning as in 33 V.S.A. § 3511.

3.4 “Child care facility” or “facility” has the same meaning as in 33 V.S.A. § 3511.

3.5 “Commissioner” means the Commissioner of Health.

3.6 “Department” means the Department of Health.

3.7 “Drinking water” has the same meaning as in 10 V.S.A. § 1671.

3.8 “Independent school” has the same meaning as in 16 V.S.A. § 11.

3.9 “Outlet” means a drinking water fixture currently or reasonably expected to be used for consumption, teeth brushing, or cooking purposes, including a drinking fountain, an ice machine, or a faucet as determined by a school district, supervisory union, independent school, or child care provider.

3.10 “Non-recurring care” means a program that provides child care designed to meet the short term, temporary child care needs of parents arising from, but not limited to tourism, recreation, or shopping.

3.11 “Responsible entity” means a school district, supervisory union, independent school, or child care provider in the State.
3.12 “Remediation Plan” encompasses the complete list of planned remediation actions submitted electronically on the state results website for all of the responsible entity’s tested outlets that are at or above the action level.

3.13 “School district” has the same meaning as in 16 V.S.A. § 11.

3.14 “Supervisory union” has the same meaning as in 16 V.S.A. § 11.

4.0 Testing Requirements

4.1 If the concentration of lead in drinking water indicates that water from an outlet is at or above the action level, the responsible entity shall ensure remediation at that outlet is conducted as described in this rule.

4.2 Initial Lead Testing in 2019-2021

On or before December 31, 2021, each responsible entity shall collect and have analyzed for lead according to the methods in Section 5.0 water samples from outlets in the buildings it owns, controls, or operates that are currently used or reasonably expected to be used for consumption, teeth brushing or cooking purposes. This includes outlets expected to be used on a temporary basis such as during temporary relocations.

4.3 New Outlets

4.3.1 All new outlets should be flushed prior to use for not less than five minutes, twice a day, for three weeks.

4.3.2 Any outlets newly used or newly installed for consumption, teeth brushing, or cooking purposes shall be tested and demonstrate first-draw and flush lead concentrations below the action level prior to use. This includes outlets expected to be used on a temporary basis.

4.3.3 All new outlets shall be lead-free and compliant with the federal Safe Drinking Water Act as amended, 9 V.S.A. Ch. 63, Subchapter 1C, and determinations by the Commissioner of Health pursuant to 9 V.S.A. § 2470e (2)(A).

4.4 Outlets exempted from testing

4.4.1 If both first draw and flush samples of an outlet test lower than 1 ppb for three testing cycles consistent with this rule, that outlet is not required to be tested again, subject to Sections 4.4.2, 4.4.3, and 4.5.
4.4.2 If every outlet in buildings owned or controlled by a responsible entity tests lower than 1 ppb for three testing cycles, the entity may choose to either:

4.4.2.1. Continue to test all outlets pursuant to the testing schedule in Section 8; or

4.4.2.2 Adopt a testing regime that includes no fewer than five outlets within the entity, not including any outlet that utilizes a filter. If a responsible entity has fewer than five taps, all taps must continue to be tested.

4.4.3 Outlets that utilize a water filter shall be tested regardless of results below detection of 1 ppb.

4.5 Retesting due to building and chemistry changes

4.5.1 Outlets shall be retested if there have been plumbing changes unrelated to remediation efforts, and that could reasonably be foreseen to result in an increase in lead levels coming from that outlet prior to use.

4.5.2 Outlets shall be retested when there is a change to water chemistry that could reasonably be foreseen to result in increased lead levels coming from that outlet prior to use.

4.6 All analysis shall be conducted by a certified drinking lab pursuant to 18 V.S.A. § 501b.

5.0 Sampling Methodology

5.1 Pre-sampling Conditions

5.1.1 Samples shall be collected after the water sits in the pipes for a minimum of 8 hours. Due to samples needing to be collected when the facility is in regular use, samples shall not be collected the day after vacations, weekends or holidays.

5.1.1.2 Samples must be collected during periods of normal use and occupation.

5.1.1.3 If an outlet or facility does not see regular use or occupancy prior to sampling, the facility shall flush water from the respective outlets for five minutes, twice a day for a three-week period prior to sampling.

5.1.2 Aerators shall be left in place during sampling.
5.1.3 Shut-off valves shall not be opened or closed prior to sample collection. The outlets may be used in the course of normal operation but no pre-stagnation flushing or plumbing work shall occur in the week prior to sampling.

5.1.4 Outlet inventory shall be conducted in a format provided by the Department.

5.1.5 Any additional guidance provided by the Department shall be followed.

5.2 Sampling

5.2.1 Following guidance provided by the Department, persons designated by the responsible entity shall collect the following samples from each outlet identified on the outlet inventory using a 250 mL bottle provided by a certified drinking water lab:

5.2.1.1 First Draw
Samples shall be collected from each outlet after the water sits in the pipes for a minimum of 8 hours; samples shall be collected when the facility is in regular use, not the day after vacations, weekends or holidays.

5.2.1.2 Flush Samples
Following 30 seconds of flushing after first draw samples are collected.

6.0 Remediation

6.1 If the concentration for lead in drinking water from an outlet is at or above the action level, the responsible entity shall ensure remediation of that outlet is conducted as required in this rule.

6.2 In conducting remediation, a responsible entity shall strive to achieve the lowest level of lead possible in drinking water.

6.3 At a minimum, the responsible entity shall remediate the outlet consistent with the guidance provided by the Department and the Vermont Department of Environmental Conservation.

6.4 When testing results are at or above the action level the responsible entity shall:

6.4.1 Prohibit use of an outlet that is at or above the action level until implementation of a lead remediation plan and sampling indicates that lead levels from the outlet are below the action level within one school day; or
6.4.2 Permanently remove, disable, or otherwise ensure it cannot be accessed by any person for the purposes of consumption, teeth brushing, or cooking purposes.

6.5 Signage

6.5.1 Posting a sign at an outlet that has tested at or above the action level is not an acceptable means of remediation.

6.5.2 Responsible entities that have determined that a sink faucet is not reasonably expected to be used for consumption, teeth brushing, or cooking purposes, but are easily accessible by the public, shall have signs stating that such sink faucet should not be used for consumption, teeth brushing, or cooking purposes. Signs must include visuals for the non-reader.

7.0 Reporting and Communication

7.1 Initial Testing – Prior to December 31, 2021

7.1.1 At least five school days, or business days for child care providers, prior to sampling and testing, responsible entities shall notify all staff, parents or guardians of students directly in writing or by electronic means of the following:

- the scheduled sampling;
- the requirements for testing;
- why testing is required;
- the potential health effects from exposure to lead in drinking water;
- information provided by the Department, regarding sources of lead exposure other than drinking water;
- information regarding how the responsible entity shall provide notice of the sample results; and
- how the responsible entity shall remediate sample results that are at or above the action level.

7.1.2 Notify all staff and all parents or guardians of students directly of the test results and the proposed or taken remedial action in writing or by electronic means within 10 school days, or business days for child care providers, after receipt of the laboratory report;

7.1.2.1 Center Based Child Care and Preschool Programs that provide non-recurring care services shall post the results of all testing and remediation measures where it will be clearly visible to all parents and guardians of students and children.
7.1.2.2 Center Based Child Care and Preschool Programs that provide non-recurring services shall note in children's enrollment forms that the child is enrolled in non-recurring care services.

7.1.2.3 Center Based Child Care and Preschool Programs that provide recurring care services shall adhere to 7.1.2 for those parents and guardians of students and children.

7.2 Reporting of Initial Remediation Actions

Initial remediation actions shall be reported by the responsible entity to the Department via the result website within five business days.

7.3 Reporting of Remediation Plans

Remediation Plans shall be submitted by the responsible entity to the Department via the result website within six months of receipt of laboratory results.

7.4 Reporting Completion of Permanent Remediation

7.4.1 All permanent remediation actions shall be completed and reported as soon as practicable but not more than 18 months from the date of receipt of results indicating a lead concentration at or above 4 ppb.

7.4.2 Following remediation, every outlet that has been remediated must be sampled and the responsible party be in possession of testing results documenting the lead level is below the action level prior to the outlet being placed back into use for consumption, brushing teeth, or cooking purposes.

7.5 Ongoing Testing after December 31, 2021

7.5.1 Responsible entities shall:

7.5.1.1 At least five school days, or business days for child care providers, prior to sampling and testing, responsible entities shall notify all staff, parents or guardians of students directly in writing or by electronic means of the information specified in Section 7.1.1

7.5.1.2 Notify all staff and all parents or guardians of students directly of the test results and the proposed or taken remedial action in writing or by electronic means within 10 school days, or business days for child care providers, after receipt of the laboratory report;
7.5.1.3 Notify all staff and all parents or guardians of students, and students in writing or by electronic means of what remedial actions have been taken. This notification requirement can be met by referring parents or guardians of students, and students to the results website.

7.5.1.4 Child care providers that offer care to children not regularly scheduled to attend shall post the results of all testing and remediation measures in a way that is easily viewed by parents, guardians, staff and the public and on any public website if one is maintained. A child care provider shall note in the child’s file whether they regularly attend or not as determined by the provider.

7.5.2 Certified Drinking Water Laboratories shall submit all laboratory results in a format determined by the Department:

7.5.2.1 Within 30 days after analysis has been completed; and

7.5.2.2 Within two days of notifying the responsible entity.

8.0 Schedule

Testing entities shall sample in accordance with the following schedule:

8.1 Child Care Facilities:

- Once every three (3) years, the child care provider shall complete water testing. Child care facilities located within or operated by schools shall comply with the schools testing schedule.

8.2 Schools (See Figure 1):

- Group A – By June 30, 2024, every three years thereafter
- Group B – By December 31, 2024, every three years thereafter
- Group C – By June 30, 2025, every three years thereafter

9.0 Retesting and Evidence of Remediation

Under 18 V.S.A. Chapter 24A and 18 V.S.A. § 104, if the Department has reasonable grounds to believe that there is a potential harm to public health, the Department may require responsible entities to retest outlets or provide additional evidence of effective remediation.