Montana Lead in School Program

Water Policy Interim Committee

May 18, 2022

In January 2020, the Montana Department of Public Health and Human Services (DPHHS) adopted amendments to the administrative rules regarding the matter of health in Montana schools. The amendments included requirements pertaining to reducing lead in schools’ drinking water. It requires all schools accredited by the Montana Board of Public Education to sample for lead in schools’ drinking water. Montana Department of Environmental Quality (DEQ) implements the program on behalf of DPHHS.

All drinking water fountains and kitchen fixtures used for drinking or food preparation must be sampled. As well as all other fixtures that have the potential of being used for food prep or drinking (classroom sinks, bathroom sinks, nurse’s office, concession stands, etc.). Results are place into the Bins in the table below.

<table>
<thead>
<tr>
<th>Bin 1</th>
<th>Greater 15.0 ug/L or ppb</th>
<th>Corrective action required. Immediately discontinue use of the affected fixture.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bin 2</td>
<td>5.0 and 15.0 ug/L</td>
<td>Corrective action required. Interim flushing plan must be developed if fixture is to remain in service.</td>
</tr>
<tr>
<td>Bin 3</td>
<td>Less than 5.0 ug/L</td>
<td>No corrective action is required, conduct routine sampling.</td>
</tr>
</tbody>
</table>

ug/L = micrograms per Liter, ppb = parts per billion

The rule also requires a school to have a water flushing program. The school is required to flush out their water system whenever the school is inactive for greater than 3 days. When a school is not being used, the water in the plumbing system becomes stagnant. The stagnant water tends to warm up due to the facility’s heating system. The warmer water can be more corrosive to the piping and fixtures causing lead to be leached out of the plumbing. Flushing is a relatively easy and inexpensive maintenance practice to help reduce lead levels in your drinking water.

As of May 10, 2022, Montana DEQ has received lead sampling results from 363 out of the 593 schools. Approximately 73% of those schools have had at least one fixture that exceeded the Montana Action Level (AL) of 5.0 micrograms per Liter (ug/L) or parts per billion.

- Total samples collected – approximately 13,000
- Total samples greater than Action Level (AL) – 3,367 (26%)
  - Sample results between 5 and 15 ppb – 2,402 (18%)
  - Sample results greater than 15 ppb – 965 (7%)
- Average number of samples per school - 36
- Number of Schools with no exceedances – 95
The table below shows the ranges of number of exceedances per school.

<table>
<thead>
<tr>
<th>Number of Fixtures that Exceeded</th>
<th>Number of schools within that range</th>
<th>Percent of schools in that range</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-5</td>
<td>127</td>
<td>48%</td>
</tr>
<tr>
<td>6-10</td>
<td>38</td>
<td>14%</td>
</tr>
<tr>
<td>11-20</td>
<td>50</td>
<td>19%</td>
</tr>
<tr>
<td>21-30</td>
<td>20</td>
<td>8%</td>
</tr>
<tr>
<td>31 and greater</td>
<td>30</td>
<td>11%</td>
</tr>
</tbody>
</table>

Corrective Actions that can be used:

- If fixture is likely source of lead
  - Replacing old fixture with new “Lead Free” fixture
  - Permanently removing fixture if not needed or used
  - Installing point of use filters
  - Routine Flushing/Signage (not preferred)

- If plumbing is likely source of lead
  - Auto-flushers
  - Partial plumbing replacement
  - Full plumbing replacement
  - Whole school treatment (corrosion control)
  - Lead service line replacement (if present)

Estimated Cost of Corrective Actions:

- New “lead free” faucet - ~$100-$500 each
- Drinking Water Fountain - ~$500 each
- Bottle Fill Stations - ~$1,000-$1,500 each
- Point of Use Filter Unit - ~$25-$100 each
  - Replacement filters – ~$10-$75 each
- Auto-Flushers - ~$300 - $500 each
- Plumbing replacement – school dependent (a few thousand dollars to a few hundred thousand dollars)
- Whole school treatment – school dependent (~$10,000+)
  - Monthly operational costs - ~ few hundred to few thousand dollars per month
- Lead service line replacement - ~$5,000
Estimating the lead remediation costs for schools can be difficult. Costs of labor and supplies can vary greatly across the state. Some of the larger school districts have in-house plumbers and electricians, but the majority of schools would have to hire a contractor.

**Funding sources available to schools include:**

- **Lead Testing in School Drinking Water Grant (Water Infrastructure Improvements for the Nation (WIIN) Act).**
  - Current funding (FY18-FY21) ($722,000 total, $483,000 remaining)
    - The grant can only be used for public schools.
    - The grant covers the laboratory costs for analyzing the samples. Laboratories invoice DEQ directly.
    - The grant can only be used for sampling activities—cannot be used for remediation.
  - New funding (FY22-FY26)
    - Five additional years of funding were added to the grant program in the 2021 Infrastructure Investment and Jobs Act.
    - New funding can be used for sampling and remediation activities.
    - State allocations have not been released yet—assume it will be at least the same as previous allocation ($270,000/year)
    - Currently planning to use funding mainly for lead remediation as well as database costs, technical assistance and sampling.
    - Probably cannot be used for past lead remediation costs.
- **DEQ/Office of Public Instruction Remediation Reimbursement Program**
  - DEQ and OPI have developed a remediation reimbursement program.
    - Schools can apply for reimbursement of remediation expenses up to $1,000.
    - Program managed through OPI.
    - Limited Funding (first come first serve) ($40,000 total, $13,000 remaining)

Other Potential sources of funding available to schools for lead remediation.

- **State Major Maintenance Fund - Permissive levy**
- **USDA Rural Development (loans and grants)**
  - Eligibility limitations based on mean household income and population
  - Match required (amount varies based on eligibility criteria)
- **MT Board of Investments (loans)**
  - Low interest loans
  - Match required
  - Funding can be quickly approved
- **DEQ State Revolving Fund (loans)**
  - Low interest loans (with some loan forgiveness)
  - Match required
• ESSER/CARES Funding
  – Can be used to reduce lead exposure in water (recent revision)

• Community Development Block Grants (CDBG)
  – Eligibility requirements – beneficiaries have to be > 51% “low- to moderate income” (LMI) according to HUD (at or below 80% of Median Household Income (MHI))
  – Funding for planning (up to $50,000) and remediation (up to $600,000)

• American Rescue Plan Act (ARPA)
  – Minimum Allocation Grant
  – Local Fiscal Recovery Funds
Lead in School Drinking Water Program
Responsibilities

**Students & Parents**
- Primary Stakeholder
- At risk population

**DPHHS**
- Regulatory Authority
- Responsible for Compliance
- Provide Health-related support
- Communication with Schools and School Associations
- Coordinates with DEQ

**DEQ**
- Implements the rule (day to day operations)
- Developed program documentation
- Coordinates with the other agencies on communication and funding
- Schools primary contact
- Provides updates to stakeholders
- Manages the Sampling Grant (WIIN)

**OPI**
- Assists with Communication to schools
- Manages the OPI/DEQ remediation reimbursement Program

**DNRC**
- Provides assistance with funding
- Coordination with potential ARPA funding

**Commerce**
- Provides assistance with funding
- Coordination with potential ARPA funding
- Communication to schools regarding ARPA funding

**Schools**
- Collects the samples
- Performs the Corrective Action
- Communicates with students and parents
Lead in School Drinking Water Program
Communication Flow

DPHHS

DEQ

DNRC

Commerce

OPI

Schools

Students & Parents