Mandatory Lead Testing in Maine Schools

Maine Water Utilities Association Conference

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Who Are We?

Maine Drinking Water Program (DWP)
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Part of Maine’s Center for Disease Control and Prevention

What we do:
• Enforce Safe Drinking Water Act
• Manage the new school lead sampling program
Why Are We Here?

• Law regarding lead in schools was passed in 2019

• All schools must sample their taps for lead in drinking water

• What does this mean for schools and water utilities in Maine?
CAVEAT

everything is subject to change
Today’s Topics

1. New State Law
2. Draft Rules
3. How we expect the program to run
4. What results we are expecting
5. How this will impact a water utility
6. How water utilities can help
New Law
School Drinking Water Testing (SP 40 - LD 153)

- Law passed in May 2019
- The DWP is charged with writing Rules that will implement the Law
What Does the New Law Say?

• All Maine schools must sample all taps used for drinking or cooking
• Cannot cost schools money for testing
• Rules must be written to implement the law:
  o Establish lead levels
  o Testing protocols & frequency
  o Mitigation (not required as part of law)
  o Public Notice
  o Etc.
• DWP must submit a detailed annual report to Legislature
1. New State Law

2. Draft Rules

3. How we expect the program to run

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Where are the Rules Now?

Draft rules have been written by DWP

- Public Comment period has closed
- Responses have been drafted and will be submitted to Attorney General’s office for review

Legislature will review and accept and/or make changes to rules

Program will roll out and schools will begin testing
What Will Sampling Look Like?

<table>
<thead>
<tr>
<th>Maine School Testing Program</th>
<th>Federal Lead Copper Rules</th>
</tr>
</thead>
<tbody>
<tr>
<td>• 1 sampling event</td>
<td>• Recurring sampling</td>
</tr>
<tr>
<td>• We pay for sample bottles, analysis, and shipping</td>
<td>• System pays all costs</td>
</tr>
<tr>
<td>• We pick the lab</td>
<td>• System chooses their own lab</td>
</tr>
<tr>
<td>• 250 mL sample volume</td>
<td>• 1 Liter sample volume</td>
</tr>
<tr>
<td>• Any site used for drinking or cooking</td>
<td>• Some sites not used even though they are used for drinking or cooking</td>
</tr>
</tbody>
</table>
Wait a second!

Won’t I need to test schools under the proposed federal LCRR?
Future Federal Sampling in Schools

<table>
<thead>
<tr>
<th>Current LCR</th>
<th>Proposed LCRR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Only schools that are also public water systems must test</td>
<td>Water utilities must test the schools and daycares they serve.</td>
</tr>
<tr>
<td></td>
<td>The water system will need to give them:</td>
</tr>
<tr>
<td></td>
<td>Their results</td>
</tr>
<tr>
<td></td>
<td>EPAs 3Ts guidance document to help them mitigate</td>
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<tr>
<td></td>
<td>Lead education materials</td>
</tr>
</tbody>
</table>

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How We Expect the Program to Run

INVENTORY → SAMPLE → PUBLIC NOTICE → REMEDIATE
Step 1 - Inventory

- Schools will document all taps in their buildings
- Which are used for drinking or cooking?
Step 2 - Sampling

• Order sample bottles from the lab that the state designates
• Collect water samples first thing in the morning
• Document samples using a Chain of Custody
• Ship samples to the lab
Step 3 – Results

• Schools will get results from the lab
• Schools must share results with faculty, students and parents
• The DWP will recommend it be shared with their water district
Step 4 – Remediation

• Collect additional samples to troubleshoot
• Plan and implement remediation efforts
• Confirm remediation was effective
• Create protocols for maintaining routine control measures
• Send completed/planned remediation efforts to the DWP
When Do We Start and Who Pays for It?

• Sampling will begin in the fall of 2020 (after final rule adoption)

• Some schools may be required to test earlier than others

• DWP plans to pay for all sample kits, analysis, and shipping

• DWP received a federal grant (WINN Act) to implement the program
  o Money will only cover the cost of samples and can only be used for samples
Can I Take Additional Samples?

• YES!

• The DWP will provide additional samples for:
  o Confirming lead levels
  o Locating the source - is it in the fixture or pipes?
  o Confirm remediation measures worked

• Will there be continual monitoring?
  • Unknown, current funding does not cover continual monitoring
Who will Conduct Sampling?

• Any individual who is familiar with “first-draw” sampling protocol
  o School staff
  o Utilities
  o Other drinking water professionals

• The DWP will provide training materials

• The school is ultimately responsible for ensuring the samples are correctly taken and documented
What if I Have Already Tested?

As a Public Water System

DWP Voluntary Testing

Independent Testing

Likely not accepted due to:
• Not every tap sampled
• Different volume bottles

Remember, final rules have not been accepted by the Legislature so final requirements are not known
Can the Sampling be Done in Stages?

• Yes
  Bottles can be mailed or dropped off to lab within 14 days of collection

• The labs add a chemical to preserve the sample

• Sampling won’t be done in summer or during long breaks
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What We Expect
Historic Voluntary School Sampling in Maine

< Detection Limit (33%)
Detection Limit to 5 ppb (47%)
5 to 10 ppb (10%)
10 to 15 ppb (4%)
>15 ppb (6%)

1,469 Samples Collected (Using 1 Liter Bottles)

Similar results were seen in Indiana and Chicago
What We Expect
State of Indiana (using 250 ml bottles)

Sample Collection

- **First draw**
  - Samples the fixture
  - 100%
- **30-second flush**
  - Samples the water serving the fixture
  - 90%
- **3-minute flush**
  - Samples the incoming water line to the school
  - 80%

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• Water Utilities May Want to Help the Schools They Serve:
  
  o Schools have never sampled water for ANYTHING before
  o Schools do not have a Designated Operator
  o Mistakes will definitely happen...hopefully small but possibly big
  o The public may not understand that lead is from the school’s internal plumbing and not your water system
• A home economics room has been unused for 2 years

• A lead sample from this room has a concentration of 9,000 ppb

• This water would not be consumed under normal-use-conditions
So, theoretically, it could have been leaching lead since 1956?
Legionnaires' disease bacteria found in Maine water district samples, state CDC says

Legionnaires' Disease Bacteria Found in Maine Water Samples
The Maine Center for Disease Control and Prevention says it has detected bacteria responsible for Legionnaires' disease samples from the Orono-Veazie Water District.

State identifies cluster of Legionnaires’ disease in Bangor area
Legionella and Good Press
Why is Helping a Good Idea?

• Allows a water utility to form a relationship with their schools
• Proposed Federal LCRR will likely require testing at your schools
• Use your expertise to prevent serious errors
• Less likely to have “false positives”
• Make schools safer for students
• Build a sense of community and trust
• Good press
Working to Get the Lead Out of Schools
October 24, 2017

This week is National Lead Poisoning Prevention week. Lead exposure can cause health problems in all people, but it's especially dangerous for young children, where it can cause behavioral problems, learning disabilities and other health issues. A new report released last week by the Health Impact Project includes several...
Questions?

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