

CHAPTER ELEVEN: OTHER LEGISLATION

Other Legislation	Small Water Works and Lead Testing
Revised:	Policy Number: 11.2 (replaces policy 1.58)

Safe Drinking Water Act, 2002

The Ontario Regulation 243/07 was created to provide a safeguard against the potential consumption of elevated levels of lead in drinking water at schools, private schools and day nurseries in Ontario. This Regulation ensures compliance with flushing, sampling and record keeping requirements. According to Health Canada, research shows that exposure to even small amounts of lead can be harmful to human health, especially for young children, infants and pregnant women. Long term chronic exposure to lead may increase the risk of subtle impairments to intellectual development. The flushing of plumbing has been shown to reduce lead levels in water at the tap. The Ontario drinking water quality standard for lead is 10 micrograms per litre. This drinking water quality standard is set out in o. Reg. 169.03 (the Ontario Drinking Water Quality Standards) made under the Safe Drinking Water Act, 2002. It is based on a national guideline set by Health Canada and reflects a prudent, protective estimate that takes children's health into consideration.

DETAILS

Child Care Centre: NORTH HASTINGS CHILDREN'S SERVICES
20 Hastings Heritage Way, Bancroft ON K0L 1C0
Identification: DWIS#: 500096461

Drinking Water Source:
Municipal Drinking Water System – Town of Bancroft Water Treatment Facility (220004796)

Lab Services: SGS CANADA INC. LAKEFIELD, ON (705)-652-6365

CO-LOCATED

York River School Age Program

DWIS#: 500282114

Drinking Water Source:
Municipal Drinking Water System – Town of Bancroft Water Treatment Facility (220004796)

Birds Creek School Age Program

DWIS#: 500427389

Drinking Water Source: Well

Maynooth School Age Program

DWIS#: 500122760

Drinking Water Source: Well

DEFINITIONS:

Drinking water fixture: For the purposes of this policy, this term means all drinking water fountains and every tap that provides drinking water or is used to prepare food or drink for children under the age of 18.

Operator: Child care centre operator - the person required to be licensed under s. 6 of the *Child Care and Early Years Act, 2014* to operate the child care centre. At NHCS this is the responsibility of the Executive Director or designate as instructed by the Board of Directors.

Ontario's drinking water quality standard for lead

The Ontario drinking water quality standard for lead is 10 micrograms per litre. You may also see this standard written as 10 µg/L or as 0.010 milligrams per litre. The lead standard is found in [Ontario Regulation 169/03](#), Ontario Drinking Water Quality Standards, made under the SDWA.

REQUIREMENTS:

A map of the building will be available identifying tap identifier number and “end of branch” plumbing.

All sinks will have the identifier number posted in an obvious location for easy identification of taps required to be flushed with all handwashing sinks having a “Handwashing only” sign posted in an obvious location. These signs are not to be removed.

An Appendix will be a part of this policy identifying;

1. Tap identifier numbers
2. Location of tap
3. If they are “end of line”
4. If they are for Handwashing or Drinking
5. The length the tap is to be flushed
6. The time of day requiring the flush
7. Person Responsible
8. The designate responsible should the person responsible not be available. This is the Supervisor on site responsibility to ensure this is completed as per policy.

Procedure:

- In the School Age Programs, the School Board will complete the water flushing and lead testing and will provide a copy of the testing annually.
- The Responsible Persons will conduct a weekly water flushing of our water system of the applicable tap(s) **between 7:15 AM and 7:30 AM every Monday (or Tuesday if long weekend).**
- **Should there** be an exceedance of the standard for lead then flushing must occur daily for the next 24 months.
- The Ministry requires that the cold water must be turned on for at least five minutes at the last tap on each branch or each run of pipe in the plumbing that serves a drinking water fountain or a tap that is commonly used to provide water for consumption by children under 18 years of age.

- Then, turn on the cold water for at least 10 seconds at every drinking water fountain and every tap that is commonly used to provide water for consumption by children under 18 years of age.
- RECORD the date, time and location of the completed flushing. Also record the name of the person who did the flushing or verified that any automatic flushing devices worked properly.

Additional Notes:

- Do not remove the aerator when flushing.
- If, for a given day or week, a part of the building will not be used to provide services or hold programs for children under 18, then flushing is not required in that part of the building.
- A written record of the date and time of every required flushing and the name of the person who performed the flushing is kept current. These records are kept on premise for two years and archived for a total of 6 years.
- If the most recent standing sample for a drinking water fixture is at or below 1 µg/L, no flushing of that drinking water fixture is required. The exception to this rule is for “end of branch” taps which will still need to be flushed. It is NHCS practise to still flush the drinking water fixtures regardless of the amount being at or below 1 µg/L.

Initial Flushing After Extended Vacancy

The ministry recommends flushing all “end of branches” (the last tap on each branch or run of pipe in the plumbing that serves a drinking water fixture) with cold water until it becomes noticeably colder in temperature to ensure that fresh water from the mains fills the plumbing before reopening the facility. Since most facilities have been closed for over two months, it is likely that the water in the plumbing has been sitting for a long time.

After the initial “end of branch” flush is complete, cold water must be turned on for at least 10 seconds at every drinking water fixture in the facility. This will ensure that the fresh water from the water main reaches drinking water fixtures that are used to provide water for consumption of any kind, including food or drink preparation.

Once this work is complete, the facility may return to its regular flushing schedule, whether daily or weekly, as required during normal operations.

PROCEDURE FOR ANNUAL WATER LEAD SAMPLING

When to take samples

Samples must be taken on any day beginning on May 1 and ending on October 31. Lead is more soluble at higher temperatures so during warmer months, a water supply may be more vulnerable to exceedances.

1. NHCS Child Care Coordinator will conduct the annual sampling required by O. Reg. 243/07 and Reg. 170/03 and transports the sample to SGS Canada Inc. to their environmental laboratories for analysis. Annually SGS is contacted and 2 sample bottles are couriered to NHCS.
2. Prior to the centre opening and ensuring that the plumbing has not been used for at least 6 hours, take the first (standing) sample. Turn on the cold water tap in the kitchen and fill to line on one-litre bottle. Document on bottle the time sample taken, identifier and STANDING SAMPLE.
3. Immediately after first sample is taken, flush the tap with cold water for at least five minutes.
4. Following the flushing, turn tap off and leave unused for at least 30 minutes and not more than 35 minutes. Leave all of the plumbing unused during this period.
5. Immediately after the 30-35 minute time period, take the second one-litre sample (flushed) of cold water from the same tap. Document on bottle the time sample taken, identifier and that it is the

FLUSHED SAMPLE.

6. When sending the two samples to the licensed laboratory, it is important to clearly identify the samples as follows:
 - a. Standing. The first sample taken after six or more hours when the plumbing is not used.
 - b. Flushed. The second sample taken after flushing the plumbing for a minimum of five minutes followed by 30-35 minutes when the plumbing is not used.
7. Record the date, time of sample, the estimated length of the period the plumbing was not used and the person conducting the sampling.
8. When completing the chain of custody form, include the unique identifier in the form's description or location field, and whether the fixture is a tap or fountain, if a filter is used, and the location.
9. Complete lab papers according to instructions and enclose ice pack with both bottles and paperwork in box. Contact courier for delivery. (Note SGS labs requires samples Monday through Thursday.) Record sampling.
10. An analysis certificate will be sent by mail with results. The results must be sent to the Executive Director immediately upon receipt.

Reporting of test results and corrective actions

O. Reg. 243/07 sets out when and with whom laboratory test results must be shared.

- Your licensed laboratory is required to send you all test results within 10 days. Laboratories will also send all test results to the ministry within this timeframe.
- If the test results are above the standard for lead or any other drinking water quality chemical standard set out in [Ontario Regulation 169/03](#) (Ontario Drinking Water Quality Standards), the laboratory must provide a written report on the exceedance within 24 hours of the laboratory's internal approval of the test result by personal delivery, fax or e-mail to:
 - the operator of the school, private school or child care centre;
 - the ministry's Spills Action Centre; and,
 - the local Medical Officer of Health.
- This written report will be sent in a form called a Notice of Lead Exceedance Test Results (LEN), which is completed in part by the licensed laboratory and in part by the operator of the facility.
- The operator of a facility who receives a LEN form from the laboratory is required to complete Section D-1 of the form as directed and to give a copy of it by personal delivery, fax or e-mail within 24 hours to:
 - the local Medical Officer of Health;
 - the ministry's Spills Action Centre;
 - the Ministry of Education, if a school or child care centre, and
 - every other co-located facility relying on the same set of samples.
- The operator must also take immediate corrective actions until the issue is resolved in accordance with the requirements of *O. Reg. 243/07* and/or as directed by the local Medical Officer of Health. Once corrective actions are taken and the issue is resolved, the operator of the

facility is required to submit a completed Section D-2: Issue Resolution on the LEN form within seven days after the resolution to:

- the local Medical Officer of Health;
- the ministry's Spills Action Centre;
- Ministry of Education, if a school or child care centre; and
- every other co-located facility relying on the same set of samples.

If you have an exceedance of the drinking water quality standard for lead, you can expect to be contacted by a Ministry of the Environment and Climate Change Water Inspector. This inspector will review whether you have met your regulatory obligation for corrective actions under *O. Reg. 243/07* including any actions directed by the local Medical Officer of Health if applicable.

If there is an exceedance of the drinking water quality standard for lead in the co-located school location, NHCS will complete the above reporting steps as required.

WHAT TO DO IF YOU GET A LEAD EXCEEDANCE IN “FLUSHED” SAMPLE

In cases where a “flushed” sample result shows an exceedance of the drinking water quality standard for lead of 10 micrograms per litre, the Chief Drinking Water Inspector; with the support of the Chief Medical Officer of Health, recommends the following steps be taken:

- Continue to flush your facility's plumbing daily.
- Follow any directions you may have received from your local Medical Officer of Health. These directions will likely include a request for you to carry out additional re-sampling from the same tap where the initial sample was taken.
- It is recommended that the operator: take two re-samples from the same tap where the initial sample was taken; on re-sample followed by second re-sample taken a minimum of seven days apart but within 30 days of the first one. Prior to taking either of these two re-samples, the operator should flush the facility's plumbing for a minimum of five minutes and then leave the plumbing unused for 30 minutes but not more than 35 minutes.

WHO TO CONTACT FOR MORE INFORMATION

If you have additional questions or would like further information about drinking water, please contact the Ministry's Public Information Centre at: 1-800-565-4923 or visit the Drinking Water Ontario website at www.ontario.ca/drinkingwater.