

## **SAFE DRINKING WATER POLICY**

Young children are more sensitive to the effects of lead because they are still developing and their small bodies can absorb it more easily than adults. Even small amounts of lead can be harmful to young children, infants and pregnant women.

The *Safe Drinking Water Act, 2002* is intended to protect human health and prevent drinking water health hazards through the control and regulation of drinking water systems and drinking water testing.

Casa Vera Montessori School's introduced the flushing water policy for teachers and all staff, which come in contact with the children and tap water in the school.

### **Flushing requirements**

**All drinking water fountains and taps** used to prepare food or drink or to provide drinking water for consumption by children will need to be **flushed for 10 seconds**. The frequency of flushing depends on the following:

**Daily flushing** is required on **every day** that child care centre is open if:

- all or part of the **plumbing was installed before January 1, 1990** and the facility **does not have lead test** results for the past **24 months**; or
- there was a **lead exceedance** in the past 24 months.

Daily flushing must be completed **before** the child care centre is open for the day.

**Weekly flushing** applies to a child care centre to which daily flushing does not apply.

**Flushing is not required** at a drinking water fountain and tap if:

- **the most recent standing sample** from that location is **at or below 1 µg/L**,  
or
- a test result since O. Reg. 243/07 first came into effect on June 7, 2007 from **a fountain or tap with a filter or other device** that is certified for lead reduction shows lead levels from a standing sample to be at or below 1 µg/L.

**Recording all flushing activities** (fountains, taps and pipes), in addition to logging the date, time and the name of the person who performed the flushing, facilities **will have to identify** the drinking water **fountains and taps** that are flushed.

### **Lead sampling requirements**

**Drinking water** fountains and taps are fountain and taps used **to prepare food or drink or to provide drinking water** for consumption by children

Fountains and taps that are **not used to prepare** food or drink or to **provide** drinking water for consumption by children **do not need** to be flushed or sampled for lead.

1. The samples must consist of **two one-litre samples of cold water** taken from the same tap or fountain.
2. If the **tap or fountain** from which the samples are to be taken **has an aerator**, the aerator **must not be removed** while the samples are being taken.
3. The samples must be taken from the **drinking water fountains and taps** that is used to prepare food or drink or to provide drinking water for consumption by children.

**The first sample** to be taken must be taken in accordance with the following rules:

- The sample must be taken **immediately** after a period of **six hours or more** when the plumbing is **not used**.
- The sample must be taken **immediately after** that period and **before** the plumbing is flushed.

**The second sample** to be taken must be taken in accordance with the following rules:

- The second sample must be taken **immediately** after the first sample.
- **Before** taking the second sample, the tap or fountain **must be turned on for at least five minutes**, and then **turned off and left unused** for a period of at least **30 but not more than 35 minutes**.
- The plumbing **must not be used** during the period of at least 30 but not more than 35 minutes that is referred.

**Each sample** must be taken during a **single continuous period** and must include the **first water** that comes out when the tap or fountain is turned on to take the sample.

**Each sample** must be taken with water flowing at a **rate** that approximates **normal use**, **without** permitting water to **splash out** of the container in which the sample is being collected.

**More than one container** may be used to take each of the samples, as long as **the time** taken to switch from one container to the next is **minimized**.

A record must be made of **the date and time** each sample was taken, an estimate of the length of the period, **the location** in the child care centre where the sample was taken and **the name of the person** who took the sample.

**Multiple set of samples** may be taken at one facility on the same day, if the first litres of all sets of water samples are taken before any of the second litres is taken from any set of samples

### **Reduced lead sampling**

If a childcare centre **has low lead results** and wishes **to reduce** its lead sampling **to once every three years**, it must meet the following requirements:

- **All** drinking water **fountains and every tap** used to prepare food or drink or to provide drinking water for consumption by children **must have been sampled** at least once **since** O. Reg. 243/07 first came into effect in **2007**;
- Test **results for a consecutive 24-month** period for the plumbing in the buildings that house the school or day nursery/childcare centre **must all be below** the Ontario Drinking Water Quality Standard for lead (**10 µg/L**); and
- **Notify the ministry** that these **conditions have been met**.

### **Reporting**

- Our licensed laboratory is **required** to send **us** 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 **childcare** centre
  - the ministry's **Spills Action Centre**
  - 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.
- If we **receive** a LEN form from the laboratory we are **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**
  - every other **co-located facility** relying on the **same** set of samples

- We **must** also **take** immediate **corrective** actions until the issue is **resolved** in accordance with the requirements of *Ontario Regulation 243/07* and/or as directed by the local medical officer of health.
- Once **corrective actions** are **taken** and the issue is **resolved**, we are 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**
  - every other **co-located** facility relying on the same set of samples
- If we **have** an **exceedance** of the drinking water quality standard for **lead**, we can expect to be **contacted** by a ministry **water inspector**. This **inspector** will **review** whether we have met **our regulatory obligation** for corrective actions under *Ontario Regulation 243/07* including any actions directed by the local medical officer of health if applicable.

Test data results from schools, private schools and child care centres are also posted on Ontario's **Open Data Catalogue** for the public's awareness.

### **Corrective action**

We must take **immediate corrective action** at any tap or fountain where a **lead exceedance has been found** from a flushed sample result at that location.

### **What to do if you get a lead exceedance in a standing sample**

- **follow** the directions in **the Reporting section** to report the **exceedance**
- **flush** the fixture **daily** for **24 months**
- **take** all steps directed by the local **medical officer** of health
- **consider** other options to **permanently** address the lead exceedance include such as installing a filter or replacing the fixture; this may also allow you to stop flushing daily

### **What to do if you get a lead exceedance in a flushed sample**

**Render** the drinking water fixture **inaccessible** until the issue is resolved. You must also:

- **follow** the directions in **the Reporting section** to report the **exceedance**
- **flush** all fixtures within the facility **daily** for **24 months**
- **take** all steps directed by the local **medical officer** of health
  - steps may include increased flushing time, resampling, replacing the fixture or installing a filter

- even if it is not required by the local medical officer of health, you should **consider** options to **permanently** address the lead exceedance, such as installing a filter or replacing the fixture

The issue **shall not be** considered resolved until:

- **Test results** from that drinking water fountain or tap show lead levels that **do not exceed** the standard for lead under O. Reg. 169/03 Ontario Drinking Water Quality Standards (**10 µg/L**); or
- A **filter or other device** that is certified for lead reduction is **installed** and **test results** show lead levels **at or below 1 µg/L** for that location; or
- **all steps** directed by the Medical Officer of Health have been **taken and completed**.

### **Exceedances in resamples**

In cases where a fixture continues to **exceed the standard for lead**, we will continue to carry out corrective actions until the issue is **considered** to be resolved under *O. Reg. 243/07*, including any steps directed by the local medical officer of health.

It is recommended that we:

- complete **an assessment** of the facility's plumbing to **determine** whether pipes, solder, fittings or drinking water fixtures could be **the source** of lead in drinking water. **Parts of** the drinking water **plumbing** system **may need** replacement.
- **develop** a longer-term remediation **action plan** under the advice of the local **medical officer** of health that can be shared with a ministry water inspector if requested

### **Information to be available to the public on site**

We ensure that the following information is **available** to the public during normal business hours and **without charge**:

- A copy of every **record** made within **the past two years** in relation to **flushing and sample** collection
- A copy of every **test result** for samples taken to complete testing of all fountains and drinking water taps and for any annual or reduced sampling conducted to comply with *Ontario Regulation 243/07* or an Order over the **past two years**
- A copy of every **test result** from a sample under the regulation indicating **an exceedance** of any standard prescribed by Schedule 2 of the Ontario

Drinking Water Quality Standards (*O. Reg. 169/03* made under the *Safe Drinking Water Act, 2002*) over the past two years

- **A copy of O. Reg. 243/07** (*Schools, Private Schools and Child Care Centres*)

## **Records**

We **ensure** that the following **original** documents and **other records** are kept for **at least six years**:

- **Every record** made in relation to **flushing and sample collection**
- **Every test result** for samples taken under the regulation, including a director's direction, or an order
- **Every test result** from a sample under the regulation indicating an **exceedance** of an Ontario Drinking Water Quality Standard
- **Every record** related to **filter** maintenance or replacement including the manufacturer's instructions
- **A copy** of every **director's direction** given under *O. Reg. 243/07* section 4, subsection 5 (2.2) and section 5.1

We are **responsible** for keeping **all records** related to the regulation and making the test results and records **available to the public**.

A provincial officer may, at any time, request a copy of a document or record required to be prepared and kept under *Ontario Regulation 243/07*. This may be done in person, by phone or by email during an inspection. If a Provincial Officer makes a **request** to see a document or record, we **must provide** this document or record within a specified timeframe.

## **Centre procedures**

We are using **only tap in the kitchen** to prepare food or drink or **to provide drinking water**.

Tap in **the toddler room is not** to be used to prepare food or drink or **to provide drinking water**

We are applying **weekly flushing** of the plumbing system and we have implemented required procedures:

1. Flushing procedure is undertaken at the beginning of the week (usually on Mondays) before the facility is open for the morning session. If Monday is public holiday, the flushing is undertaking on next working day.

2. The **cold** water tap in **preschool** washroom, **toddler** old washroom and **kitchen** (the last cold water tap on each branch) must be opened and allowed to run for at least 5 minute.
3. Following the 5 minute flush , all taps and drinking water fountains that are likely to be used for human consumption or food preparation must be flushed at least 10 seconds.

Morning staff, which open the school early morning is trained how to flash the water.

After flashing procedure the teacher makes the report in the " Water Flush Report Sheet". The " Water Flush Report Sheet" is in the logbook in the kitchen.

The water is tested annually, **between May 1 and October 31**. Our testing laboratory is:

The Maxxam Analytic Inc.,  
6740 Campobello Rd., Mississauga,  
ON, L5N 2L8  
Contact: Sean Conacher, tel: 905 817 5700 (ext: 5767)

We keep the record of flushing and testing water for inspection and for the public for period of 6 years.

All teachers read and review the policy every year.

### **Decision tree for lead testing sample results**

*We have received results from the lab.*

*Sample results are **adverse** (greater than the standard for lead), if a **flushed** or **standing** sample result is **greater than 10**:*

- *if **flushed** result is greater **than 10**:*
  - ***render** this drinking water fixture **inaccessible** until the issue is resolved*
  - ***flush** all drinking water fixtures **daily***
  - *take **corrective** actions, if any, as directed by local medical officer of health*
- *if **standing** result is greater **than 10**:*
  - ***flush** this drinking water fixture **daily***
  - *take **corrective** actions, if any, as directed by local medical officer of health*

***Possible corrective actions we may need to do:***

- **Increase flushing:** Resampling may be needed to ensure water from the drinking water fixture is below the standard
- **Install a NSF filter:** A resample after the installation of the filter will be necessary to confirm the filter is working properly and that the water from the drinking water fixture is at or below the standard
- **Replace fixture:** Useful if fixture is the source of the lead contamination
- **Permanently render fixture unusable:** An option of last resort if other solutions do not correct the problem

Sample results are **good** (at or below the standard for lead) if flushed or standing result is **at or below 10**:

- if **standing** and **flushed** results are **both at or below 10**, has this drinking water fixture received an **exceedance** in the **past 24 months**?
  - **if no, flush** this drinking water fixture **weekly**
  - **if yes, and**
    - if **exceedance** was in a **standing** sample, **flush this** drinking water fixture **daily**
    - if **exceedance** was in a **flushed** sample, **flush all** drinking water fixtures **daily**
- If **standing** result is **at or below 1**, this drinking water fixture is **exempted** from flushing

**Please note:** Where a facility has had a **flushed exceedances** within the past **24 months**, every fixture must be flushed **daily** with the **exception** of fixtures where the most recent 'standing' result was **at or below 1 µg/L** (this includes a fixture that has been replaced).