



Amendments to O. Reg. 243/07
& Year 1 in Review
A presentation for Stakeholders

**Ministry of the Environment and Climate Change
Safe Drinking Water Branch**

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Evolving Science

World Health Organization

<http://www.who.int/mediacentre/factsheets/fs379/en/>

“There is no known safe blood lead concentration...”

Centres for Disease Control and Prevention

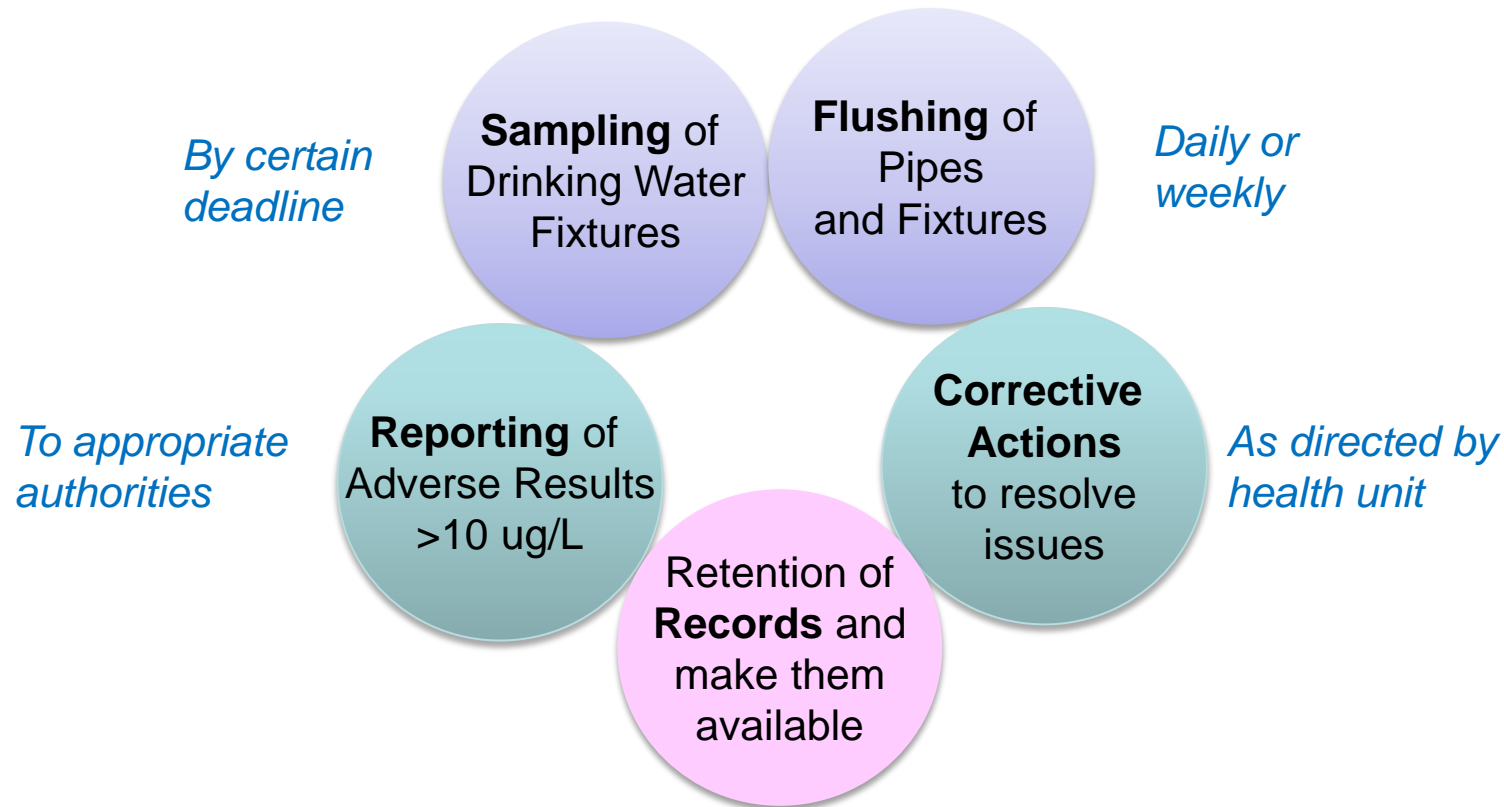
<http://www.cdc.gov/nceh/lead/>

“Lead exposure can affect nearly every system in the body.”

Background

- Since 2007, O. Reg. 243/07 has set the flushing and sampling of drinking water requirements for Schools, Private Schools and Child Care Centres*
- In support of these requirements, the ministry created and implemented:
 - a suite of education and outreach material, template records and
 - a self-reporting initiative

5 Pillars of Regulation



Sampling

The following new requirements apply to ALL facilities
(including those co-located within Schools)

- Ensure that samples are collected from every drinking water fixture* that has not yet been sampled under O. Reg. 243/07
- Multiple sets of samples can be collected at a facility on the same day
- New requirements to sample at all drinking water fixtures supersede existing reduced sampling schedules

***drinking water fixture** – a drinking water fountain or tap that is used to provide water for food prep or consumption

Timelines

Amendments came into effect July 1, 2017.

Sampling deadlines

- Child Care Centres and Schools in the 'Primary' Division are considered the priority and must have their sampling completed by Jan 1, 2020
 - Minimum of 1/3 of sampling in each 2017, 2018 & 2019
- All other Schools have an extended timeframe to complete their sampling – Jan 1, 2022

Flushing

Flushing of
Pipes
and Fixtures

Flushing is required at every facility, either daily or weekly depending on results.

Flushing would not be required* at certain fixtures if:

- the tap is not accessible to children
- The most recent 'standing' sample result was at or below one microgram per litre (1 µg/L)
- An NSF certified filter is installed at the fixture and a verification sample result was at or below 1 µg/L
 - records must be maintained to document the filters being changed

****At least weekly end-of-branch flushing would still be required***

Reporting

For all exceedances.

- Notification procedure to Ministry of Environment and Climate Change, Ministry of Education and Public Health Unit remains the same
- Facility operators are still required to follow all direction of their Public Health Unit
- The ministry is requesting that laboratories complete a Lead Exceedance Notification Form (LEN) for each individual fixture – **new LEN only allows one entry per form**

Corrective Actions

Corrective
Actions
to resolve
issues

For incidents where ONLY the standing sample result is in exceedance.

- Subsequent daily flushing requirement **applies only to the fixture where the sample was collected**
- The MOECC is recommending that the daily flushing requirement be extended to include any UN-SAMPLED drinking water fixtures in the facility
- Fixture must be flushed daily for at least 24 months

Corrective Actions

Corrective
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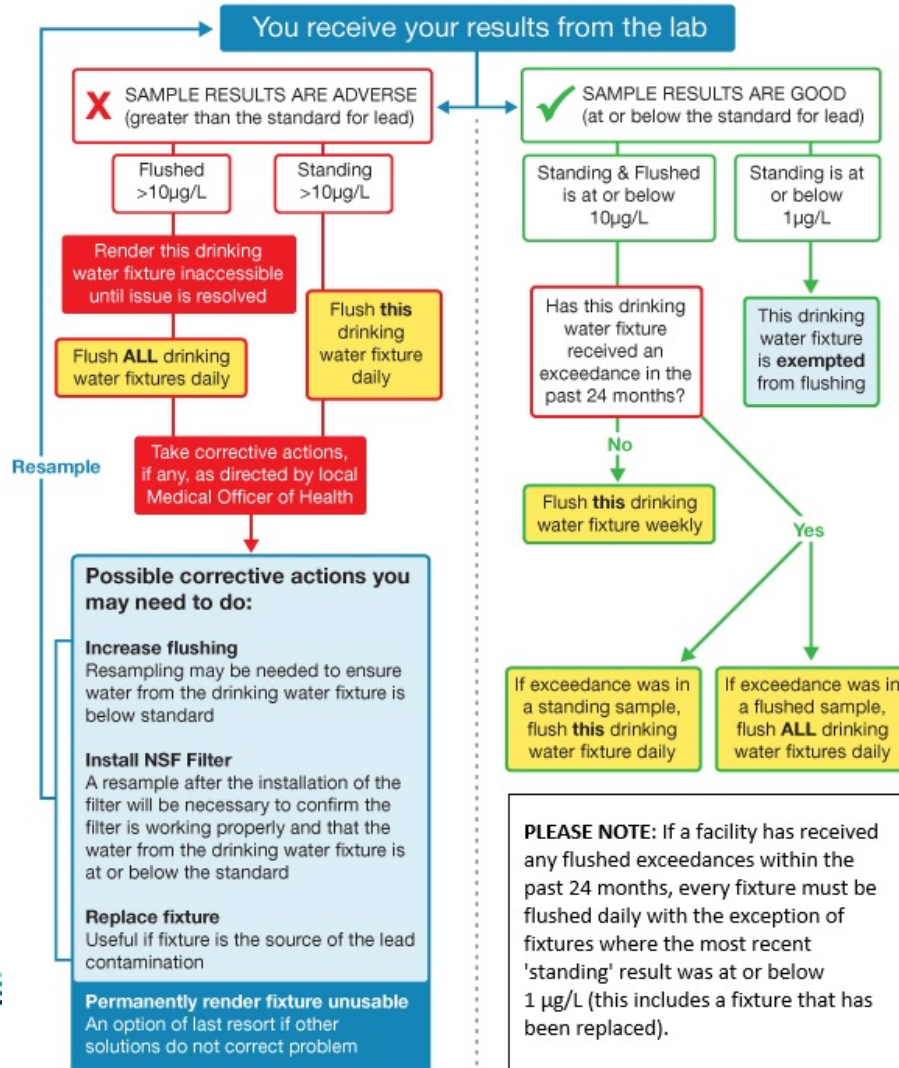
For incidents where the flushed sample result is in exceedance.

- **All DW fixtures in facility** must be flushed daily for at least 24 months, even if the fixture that had the exceedance is removed/replaced.
- The regulation requires the fixture to be rendered inaccessible as soon as exceedance has been identified.
- Based on the judgement of the PHU, the fixture can remain out of service until issue resolved

Corrective Actions

I got my lead test results back from the lab. Now what?

The following decision tree will help you know what actions you should take depending on the results of your lead testing sample results.



Possible Lead(Pb) Standard Change

- Health Canada has completed consultation on a change to the lead standard from 10 µg/L to 5 µg/L
- Typically, when the federal government changes a health standard, the provinces will follow shortly afterwards

So...How did the first year go?



Program Statistics



- Over 11,200 regulated R243 facilities
(As of Feb 22, 2018)
- Over 86,000 samples taken in 2017
 - compared to 144,000 in 2007 to 2016
- Over 3,000 LENs in 2017 alone
 - compared to 10,000 in 2007 to 2016

Drinking Water Fixture Inventories

- In August, Self-Reports were sent out to more than 6,000 child care centres and private schools
 - Self-Reports collected baseline information on the number of taps and fountains and how many have been sampled in each facility
 - **Over 4100 facilities participated**
- In November, inventory templates were sent out to all school boards to collect the same baseline info.
 - **Inventories were received from all 77 boards, representing over 4,900 schools**



ALMOST 2000 facilities have not yet submitted their inventory

Fixture Inventories

Asked 4 key questions:

- How many drinking water fountains?
- How many of them have been sampled?
- How many consumption taps?
- How many of them have been sampled?

Didn't get or complete a Self-Report or an Inventory?

Contact us:

R243LeadSelf-Report@ontario.ca

Communications



R243LeadSelf-Report@Ontario.ca

- Primary email contact for all things R243 related
- Used to distribute online Self-Reports and inventory templates
- Received over 600 inquiries since November 2017

R243 Hotline 1-855-515-1331

- Dedicated line for facilities, consultants, laboratories and PHUs
- Used in all outreach communications
- 100's of calls since July 2017 amendments

R243 Outreach – 2017

- Guides, Manuals and Posters were updated
- New template documents were developed
- Optional signage developed and made available
- Multiple webinars held in English and French
- Meeting with many school boards, health units and child care organizations
- Self-Report and inventories circulated to obtain data
- Hotline and dedicated email address created to assist the regulated community

R243 Outreach - 2018

Development of targeted action-specific ‘Fact Sheets’

FACT SHEET EXAMPLES
“My facility is eligible to apply for reduced sampling, what’s next?”
“I have opened a new child care facility, what’s next?”
“I need to test my drinking water fixtures for lead, what’s next?”
“My facility is co-located, what do I need to know about testing my drinking water fixtures for lead?”
“I have sampled all my drinking water fixtures once, what’s next?”
“What is a consumption point?”
“I have not completed my drinking water fixture inventory, what’s next?”
“I have a lead exceedance, what’s next?”
“My facility is eligible to apply for reduced sampling, what’s next?”

R243 Outreach - 2018

Fact Sheet shared with laboratories that will be included in your sample shuttle detailing:

- **Sampling, Chain of Custody and LEN* Best Practices** - A quick guide to help you ensure samples are submitted correctly and exceedances are properly resolved
- Includes information on **co-location** to ensure the use of correct DWIS number

* **Lead Exceedance Notification Form**

What's New?




Changes to Lead Exceedance Notification Form (LEN)

- New required field:
‘Fixture Identification Number/Description’
- Once completed in Part A it auto-populates throughout the form (‘smart’ form)
- Only single fixture results to be reported
 - ensures one AWQI number is assigned per fixture
- Lab completes section B, C and F
- New e-mail address dedicated to AWQIs/LENs

LEN – Updated Form Number

[Print Blank Form](#)



Ministry of the Environment and Climate Change

Notice of Lead Exceedance Test Results Schools, Private Schools and Child Care Centres (O. Reg. 243/07)

Fields marked with an asterisk (*) are mandatory.

Instructions

- Please print if completing by hand.
- Submit completed forms by fax or e-mail.
- Lab completes sections B, C and F.
- Facility operator completes section A, section D1 and section E and submits with sections B, C and F within 24 hours to the applicable agencies listed in section E. Facility operator also completes and submits section D2 upon Issue Resolution.

SAC Office Use Only

AWCI Number

Part A – Operator of Facility Verification and Consent

Picture Identification Number/Description*

Signature of Facility Operator * Date (yyyy/mm/dd)

Part B – Laboratory Information

Laboratory Name * Licence Number *

Unit/Suite Number Street Number * Street Name *

Rural Route Lot/Part/Block/Section Concession

City/Town/Municipality * Province * Postal Code *

Business Phone Number * Laboratory Withen Notification Prepared By *

Date of Exceedance O. Reg 243/07 Test Result Authorized (yyyy/mm/dd) * Date of Exceedance Notifications Submitted (yyyy/mm/dd) *

Signed By Signature

Part C – Facility Information

Name of School/Private School/Child Care Centre *

Legal Name of School/Private School/Child Care Centre Operator (i.e. School Board) *

Type *

School Private School Child Care Centre

DWS Number * Ministry of Education SPS Number/School Number Child Care Centre Licence Number

Unit/Suite Number Street Number * Street Name *

Rural Route Lot/Part/Block/Section Concession

City/Town/Municipality * Province Postal Code

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Unit/Suite Number	Street Number *	Street Name *
Rural Route		Lot/Part/Block/Section
City/Town/Municipality *		
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*Your lab should provide you with the latest version of the form

LEN – One Exceedance Reported

Part F - Drinking Water Exceedance Results						
Name of School/Private School/Child Care Centre						DWIS Number
Local Medical Officer of Health/Public Health Inspector Name *						
Telephone Number	ext.	Fax Number	Email Address			
For Lead Samples Only						
Lab Sample ID	Fixture Identification Number/Description	Sample Collection Date (yyyy/mm/dd)	Sample Type	Parameter Name	Test Result (µg/L)	Ontario Drinking Water Quality Standard
			Standing	Lead		10µg/L
			Flushed	Lead		10µg/L
Other Parameter Exceedances Under O. Regulation 242/07						

*One fixtures standing and flushed sample results per form. Further exceedances will be reported on additional forms.

LEN – Checklist for Corrective Actions (Part D1)

Corrective Actions Required by Health Unit

Corrective Actions	Required *	Comments
Continue Flushing (ensuring daily flushing of fixture for standing exceedances; and daily flushing of all fixtures for flushed exceedances)	<input type="checkbox"/> Yes <input type="checkbox"/> No	
Tap rendered inaccessible to Children (Specific to flushed exceedances)	<input type="checkbox"/> Yes <input type="checkbox"/> No	
Install Filter and collect samples	<input type="checkbox"/> Yes <input type="checkbox"/> No	
Replace Fixture and collect samples	<input type="checkbox"/> Yes <input type="checkbox"/> No	
Increase Flushing	<input type="checkbox"/> Yes <input type="checkbox"/> No	
Resample	<input type="checkbox"/> Yes <input type="checkbox"/> No	
Notified Parents	<input type="checkbox"/> Yes <input type="checkbox"/> No	

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Other Corrective Actions (If no actions required also indicate here)	
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Sample Results are attached/enclosed *

Yes No

Name of person completing this section *

Signature	Date Written Notification Submitted (yyyy/mm/dd) *
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LEN – Submission Email Addresses



Telephone Number *	ext.	Fax Number	Email Address
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If you are e-mailing this section, please enter "R243 Exceedance and name of your School/Private School/Child Care

Ministry of the Environment and Climate Change - Spills Action Centre

Telephone: 1-800-268-6060 (toll free) or 416-325-3000

Fax: 1-800-268-6062 (toll free) or 416-325-3011

Email: AWQI.Reporting@ontario.ca

Public schools submit exceedance results to **Ministry of Education.**

Fax: 416-325-4024

Public Schools contact: EDU_DrinkingWater@ontario.ca

Child Care Centres submit exceedance results to **Ministry of Education.**

Child Care Centres contact: childcare_ontario@ontario.ca

Frequently Asked Questions



What taps do I have to sample?

A: All 'drinking water fixtures'. A "drinking water fixture" refers to every drinking water fountain and every tap that is used to provide drinking water or to prepare food and/or drink for children under 18 years of age.



Can I count previous samples?

A: If a facility has the **appropriate sampling records** that show a specific location has been sampled under O. Reg. 243/07 already then that fixture can be counted as done.



Can I test everything this year?

A: Yes. There is no provision in the regulation that prevents facilities from sampling all applicable fixtures this year. For child care centres and any school in the 'primary division' (gr 3 or below) they have to sample at least 1/3 of their drinking water fixtures, that's a minimum, not a target.

How do I calculate 1/3 of my taps?

A: The requirement is 1/3 of the drinking water fixtures that do not have existing sampling records in each facility. The requirement is not for a school board to sample all of the taps in 1/3 of their schools. Each facility is measured separately, including the co-located child care centres within schools.

I have multi-outlet fixtures, 1 sample or 2?



**Each example
requires 2
samples.**

I was told that the sampling times don't matter when doing multiple samples at the same time?

A: To ensure accurate results, it is important that facilities collect all standing samples before any flushing takes place. Drinking water fixtures being sampled on the same day should not be too close to one another to ensure all samples collected are from water that has been standing in the plumbing.

The following can help determine whether two sampling locations are too close:

1 litre of water is contained in approximately 26 feet of ½ inch copper pipe or 12 feet of ¾ inch copper pipe.

What are the flushing requirements for a replaced fixture (standing adverse)?

A: Where a standing adverse is obtained but the flushed sample is below the standard, daily flushing applies to the fixture that generated that adverse result. If the operator chooses to replace with a new one, the replacement fixture still needs to be tested. The flushing regime (daily or weekly) would be based on the results from the newly installed fixture. If the test results are below the standard, weekly flushing would be expected. If at or below 1 ug/L, the new fixture would not need flushing.

What are the flushing requirements for a replaced fixture (flushed adverse)?

A: Flushing required would be as follows:

- As the facility has had a flushed exceedance within the previous 24 months, daily flushing is required
- End-of-pipe runs must be flushed daily for 5 min for 24 months following the exceedance
- Drinking water fixtures where most recent standing result is at or below 1 ug/L are exempt from flushing (this would include the replaced and resampled fixture)
- Untested drinking water fixtures, and any fixtures where the most recent standing result is between 1-10ug/L, must be flushed daily

What are the requirements for a Child Care Centre located in a school?

A: The regulation applies to operators of all child care centres. You are required to meet all the requirements of the amended regulation. The operator of the school within which you are located **MAY** offer to conduct your sampling and/or flushing but are not required to. Have this discussion with them.

How should a Chain of Custody form be completed in a co-located scenario?

- Facilities should have a conversation with the school or child care centre they are co-located with about which taps and fountains 'belong' to which facility.
- Samples **MUST** be submitted to the licensed laboratory using the correct DWIS number. (if the samples have been collected from a tap in the co-located child care centre, ensure it is the child care centre's DWIS number on the chain of custody form **NOT** the school's)

I am a co-located facility, when can I share samples again?

A: Sample sharing is only available to facilities that are co-located when BOTH parties are completed their mandatory sampling.

This is detailed in subsection 5(2)5.3i of the regulation

Is the MOECC signage mandatory?

A: 2 types of signs have been developed, printed and laminated by MOECC. They are available for facilities to order through Publications Ontario.

Neither are mandatory, there are no expectations on type or frequency of usage, the facilities are free to use them as a resource as they deem necessary.

Optional Signage



What does minimum level of corrective actions mean?

A: It means making the fixture that produced the flushed exceedance inaccessible to children until the lead issue at the fixture has been resolved. This is required in all situations, unless the facility is instructed by the Public Health Unit that they can continue to use the fixture for handwashing/sanitation purposes if necessary.

Reduced Lead Sampling

You can reduce your annual lead sampling frequency to once every three years if:

- your two most recent years of test results for lead, from both standing and flushed samples, do not exceed the drinking water standard for lead;
- all of the drinking water fixtures throughout the facility have been sampled at least once since June 7, 2007; and
- a [Notice of Reduced Lead Sampling](#) form has been submitted to the ministry.

If you are currently on a reduced sampling schedule and have already sampled all of your facility's drinking water fixtures then the reduced sampling schedule remains valid.

ANY
QUESTIONS
?