



## **New Lead Testing Regulations Apply to Buildings**

The Ministry of the Environment (MOE) has introduced an amendment in Regulation O.R 170/03 effective July 26, 2007 to have community-wide lead testing commencing December 15, 2007 and repeated every 6 months. This amendment makes it mandatory for municipalities to:

- 1) regularly sample and test for lead at a specified number of taps within homes and other facilities,
- 2) notify the home and facility occupants of the results from their taps, and,
- 3) take corrective action in municipally owned systems with elevated lead levels, if any.

There are two sampling periods proposed under the amended Regulation i.e. every 6 months covering winter and summer seasons. The first 6-month period is between December 15, 2007 and April 15, 2008 and the second 6-month period starts between June 15, 2008 and October 2008. Loyalist Township is required to conduct community-wide lead sampling, based on population during a year, for both the systems as:

- Fairfield Water Distribution System (Amherstview, Odessa, Hwy. 33/Bath Road): 80 single family dwellings, 8 non-residential buildings, and 16 distribution system samples (as close as possible to the residential sampling sites).

-Bath Water Distribution System: 40 single-family dwellings, 4 non-residential buildings, and 8 distribution system samples (as close as possible to the residential sampling sites).

## **How Will Residents be Involved?**

The Township will be selecting multiple locations for sampling. The sampling requirements require one of our certified operators to enter your home or business. Our staff have photo identification.

Sampling protocol for plumbing is most tedious and time consuming, as three samples at one property are to be collected when the tap is turned on for 5 minutes and then turned off for 30 minutes. The first two samples so collected, after 30 minutes off time, are tested for lead and the third one for pH. During this time, the resident cannot use their taps, etc. The MOE sampling protocol requires samples to be taken at your kitchen tap.

Within 7 days of receipt of lab results, staff has to share test result information with the owner of the property. If the report indicates an exceedence of lead concentration, then staff has to inform the Health Unit as well; whereas the accredited lab shall notify the MOE Spill Action Centre (SAC), owner of the building and the Kingston Frontenac Lennox & Addington Health Unit (KFLA) instantaneously. Corrective action would be as directed by the KFLA Health Unit.

## **Background Information on Lead and Testing Program**

The new regulations provide a protocol for sampling with the intent of obtaining the majority of samples in areas where higher concentrations of lead may be apparent. Buildings constructed prior to the mid 1980's will have copper pipes with solder containing lead. Lead solder was not used after the mid 1980's. Most of the homes built in the last 5 years within the Township do not have any copper pipes.

The Township believes that our distribution system does not have lead water mains or lead services. Residents may expect very low-level lead concentrations due to the use of lead used in solder for copper pipes until the mid-1980's. Lead in drinking water may be from multiple sources, such as background natural levels and residential plumbing.

The maximum acceptable concentration for lead in drinking water is 0.010 mg/L (10 parts per billion). This applies to water at the point of consumption since lead is only present as a result of corrosion of lead solder, lead containing brass fittings or lead pipes which are found close to or in domestic plumbing and the service connection to buildings. Lead ingestion should be avoided, particularly by pregnant women and young children, who are most susceptible. It is recommended that only the cold water supply be used for drinking/consumption and only after five minutes of flushing to rid the system of standing water. This ensures that only fresh water is being consumed as opposed to water, which may have resided in plumbing for several hours.

If less than 10% of the samples exceed 0.005 mg/l (half of the prescribed limit) and no sample exceeds 0.010 mg/l limit for the consecutive two years covering two summers and winter seasons, then the Township will be allowed to reduce the number of sampling sites by half in the third year, but the frequency and protocol will remain the same. This reduction may cease, if during any period more than 10% of the samples exceed half of the permissible limit or any sample exceeds the permissible limit i.e. 0.010 mg/l. (Note: 0.001 mg/l is equivalent to one part per billion).

## **Next Steps**

Very shortly, Township staff shall be arranging appointments for lead testing with residents and businesses. To make the community-wide lead testing successful, Township staff will need to have your cooperation. For further clarification, you may contact Manager Utilities at (613) 386-7351 Ext-108, [utilities@loyalist.ca](mailto:utilities@loyalist.ca).

If you would like to have your home sampled, please advise the undersigned and staff will attempt to prioritize your address.

Saeed Ahmed, P.Eng.  
Manager Utilities