

The Municipality Of Port Hope Water Department Quarterly Report

January 1/03 – March 31/03

The Corporation of the Municipality of Port Hope's Water Department is pleased to present to its citizens our Quarterly Report. Ontario's Drinking Water Protection Regulation (reg. 459/00) requires that we publish this report for your information. This report can be obtained from the Water Treatment Plant, The Public Works Office and at the Municipality of Port Hope's Administrative Office or by viewing it on our website at www.porthope.ca, click on the Waterworks menu. Here you will find the water quality data and other information that we are required to collect for the period of January 1/03 through March 31/03.

Our Compliance Report is available for viewing by the public. This report includes information from January 1, 2002 to December 31, 2002. This report may be viewed at the Water Treatment Plant, The Public Works Office and at the Municipality of Port Hope's Administrative Office and will include information such as:

- I)** Details of non-compliance and how and when it was corrected
- II)** A summary of the water supplied compared to the rated capacity specified in our Certificate of Approval, including monthly average and maximum daily flows
- III)** Summary of records related to flow rate exceedances, and a summary of analytical results as stated in our Certificate of Approval
- IV)** A summary of chemical usage, average dosage rates and any abnormal usages
- V)** A statement of compliance required by our Certificate of Approval and a detailed description of the measures taken to ensure compliance.

We are part of the Public Works Department for the Municipality of Port Hope, their office is located at 43 Augusta St. in Port Hope.

Please direct all billing inquiries by visiting or phoning the Finance Department. The Finance Department is located on the main floor of the Municipalities administrative hall at 56 Queen St. in Port Hope; their phone number is (905) 885-4544.

If you have a question about the water distribution system in the community of Port Hope please contact the Public Works Department at 885-2431 or the Water Distribution Superintendent at 885-7461.

If you have a question about this report or your water quality please call our Treatment Plant at 885-2209 to speak with the Operator on duty or the Water Treatment Supervisor.

All of our Treatment Plant and Distribution system Operators are licensed by the Ministry of the Environment and are members of the Ontario Waterworks Association, a section of the American Waterworks Association.

Our Water Treatment Plant is located on Marsh St. at the intersection of Choate St. (west of Cameco Corp.).

The Port Hope Waterworks Commission was established in 1896 with the Commission being changed to the Water Department for the new Municipality of Port Hope and Hope on January 1, 2001. On August 9, 2001, the Town of Port Hope and Hope received approval from the Ministry of Municipal Affairs to change our name to The Corporation of the Municipality of Port Hope.

The first formal pumping station was built at the base of Smith St. Many changes over the years have improved water quality and distribution, from infiltration wells to slow sand filtration and finally with what we use today, dual media rapid sand filters.

Chlorine (pre chlorine) is used to disinfect the water as it enters our treatment process. Before we pump the water into the distribution system we add more chlorine (post chlorine) to aid us in maintaining a chlorine residual in the distribution system.

Before filtration we use aluminium sulphate as a coagulant (to help settle out suspended particulate matter). Aluminium sulphate attracts suspended particulate matter to it and creates a larger particle, this larger particle will then settle out in the settling chambers before it enters the Filters. Any particulate matter remaining is trapped in the filters.

We do not add Fluoride to the water, any Fluoride in the Treated Water is naturally occurring.

Because of the Towns hilly terrain, we have other pumping stations located on the West Side of the municipality. They are required to help maintain adequate pressure in the distribution system, they include a reservoir that can hold up to 500,000 gallons, a booster pumping station, and a standpipe that can hold up to 243,000 gallons.

**The Municipality of Port Hope Water Department Quarterly Report Parameters
January 1/03 - March 31/03**

Microbiological Parameters	MAC or IMAC	# of Samples	# of Detectable Results	Sampling Date	Range	Exceedence?	Typical Source of Contaminant
Total Coliforms (counts/ 100ml)	*	83	1	07/01/03-25/03/03	N/A	NO	Indicates possible presence of fecal matter.
Escherichia Coli (counts/ 100ml) <small>* Indicator of adverse water quality if detected in treated water.</small>	*	83	0	07/01/03-25/03/03	N/A	NO	Definite indicator of fecal contamination.
Background Colonies	>200 CFU/100ml	83	0	07/01/03-25/03/03	N/A	NO	
Parameters Related to Microbiological Quality	MAC or IMAC	# of Samples	# of Detectable Results	Sampling Date	Range	Exceedence?	Typical Source of Contaminant
Turbidity (NTU)	1 NTU	Continuous	Continuous	01/01/03-31/03/03	.020 - .240 ntu	NO	Indicates presence of particles in water.
Free Chlorine-Plant (MG/L)	.05 mg/L	Continuous	Continuous	01/01/03-31/03/03	.57 - 1.0 mg/L	NO	See below
Free Chlorine-System (mg/L)	.05 mg/L	83	83	07/01/03-25/03/03	.15 - .77 mg/L	NO	Recommended level of at least 0.2 mg/l in system to maintain microbiological quality in system.
<u>Inorganic Parameters</u>							
Floride (mg/L)	1.0 mg/L	1	1	26/08/03	0.07 mg/L	NO	Naturally Occuring
Nitrate (mg/L)	10.0 mg/L	1	1	19/11/03	0.411 mg/L	NO	Natural component of water at this level.

Nitrites as N (mg/L)	1.0 mg/L	1	1	19/11/02	0.011 <MDL	NO	this level.
<u>Volatile Organics</u>							

* THM MAC is based on a running annual average of four quarterly samples. This value is the avg. of the most recent four detects.

Trihalomethanes (mg/l)	100 ug/L	4	4	Oct.22, Nov. 5/02 Jan 14, Feb 18/03	18.75 ug/L	NO	Byproduct of chlorination.
<u>Pesticides and PCB's</u>							
		57	0	18/02/03		NO	

* See the exceedances section of this report for details

Terms Used

OG= Operational Guideline

AO = Aesthetic Objective

mg/L=milligrams per litre (parts per million)

ug/L=micrograms per litre (parts per billion)

<MDL = less than Method Detectable Limit

MAC = Maximum Acceptable Concentration

IMAC= Interm Maximum Acceptable Concentration

TCU= True Colour Units

NTU = Nephelometric Turbidity Unit

C = Celcius

RDW = Raw Drinking water

TDW = Treated Drinking Water

DDW = Distribution Drinking Water

UIS = Unreliable: Interference Suspected

Low level interference is present in the sample, thus, results cannot accurately and confidently be reported at the method detection level. However, Lakefield Research Limited is confident that the compound is not present in the sample at a concentration greater than the result stated.