Ontario Clean Water Agency
Agence Ontarienne Des Eaux

Amherstburg Water Treatment Plant

Quarterly Report

Operated by the Ontario Clean Water Agency (OCWA)
under contract to the Town of Amherstburg
For the period ending: December 31, 2002

Introduction

This report is a summary of the last quarter's water quality, published in accordance with Ontario's Drinking Water Protection Regulation. It includes important information regarding the source of your water, analytical test results, and how it compares to standards set by the Province. If you have any questions regarding this report, please contact our Client Services Representative listed in section 3 below.

During this quarter, the Ontario Clean Water Agency (OCWA) conducted more than 96 bacteriological tests for water quality parameters. Of those tests, 1 sample was found to exceed the Ontario Drinking Water Standards as set out in Ontario Regulation 459/00 for Background Coliform. As a result, we actively undertook the following remedial actions of re-sampling flushing and an increase in distribution chlorine residual.

Compliance With Provincial Regulations

OCWA operates your water facility in accordance with provincial regulations. Here is how we do it:

- Use of Accredited Labs: Analytical tests to monitor your water quality are conducted by a laboratory audited by the Canadian Association for Environmental Analytical Laboratories (CAEAL) and accredited by the Standards Council of Canada (SCC). Accreditation ensures that the laboratory has acceptable laboratory protocols and test methods in place. It also requires the laboratory to provide evidence and assurances of the proficiency of the analysts performing the test methods.

- Operation by Licensed Operators: Your water treatment plant is operated and maintained by the OCWA's competent and licensed staff. The mandatory licensing program for operators of drinking water facilities in Ontario is regulated under the Ontario Water Resources Act (OWRA) Regulation 435/93. Licensing means that an individual meets the education and experience requirements and has successfully passed the certificate exam.

- Sampling and Analytical Requirements: OCWA follows a sampling and analysis schedule required by OWRA Regulation 459/00, the Ontario drinking Water Standards. More information on sampling and analysis including results are available in this report and from your municipal office.

- Adherence to Ministry Guidelines and Procedures: To ensure the protection of the public health and operational excellence, the OCWA adheres to the guidelines and procedures developed by the Ministry of Environment and the Ministry of Health.

System Information

Facility Name:	Amherstburg Water Treatment Plant
Total Design Capacity:	18.184 (1000 m3/day)
Raw Water Source:	Detroit River
Disinfection Method:	Chlorine (gaseous)
Municipal Location:	Town of Amherstburg
Service Area:	Central/Western Area
Service Population:	20,599
Client Services:	Anthony Pizans
Phone Number:	519-344-7420
E-mail Address:	apizans@ocwa.com
(A)Operations Manager:	Chuck Fiddy
Phone Number:	519-736-5447
E-mail Address:	cfiddy@ocwa.com

Operational Description

Pretreatment Chemicals:	Prechlorination (gaseous), Zebra mussel control
Coagulation/Flocculation:	Aluminum sulphate, Poly electrolytes
Filtration:	Anthracite, Dual Media
Disinfection Method:	Chlorine (gaseous)
Post Treatment Chemical Addition:	Fluoride, Chlorine (gas), Powdered Activated Carbon
Waste effluent/residual Disposal:	Direct to water course

Analytical Test Results

Micro biological Parameters	October	November	December	Quarter Summary	MAC / IMAC
Total Coliform					
counts/100mls	0	0	0	0	0
Number of Samples	40	32	24	96	
Number of Detectable Results	0	0	0	0	
Min / Max					
Exceedences					
Fecal Coliform					
counts/100mls	0	0	0	0	0
Number of Samples	40	32	24	96	
Number of Detectable Results	0	0	0	0	
Min / Max					
Exceedences					
Heterotrophic Plate Count					
Number of Samples	15	12	9	36	
Min / Max	0/64	0/4	0/3	0/64	500 Max
Exceedences	0	0	0	0	
Chlorine Residual					
Min.Chlorine residual	0.1	0.42	0.36	0.1	0.05
Exceedences	0	0	0	0	
Turbidity					
Number of Samples	186	180	186	552	
Min/Max	0.01/0.04	0.01/0.03	0.02/0.07	0.01/0.07	
Exceedences	0	0	0	0	

Discussion of Analytical Results

Continuous on line monitoring equipment is in place for turbidity and chlorine residuals.
On October 24th. we received a sample with a high background count of >2500. That was followed up with 3 special samples collected upstream down stream and at the original sample location for consecutive three days. All special sample results were negative. No follow-up action was determined necessary.

Availability of Analytical Test Results

The certificate of approval from the Ministry of the Environment, and Regulation 459/00 set out monitoring requirements for your water. The tables above summarize all the results required for inclusion in quarterly reports. Your water is extensively tested for the presence of dozens of compounds. Some compounds, not listed above, may be present in low concentrations and their presence does not necessarily mean that the water poses a health risk. Results of all analytical tests are available through your municipal office.

A requirement of the facility Certificate of Approval (Cof A) is a Compliance Report which must be completed and made available not later than March 31. Upon completion, this report will be located at the Municipal Office were it can be inspected.

Definitions and Abbreviations

- **MAC** - Maximum Acceptable Concentration.
- **IMAC** - Interim Maximum Acceptable Concentration.
- **Coliform Bacteria** - a group of commonly occurring rod shaped bacteria. Their presence in a water sample is indicative of inadequate filtration and/or disinfection.
- **Fecal Coliform Bacteria** - refers to a subgroup of coliform bacteria present in the digestive system of warm blooded animals and humans.
- **Heterotrophic Plate Count** - a method of measuring bacterial content in water samples. Also known as Standard Plate Count.
- **Organic Parameter** - a group of chemical compounds containing carbon.
- **Inorganic Parameter** - a group of chemical compounds not containing carbon.
- **Raw Water** - Surface or ground water available as a source of drinking water that has not received any treatment.