

Director of Operations

January 26, 2006

The Mayor and Members of Council
Municipal Offices
45 Hillside Drive North
Elliot Lake, Ontario
P5A 1X5

ATTENTION: Mayor and Member of Council

Your Worship Mayor Farkouh and Members of Council:

**RE: ELLIOT LAKE WATER TREATMENT PLANT
SUMMARY REPORT FOR MUNICIPALITIES
Municipal: Large Residential**

Please find attached the 2005 Summary Report for the Elliot Lake Water Treatment Plant. This report has been prepared in accordance to the guidelines set out in Schedule 22 of the Safe Drinking Water Act, 2002 (Ontario Regulation 170/03).

As per the regulation, this report is for the period from January 1, 2005 to December 31, 2005.

Any questions or concerns should be directed to the undersigned.

Yours truly,

R. deBortoli
Director of Operations

RD:jc

ELLIOT LAKE WATER TREATMENT PLANT

Compliance Report

Section 18 of the Safe Drinking Water Act requires the system operator to report adverse test results immediately after the result is obtained. An adverse test result constitutes a parameter failing to meet, at a minimum, the requirements of the prescribed drinking water standards established for that parameter, under the Ontario Drinking Water Standards. Adverse test results must be identified in the Summary Report.

There were not any incidents of adverse test results during 2005.

The water supply to the North Industrial Area was interrupted, in November (1-4), as a result of a water main break. A large portion of the main that supplies water to the North Industrial Area lies on the bottom of Elliot Lake. The break occurred at a point where the main is submerged.

Corrective Action: A boil water advisory was issued (November 2-15) for the North Industrial Area. The main was repaired, super-chlorinated, flushed and sampled. Sample results were negative with respect to the presence of microbiological organisms and as a result the boil water advisory was lifted.

The Ministry of the Environment carried out a plant inspection on August 30, 2005. The water systems (treatment and distribution) were found to be non-compliant with regulatory requirements in two areas.

1. All microbiological water quality monitoring required by the legislation was not being conducted. The operating authority must ensure that weekly treated drinking water samples include an analysis of general background bacteria population expressed as a colony counts or as colony counts on a heterotrophic plate count. **Corrective Action: the bacti-sampling program has been modified to comply with the microbiological sampling and testing provisions outlined in schedule 10 of Regulation 170/03 and the sampling program is now in compliance.**
2. The distribution system was not being operated/overseen by an individual having the appropriate certification (class 3) for the system. **Corrective Action: this problem had been identified and corrective action implemented prior to the MOE inspection. At the time of the inspection an offer of employment had been made to an individual with a class 2 license (one below the rating of the distribution system). Since that time the City has applied for and received a Conditional Certificate for the distribution system and now is in compliance with the regulatory requirements.**

Terms and Conditions of Certificate of Approval

Performance: The Elliot Lake Water Treatment Plant meets the requirement of the Ontario “Drinking Water Standards.” Disinfection of treated water is achieved as per Ministry Procedure B13-3. Backwash/wastewater effluent discharge suspended solids are below the 25 mg/l annual average.

Monitoring and Recording: Flow meters, chlorine analyzers and turbidimeters are calibrated per manufacturer’s specifications and certificates are provided where necessary.

Operations and Maintenance: Maintenance of the water treatment plant is conducted and controlled through a preventive maintenance program. All operators are certified with at least one operator certified at the designated level of the facility. All treatment chemicals meet A.W.W.A. (American Water Works Association) quality criteria for drinking water. The following are the chemicals used and dosage rates:

Chemical	Approx. Dosage
Hydrated Lime	15 mg/l
Hydrofluosilicic Acid	3.5 mg/l
Chlorine	1.8 mg/l
Polyhydroxyaluminum Chloride	7.0 mg/l

Contingency plans with regard to emergencies, upset conditions and breakdowns are posted in the operator control room and contained in the Plant Operations Manual. Detailed drawings of the facility are centrally located in the Operator’s Control Room.

ELLIOT LAKE WATER TREATMENT PLANT

2005 MONTHLY FLOWS

MONTH	MINIMUM FLOW/DAY (cu m)	MAXIMUM FLOW/DAY (cu m)	AVERAGE FLOW/DAY (cu m)	TOTAL FLOW (cu m)	INSTANTANEOUS PEAK FLOW (cu m)
JANUARY	7,415	8,986	8,163	262,617	20,207
FEBRUARY	7,432	8,563	7,996	232,826	20,086
MARCH	6,682	8,834	7,839	252,198	16,374
APRIL	7,128	9,464	7,968	247,898	19,858
MAY	7,130	11,615	8,611	275,841	16,186
JUNE	7,642	14,007	10,639	257,710	21,019
JULY	8,178	15,898	11,954	383,237	26,242
AUGUST	6,797	12,245	8,870	284,348	20,462
SEPTEMBER	7,192	10,396	8,962	269,289	15,984
OCTOBER	6,833	8,064	7,534	257,710	15,877
NOVEMBER	6,353	9,144	7,227	224,460	18,287
DECEMBER	6,524	9,520	8,301	265,029	22,335
TOTAL				3,213,163	
NOTE: The maximum rated capacity of 28,400 cu m/day as specified in the facility's Certificated of Approval was not exceeded for the period of this report.					