Director of Operations

February 3, 2009

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 Hamilton and Members of Council:

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

Please find attached the 2008 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, 2008 to December 31, 2008.

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 5 instances in 2008 when reports were made to the Spills Action Centre in accordance with Section 18 of the Safe Drinking Water Act.

Incident Date	Parameter	Result	Unit of Measure	Corrective Action
Sept. 1	**Boil Water Advisory**	**N/A**		**Repair water main**
Sept. 24	**Lead**	**25.1**	**ug/L**	**resample**
Oct. 8	**Low Chlorine**	**<0.05**	**mg/L**	**Increase Cl_2/flush**
Oct. 15	**Lead**	**24.3**	**ug/L**	**resample**
Oct. 15	**Lead**	**11.7**	**ug/L**	**resample**

Corrective Action:

Please refer to the table above.

MOE Inspection:

The Ministry of the Environment carried out a plant inspection on October 8, 2008. The following actions were required as a result of the inspection.

1. A standard operating procedure was requested for monitoring chlorine residuals within the distribution system during the annual flushing of the system-*complete.*

2. A standard operating procedure was requested for monitoring chlorine residuals within the distribution system during periods when the lime system at the water treatment plant may be out of service for periods of time in excess of 24 hours- *complete*.

3. The distribution system log book did not list the overall responsible operator (ORO) or the operator in charge (OIC) for the times that work was being performed within the system – *ORO and OIC information is now being recorded in the distribution system logbook.*

4. There was a concern regarding the municipality's ability to meet its requirements under Section 23 of O. Reg. 128/04 in the event that the designated ORO was unavailable. In order to be designated as ORO an individual must hold a system license equivalent to the classification of the system. – *Since the time of the inspection an extensive review of the distribution system classification was undertaken. Through discussions with other municipalities it became evident that our distribution system was ranked too high and that the classification exceeded the complexity of the system. An application was made to the OETC to review the system and make a determination as to the classification of the system. The review resulted in the distribution system being reclassified to a level 1 system. The municipality can now meet requirements of section 23 should the designated ORO be unable to act in that capacity.*

5. An order was issued regarding the drinking water system's ability to retain data for a two year period and that this data could be called upon at any time to observe parameter trending i.e. the ability to determine the chlorine residual in the treated water over the operating period of the plant. – *A report (attached) has been presented to council and council has approved funding to upgrade the existing SCADA system at the water treatment plant.*

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	23 mg/l
Hydrofluosilicic Acid	3.2 mg/l
Chlorine	2.15 mg/l
Polyhydroxyaluminum Chloride	28.67 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 Process Control Room.

ELLIOT LAKE WATER TREATMENT PLANT

2008 MONTHLY FLOWS

MONTH	MINIMUM FLOW/DAY (m^3)	MAXIMUM FLOW/DAY (m^3)	AVERAGE FLOW/DAY (m^3)	TOTAL FLOW (m^3)	INSTANTANEOUS PEAK FLOW (m^3)
JANUARY	6,090	7,704	6,914	222,718	16,112
FEBRUARY	6,756	9,186	7,569	228,703	16,233
MARCH	7,647	10,065	8,803	284,494	23,362
APRIL	6,095	9,834	7,947	248,122	16,098
MAY	6,324	8,245	7,112	229,539	15,555
JUNE	6,262	8,887	7,101	223,680	15,695
JULY	6,637	10,936	8,157	264,041	18,649
AUGUST	6,484	10,880	8,535	280,251	22,402
SEPTEMBER	6,024	11,784	7,175	230,408	23,684
OCTOBER	5,715	6,916	6,342	206,958	17,045
NOVEMBER	5,392	6,630	6,296	197,884	16,904
DECEMBER	5,278	7,954	7,129	233,400	15,682
TOTAL				2,850,198	

NOTE: The maximum rated capacity of 28,400 m^3/day as specified in the facility's Certificate of Approval was not exceeded for the period of this report.