

Acting Director of Operations

February 1st, 2005

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 2004 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 1st, 2004 to December 31st, 2004.

Any questions or concerns should be directed to the undersigned.

Yours truly,

R. deBortoli
Acting 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 five separate incidents of adverse test results during 2004. Each adverse result involved the heterotrophic plate count exceeding 500 colony-forming units (CFU) per milliliter. Heterotrophic plate count is a means of determining the number of live heterotrophic bacteria in a water sample.

Corrective Action: Section 17 of Ontario Reg. 170/03 identifies the first step in the corrective measures to be taken in respect of the general bacteria population expressed as colony counts on a heterotrophic plate count to be immediate resample and test. This action was carried out (along with water main flushing in the first two cases) with respect to each of the five separate adverse cases and each re-sample and test, produced results meeting or exceeding minimum requirements. Therefore, no further action was required.

The Corporation of the City of Elliot Lake was issued a Provincial Officer's Order by the Ministry of the Environment as a result of backwash water, which likely contained elevated levels of fluoride being discharged into Elliot Lake.

Corrective Action: all conditions set out in the Order were complied with. Further to the conditions of the Order alterations were made to the set-up at the plant to prevent any further instance of fluoride being misdirected within the treatment plant.

The Ministry of the Environment carried out a plant inspection on September 29, 2004. The report is forthcoming.

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

2004 MONTHLY FLOWS

MONTH	MINIMUM FLOW/DAY (cu m)	MAXIMUM FLOW/DAY (cu m)	AVERAGE FLOW/DAY (cu m)	INSTANTANEOUS PEAK FLOW (cu m)	TOTAL FLOW (cu m)
JANUARY	7,333	9,767	8,500	22,046	275,656
FEBRUARY	7,212	8,709	7,965	17,253	241,396
MARCH	7,521	9,016	8,326	22,556	268,033
APRIL	6,798	7,924	7,528	16,951	234,727
MAY	6,656	8,121	7,348	16,468	236,712
JUNE	6,965	11,175	8,354	19,824	259,179
JULY	7,279	13,370	9,281	20,610	298,346
AUGUST	6,464	12,726	8,749	19,549	280,200
SEPTEMBER	6,936	9,018	7,885	19,039	244,634

OCTOBER	6,592	8,089	7,239	16,474	232,266
NOVEMBER	6,511	7,866	7,202	19,945	223,639
DECEMBER	6,735	10,252	8,076	26,242	258,331
TOTAL					3,053,119

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.