



Drinking-Water System Number:	220002789
Drinking-Water System Name:	Elliot Lake Water Works
Drinking-Water System Owner:	Corporation of the City of Elliot Lake
Drinking-Water System Category:	Water Treatment Subsystem Class 2
Period being reported:	January 1 – December 31, 2010

<p><u>Complete if your Category is Large Municipal Residential or Small Municipal Residential</u></p> <p>Does your Drinking-Water System serve more than 10,000 people? Yes [X] No []</p> <p>Is your annual report available to the public at no charge on a web site on the Internet? Yes [X] No []</p> <p>Location where Summary Report required under O. Reg. 170/03 Schedule 22 will be available for inspection.</p> <div style="border: 1px solid black; padding: 5px;"> <p>The summary report will be available at City Hall, the Water Treatment Plant, and will be posted on the City's website.</p> </div>	<p><u>Complete for all other Categories.</u></p> <p>Number of Designated Facilities served: <input style="width: 100px; height: 20px;" type="text"/></p> <p>Did you provide a copy of your annual report to all Designated Facilities you serve? Yes [] No []</p> <p>Number of Interested Authorities you report to: <input style="width: 100px; height: 20px;" type="text"/></p> <p>Did you provide a copy of your annual report to all Interested Authorities you report to for each Designated Facility? Yes [] No []</p>
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Note: For the following tables below, additional rows or columns may be added or an appendix may be attached to the report

List all Drinking-Water Systems (if any), which receive all of their drinking water from your system:

Drinking Water System Name	Drinking Water System Number
N/A	

Did you provide a copy of your annual report to all Drinking-Water System owners that are connected to you and to whom you provide all of its drinking water?

Yes [] No []



Indicate how you notified system users that your annual report is available, and is free of charge.

- Public access/notice via the web
- Public access/notice via Government Office
- Public access/notice via a newspaper
- Public access/notice via Public Request
- Public access/notice via a Public Library
- Public access/notice via other method _____

Describe your Drinking-Water System

The method of treatment at the Elliot Lake Water Plant is that of direct filtration.

Water is drawn from the lake through an intake structure located in approximately 12.2m (40ft) of water and is gravity fed through a 295m long marine pipeline to the low lift pumping station wet well. The water is then pumped to the main plant on Spine Road. At the plant it passes through a raw water flow meter and into reactor/mixing tanks. At this point Polyhydroxyl Aluminum Chloride (PAC) is added to the process to aid in the production of floc (particulate matter of sufficient size to be removed by the filters). The water is then filtered through granular media, collected in an underdrain system, and stored in a clearwell (storage reservoir) on site.

Chlorine is added to the treated water as it leaves the filters to achieve required disinfection. Fluoride is also added at this point. Fluoride does not play a role in the treatment process but rather acts as an agent in the prevention of tooth decay in young children.

Lime is added to the water as it leaves the plant to aid in the prevention of corrosion in the distribution system. Water pumped from the plant enters the distribution system where it makes its way to consumers' homes, either directly or from the standpipe storage facilities.

List all water treatment chemicals used over this reporting period

Chlorine, Polyhydroxyl Aluminum Chloride (PAC), Lime, Fluoride

Were any significant expenses incurred to?

- Install required equipment
- Repair required equipment
- Replace required equipment



Ontario Drinking-Water Systems Regulation O. Reg. 170/03

Please provide a brief description and a breakdown of monetary expenses incurred

No significant expenses were incurred to either, install, repair, or replace required equipment.

Provide details on the notices submitted in accordance with subsection 18(1) of the Safe Drinking-Water Act or section 16-4 of Schedule 16 of O.Reg.170/03 and reported to Spills Action Centre

Incident Date	Parameter	Result	Unit of Measure	Corrective Action	Corrective Action Date
June 24	Total Coliform	1	cfu/100ml	resample	June 24
Oct. 26	Chlorine residual	<0.05	mg/L	Flush and adjust valve	Oct. 26
Oct. 29	Chlorine residual	<0.05	mg/L	Flush and adjust valve	Oct. 29

Microbiological testing done under the Schedule 10, 11 or 12 of Regulation 170/03, during this reporting period.

	Number of Samples	Range of E.Coli Or Fecal Results (min #)-(max #)	Range of Total Coliform Results (min #)-(max #)	Number of HPC Samples	Range of HPC Results (min #)-(max #)
Raw	52	0-6	0 - TNTC	N/A	N/A
Treated	52	Absent	Absent	52	0-26
Distribution	380	Absent	Absent - 1	131	0-360

Operational testing done under Schedule 7, 8 or 9 of Regulation 170/03 during the period covered by this Annual Report.

	Number of Grab Samples	Range of Results (min #)-(max #)
Turbidity	8760	.12 - .48 NTU
Chlorine	8760	1.32 – 2.05
Fluoride (If the DWS provides fluoridation)	365	.10 - .95

NOTE: For continuous monitors use 8760 as the number of samples.

NOTE: Record the unit of measure if it is not milligrams per litre.



Summary of additional testing and sampling carried out in accordance with the requirement of an approval, order or other legal instrument.

Date of legal instrument issued	Parameter	Date Sampled	Result	Unit of Measure
C of A Feb. 13, 2002	Clarifier Overflow Suspended Solids	January 7	17	mg/L
		February 12	17	mg/L
		March 18	14	mg/L
		April 10	24	mg/L
		May 21	7	mg/L
		June 9	5	mg/L
		July 6	17	mg/L
		August 17	17	mg/L
		September 1	19	mg/L
		October 13	21	mg/L
		November 4	22	mg/L
		December 3	15	mg/L

Summary of Inorganic parameters tested during this reporting period or the most recent sample results

Parameter	Sample Date	Result Value	Unit of Measure	Exceedance
Antimony	Jan. 26	<0.5	ug/L	no
Arsenic	Jan. 26	<1	ug/L	no
Barium	Jan. 26	11.8	ug/L	no
Boron	Jan. 26	56.3	ug/L	no
Cadmium	Jan. 26	<0.1	ug/L	no
Chromium	Jan. 26	<1	ug/L	no
*Lead	n/a	n/a		n/a
Mercury	Jan. 26	<0.01	ug/L	no
Selenium	Jan. 26	<1	ug/L	no
Sodium	Oct. 27/08	9.38	mg/L	n/a
Uranium	Jan. 26	<1	ug/L	no
Fluoride	Daily at WTP	n/a	mg/L	n/a
Nitrite	Quarterly Ave.	<0.05	mg/L	no
Nitrate	Quarterly Ave.	0.1	mg/L	no

*only for drinking water systems testing under Schedule 15.2; this includes large municipal non-residential systems, small municipal non-residential systems, non-municipal seasonal residential systems, large non-municipal non-residential systems, and small non-municipal non-residential systems



Summary of lead testing under Schedule 15.1 during this reporting period

(applicable to the following drinking water systems; large municipal residential systems, small municipal residential systems and non-municipal year-round residential systems)

Location Type	Number of Samples	Range of Lead Results (min#) – (max #)	Number of Exceedances
	0		
	0		

Summary of Organic parameters sampled during this reporting period or the most recent sample results

Parameter	Sample Date	Result Value	Unit of Measure	Exceedance
Alachlor	Jan. 26	<0.47	ug/L	no
Aldicarb	Jan. 26	<0.58	ug/L	no
Aldrin + Dieldrin	Jan. 26	<0.004	ug/L	no
Atrazine + N-dealkylated metabolites	Jan. 26	<0.90	ug/L	no
Azinphos-methyl	Jan. 26	<0.35	ug/L	no
Bendiocarb	Jan. 26	<1.2	ug/L	no
Benzene	Jan. 26	<0.25	ug/L	no
Benzo(a)pyrene	Jan. 26	<0.0048	ug/L	no
Bromoxynil	Jan. 26	<0.50	ug/L	no
Carbaryl	Jan. 26	<1.2	ug/L	no
Carbofuran	Jan. 26	<1.2	ug/L	no
Carbon Tetrachloride	Jan. 26	<0.25	ug/L	no
Chlordane (Total)	Jan. 26	<0.004	ug/L	no
Chlorpyrifos	Jan. 26	<0.35	ug/L	no
Cyanazine	Jan. 26	<0.35	ug/L	no
Diazinon	Jan. 26	<0.35	ug/L	no
Dicamba	Jan. 26	<0.20	ug/L	no
1,2-Dichlorobenzene	Jan. 26	<0.25	ug/L	no
1,4-Dichlorobenzene	Jan. 26	<0.25	ug/L	no
Dichlorodiphenyltrichloroethane (DDT) + metabolites	Jan. 26	<0.005	ug/L	no
1,2-Dichloroethane	Jan. 26	<0.25	ug/L	no
1,1-Dichloroethylene (vinylidene chloride)	Jan. 26	<0.25	ug/L	no
Dichloromethane	Jan. 26	<0.25	ug/L	no
2-4 Dichlorophenol	Jan. 26	<0.056	ug/L	no
2,4-Dichlorophenoxy acetic acid (2,4-D)	Jan. 26	<0.20	ug/L	no
Diclofop-methyl	Jan. 26	<0.20	ug/L	no
Dimethoate	Jan. 26	<0.35	ug/L	no
Dinoseb	Jan. 26	<0.050	ug/L	no
Diquat	Jan. 26	<7	ug/L	no
Diuron	Jan. 26	<5.8	ug/L	no
Glyphosate	Jan. 26	<20	ug/L	no

Heptachlor + Heptachlor Epoxide	Jan. 26	<0.0005	ug/L	no
Lindane (Total)	Jan. 26	<0.00037	ug/L	no
Malathion	Jan. 26	<0.35	ug/L	no
Methoxychlor	Jan. 26	<0.001	ug/L	no
Metolachlor	Jan. 26	<0.23	ug/L	no
Metribuzin	Jan. 26	<0.23	ug/L	no
Monochlorobenzene	Jan. 26	<0.25	ug/L	no
Paraquat	Jan. 26	<1	ug/L	no
Parathion	Jan. 26	<0.23	ug/L	no
Pentachlorophenol	Jan. 26	<0.056	ug/L	no
Phorate	Jan. 26	<0.35	ug/L	no
Picloram	Jan. 26	<0.050	ug/L	no
Polychlorinated Biphenyls(PCB)	Jan. 26	<0.0031	ug/L	no
Prometryne	Jan. 26	<0.23	ug/L	no
Simazine	Jan. 26	<0.35	ug/L	no
THM (NOTE: show latest annual average)		61.75	ug/L	no
Temephos	Jan. 26	<16	ug/L	no
Terbufos	Jan. 26	<0.23	ug/L	no
Tetrachloroethylene	Jan. 26	<0.25	ug/L	no
2,3,4,6-Tetrachlorophenol	Jan. 26	<0.056	ug/L	no
Triallate	Jan. 26	<0.23	ug/L	no
Trichloroethylene	Jan. 26	<0.25	ug/L	no
2,4,6-Trichlorophenol	Jan. 26	<1.70	ug/L	no
2,4,5-Trichlorophenoxy acetic acid (2,4,5-T)	Jan. 26	<0.050	ug/L	no
Trifluralin	Jan. 26	<0.23	ug/L	no
Vinyl Chloride	Jan. 26	<0.25	ug/L	no

List any Inorganic or Organic parameter(s) that exceeded half the standard prescribed in Schedule 2 of Ontario Drinking Water Quality Standards.

Parameter	Result Value	Unit of Measure	Date of Sample
THM	51.80	ug/L	Jan 26
THM	54.10	ug/L	July 12
THM	94.10	ug/L	Oct.18