



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, 2009

<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



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
Jan. 19	Chlorine residual	<0.05	mg/L	Flush – valve open	Jan.21
Mar. 18	Lead	10.4	ug/L	resample	March 27
July 10	Total Coliform	1	cfu/100ml	resample	July 16
Oct. 1	Lead	13.7	ug/L	resample	Oct. 16

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	0-12	2-168		
Treated	52	Absent	Absent	52	0-10
Distribution	381	Absent	Absent - 1	130	0-100

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	.15 - .42 NTU
Chlorine	8760	1.23 – 2.03
Fluoride (If the DWS provides fluoridation)	366	.30 - .80

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 9	14	mg/L
		February 20	22	mg/L
		March 13	8	mg/L
		April 17	3	mg/L
		May 8	2	mg/L
		June 10	7	mg/L
		July 17	6	mg/L
		August 7	7	mg/L
		September 18	19	mg/L
		October 21	15	mg/L
		November 18	8	mg/L
		December 11	18	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	July 8	<0.5	ug/L	no
Arsenic	July 8	<1	ug/L	no
Barium	July 8	13.1	ug/L	no
Boron	July 8	5.4	ug/L	no
Cadmium	July 8	<0.1	ug/L	no
Chromium	July 8	<1	ug/L	no
*Lead	July 8			
Mercury	July 8	<0.01	ug/L	no
Selenium	July 8	<1	ug/L	no
Sodium		n/a	mg/L	no
Uranium	July 8	<1	ug/L	no
Fluoride		n/a	mg/L	no
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
Plumbing	134	0 – 13.7 ug/ L	2
Distribution	24	<1 – 2.0 ug/L	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	July 8	<0.48	ug/L	no
Aldicarb	July 8	<0.79	ug/L	no
Aldrin + Dieldrin	July 8	<0.004	ug/L	no
Atrazine + N-dealkylated metabolites	July 8	<0.9	ug/L	no
Azinphos-methyl	July 8	<0.36	ug/L	no
Bendiocarb	July 8	<1.6	ug/L	no
Benzene	July 8	<0.25	ug/L	no
Benzo(a)pyrene	July 8	<0.006	ug/L	no
Bromoxynil	July 8	<0.41	ug/L	no
Carbaryl	July 8	<1.6	ug/L	no
Carbofuran	July 8	<1.6	ug/L	no
Carbon Tetrachloride	July 8	<0.25	ug/L	no
Chlordane (Total)	July 8	<0.004	ug/L	no
Chlorpyrifos	July 8	<0.36	ug/L	no
Cyanazine	July 8	<0.36	ug/L	no
Diazinon	July 8	<0.36	ug/L	no
Dicamba	July 8	<0.17	ug/L	no
1,2-Dichlorobenzene	July 8	<0.25	ug/L	no
1,4-Dichlorobenzene	July 8	<0.25	ug/L	no
Dichlorodiphenyltrichloroethane (DDT) + metabolites	July 8	<0.005	ug/L	no
1,2-Dichloroethane	July 8	<0.25	ug/L	no
1,1-Dichloroethylene (vinylidene chloride)	July 8	<0.25	ug/L	no
Dichloromethane	July 8	<0.25	ug/L	no
2-4 Dichlorophenol	July 8	<0.059	ug/L	no
2,4-Dichlorophenoxy acetic acid (2,4-D)	July 8	<0.17	ug/L	no
Diclofop-methyl	July 8	<0.17	ug/L	no
Dimethoate	July 8	<0.36	ug/L	no
Dinoseb	July 8	<0.041	ug/L	no
Diquat	July 8	<7	ug/L	no
Diuron	July 8	<7.9	ug/L	no
Glyphosate	July 8	<20	ug/L	no

Heptachlor + Heptachlor Epoxide	July 8	<0.004	ug/L	no
Lindane (Total)	July 8	<0.00055	ug/L	no
Malathion	July 8	<0.36	ug/L	no
Methoxychlor	July 8	<0.0015	ug/L	no
Metolachlor	July 8	<0.24	ug/L	no
Metribuzin	July 8	<0.24	ug/L	no
Monochlorobenzene	July 8	<0.25	ug/L	no
Paraquat	July 8	<1	ug/L	no
Parathion	July 8	<0.24	ug/L	no
Pentachlorophenol	July 8	<0.059	ug/L	no
Phorate	July 8	<0.36	ug/L	no
Picloram	July 8	<0.041	ug/L	no
Polychlorinated Biphenyls(PCB)	July 8	<0.0046	ug/L	no
Prometryne	July 8	<0.24	ug/L	no
Simazine	July 8	<0.36	ug/L	no
THM (NOTE: show latest annual average)	July 8	47.23	ug/L	no
Temephos	July 8	<22	ug/L	no
Terbufos	July 8	<0.24	ug/L	no
Tetrachloroethylene	July 8	<0.25	ug/L	no
2,3,4,6-Tetrachlorophenol	July 8	<0.059	ug/L	no
Triallate	July 8	<0.24	ug/L	no
Trichloroethylene	July 8	<0.25	ug/L	no
2,4,6-Trichlorophenol	July 8	<0.059	ug/L	no
2,4,5-Trichlorophenoxy acetic acid (2,4,5-T)	July 8	<0.041	ug/L	no
Trifluralin	July 8	<0.24	ug/L	no
Vinyl Chloride	July 8	<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	70.5	ug/L	July 8
THM	76	ug/L	Oct. 21