

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

Part III Form 2

Section 11. ANNUAL REPORT.

Drinking-Water System Number:
Drinking-Water System Name:
Drinking-Water System Owner:
Drinking-Water System Category:
Period being reported:

220002841
Lefavre Water Treatment plant
The Corporation of the Alfred & Plantagenet
Large Municipal Residential
January 1 st to December 31, 2004

Complete if your Category is Large Municipal Residential or Small Municipal Residential

Does your Drinking-Water System serve more than 10,000 people? Yes [] No [x]

Is your annual report available to the public at no charge on a web site on the Internet? Yes [] No [x]

Location where Report required under O. Reg. 170/03 Schedule 22 will be available for inspection.

Municipal Office
The Corporation of the Alfred &
Plantagenet
PO Box 350, Old Hwy 17,
Plantagenet Ontario,
K0R 1L0

Complete for all other Categories.

Number of Designated Facilities served:

N/A

Did you provide a copy of your annual report to all Designated Facilities you serve?

Yes [] No []

Number of Interested Authorities you report to:

N/A

Did you provide a copy of your annual report to all Interested Authorities you report to for each Designated Facility?

Yes [] No []

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

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

[x] Public access/notice via Government Office

[] Public access/notice via a newspaper

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

- ☐ Public access/notice via Public Request
☐ Public access/notice via a Public Library
☒ Public access/notice via other method (Municipal Bulletin)

Describe your Drinking-Water System

The Lefaivre water treatment plant is a surface water treatment facility, serving the hamlet of Lefaivre and the village of Alfred rated at a maximum daily flow of 2,900 m³/day and consisting of the following components; Raw water intake, low lift pumping station including four (4) low lift pumps, one (1) clarifier/flocculator, two (2) high rate filters (with double compartments), one (1) clearwell with a total volume of 660m³, a two (2) district high lift pump installation for Lefaivre and Alfred distribution system including three (3) high lift pumps for each system and a chemical feed system consisting of chemical pumps, storage tanks, piping and associated appurtenances to dose alum, polyelectrolyte, soda ash, fluoride and sodium hypochlorite. This facility operates under Certificate of Approval # 9014-5JASMT and Permit to Take Water # 90-P-4027.

List all water treatment chemicals used over this reporting period

Phass, Polyelectrolyte, Soda ash, Fluoride, and Sodium hypochlorite.

Were any significant expenses incurred to?

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

Describe

- Installed solenoid valves on each filter effluent lines
- Installed a calibration chambers on all process chemical metering pumps
- Purchase a new Chlorine Analyzer to monitor secondary chlorine residual in the distribution system (To install in 2005)
- Repaired High Lift pump # 7 motor
- Repaired distribution system valves
- Repaired the Alfred water sodium hypochlorite injection point pipe
- Replaced the raw water flow meter

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
31 Aug 2004	Fail to meet Primary Disinfection Target	0.05	mg/l	Increase Chlorine	31 Aug 2004
15 Nov 2004	Fluoride	3.5	mg/l	Dilute water in clearwell	15 Nov 2004

Microbiological testing done under section 8-2 during this reporting period

	Number of Samples	Range of E.Coli Or Fecal Results (##)	Range of Total Coliform Results (##)	Number of HPC Samples Or Background Colony Counts	Range of HPC Results (##) Or Background Colony Counts
Raw	52	1 - 312	5 - 39000	0	0
Treated	52	<1	<1	52	<1 - 1
Distribution	154	<1	<1	52	<1 - 3

Operational testing done under Schedule 7, 8 or 9 during the period covered by this Annual Report.

	Number of Grab Samples	Range of Results (##)
Turbidity	8760	0.01 - 3.0 NTU
Chlorine	8760	0.3 - 3.0 mg/l
Chlorine Residual Distribution System	474	0.21 - 1.71 mg/l
Fluoride (If the DWS provides fluoridation)	8760	0.20 - 3.5 mg/l

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 or order.

Date of order or C of A	Parameter	Date Sampled	Result	Unit of Measure
16 Aug 2004 (C of A)	Suspended Solids	7 Jan 2004	13	mg/l
16 Aug 2004 (C of A)	Colour	12 Jan 2004	22	TCU
16 Aug 2004 (C of A)	Organic Nitrogen	12 Jan 2004	0.28	mg/l
16 Aug 2004 (C of A)	DOC	12 Jan 2004	8.0	mg/l
16 Aug 2004 (C of A)	Suspended Solids	19 Feb 2004	3	mg/l
16 Aug 2004 (C of A)	Colour	6 Apr 2004	18	TCU
16 Aug 2004 (C of A)	Organic Nitrogen	6 Apr 2004	0.78	mg/l
16 Aug 2004 (C of A)	DOC	6 Apr 2004	4.1	mg/l
16 Aug 2004 (C of A)	Suspended Solids	7 Apr 2004	7	mg/l
16 Aug 2004 (C of A)	Suspended Solids	12 May 2004	<3	mg/l
16 Aug 2004 (C of A)	Suspended Solids	3 Jun 2004	<3	mg/l
16 Aug 2004 (C of A)	Colour	12 Jul 2004	36	TCU
16 Aug 2004 (C of A)	Organic Nitrogen	12 Jul 2004	0.28	mg/l
16 Aug 2004 (C of A)	DOC	12 Jul 2004	5.2	mg/l
16 Aug 2004 (C of A)	Suspended Solids	12 Jul 2004	3	mg/l
16 Aug 2004 (C of A)	Suspended Solids	10 Aug 2004	8	mg/l

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

16 Aug 2004 (C of A)	Suspended Solids	8 Sep 2004	17	mg/l
16 Aug 2004 (C of A)	Suspended Solids	4 Oct 2004	7	mg/l
16 Aug 2004 (C of A)	Colour	5 Oct 2004	27	TCU
16 Aug 2004 (C of A)	Organic Nitrogen	5 Oct 2004	0.4	mg/l
16 Aug 2004 (C of A)	DOC	5 Oct 2004	5.0	mg/l
16 Aug 2004 (C of A)	Suspended Solids	3 Nov 2004	3	mg/l
16 Aug 2004 (C of A)	Suspended Solids	7 Dec 2004	11	mg/l

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

Parameter	Sample Date	Result Value	Unit of Measure	Exceedance
Antimony	6 Apr 2004	<0.001	mg/l	No
Arsenic	6 Apr 2004	<0.001	mg/l	No
Barium	6 Apr 2004	0.017	mg/l	No
Boron	6 Apr 2004	0.008	mg/l	No
Cadmium	6 Apr 2004	<0.0001	mg/l	No
Chromium	6 Apr 2004	0.001	mg/l	No
Lead	6 Apr 2004	<0.0002	mg/l	No
Mercury	6 Apr 2004	<0.0001	mg/l	No
Selenium	6 Apr 2004	<0.001	mg/l	No
Sodium	6 Apr 2004	10.9	mg/l	No
Uranium	6 Apr 2004	<0.0001	mg/l	No
Nitrite	12 Jan 2004	<0.1	mg/l	No
Nitrate	12 Jan 2004	<0.1	mg/l	No
Nitrite	6 Apr 2004	<0.1	mg/l	No
Nitrate	6 Apr 2004	0.4	mg/l	No
Nitrite	12 Jul 2004	<0.1	mg/l	No
Nitrate	12 Jul 2004	0.2	mg/l	No
Nitrite	5 Oct 2004	<0.1	mg/l	No
Nitrate	5 Oct 2004	0.3	mg/l	No

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

Parameter	Sample Date	Result Value	Unit of Measure	Exceedance
Alachlor	6 Apr 2004	<0.0003	mg/l	No
Aldicarb	6 Apr 2004	<0.003	mg/l	No
Aldrin + Dieldrin	6 Apr 2004	<0.00002	mg/l	No
Atrazine + N-dealkylated metabolites	6 Apr 2004	<0.001	mg/l	No
Azinphos-methyl	6 Apr 2004	<0.001	mg/l	No
Bendiocarb	6 Apr 2004	<0.003	mg/l	No
Benzene	6 Apr 2004	<0.0005	mg/l	No

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

Benzo(a)pyrene	6 Apr 2004	<0.000005	mg/l	No
Bromoxynil	6 Apr 2004	<0.000094	mg/l	No
Carbaryl	6 Apr 2004	<0.003	mg/l	No
Carbofuran	6 Apr 2004	<0.001	mg/l	No
Carbon Tetrachloride	6 Apr 2004	<0.0002	mg/l	No
Chlordane (Total)	6 Apr 2004	<0.00004	mg/l	No
Chlorpyrifos	6 Apr 2004	<0.0005	mg/l	No
Cyanazine	6 Apr 2004	<0.0005	mg/l	No
Diazinon	6 Apr 2004	<0.001	mg/l	No
Dicamba	6 Apr 2004	<0.005	mg/l	No
1,2-Dichlorobenzene	6 Apr 2004	<0.0001	mg/l	No
1,4-Dichlorobenzene	6 Apr 2004	<0.0002	mg/l	No
Dichlorodiphenyltrichloroethane (DDT) + metabolites	6 Apr 2004	<0.0001	mg/l	No
1,2-Dichloroethane	6 Apr 2004	<0.0001	mg/l	No
1,1-Dichloroethylene (vinylidene chloride)	6 Apr 2004	<0.0001	mg/l	No
Dichloromethane	6 Apr 2004	<0.0003	mg/l	No
2,4-Dichlorophenol	6 Apr 2004	<0.0001	mg/l	No
2,4-Dichlorophenoxy acetic acid (2,4-D)	6 Apr 2004	<0.005	mg/l	No
Diclofop-methyl	6 Apr 2004	<0.0004	mg/l	No
Dimethoate	6 Apr 2004	<0.001	mg/l	No
Dinoseb	6 Apr 2004	<0.001	mg/l	No
Diquat	6 Apr 2004	<0.005	mg/l	No
Diuron	6 Apr 2004	<0.005	mg/l	No
Glyphosate	6 Apr 2004	<0.025	mg/l	No
Heptachlor + Heptachlor Epoxide	6 Apr 2004	<0.0001	mg/l	No
Linadane (Total)	6 Apr 2004	<0.0001	mg/l	No
Malathion	6 Apr 2004	<0.005	mg/l	No
Methoxychlor	6 Apr 2004	<0.0001	mg/l	No
Metolachlor	6 Apr 2004	<0.003	mg/l	No
Metribuzin	6 Apr 2004	<0.003	mg/l	No
Monochlorobenzene	6 Apr 2004	<0.0002	mg/l	No
Paraquat	6 Apr 2004	<0.001	mg/l	No
Parathion	6 Apr 2004	<0.003	mg/l	No
Pentachlorophenol	6 Apr 2004	<0.0001	mg/l	No
Phorate	6 Apr 2004	<0.0003	mg/l	No
Picloram	6 Apr 2004	<0.005	mg/l	No
Polychlorinated Biphenyls(PCB)	6 Apr 2004	<0.00005	mg/l	No
Prometryne	6 Apr 2004	<0.0001	mg/l	No
Simazine	6 Apr 2004	<0.0005	mg/l	No
THM (NOTE: show latest annual average)	5 Oct 2004	0.078	mg/l	No
Temephos	6 Apr 2004	<0.013	mg/l	No
Terbufos	6 Apr 2004	<0.0003	mg/l	No

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

Tetrachloroethylene	6 Apr 2004	<0.0002	mg/l	No
2,3,4,6-Tetrachlorophenol	6 Apr 2004	<0.00014	mg/l	No
Triallate	6 Apr 2004	<0.01	mg/l	No
Trichloroethylene	6 Apr 2004	<0.0001	mg/l	No
2,4,6-Trichlorophenol	6 Apr 2004	<0.0001	mg/l	No
2,4,5-Trichlorophenoxy acetic acid (2,4,5-T)	6 Apr 2004	<0.011	mg/l	No
Trifluralin	6 Apr 2004	<0.0005	mg/l	No
Vinyl Chloride	6 Apr 2004	<0.0002	mg/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

(Only if DWS category is large municipal residential, small municipal residential, large municipal non-residential, non municipal year round residential, large non municipal non residential)