

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

Part III Form 2

Section 11. ANNUAL REPORT.

Drinking-Water System Number:	210001736
Drinking-Water System Name:	Plantagenet Water Treatment Plant
Drinking-Water System Owner:	The Corporation of Alfred & Plantagenet
Drinking-Water System Category:	Large Municipal Residential
Period being reported:	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 Township of Alfred &
Plantagenet, PO Box 350, Old Hwy 17
Plantagenet Ontario,
K0B 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

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- ☐ 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 Plantagenet water treatment plant is a surface water treatment facility, rated at a maximum daily flow of 1700 m³/day and consisting of the following components; Raw water intake, low lift pumping station including three (3) low lift pumps, one (1) package water treatment plant (consisting of a dual operating mode flocculation/clarification unit, Two pulsator clarifiers equipped with settling tubes, two dual media filters, one backwash pump, one sludge transfer basin and a provisional polyelectrolyte feed system), a three (3) cell clearwell with a total volume of 525 m³, three (3) vertical turbine high lift pumps and a chemical feed system consisting of chemical pumps, storage tanks, piping and associated appurtenances to dose alum, polyelectrolyte, soda ash, lime, activated carbon and sodium hypochlorite. This facility operates under Certificate of Approval # 0585-5XBRRE and Permit to Take Water # 03-P-4056.

List all water treatment chemicals used over this reporting period

Phass, Polyelectrolyte, Activated Carbon and Sodium hypochlorite.

Were any significant expenses incurred to?

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

Describe

- Purchased a new Chlorine Analyzer to monitor secondary chlorine residual in the distribution system (To install in 2005)
- Repaired distribution system valves
- Repaired vent screening on the overflow at the water Standpipe
- Replaced the Air Actuator on Filter # 1
- Replaced the media in Filter # 2 (Sand & Anthracite)

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
5 Mar 2004	Fail to meet Primary Disinfection Target	0.25	mg/l	Increase Chlorine	5 Mar 2004
3 Jun 2004	Background	>200	Cts/100ml/l	Resample	3 Jun 2004

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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 - 800	2 - 90000	0	0
Treated	52	<1 - 1	<1 - 1	52	<1 - 1
Distribution	159	<1 - 1	<1 - 1	52	<1 - >200

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	0.04 – 3.0 NTU
Chlorine	8760	0.25 – 4.3 mg/l
Chlorine Residual Distribution System	472	0.13 - > 2.2 mg/l
Fluoride (If the DWS provides fluoridation)	N/A	N/A

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
8 Apr 2004 (C of A)	Suspended Solids	1 Dec 2004	6	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	0.029	mg/l	No
Boron	6 Apr 2004	0.016	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	19.1	mg/l	No
Uranium	6 Apr 2004	<0.0001	mg/l	No

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Fluoride	6 Apr 2004	<0.1	mg/l	No
Nitrite	12 Jan 2004	<0.1	mg/l	No
Nitrate	12 Jan 2004	2.5	mg/l	No
Nitrite	6 Apr 2004	<0.1	mg/l	No
Nitrate	6 Apr 2004	1.6	mg/l	No
Nitrite	12 Jul 2004	<0.1	mg/l	No
Nitrate	12 Jul 2004	0.8	mg/l	No
Nitrite	5 Oct 2004	<0.1	mg/l	No
Nitrate	5 Oct 2004	1.4	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
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

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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	<0.005	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	0.090	mg/l	No
Temephos	6 Apr 2004	<0.013	mg/l	No
Terbufos	6 Apr 2004	<0.0003	mg/l	No
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)