



ANNUAL REPORT

FOR

TOWN OF ARNPRIOR WATERWORKS

PERIOD: January 1, 2018 – December 31, 2018



Drinking-Water System Number:	220000932
Drinking-Water System Name:	Arnprior Drinking Water System
Drinking-Water System Owner:	Town of Arnprior
Drinking-Water System Category:	Large Municipal Residential
Period being reported:	Year 2018

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 [x] No []

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

Town of Arnprior
Town Hall
105 Elgin St. W.
Arnprior ON.
K7S 0A8

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 [] N/A [x]



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 Arnprior Water Filtration Plant (WFP) is owned and operated by the Corporation of the Town of Arnprior. The WFP is situated at 71 James St. Arnprior Ontario, plant operators can be reached at 613-623-4231 Ext 1809. Certified operators monitor and control the treatment and testing of water production and quality.

Water is pumped from the Madawaska River to the treatment plant where Coagulant and Polymer are added as a flocculent. The water is then put through a clarification process called an Actiflow system, where microsand is utilized to enhance flocculation and acts as a ballast to aid in settling solids. The water is then filtered; Chlorine, Fluoride, Phosphoric Acid and Soda Ash are added to prepare the water for consumption. The treated water is stored in two 2,200 m³ reservoirs, Aqueous Ammonia is added, the treated water is then pumped to the distribution system, as well as a 2,700 m³ elevated water storage tank.

List all water treatment chemicals used over this reporting period

- Coagulant
- Soda Ash
- Chlorine gas
- Fluoride
- Ammonium Sulphate
- Phosphoric Acid

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

- New Ammonium Sulphate dosing pumps were installed.
- New V10K Chlorinator controller was installed

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
2018/02/06	Total Coliform	1	Cfu/100ml	Re-sampled upstream, downstream and at location, Re-sample had no adverse results.	2018/02/09

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 - 19	10 – 80	N/A	
Treated	52	absent	absent	52	<2 - 10
Distribution	306	absent	0 - 1	156	<2 -12

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
Turbidity	8760	0.03 - 0.09 NTU
Chlorine (Free)	8760	1.66 – 2.12 mg/L
Fluoride (If the DWS provides fluoridation)	8760	0.3 - 0.61 mg/L

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



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

Parameter	Date Sampled	Result	Unit of Measure
Benzo(a)pyrene	Jan. 16/18	<0.005	mg/L
Haloacetic Acid	Mar 23/18	26.5	µg/L
Total organic Carbon	Jan. 16/18	2.9	mg/L
Dissolved Organic Carbon	Jan. 16/18	2.0	mg/L
Colour	Jan. 16/18	<2	TCU
Nitrite	Jan. 16/18	<0.1	mg/L
Nitrate	Jan. 16/18	0.1	mg/L
Benzo(a)pyrene	Apr. 17/18	<0.005	mg/L
Haloacetic Acid	Apr. 17/18	37.7	µg/L
Total organic Carbon	Apr. 17/18	2.9	mg/L
Dissolved Organic Carbon	Apr. 17/18	2.9	mg/L
Colour	Apr. 17/18	<2	TCU
Nitrite	Apr. 17/18	<0.1	mg/L
Nitrate	Apr. 17/18	0.2	mg/L
Benzo(a)pyrene	Jul. 10/18	<0.005	mg/L
Haloacetic Acid	Jul. 10/18	38.1	µg/L
Total organic Carbon	Jul. 10/18	2.4	mg/L
Dissolved Organic Carbon	Jul. 10/18	2.3	mg/L
Colour	Jul. 10/18	<2	TCU
Nitrite	Jul. 10/18	<0.1	mg/L
Nitrate	Jul. 10/18	<0.1	mg/L
Benzo(a)pyrene	Oct. 16/18	<0.005	mg/L
Haloacetic Acid	Oct. 16/18	45.8	µg/L
Total organic Carbon	Oct. 16/18	2.8	mg/L
Dissolved Organic Carbon	Oct. 16/18	2.7	mg/L
Colour	Oct. 16/18	<2	TCU
Nitrite	Oct. 16/18	<0.1	mg/L
Nitrate	Oct. 16/18	<0.1	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	16-Jan-18	<0.0001	mg/L	no
Arsenic	16-Jan-18	<0.0001	mg/L	no
Barium	16-Jan-18	0.020	mg/L	no
Boron	16-Jan-18	<0.005	mg/L	no
Cadmium	16-Jan-18	<0.00002	mg/L	no



Parameter	Sample Date	Result Value	Unit of Measure	Exceedance
Chromium	16-Jan-18	<0.002	mg/L	no
*Lead	16-Jan-18	0.00002	mg/L	no
Mercury	16-Jan-18	<0.00002	mg/L	no
Selenium	16-Jan-18	<0.001	mg/L	no
Sodium	16-Jan-18	7.4	mg/L	no
Uranium	16-Jan-18	<0.00005	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 Sample sites	Range of Lead Results mg/L (min#) – (max #)	Number of Exceedances (>0.01mg/L)
Plumbing	15	<0.00002 – 0.00298	0
Distribution	4	<0.00002 – 0.00008	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	16-Jan-18	<0.3	µg/L	no
Aldicarb	16-Jan-18	<3	µg/L	no
Aldrin + Dieldrin	16-Jan-18	<0.02	µg/L	no
Atrazine + N-dealkylated metabolites	16-Jan-18	<0.5	µg/L	no
Azinphos-methyl	16-Jan-18	<1	µg/L	no
Bendiocarb	16-Jan-18	<3	µg/L	no
Benzene	16-Jan-18	<0.5	µg/L	no
Benzo(a)pyrene	16-Jan-18	<0.005	µg/L	no
Bromoxynil	16-Jan-18	<0.3	µg/L	no
Carbaryl	16-Jan-18	<3	µg/L	no
Carbofuran	16-Jan-18	<1	µg/L	no
Carbon Tetrachloride	16-Jan-18	<0.2	µg/L	no
Chlordane (Total)	16-Jan-18	<0.04	µg/L	no
Chlorpyrifos	16-Jan-18	<0.5	µg/L	no
Cyanazine	16-Jan-18	<0.5	µg/L	no
Diazinon	16-Jan-18	<1	µg/L	no
Dicamba	16-Jan-18	<5	µg/L	no
1,2-Dichlorobenzene	16-Jan-18	<0.1	µg/L	no
1,4-Dichlorobenzene	16-Jan-18	<0.2	µg/L	no
Dichlorodiphenyltrichloroethane (DDT) + metabolites	16-Jan-18	<0.1	µg/L	no
1,2-Dichloroethane	16-Jan-18	<0.1	µg/L	no



Parameter	Sample Date	Result Value	Unit of Measure	Exceedance
1,1-Dichloroethene (vinylidene chloride)	16-Jan-18	<0.1	µg/L	no
Dichloromethane	16-Jan-18	<0.3	µg/L	no
2-4 Dichlorophenol	16-Jan-18	<0.1	µg/L	no
2,4-Dichlorophenoxy acetic acid (2,4-D)	16-Jan-18	<5	µg/L	no
Diclofop-methyl	16-Jan-18	<0.5	µg/L	no
Dimethoate	16-Jan-18	<1	µg/L	no
Dinoseb	16-Jan-18	<0.5	µg/L	no
Diquat	16-Jan-18	<5	µg/L	no
Diuron	16-Jan-18	<5	µg/L	no
Glyphosate	16-Jan-18	<25	µg/L	no
Heptachlor + Heptachlor Epoxide	16-Jan-18	<0.1	µg/L	no
Lindane (Total)	16-Jan-18	<0.1	µg/L	no
Malathion	16-Jan-18	<5	µg/L	no
Methoxychlor	16-Jan-18	<0.1	µg/L	no
Metolachlor	16-Jan-18	<3	µg/L	no
Metribuzin	16-Jan-18	<3	µg/L	no
Monochlorobenzene	16-Jan-18	<0.2	µg/L	no
Paraquat	16-Jan-18	<1	µg/L	no
Parathion	16-Jan-18	<3	µg/L	no
Pentachlorophenol	16-Jan-18	<0.1	µg/L	no
Phorate	16-Jan-18	<0.3	µg/L	no
Picloram	16-Jan-18	<5	µg/L	no
Polychlorinated Biphenyls(PCB)	16-Jan-18	<0.05	µg/L	no
Prometryne	16-Jan-18	<0.1	µg/L	no
Simazine	16-Jan-18	<0.5	µg/L	no
THM (NOTE: show latest annual average)	16-Jan-18	41.4	µg/L	no
Temephos	16-Jan-18	<10	µg/L	no
Terbufos	16-Jan-18	<0.3	µg/L	no
Tetrachloroethylene	16-Jan-18	<0.2	µg/L	no
2,3,4,6-Tetrachlorophenol	16-Jan-18	<0.1	µg/L	no
Triallate	16-Jan-18	<10	µg/L	no
Trichloroethylene	16-Jan-18	<0.1	µg/L	no
2,4,6-Trichlorophenol	16-Jan-18	<0.1	µg/L	no
2,4,5-Trichlorophenoxy acetic acid (2,4,5-T)	16-Jan-18	<10	µg/L	no
Trifluralin	16-Jan-18	<0.5	µg/L	no
Vinyl Chloride	16-Jan-18	<0.2	µg/L	no
MCPA	16-Jan-18	<00012	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 and Location
No Exceedances			

**Michael Trumble
Waterworks Supervisor
Arnprior**