



Annual Report

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|--|---------------------------------------|
| Drinking-Water System Number: | 260002136 |
| Drinking-Water System Name: | Aylmer Distribution System |
| Drinking-Water System Owner: | The Corporation of the Town of Aylmer |
| Drinking-Water System Category: | Large Municipal |
| Period being reported: | January 1, 2016 to December 31, 2016 |

| | |
|---|---|
| <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 [] No [X]</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 Aylmer Distribution System Annual Report required under O. Reg. 170/03 Schedule 11 will be available for viewing inspection.</p> <div style="border: 1px solid black; padding: 5px;"> <p>Town of Aylmer</p> <p>46 Talbot St W</p> <p>Aylmer, Ontario</p> <p>N5H 1J7</p> </div> | <p><u>Complete for all other Categories.</u></p> <p>Number of Designated Facilities served:</p> <div style="border: 1px solid black; width: 100px; height: 20px; margin: 5px 0;"></div> <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:</p> <div style="border: 1px solid black; width: 100px; height: 20px; margin: 5px 0;"></div> <p>Did you provide a copy of your annual report to all Interested Authorities you report to for each Designated Facility? Yes [] No []</p> |
|---|---|

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 |
|---|------------------------------|
| Malahide Distribution System -Dingle Street -Talbot Street East | #260004774 |



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 [X] 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

Treated water is supplied to the Town of Aylmer from the Elgin Water Treatment Plant via the Elgin Area Primary Water Supply System, the Elgin- Middlesex Reservoir, and the Aylmer Secondary System. When required, two pumps, located at the Elgin-Middlesex Pumping Station in St. Thomas, pump water to Aylmer through a 450 mm dia. secondary transmission main (the Aylmer Secondary System). The main leaves the Pumping Station and proceeds along the north side of Hwy #3, through the Municipality of Central Elgin and Malahide Township until it connects to the Aylmer Distribution System at Bodkin Ave. Depending on system pressure and demand, the Secondary System may be used to directly feed the Distribution System or may be used to fill a 4,300 m3 standpipe located at 23 Myrtle Street. There is a continuous chlorine monitor, a tower level indicator and pressure sensor located at the standpipe.

The Aylmer Distribution System consists of approximately 42 kilometers of water main of varying sizes (50 mm to 450mm) and types (cast iron, ductile iron, DR-18 plastic, transite). There are nine meter chambers, 207 fire hydrants and approximately 350 street valves within the system.

List all water treatment chemicals used over this reporting period

Sodium hypochlorite 12% was used to disinfect tools and repair parts for a main break on St George St, and service leaks on Talbot St E, John St S, and Elk St.



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

| | |
|-----------------------------|--------------|
| Water St water main..... | \$163,000.00 |
| Meter replacement (85)..... | \$9,849.00 |
| Standpipe cable tray..... | \$3,955.00 |
| Standpipe inspection..... | \$3,816.00 |

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 |
|---------------|-----------|--------|-----------------|-------------------|------------------------|
| | | | | | |
| | | | | | |

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 | N/A | | | | |
| Treated | N/A | | | | |
| Distribution | 258 | 0 | 0 | 104 | <10 to 950 |



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 #) | Unit of Measure |
|--|-------------------------------|---|------------------------|
| Turbidity | N/A | | |
| Chlorine (Free) | 258 grab 8760 at CL17 | 0.61 to 1.31 0.00 to 1.66 | mg/L mg/L |
| Fluoride (If the DWS provides fluoridation) | N/A | | |

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

Note: There were a few instances in 2016 when the water distribution free chlorine residual was recorded below 0.05 mg/L by the continuous online analyzer. Each of these events coincided with operational maintenance, loss of power or equipment failure and do not reflect the actual free chlorine residual maintained in the distribution system

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 |
|--|------------------|---------------------|---------------|------------------------|
| N/A | | | | |

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 | | | | |
| Arsenic | | | | |
| Barium | | | | |
| Boron | | | | |
| Cadmium | | | | |
| Chromium | | | | |
| *Lead | | | | |
| Mercury | | | | |
| Selenium | | | | |
| Sodium | | | | |
| Uranium | | | | |
| Fluoride | | | | |



| | | | | |
|---------|--|--|--|--|
| Nitrite | | | | |
| Nitrate | | | | |

*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 #) | Unit of Measure | Number of Exceedances |
|---------------|-------------------|--|-----------------|-----------------------|
| Plumbing | 0 | | | |
| Distribution | 16 | 0.06 to 0.48 | ug/L | 0 |
| pH | 16 | 6.23 to 6.97 | | 0 |
| Alkalinity | 16 | 91 to 126 | mg/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 | | | | |
| Aldicarb | | | | |
| Aldrin + Dieldrin | | | | |
| Atrazine + N-dealkylated metabolites | | | | |
| Azinphos-methyl | | | | |
| Bendiocarb | | | | |
| Benzene | | | | |
| Benzo(a)pyrene | | | | |
| Bromoxynil | | | | |
| Carbaryl | | | | |
| Carbofuran | | | | |
| Carbon Tetrachloride | | | | |
| Chlordane (Total) | | | | |
| Chlorpyrifos | | | | |



| | | | | |
|---|-----------------|------|------|----|
| Cyanazine | | | | |
| Diazinon | | | | |
| Dicamba | | | | |
| 1,2-Dichlorobenzene | | | | |
| 1,4-Dichlorobenzene | | | | |
| Dichlorodiphenyltrichloroethane (DDT) + metabolites | | | | |
| 1,2-Dichloroethane | | | | |
| 1,1-Dichloroethylene (vinylidene chloride) | | | | |
| Dichloromethane | | | | |
| 2,4 Dichlorophenol | | | | |
| 2,4-Dichlorophenoxy acetic acid (2,4-D) | | | | |
| Diclofop-methyl | | | | |
| Dimethoate | | | | |
| Dinoseb | | | | |
| Diquat | | | | |
| Diuron | | | | |
| Glyphosate | | | | |
| Heptachlor + Heptachlor Epoxide | | | | |
| Lindane (Total) | | | | |
| Malathion | | | | |
| Methoxychlor | | | | |
| Metolachlor | | | | |
| Metribuzin | | | | |
| Monochlorobenzene | | | | |
| Paraquat | | | | |
| Parathion | | | | |
| Pentachlorophenol | | | | |
| Phorate | | | | |
| Picloram | | | | |
| Polychlorinated Biphenyls(PCB) | | | | |
| Prometryne | | | | |
| Simazine | | | | |
| THM (NOTE: show latest annual average) | Average 2016 | 24.0 | ug/L | No |
| Temephos | | | | |
| Terbufos | | | | |
| Tetrachloroethylene | | | | |
| 2,3,4,6-Tetrachlorophenol | | | | |
| Triallate | | | | |



| | | | | |
|---|--|--|--|--|
| Trichloroethylene | | | | |
| 2,4,6-Trichlorophenol | | | | |
| 2,4,5-Trichlorophenoxy acetic acid (2,4,5-T) | | | | |
| Trifluralin | | | | |
| Vinyl Chloride | | | | |

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 |
|-----------|--------------|-----------------|----------------|
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