



ANNUAL REPORT – 2016

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| Drinking-Water System Number: | 260006529 |
| Drinking-Water System Name: | North Middlesex Water Distribution System |
| Drinking-Water System Owner: | Municipality of North Middlesex |
| Drinking-Water System Category: | Large Municipal Residential |
| Period being reported: | January 1 – December 31, 2016 |

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|--|---|
| <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 Summary Report required under O. Reg. 170/03 Schedule 22 will be</p> <div style="border: 1px solid black; padding: 5px; min-height: 100px;"> <p>229 Main St Parkhill, ON N0M 2K0</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; text-align: center; padding: 2px;">0</div> <p>Did you provide a copy of your annual report to all Designated Facilities you serve?</p> <p>Not Applicable</p> <p>Number of Interested Authorities you report to:</p> <p>Not Applicable</p> <p>Did you provide a copy of your annual report to all Interested Authorities you report to for each Designated Facility?</p> <p>Not Applicable</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 |
|-----------------------------------|-------------------------------------|
| Not applicable | Not applicable |



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?

Not Applicable

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-Water Department 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 North Middlesex Distribution System provides drinking water to consumers within the Municipality of North Middlesex. The North Middlesex Distribution System purchases potable water from the Lake Huron Primary Water Supply System; water can enter the North Middlesex Distribution System from five points along the Lake Huron Primary Water Supply System main transmission line. The North Middlesex Distribution System is comprised of two water reservoirs, two booster pump stations, multiple water-mains and other water main appurtenances such as valves, hydrants, air release chambers and pressure reducing and sustaining chambers. The North Middlesex Distribution System is connected to the Village of Thedford water system. The Thedford water system is located in the Municipality of Lambton Shores and is operated by Operations Management International Canada Inc. (OMI). Thedford is part of the Lake Huron Water Board’s Supply System; the Municipality of North Middlesex reports annually to the board.

List all water treatment chemicals used over this reporting period

Not applicable

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

| | |
|--|--------------------|
| Distribution System –Equipment Replacement & Repairs | \$15,000.00 |
| Mount Carmel Reservoir Inspection | \$ 4,500.00 |
| TOTAL | \$19,500.00 |

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 |
|----------------------|-----------|--------|-----------------|-------------------|------------------------|
| No Reportable issues | | | | | |

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 #) | Range of Background Results min-max cfu/100ml | Number of HPC Samples | Range of HPC Results (min #)-(max #) |
|--------------|-------------------|--|---|---|-----------------------|--------------------------------------|
| Distribution | 225 | 0 - 0 | 0 – 0 | 0 –5 | 70 | <10 – >2000 |

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 #) |
|----------|------------------------|----------------------------------|
| Chlorine | 633 | 0.70 – 1.48 |

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 |
|---------------------------------|-----------|--------------|--------|-----------------|
| Not Applicable | | | | |

Summary of Inorganic parameters tested during this reporting period or the most recent sample results:

Not Applicable



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 | Date Sampled | Number of Samples | pH Range | Range of Alkalinity (min.#) – (max#) mg/L | Range of Lead Results (min#) – (max #) ug/L | Number of Exceedances |
|----------------------|---------------------|--------------------------|-----------------|--|--|------------------------------|
| Distribution | February 09, 2016 | 3 | 7.49-7.81 | 80 - 81 | 0.05 - 1.07 | 0 |
| Distribution | August 23, 2016 | 3 | 7.95-8.23 | 76 - 79 | 0.15-0.30 | 0 |

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

| Parameter | Annual Running Average | Result Value | Unit of Measure | Exceedance |
|--|-------------------------------|---------------------|------------------------|-------------------|
| THM (NOTE: show latest annual average) | Jan –Dec. 2016 | 30.5 | 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 |
|------------------|---------------------|------------------------|-----------------------|
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