February 28, 2019

Chief Administrative Officer
Corporation Township of Adjala-Tosorontio
7855 Sideroad 30, RR #1
Alliston, ON
L9R 1V1

Re: Safe Drinking Water Act, O.Reg. 170/03 Schedule 22 Summary Report for Loretto Heights DWS

Dear CAO,

Attached is the 2018 Summary Report for the Loretto Heights Drinking Water System (DWS). This report has been completed based on the information in our records and in accordance with Schedule 22 of O. Reg. 170/03, under the Safe Drinking Water Act, which requires a Summary Report to be prepared no later than March 31st of each year for the preceding calendar year. This report covers the period of January 1, 2018 to December 31, 2018.

Please remember that any Orders that the Town has received directly from the Ministry of the Environment, Conservation and Parks (MECP) should be reviewed. If there is a non-compliance with the Order, we recommend that the information be added to this report, if not already. After your review and inclusion of any additional information, this Summary Report is to be provided to the members of the Municipal Council. Please ensure its distribution to the Council Members and please provide proof of their review.

We emailed a copy of the 2018 Annual Report for the Loretto Heights DWS to Doug Sitland on February 26, 2019. The Annual Report must cover the period from January 1 to December 31 in a year and must be prepared in accordance with Section 11 of O. Reg 170/03 and submitted no later than February 28 of the following year.

Section 12 of O. Reg. 170/03 requires both the Summary Report and the Annual Report to be made available for inspection by any member of the public at the office of the municipality or at a location that is reasonably convenient to the users of the water system, as indicated in the Section 11 Annual Report, during normal business hours and without charge.

Please let me know if there are any questions or comments concerning the Summary and/or Annual Report(s).

Thank you for your time.

Kind Regards,

[Signature]

Robyn Waher
Process Compliance Technician | Ontario Clean Water Agency
South Simcoe Hub | Georgian Highlands Region
30 Woodland Drive, Wasaga Beach, ON L9Z 2V4
T: 705.429.2525 | C: 705.817.9646 | F: 705.429.7967 | RWaher@ocwa.com

cc: Doug Sitland, Director of Infrastructure and Development
LORETTO HEIGHTS
DRINKING WATER SYSTEM

FOR THE PERIOD:
JANUARY 1, 2018 – DECEMBER 31, 2018

Prepared for the Corporation of the Township of Adjala-Tosorontio
by the Ontario Clean Water Agency
SCHEDULE 22
SUMMARY REPORTS FOR MUNICIPALITIES

Municipal: Large Residential
Small Residential

Application

22-1. This Schedule applies to the following drinking water systems:
1. Large municipal residential systems.
2. Small municipal residential systems.

Report

22-2. (1) The owner of a drinking water system shall ensure that, not later than March 31 of each year after 2003, a report is prepared in accordance with subsections (2) and (3) for the preceding calendar year and is given to,

(a) in the case of a drinking water system owned by a municipality, the members of the municipal council;
(b) in the case of a drinking water system owned by a municipal service board established under section 195 of the Municipal Act, 2001, the members of the municipal service board; or
(c) in the case of a drinking water system owned by a corporation, the board of directors of the corporation.

(2) The report must,

(a) list the requirements of the Act, the regulations, the system’s approval, drinking water works permit, municipal drinking water licence, and any orders applicable to the system that were not met at any time during the period covered by the report; and

(b) for each requirement referred to in clause (a) that was not met, specify the duration of the failure and the measures that were taken to correct the failure.

(3) The report must also include the following information for the purpose of enabling the owner of the system to assess the capability of the system to meet existing and planned uses of the system:

1. A summary of the quantities and flow rates of the water supplied during the period covered by the report, including monthly average and maximum daily flows.

2. A comparison of the summary referred to in paragraph 1 to the rated capacity and flow rates approved in the system’s approval, drinking water works permit or municipal drinking water licence, or if the system is receiving all of its water from another system under an agreement pursuant to subsection 5 (4), to the flow rates specified in the written agreement.

(4) If a report is prepared under subsection (1) for a system that supplies water to a municipality under the terms of a contract, the owner of the system shall give a copy of the report to the municipality by March 31.

(5) Revoked: O. Reg. 253/05, s. 18.
REPORT
This report is a summary of water quantity for the Loretto Heights Drinking Water System (DWS) in the Township of Adjala-Tosorontio written in accordance with Schedule 22 of Ontario’s Drinking Water Systems Regulation for the reporting period of January 1, 2018 to December 31, 2018. This report was prepared by the Ontario Clean Water Agency on behalf of the Corporation of the Township of Adjala-Tosorontio.

Note: The Loretto Heights DWS was added to the Weca DWS as of December 14, 2018 by means of connecting their distribution systems. Loretto Heights is no longer an independent DWS and will be captured as a pumphouse within the Weca DWS reports moving forward.

ISSUES OF NON-COMPLIANCE
The following outlines any instances when the DWS failed to meet the requirements of the Act, Regulations, System Approval(s) and any Order during this reporting period and the measures taken to correct each failure.

Not Applicable for Reporting Period

Please refer to the Section 11 Annual Report for the Loretto Heights DWS for information regarding Adverse Water Quality Incident(s) that may have occurred during the reporting period.

SYSTEM PERFORMANCE
The following (Table 1) summarizes the quantities and flow rates of the raw water taken and treated water supplied during the period covered by this report, including monthly average and maximum day flows, and daily instantaneous peak flow rates, as well as a comparison with the maximum daily volume and flow rates specified in the system approval:

Table 1: Loretto Heights DWS – Raw Water (RW) Summary for Reporting Period

<table>
<thead>
<tr>
<th>Description</th>
<th>Well 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maximum Allowable Daily Volume (m³/day)*</td>
<td>163.8</td>
</tr>
<tr>
<td>Maximum Allowable Flow Rate (L/s)**</td>
<td>1.90</td>
</tr>
<tr>
<td>Average Daily Flow (m³/day)</td>
<td>19.8</td>
</tr>
<tr>
<td>Percentage of Maximum Daily Volume*</td>
<td>12%</td>
</tr>
<tr>
<td>Maximum Daily Flow (m³/day)</td>
<td>54.7</td>
</tr>
<tr>
<td>Percentage of Maximum Daily Volume*</td>
<td>33%</td>
</tr>
<tr>
<td>Average Flow Rate (L/s)</td>
<td>1.41</td>
</tr>
<tr>
<td>Percentage of Maximum Allowable Flow Rate**</td>
<td>74%</td>
</tr>
</tbody>
</table>
Ontario Regulation 170/03: Drinking Water Systems
Schedule 22 Summary Report
JANUARY 01, 2018 – DECEMBER 31, 2018

<table>
<thead>
<tr>
<th>Description</th>
<th>Well 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maximum Instantaneous Peak Flow Rate (L/s)</td>
<td>3.54+</td>
</tr>
<tr>
<td>Percentage of Maximum Allowable Flow Rate**</td>
<td>186%</td>
</tr>
<tr>
<td>Total Annual Volume (m$^3$)</td>
<td>7,002.6</td>
</tr>
</tbody>
</table>

*Loretto Heights Well and Pumphouse added to Weca DWS as of December 14, 2018.
*As specified in the Permit to Take Water, where the “maximum daily volume” is the “Maximum Taken per Day” per well expressed in litres per day and stipulates a “Total Taking” of 163.8 m$^3$/day.
**As specified in the Permit to Take Water, where the “maximum flow rate” is the Maximum Taken per Minute” per well expressed in litres per minute.
+Exceedances are due to well pump start-ups and their instantaneous flow rate measurements.

Table 2: Loretto Heights DWS – Treated Water (TW) Summary for Reporting Period

<table>
<thead>
<tr>
<th>Description</th>
<th>TW</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rated Capacity (m$^3$/day)*</td>
<td>137.0</td>
</tr>
<tr>
<td>Average Daily Flow (m$^3$/day)</td>
<td>19.8</td>
</tr>
<tr>
<td>Percentage of Rated Capacity (m$^3$/day)*</td>
<td>15%</td>
</tr>
<tr>
<td>Maximum Daily Flow (m$^3$/day)</td>
<td>54.7</td>
</tr>
<tr>
<td>Percentage of Rated Capacity (m$^3$/day)*</td>
<td>40%</td>
</tr>
<tr>
<td>Total Annual Volume (m$^3$)</td>
<td>7,002.6</td>
</tr>
</tbody>
</table>

*As specified in the Municipal Drinking Water Licence, where the “rated capacity” is the “the maximum daily volume of treated water that flows from the treatment subsystem to the distribution system,” expressed in cubic metres per day.

A review of flow information for the period of January 1, 2018 to December 31, 2018 indicates that the maximum daily volume specified in the PTTW was not exceeded at the well. Also, the drinking water system did not exceed the MDWL Rated Capacity for treated water that flows from the treatment subsystem to the distribution system. The instances of exceeding the allowable PTTW maximum flow rate are explained by instantaneous flow rate measurements and well pump start-ups. Instantaneous flow rate exceedances do not result in non-compliances because the PTTW dictates daily and total water taking volumes only.

The following table (Table 3) outlines a more detailed flow summary for the Well.

Table 3: Loretto Heights DWS - Facility Flow Summary for Raw Water Source Well 1^
## Ontario Regulation 170/03: Drinking Water Systems
### Schedule 22 Summary Report
**JANUARY 01, 2018 – DECEMBER 31, 2018**

<table>
<thead>
<tr>
<th>Month</th>
<th>Monthly Flow Total (m³/month)</th>
<th>Daily Flow Average (m³/day)</th>
<th>Daily Flow Maximum (m³/day)</th>
<th>Daily Average Flow Rate (L/sec)</th>
<th>Daily Peak Flow Rate (L/sec)</th>
<th>Number of Days of Water Taking</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sep</td>
<td>600.69</td>
<td>20.02</td>
<td>28.85</td>
<td>1.42</td>
<td>1.66</td>
<td>30</td>
</tr>
<tr>
<td>Oct</td>
<td>759.60</td>
<td>24.50</td>
<td>54.71</td>
<td>1.40</td>
<td>1.69</td>
<td>31</td>
</tr>
<tr>
<td>Nov</td>
<td>520.12</td>
<td>20.00</td>
<td>41.64</td>
<td>1.35</td>
<td>1.62</td>
<td>26</td>
</tr>
<tr>
<td>Dec</td>
<td>68.65</td>
<td>6.87</td>
<td>14.74</td>
<td>1.23</td>
<td>1.54</td>
<td>10</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>7002.57</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td><strong>340</strong></td>
</tr>
<tr>
<td><strong>Avg.</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Max.</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td><strong>54.71</strong></td>
</tr>
</tbody>
</table>

*Loretto Heights Well and Pumphouse added to Weca DWS as of December 14, 2018.*