

Annual Summary Report

February 22, 2010

Lou Zarlenga
Manager of Public Services
Corporation of the Town of Amherstburg
P.O. Box 159
271 Sandwich St. S,
Amherstburg, Ontario
Canada N9V 2Z3

Dear Mr. Zarlenga:

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

Attached is the 2009 Summary Report for the Amherstburg Water Treatment Plant. This report has been completed based on the information obtained from the water treatment plant 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 not later than March 31st of each year for the preceding calendar year. This report covers the period of January 1, 2009 to December 31, 2009.

Please remember that any Orders that you have received directly from the MOE should be reviewed. Where non-compliance with the Order is evident and it is not included in the attached 2009 Summary Report, then we recommend that this information be added to the Summary Report. Note: Schedule 22-2 (a) specifies that the summary report is given to, in the case of a drinking water system owned by a municipality, the members of the municipal council for the Town of Amherstburg, and is not intended for distribution to the Ministry of the Environment.

After your review and inclusion of any additional information, these Summary Reports are to be provided to the members of the municipal council. Please ensure this distribution.

Section 12 of O. Reg. 170/03, requires the Summary Reports be made available for inspection by any member of the public during normal business hours, without charge. The reports should be made available for inspection at the office of the municipality, or at a location that is reasonably convenient to the users of the water system.

Please find enclosed reports. If you have any questions, please feel free to contact Operations Manager, Tim Sunderland, at (519) 736-5447.

Sincerely,

Dan Mitchell

Dan Mitchell
Process & Compliance Technician
Ontario Clean Water Agency

SUMMARY REPORTS FOR MUNICIPALITIES

Report

This report is a summary of water quality information for the Amherstburg WTP, published in accordance with Schedule 22 of Ontario’s Drinking-Water Systems Regulation for the reporting period of January 1, 2009 to December 31, 2009. The Amherstburg WTP is categorized as a Large Municipal Residential Drinking Water System.

This report was prepared by The Ontario Clean Water Agency on behalf of The Corporation of the Town of Amherstburg.

Who gets a copy of the Summary Report?

- in the case of a drinking-water system owned by a municipality, the members of the municipal council;
- 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
- in the case of a drinking-water system owned by a corporation, the board of directors of the corporation.

What must the Summary Report contain?

The report must,

- (a) list the requirements of the Act, the regulations, the system’s approval and any order that the system **failed to meet** at any time during the period covered by the report and specify the duration of the failure; and
- (b) for each failure referred to in clause (a), describe the measures that were taken to correct the failure.

The following table 1 lists the requirements that the system failed to meet and the measures taken to correct the failure:

| Drinking Water Legislation | List the requirement(s) the system failed to meet | Specify the duration of the failure (i.e. date(s)) | Describe the measures taken to correct the failure | Status (complete or outstanding) |
|---|---|--|--|----------------------------------|
| Safe Drinking Water Act | None to report | _____ | _____ | _____ |
| Ontario Regulations (eg. O.Reg 170/03, O.Reg 435/93, O.Reg 903) | None to report | _____ | _____ | _____ |
| System Certificate of Approval #0896-7JHHW8 | None to report | _____ | _____ | _____ |
| Provincial Officer’s Order | None to report | _____ | _____ | _____ |

Table 1

What else must the Summary Report contain?

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 and daily instantaneous peak flow rates.

Attached please find a copy of the quantities and flow rates report of the water supplied for Amherstburg WTP during 2009.

2. A comparison of the summary referred to in paragraph 1 to the rated capacity and flow rates approved in the system’s approval.

By comparison, the rated capacity and flow rates for raw flow and treated water did exceed the legislative requirement. No max day treated flows exceeded 80% of the rated treated capacity for the reporting period.

| Flow | Requirement | Maximum Daily Flow | Requirement | Maximum Flow Rate |
|--------------|--|-------------------------------|--|----------------------------------|
| 2009 | Maximum Allowable (per day) | Maximum Achieved (per day) | Maximum Allowable (per minute) | Maximum Achieved (per minute) |
| Raw Flow | 22,900,000 L/d Permit to Take Water (#3750-7FAHRN) | 16,202,000 L/d | 15,903 L/min Permit to Take Water (#3750-7FAHRN) | 17,833 L/min |
| Treated Flow | 18,184 m ³ /d C of A (#0896-7JHHW8) | 12,797 m ³ /d | _____ | _____ |

Table 2

When Does the Summary Report Get Submitted?

If a report is prepared 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.

End



Ontario Clean Water Agency
Monthly Process Data Report

Printed on: 1/14/2010
d_monthlyprocessrep

Municipality: Town of Amherstburg formely (Twp of Malden, Twp of Anderdon, Town of Amherstburg)
Facility: [5819] - Amherstburg Water Treatment Plant & Distribution System
Works: [210000149] - Amherstburg Water Treatment Plant & Distribution System
Classification: Class 2 Water Distribution, Class 3 Water Treatment
Water Source: Detroit River

Period: 01/01/2009 to 12/31/2009
Serviced Population: 20,599
Total Design Capacity(m³/day): 18,184.0

| | Jan/2009 | Feb/2009 | Mar/2009 | Apr/2009 | May/2009 | Jun/2009 | Jul/2009 | Aug/2009 | Sep/2009 | Oct/2009 | Nov/2009 | Dec/2009 | <-- Summary --> |
|--|-----------|-----------|-----------|-----------|------------|------------|------------|------------|-----------|-----------|-----------|-----------|-----------------|
| Raw Water/Flows - Raw Water | | | | | | | | | | | | | |
| Raw Flow: Sum (m3/d) | | | | | | | | | | | | | |
| Avg | 9,448.516 | 9,213.571 | 9,031.29 | 9,545.667 | 10,302.613 | 11,816.4 | 12,309.29 | 11,655.355 | 9,975.467 | 8,859.161 | 8,454.667 | 8,720.0 | 9,950.299 |
| Cnt | 31.0 | 28.0 | 31.0 | 30.0 | 31.0 | 30.0 | 31.0 | 31.0 | 30.0 | 31.0 | 30.0 | 31.0 | 365.0 |
| Max | 11,030.0 | 10,828.0 | 10,650.0 | 11,490.0 | 12,384.0 | 15,384.0 | 15,040.0 | 16,202.0 | 11,419.0 | 10,130.0 | 9,300.0 | 9,450.0 | 16,202.0 |
| Min | 7,632.0 | 7,733.0 | 7,730.0 | 7,447.0 | 8,290.0 | 8,583.0 | 9,823.0 | 8,708.0 | 8,047.0 | 7,680.0 | 7,422.0 | 7,906.0 | 7,422.0 |
| Raw Flow: Peak (L/min) | | | | | | | | | | | | | |
| Avg | 6,809.194 | 6,760.429 | 7,759.129 | 7,484.5 | 7,594.71 | 9,937.233 | 9,377.903 | 8,724.808 | 7,371.5 | 6,610.968 | 6,112.4 | 6,281.0 | 7,573.562 |
| Cnt | 31.0 | 28.0 | 31.0 | 30.0 | 31.0 | 30.0 | 31.0 | 31.0 | 30.0 | 31.0 | 30.0 | 31.0 | 365.0 |
| Max | 7,708.0 | 8,069.0 | 12,994.0 | 17,833.0 | 9,076.0 | 15,899.0 | 14,236.0 | 11,921.0 | 8,635.0 | 8,493.0 | 7,246.0 | 6,853.0 | 17,833.0 |
| Min | 5,901.0 | 5,819.0 | 5,966.0 | 5,987.0 | 6,051.0 | 7,600.0 | 7,034.0 | 6,670.0 | 5,982.0 | 5,616.0 | 5,593.0 | 5,548.0 | 5,548.0 |
| Treated Water/Flows - Treated Water | | | | | | | | | | | | | |
| Treated Flow (m3/d) | | | | | | | | | | | | | |
| Avg | 7,736.194 | 7,527.357 | 7,284.839 | 8,028.667 | 9,226.774 | 10,638.933 | 11,055.548 | 10,435.903 | 8,911.2 | 7,632.935 | 7,198.2 | 7,236.032 | 8,583.373 |
| Cnt | 31.0 | 28.0 | 31.0 | 30.0 | 31.0 | 30.0 | 31.0 | 31.0 | 30.0 | 31.0 | 30.0 | 31.0 | 365.0 |
| Max | 8,306.0 | 8,250.0 | 7,840.0 | 12,166.0 | 11,691.0 | 12,717.0 | 12,797.0 | 12,601.0 | 10,259.0 | 8,494.0 | 7,800.0 | 7,900.0 | 12,797.0 |
| Min | 7,130.0 | 6,883.0 | 6,636.0 | 7,100.0 | 7,864.0 | 9,077.0 | 9,080.0 | 7,912.0 | 7,777.0 | 6,970.0 | 6,417.0 | 6,576.0 | 6,417.0 |



**Ontario Clean Water Agency
Performance Assessment Report - Surface Water Supply**

Printed on: 1/14/2010
d_par_swt

Municipality: Town of Amherstburg formerly (Twp of Malden, Twp of Anderdon, Town of Amherstburg)
 Facility: [5819] - Amherstburg Water Treatment Plant & Distribution System
 Works: [210000149] - Amherstburg Water Treatment Plant & Distribution System
 Classification: Class 2 Water Distribution, Class 3 Water Treatment
 Water Source: Detroit River

Period: 01/01/2009 to 12/31/2009
 Serviced Population: 20,599
 Total Design Capacity(m³/day): 18,184.0
 Raw Group Selected: RW
 Effluent Group Selected: TW

| | Jan/2009 | Feb/2009 | Mar/2009 | Apr/2009 | May/2009 | Jun/2009 | Jul/2009 | Aug/2009 | Sep/2009 | Oct/2009 | Nov/2009 | Dec/2009 | <-- Total --> | <-- Avg. --> | <-- Max. --> | <-- Criteria--> |
|--------------------------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|---------------|--------------|--------------|-----------------|
| Flow | | | | | | | | | | | | | | | | |
| Raw: Total Flow(m3/mth) | 292,904.0 | 257,980.0 | 279,970.0 | 286,370.0 | 319,381.0 | 354,492.0 | 381,588.0 | 361,316.0 | 299,264.0 | 274,634.0 | 253,640.0 | 270,320.0 | 3,631,859.0 | | | |
| Raw: Avg. Day Flow(m3/day) | 9,448.5 | 9,213.8 | 9,031.3 | 9,545.7 | 10,302.6 | 11,816.4 | 12,309.3 | 11,655.4 | 9,975.5 | 8,859.2 | 8,454.7 | 8,720.0 | 9,956.3 | | | |
| Raw: Max. Day Flow(m3/day) | 11,030.0 | 10,828.0 | 10,650.0 | 11,490.0 | 12,384.0 | 15,384.0 | 15,040.0 | 16,202.0 | 11,419.0 | 10,130.0 | 9,300.0 | 9,450.0 | 16,202.0 | | | |
| Treat: Total Flow(m3/mth) | 239,822.0 | 210,766.0 | 225,830.0 | 240,860.0 | 286,030.0 | 319,168.0 | 342,722.0 | 323,513.0 | 267,336.0 | 236,621.0 | 215,946.0 | 224,317.0 | 3,132,931.0 | | | |
| Treat: Avg. Day Flow(m3/day) | 7,736.2 | 7,527.4 | 7,284.8 | 8,028.7 | 9,226.8 | 10,638.9 | 11,055.3 | 10,435.9 | 8,911.2 | 7,632.9 | 7,198.2 | 7,236.0 | 8,583.4 | | | |
| Treat: Max. Day Flow(m3/day) | 8,306.0 | 8,250.0 | 7,840.0 | 12,166.0 | 11,691.0 | 12,717.0 | 12,797.0 | 12,601.0 | 10,259.0 | 8,494.0 | 7,800.0 | 7,900.0 | 12,797.0 | | | |
| Physical/Chemical Parameters | | | | | | | | | | | | | | | | |
| Raw: Max. Turbidity(NTU) | 60.0 | 400.0 | 313.0 | 186.0 | 140.0 | 35.0 | 38.6 | 21.0 | 45.7 | 74.3 | 89.1 | 127.0 | 38.38 | 400.0 | | |
| Treat: Min. Turbidity(NTU) | 0.04 | 0.04 | 0.04 | 0.04 | 0.03 | 0.03 | 0.02 | 0.02 | 0.02 | 0.02 | 0.04 | 0.03 | 0.04 | 0.04 | | 0 |
| Treat: Max. Turbidity(NTU) | 0.07 | 0.15 | 0.13 | 0.1 | 0.07 | 0.06 | 0.41 | 0.06 | 0.04 | 0.05 | 0.21 | 0.1 | 0.05 | 0.41 | | 1.0 |
| Treat: Min. Filter Turb. (NTU) [] | 0.02 | 0.02 | 0.03 | 0.03 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.03 | 0.02 | 0.02 | 0.02 | | 0 |
| Treat: Max. Filter Turb. (NTU) [] | 0.15 | 0.77 | 0.32 | 0.46 | 0.17 | 16.9 | 0.72 | 0.07 | 0.05 | 0.11 | 0.12 | 0.09 | 0.12 | 15.9 | | 1.0 |
| Treat: Max. Nitrite(mg/L) | <= 0.01 | | | <= 0.01 | | | <= 0.01 | | | <= 0.01 | | | <= 0.01 | <= 0.01 | | 1.0 |
| Treat: Max. Nitrate(mg/L) | 0.99 | | | 0.61 | | | 0.39 | | | 0.23 | | | 0.59 | 0.99 | | 10.0 |
| Dist.: Max. Lead(ug/L) | | | | | | | 0.72 | | | | | | 0.72 | 0.72 | | 10.0 |
| Dist.: Avg. THM(ug/L) | 20.0 | | | 22.0 | | | 39.0 | | | 26.0 | | | 26.8 | | | 100.0 |
| Disinfection | | | | | | | | | | | | | | | | |
| Treat: Min. Free CL2 Resid.(mg/L) | 0.98 | 0.9 | 0.62 | 0.81 | 0.92 | 0.93 | 0.87 | 0.96 | 0.99 | 0.96 | 1.05 | 0.97 | 1.06 | | | 0.6 |
| Treat: Max. Free CL2 Resid.(mg/L) | 1.62 | 1.3 | 1.33 | 1.26 | 1.2 | 1.27 | 1.49 | 1.2 | 1.48 | 1.16 | 1.18 | 1.29 | 1.13 | 1.62 | | 4.0 |
| Dist.: Min. Free CL2 Resid.(mg/L) | 0.59 | 0.43 | 0.51 | 0.53 | 0.57 | 0.68 | 0.63 | 0.51 | 0.55 | 0.61 | 0.61 | 0.61 | 0.73 | | | 0.05 |
| Dist.: Max. Free CL2 Resid.(mg/L) | 1.51 | 1.33 | 1.13 | 1.08 | 1.04 | 1.06 | 0.98 | 1.03 | 0.93 | 1.04 | 1.03 | 1.14 | 0.95 | 1.51 | | 4.0 |
| No. Of Bacti Sample Collected | | | | | | | | | | | | | | | | |
| Raw | 4.0 | 4.0 | 5.0 | 4.0 | 4.0 | 5.0 | 4.0 | 4.0 | 5.0 | 4.0 | 4.0 | 5.0 | 52.0 | 1.0 | 5.0 | |
| Treated | 4.0 | 4.0 | 5.0 | 4.0 | 4.0 | 5.0 | 4.0 | 4.0 | 5.0 | 4.0 | 4.0 | 5.0 | 52.0 | 1.0 | 5.0 | |
| Treat: Adverse | | | | | | | | | | | | | 0 | 0 | 0 | 0 |
| Dist.: Adverse | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

Legend:
 Raw Group Selected: RW - Raw Water
 Effluent Group Selected: TW - Treated Water

Report Submitted By: Tim Sunderland,
Operations Manager,
Essex West Hub, Ontario Clean Water Agency

Signature _____ **Date** _____

Received By: _____

Signature _____ **Date** _____

Confirmed By Resolution of Council:

Signature _____ **Date** _____