# Monthly Operations Report

for the Municipality of Casselman's Water and Wastewater Systems

October 2023

Ontario Clean Water Agency
Agence Ontarienne Des Eaux

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# SECTION 1 – MONTHLY OPERATIONS REPORT CARD

## Operations and Compliance Reliability Indices

| Legend | | | | | |
|---|---|---|---|---|---|
| ✓ | ● | ▲ | ✕ | Y/N | N/A |
| Achieved | On Target | Caution | Not Achieved | Yes/No | Not Applicable |

| | Target | Current Month | Comments |
|---|---|---|---|
| **Health & Safety** | | | |
| Number of Incidents | 0 | ● | |
| *Actual Result* | | 0 | |
| **Drinking Water** | | | |
| Inspection Ratings (YTD) | 100 % | ● | |
| *Actual Result* | | 100 % | |
| AWQI's | 0 | ✕ | *Filter turbidity exceedance* |
| *Actual Result* | | 1 | |
| Number of Non-Compliances | 0 | ● | |
| *Actual Result* | | 0 | |
| Number of Water Main Breaks | 0 | ● | |
| *Actual Result* | | 0 | |
| Number of Complaints | 0 | ● | |
| *Actual Result* | | 0 | |
| Water Main Flushing | 100% | ● | |
| *Target Achieved* | | Y | |
| **Wastewater** | | | |
| Number of Non-Compliances | 0 | ● | |
| *Actual Result* | | 0 | |
| Number of Bypasses | 0 | ● | |
| *Actual Result* | | 0 | |
| Number of Sanitary Sewer Back-ups | 0 | ● | |
| *Actual Result* | | 0 | |
| Sanitary Collection System Flushing | 0 | ● | |
| *Target Achieved* | | Y | |
| **Preventive Maintenance** | | | |
| Work Orders Completed | >95% | ● | |
| *Target Achieved* | | Y | |

## SECTION 2 – FACILITY LISTING

Water Treatment & Distribution

| Facility | Type |
|---|---|
| 5971 - Casselman Water Treatment Plant | 1 WTP (Actiflo Process) |
| 1553 - Casselman Water Distribution System | 1 Water Storage Tower + Water Distribution System |

Wastewater Treatment & Collection

| Facility | Type |
|---|---|
| 1501 - Casselman Wastewater Treatment Plant | 3 Facultative Lagoon Cells<br>1 MBBR (Moving Bed Biofilm Reactor) |
| 5976 - Casselman Wastewater Collection System | 6 Sewage Pumping Stations + Wastewater Collection System |

## SECTION 3 – COMPLIANCE

One AWQI was reported for Casselman's Drinking Water System. The monthly filter performance criteria of <0.3 NTU 95% of the time was not achieved for the month of October 2023. Please see the AWQI notification submitted to MECP, attached in Appendix D.

The most recent MECP inspections are listed below:

| Location | Inspector | Inspection Rating (%) | Date |
|---|---|---|---|
| Casselman Water | Jean-Francois Durocher | 100 | February 9, 2023 |
| Casselman Sewage | **OCWA has no recent sewage system inspections on file.* | | |

There are no outstanding actions required from any recent MECP inspections.

## SECTION 4 – FACILITY PERFORMANCE

Please see the Water & Wastewater Performance Assessment Reports attached in Appendix A.

## SECTION 5 – DRINKING WATER QUALITY MANAGEMENT SYSTEM (DWQMS)

OCWA was re-accredited as the Operating Authority for Casselman's Drinking Water System on January 24, 2023.

## SECTION 6 - MAINTENANCE / CAPITAL / ADDED VALUE

Water Treatment & Distribution

- Responded to 10 after-hours call-in alarms
- Collected samples for blue-green algae due to observation of algae bloom in the source water; results indicated no cyanotoxins present.
- Completed fall flushing & winterizing of hydrants in the water distribution system
- Completed repair of hydrant at Dollard and Principale. Hydrant parts failed during operation of the hydrant while flushing and required repair.
- Completed annual calibration of WTP flow meters
- Installed new raw water sample pump
- Replaced door in chlorine room

Wastewater Treatment & Collection

- Responded to 3 after-hours call-in alarms
- Serviced and repaired Blower #2 at lagoon
- Completed annual calibration of flow meters
- Lagoon discharge commenced October 5th

Preventive Maintenance Plan (PMP) Work Order Summary

All required work orders were completed. Please refer to the summary reports attached in Appendix B.

## SECTION 7 – COMPLAINTS

| Facility | Date | Description |
|---|---|---|
| None to report | | |

## SECTION 8 – RECOMMENDATIONS / GENERAL COMMENTS

General

- 33 locates were completed in October.

Water Treatment & Distribution

- Capital/Major Maintenance projects approved for 2023 are underway.
- OCWA staff continued working with chemist Dr. Dallala on behalf of the Municipality.

Wastewater Treatment & Collection

- Capital/Major Maintenance projects approved for 2023 are underway.

# Appendix A

## Performance Assessment Reports

# ONTARIO CLEAN WATER AGENCY
# PERFORMANCE ASSESSMENT REPORT

**MUNICIPALITY:** MUNICIPALITY OF CASSELMAN
**PROJECT:** CASSELMAN DRINKING WATER SYSTEM
**DESCRIPTION:** SURFACE WATER TREATMENT PLANT
CHEMICALLY ASSISTED FILTRATION

**YEAR:** 2023
**WATER SOURCE:** NATION RIVER
**DESIGN CAPACITY:** 3182 m3/d
**WORKS NUM.:** 210001219

| MONTH | SYSTEM FLOWS (TREATED) | | | TREATED | | DISTRIBUTION | | RAW | | | | | TREATED | | | | | | | DISTRIBUTION | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Total Flow ($m^3$) | Avg. Flow ($m^3$) | Max Day Flow ($m^3$) | Min. Free $Cl_2$ Resid. (mg/L) | Max Free $Cl_2$ Resid. (mg/L) | Min Combined Cl2 Resid. (mg/L) | Max Combined Cl2 Resid. (mg/L) | Dissolved Organic Carbon (mg/L) | Total Organic Carbon (mg/L) | Total Hardness (mg/L) | Average Manganese (mg/L) | Max Manganese (mg/L) | IH Avg. Turbidity (NTU) | IH Max. Turbidity (NTU) | Dissolved Organic Carbon (mg/L) | Total Organic Carbon (mg/L) | Total Hardness (mg/L) | Average Manganese (mg/L) | Max Manganese (mg/L) | THM (µg/L) quaterly | HAA (µg/L) quaterly | NDMA (µg/L) quaterly |
| JAN | 30,573 | 986 | 1259 | 1.10 | 2.49 | 1.00 | 2.26 | 8.30 | 8.40 | 242 | 0.12 | 0.20 | 0.22 | 0.33 | 3.00 | 3.20 | 224 | 0.07 | 0.18 | 53.75 | 32.13 | < 0.0009 |
| FEB | 28,511 | 1018 | 1342 | 1.33 | 2.55 | 0.70 | 2.02 | 4.00 | 4.00 | 372 | 0.12 | 0.18 | 0.27 | 0.42 | 1.40 | 1.70 | 361 | 0.12 | 0.34 | - | - | - |
| MAR | 29,920 | 965 | 1223 | 1.38 | 2.37 | 1.01 | 2.00 | 4.60 | 4.60 | 330 | 0.16 | 0.19 | 0.26 | 0.35 | 2.00 | 2.00 | 329 | 0.06 | 0.09 | - | - | - |
| APR | 31,287 | 1043 | 1266 | 0.83 | 3.60 | 0.79 | 1.79 | 3.30 | 5.60 | 169 | 0.11 | 0.13 | 0.34 | 0.53 | 1.60 | 1.70 | 161 | 0.03 | 0.04 | 27.00 | 26.80 | < 0.0009 |
| MAY | 38373 | 1238 | 1571 | 0.85 | 2.87 | 0.30 | 2.63 | 6.90 | 6.90 | 222 | 0.13 | 0.19 | 0.48 | 0.77 | 2.00 | 2.00 | 218 | 0.03 | 0.05 | - | - | - |
| JUN | 39275 | 1309 | 1879 | 1.50 | 2.37 | 0.66 | 2.33 | 3.30 | 3.30 | 275 | 0.31 | 0.88 | 1.04 | 4.43 | 1.60 | 1.60 | 281 | 0.11 | 0.55 | - | - | - |
| JUL | 39232 | 1266 | 1988 | 0.73 | 3.10 | 0.58 | 2.40 | 5.20 | 5.20 | 274 | 0.62 | 1.22 | 4.06 | 13.20 | 1.00 | 1.00 | 271 | 0.39 | 1.00 | 147.00 | 119.00 | 0.0024 |
| AUG | 36194 | 1168 | 1449 | 1.00 | 2.96 | 0.30 | 2.45 | 5.90 | 5.90 | 245 | 0.11 | 0.17 | 0.41 | 0.50 | 3.10 | 3.10 | 248 | 0.03 | 0.07 | - | - | - |
| SEP | 37708 | 1257 | 1524 | 0.97 | 3.26 | 0.46 | 2.06 | 8.50 | 8.50 | 308 | 0.20 | 0.53 | 0.45 | 0.73 | 4.40 | 4.40 | 287 | 0.03 | 0.06 | - | - | - |
| OCT | 36609 | 1181 | 1851 | 0.99 | 2.85 | 0.54 | 2.07 | 1.80 | 6.70 | 323 | 0.12 | 0.16 | 0.42 | 0.59 | 0.20 | 1.50 | 321 | 0.03 | 0.06 | 90.00 | 28.30 | < 0.0009 |
| NOV | | | | | | | | | | | | | | | | | | | | | | |
| DEC | | | | | | | | | | | | | | | | | | | | | | |
| TOTAL | 347,683 | | | | | | | | | | | | | | | | | | | | | |
| AVG | | 1,143 | | | | | | 5.18 | 5.91 | 276.00 | 0.20 | | 0.80 | | 2.03 | 2.22 | 270.10 | 0.09 | | 79.44 | 51.56 | 0.0009 |
| MAX | | | 1,988 | | 3.60 | | 2.63 | | | | | 1.22 | | 13.20 | | | | | 1.00 | | | |
| MIN | | | | 0.73 | | 0.30 | | | | | | | | | | | | | | | | |
| CRITERIA | | | **3,182** | **CT** | | **0.25** | **3.00** | | | | | | | | | | | | | **<100** | **<80** | **<0.009** |

| MONTH | SYSTEM FLOWS (RAW) | | | | ACTIFLO FILTER #1 | | ACTIFLO FILTER #2 | | Efficiency | | TANK | | TREATED | | | | *E. coli* / Total Coliform / HPC (Number of Samples Collected) | | | | RAW WATER | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Total Flow ($m^3$) | Avg. Day Flow ($m^3$) | Max. Flow ($m^3$) | Max. Flow Rate (L/min) | Avg. Turbidity (NTU) | Max. Turbidity (NTU) | Avg. Turbidity (NTU) | Max. Turbidity (NTU) | Turbidity % < 0.3 NTU Filter #1 | Turbidity % < 0.3 NTU Filter #2 | Backwash TSS (mg/L) | Supernatant TSS (mg/L) | OL Avg. Turbidity (NTU) | OL Max. Turbidity (NTU) | Min UV Intensity ($mJ/cm^2$) | Min UVT (%) | Safe | | Adverse | | Coliform | *E.coli* |
| | | | | | | | | | | | | | | | | | Treated | Distribution | Treated | Distribution | Max. Count | Max. Count |
| JAN | 38,963 | 1257 | 1790 | 2195 | 0.14 | 0.56 | 0.08 | 0.84 | 99.71 | 99.71 | 11 | 3 | 0.44 | 0.90 | 70 | 81 | 5 | 15 | 0 | 0 | 16,200 | 66 |
| FEB | 38,499 | 1375 | 1666 | 2149 | 0.15 | 0.34 | 0.10 | 0.29 | 99.97 | 99.97 | 3 | 6 | - | - | 65 | 87 | 4 | 12 | 0 | 0 | 1,860 | 85 |
| MAR | 38,816 | 1252 | 1606 | 2016 | 0.16 | 0.72 | 0.11 | 0.38 | 98.93 | 98.93 | 3 | 5 | - | - | 82 | 86 | 4 | 12 | 0 | 0 | 780 | 76 |
| APR | 39,411 | 1314 | 1963 | 2086 | 0.18 | 0.81 | 0.14 | 0.71 | 97.00 | 98.39 | 3 | 11 | - | - | 96 | 86 | 4 | 12 | 0 | 0 | 19,600 | 45 |
| MAY | 45,286 | 1461 | 1750 | 2021 | 0.21 | 0.83 | 0.15 | 0.71 | 92.56 | 97.25 | 14 | 9 | - | - | 63 | 85 | 5 | 15 | 0 | 0 | 2,400 | 152 |
| JUN | 44,165 | 1472 | 2317 | 2171 | 0.28 | 0.93 | 0.20 | 0.86 | 71.41 | 90.61 | 12 | 9 | 0.90 | 3.70 | 81 | 86 | 4 | 12 | 0 | 0 | 50 | 14 |
| JUL | 47,573 | 1535 | 2070 | 2215 | 0.35 | 0.86 | 0.38 | 0.98 | 50.56 | 63.44 | 15 | 7 | 2.83 | 5.00 | 73 | 87 | 5 | 16 | 0 | 0 | 20,000 | 290 |
| AUG | 41,731 | 1346 | 1844 | 1993 | 0.15 | 0.80 | 0.19 | 0.68 | 98.96 | 96.84 | 10 | 4 | 0.29 | 1.55 | 75 | 72 | 4 | 12 | 0 | 0 | 110 | 26 |
| SEP | 42,782 | 1426 | 1737 | 1970 | 0.18 | 0.90 | 0.24 | 0.68 | 94.45 | 90.74 | 15 | 6 | 0.33 | 0.69 | 68 | 69 | 4 | 12 | 0 | 0 | 150 | 12 |
| OCT | 42,127 | 1359 | 1919 | 1925 | 0.17 | 0.73 | 0.22 | 0.62 | 95.72 | 91.81 | 15 | 8 | 0.30 | 0.70 | 66 | 74 | 5 | 15 | 0 | 0 | 160 | 43 |
| NOV | | | | | | | | | | | | | | | | | | | | | | |
| DEC | | | | | | | | | | | | | | | | | | | | | | |
| TOTAL | 419,352 | | | | | | | | | | | | | | | | 44 | 133 | 0 | 0 | | |
| AVG | | 1,380 | | | 0.20 | | 0.18 | | 89.93 | 92.77 | 10.1 | 6.8 | 0.85 | | | | | | | | | |
| MAX | | | 2,317 | 2,215 | | 0.93 | | 0.98 | | | 15 | 11 | | 5.00 | | | | | | | 20,000 | 290 |
| MIN | | | | | | | | | | | | | | | 63.00 | 69.00 | | | | | | |
| CRITERIA | | | **3,182** | **2,205** | | **<1** | | **<1** | **>95%** | **>95%** | | | | **<5** | **>40** | | | | | | | |

**COMMENTS:**

* Treated Water OL Turbidity - No reliable readings trended on SCADA from January 20th - 31th, February, March, April, May, June 1 to June 14th 2023

** Added Individual Fitlter Efficiency Tracking in April 2023

*** Raw Water Flow Rate Spike above 2205 L/min on July 17, 2023 for less then 1 minute.

**ONTARIO CLEAN WATER AGENCY**
**PERFORMANCE ASSESSMENT REPORT**

**OWNER:** MUNICIPALITY OF CASSELMAN
**PROJECT:** CASSELMAN WASTEWATER TREATMENT SYSTEM
**ECA NUM.:** 8160-BAHPRF
**DESCRIPTION:** MOVING BED BIOLOGICAL REACTOR (MBBR) TREATMENT LAGOON

**YEAR:** 2023
**WATER COURSE:** NATION RIVER
**DESIGN CAPACITY:** 2,110 $m^3/d$
**FACILITY WORKS#:** 110002201

| MONTH | RAW | | | | | | | | EFFLUENT | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Total Flow $m^3$ | Avg Day Flow $m^3$ | Max Day Flow $m^3/d$ | Avg Alum Dosage (mg/L) | Avg Raw BOD5 (mg/L) | Avg Raw TSS (mg/L) | Avg. Raw TKN (mg/L) | Avg Raw TP (mg/L) | Effluent Flow $m^3$ | Effluent Avg Flow $m^3$ | Effluent Max Flow $m^3/d$ | Avg CBOD5 (mg/L) | Avg TSS (mg/L) | Avg TAN (mg/L) | Avg TP (mg/L) | Avg TKN (mg/L) | Avg Nitrate (mg/L) | Avg Nitrite (mg/L) | E. coli (cfu/100 mL) |
| JAN | 48,260 | 1,557 | 2,167 | 175 | 167 | 240 | 36.8 | 4.10 | 131,702 | 4,248 | 4,906 | 7.6 | 12.0 | 15.80 | 0.36 | 19.5 | 7.1 | 0.09 | 2717 |
| FEB | 45,524 | 1,626 | 1,948 | 192 | 500 | 660 | 82.0 | 9.14 | 56,404 | 2,014 | 2,344 | 4.3 | 10.3 | 11.14 | 0.47 | 14.2 | 18.5 | 0.12 | 738 |
| MAR | 61,249 | 1,976 | 2,888 | 188 | 294 | 480 | 52.0 | 6.29 | 60,153 | 1,940 | 3,458 | 4.0 | 8.0 | 0.91 | 0.36 | 2.62 | 29.1 | 0.07 | 598 |
| APR | 69,141 | 2,305 | 3,316 | 191 | 97 | 156 | 33.3 | 3.73 | 106,114 | 3,790 | 4,734 | 3.3 | 5.8 | 0.72 | 0.51 | 2.38 | 15.8 | 0.07 | 20 |
| MAY | 47,919 | 1,546 | 2,216 | 163 | 329 | 850 | 33.4 | 6.42 | 33,643 | 4,205 | 4,977 | 3.0 | 5.0 | 0.08 | 0.45 | 1.35 | 10.2 | 0.05 | 2 |
| JUN | 36,924 | 1,231 | 1,289 | 92 | 293 | 590 | 86.0 | 9.22 | | | | | | | | | | | |
| JUL | 48,167 | 1,554 | 1,688 | 127 | 439 | 630 | 49.3 | 7.24 | | | | | | | | | | | |
| AUG | 44,749 | 1,444 | 1,636 | 84 | 266 | 988 | 32.0 | 4.06 | | | | | | | | | | | |
| SEPT | 36,022 | 1,201 | 1,317 | 85 | 220 | 330 | 50.8 | 5.17 | | | | | | | | | | | |
| OCT | 37,523 | 1,210 | 1,254 | 64 | 341 | 630 | 124.0 | 11.40 | 60,800 | 2,252 | 2,456 | 3.0 | 3.8 | 0.07 | 0.09 | 1.20 | 0.8 | 0.05 | 12 |
| NOV | | | | | | | | | | | | | | | | | | | |
| DEC | | | | | | | | | | | | | | | | | | | |
| TOTAL | 475,478 | | | | | | | | 448,816 | | | | | | | | | | |
| AVG | | 1,565 | | 136 | 295 | 555 | 58 | 6.68 | | 3,075 | | 4.2 | 7.5 | 4.8 | 0.4 | 6.88 | 13.57 | 0.08 | 681 |
| MAX | | | 3,316 | | 500 | 988 | 124 | 11.40 | | | 4,977 | 7.6 | 12.0 | 15.8 | 0.5 | 19.54 | 29.05 | 0.12 | 2,717 |
| CRITERIA | | | | | | **Fall Discharge** | | | **267,650** | **2,909** | | | | | | | | | |
| | | | | | | **Winter/Spring Dircharge** | | | **502,500** | **3,722** | **5,000** | | | | | | | | |
| **COMPLIANCE** | | | | | | | | | | | **YES** | | | | | | | | |

| MONTH | UPSTREAM* | | | | DOWNSTREAM** | | | |
|---|---|---|---|---|---|---|---|---|
| | Avg CBOD5 (mg/L) | Avg TSS (mg/L) | Avg TAN (mg/L) | Avg PHOS. (mg/L) | Avg CBOD5 (mg/L) | Avg TSS (mg/L) | Avg TAN (mg/L) | Avg PHOS. (mg/L) |
| JAN | 3.0 | 17.0 | 0.10 | 0.08 | - | - | - | - |
| FEB | - | - | - | - | - | - | - | - |
| MAR | - | - | - | - | - | - | - | - |
| APR | 3.3 | 75.0 | 0.35 | 0.22 | 2.75 | 19.0 | 0.20 | 0.10 |
| MAY | 3.0 | 17.5 | 0.05 | 0.11 | 3.0 | 78.5 | 0.05 | 0.09 |
| JUN | | | | | | | | |
| JUL | | | | | | | | |
| AUG | | | | | | | | |
| SEPT | | | | | | | | |
| OCT | 3.0 | 8.6 | 0.19 | 0.07 | 3.0 | 12.6 | 0.16 | 0.07 |
| NOV | | | | | | | | |
| DEC | | | | | | | | |
| TOTAL | | | | | | | | |
| AVG | 3.1 | 30 | 0.17 | 0.12 | 2.9 | 36.7 | 0.14 | 0.09 |
| MAX | 3.25 | 75 | 0.35 | 0.22 | 3.0 | 78.5 | 0.20 | 0.10 |
| CRITERIA | | | | | | | | |
| **COMPLIANCE** | | | | | | | | |

**Comments:**

*No Upstream Samples required to be collected when downstream sampling is not feasible (January 31, February, March)

**No Downstream samples were taken due to ice cover on the Nation River (January, February, March)

# Appendix B

**Work Order Summary Reports**

# Monthly Work Order Summary – October 2023
# Casselman Drinking Water System

| Description | Status | Work Type |
|---|---|---|
| Actuator (air) Inspection/Service (1y) 5971 | COMP | PM |
| Analyzer Total Chlorine Inspection/Service (1m) 5971 | COMP | PM |
| Analyzer pH Inspection/Service (1m) 5971 | COMP | PM |
| Analyzer Spectrophotometer Insp/Service (1m) - 5971 | COMP | PM |
| Analyzer Turbidity Inspection/Service (1m) 5971 | COMP | PM |
| Blower Centrifugal Inspection/Service (1m) 5971 | COMP | PM |
| Air Compressor Inspection/Service (1m) 5971 | COMP | PM |
| Dryer Air Service (1m) - 5971 | COMP | PM |
| Gear Drive Sludge Pump Service (6m) - 5971 | APPR | PM |
| Generator Inspection (1m) 5971 | COMP | PM |
| Meter Level Inspection/Service (3m) 5971 | APPR | PM |
| Sensor Gas Monitor Insp (6m) 5971 | COMP | PM |
| Pump Submersible ACTIFLO Inspection (3m) 5971 | COMP | PM |
| PANEL ALARM/DIALER TEST (1m) - 5971 | COMP | PM |
| VALVE SLUICE GATE Lo Lift Inspection/Maintenance (1y) 5971 | APPR | PM |
| Valve Regulating Treated Water Inspection (1y) 5971 | COMP | PM |
| Valve Gate Raw Water Inspection/Maintenance (1y) 5971 | APPR | PM |
| VALVE CHECK HI LIFT 03 INSP (1y) - 5971 | APPR | PM |
| Valve Butterfly Filtered Water Inspection/Maintenance (1y) 5971 | COMP | PM |
| UV Light Bank Insp/Service (1m) - 5971 | COMP | PM |
| Monthly H&S Equipment Check (1m) - 5971 | COMP | PM |
| Quarterly H&S Equipment Check (3m) - 5971 | COMP | PM |
| Client Reports (1m) - Casselman 5971 | COMP | PM |
| UVT Sensor Checks/Calibration (1m) - 5971 | COMP | PM |
| Pump Diaphragm Coagulant Route Inspection/Service (1m) 5971 | COMP | PM |
| Pump Diaphragm Polymer Route Inspection/Service (1m) 5971 | COMP | PM |
| Pump Diaphragm Sodium Hydroxide Route Inspection/Service (1m) 5971 | COMP | PM |
| Pump Diaphragm Ammonium Sulphate Route Inspection/Service (1m) 5971 | COMP | PM |
| Pump Diaphragm Potassium Permanganate Route Inspection/Service (1m) 5971 | COMP | PM |
| Analyzer Turbidity Inspection/Service (1m) 1501 | COMP | PM |
| JHSC Meeting (3m) - 5971 | APPR | PM |
| WISKI Monthly Review(1m) 5971 | COMP | PM |
| CLEAR WELL , HIGH LIFT PUMP (1y) - 5971 | APPR | PM |
| UV Sensor Reference Check/Calibration (1m) - 5971 | COMP | PM |
| Hydrant Flushing & Winterization (1y) 1553 | APPR | PM |
| Workplace Inspection (1m) - 5971 | COMP | OPER |
| Casselman - 5971 - WTP - Calibrated flow meters in water plant by Capiltal Controls | COMP | OPER |
| Budget Tank Cleaning(Clearwell/Backwash/Raw water) Casselman WTP 5971 | COMP | CAP |
| Capital - Casselman - 5971 - WTP - UV Parts | COMP | CAP |
| MM - Casselman - 5971 - WTP - Valve Parts | COMP | CAP |

# Monthly Work Order Summary – October 2023
# Casselman Drinking Water System

| | | |
|---|---|---|
| Capital - Casselman - WDS - 1553 - Emergency repair for hydrant valve on Dollard and Principale st | COMP | CAP |
| Capital Distribution Maintenance Hydrant Rizer kits Casselman Dist 1553 | COMP | CAP |
| Casselman - 1553 - WD - Turn On Water Service - 776 St Joseph | COMP | CAP |
| MM - Casselman - 1553 - WDS - Hydrant repair at the corner of Brebeuf St and Dollard St | COMP | CAP |
| Call Back - Casselman - 5971 - WTP - High level and raw valve failure filter 1 | COMP | CALL |
| Call Back - Casselman - 5971 - WTP - High pressure diferential issues for filter #2 | COMP | CALL |
| Call Back - Casselman - 5971 - WTP - High level and pressure differential issues for filter 1 | COMP | CALL |
| Call Back - Casselman - 5971 - WTP - High Differential Actiflo 2 | COMP | CALL |
| Call Back - Casselman - 5971 - WTP - High LVL Actiflo 1 | COMP | CALL |
| Call Back - Casselman - 1501 - Lagoon - Power Blip | COMP | CALL |
| Call Back - Casselman WTP - 5971 - Filter #2 High Turbidity | COMP | CALL |
| Call Back - Casselman WTP - 5971 - Filter #2 Pressure Differential | COMP | CALL |
| Call Back - Casselman WTP - 5971 - Filter #2 Pressure Differential | COMP | CALL |
| Casselman 5971 Actiflo 1 Backwash process | COMP | CALL |
| AWQI Adverse Drinking Water Sample - Filter 1 & 2 - 95 % Efficiency - 5971 | APPR | ADMIN |

# Monthly Work Order Summary – October 2023
# Casselman Wastewater Treatment & Collection System

| Description | Status | Work Type |
|---|---|---|
| Generator Inspection (1m) SPS #1 1501 | COMP | PM |
| Generator Inspection (1m) SPS #2 1501 | COMP | PM |
| Generator Inspection (1m) SPS #3 1501 | COMP | PM |
| Generator Inspection (1m) SPS #5 1501 | COMP | PM |
| Generator Inspection (1m) SPS #6 1501 | COMP | PM |
| Generator Inspection (1m) 1501 | COMP | PM |
| Analyzer Turbidity Inspection/Service (1m) 1501 | COMP | PM |
| PANEL ALARM/DIALER TEST (1m) 1501 | COMP | PM |
| Monthly H&S Equipment Check (1m) - 1501 | COMP | PM |
| Blower Inspection/Service (1m/1y) 1501 | COMP | PM |
| Blower Inspection/Service (1m/1y) 1501 | COMP | PM |
| Blower Inspection/Service (1m/1y) 1501 | COMP | PM |
| Blower Inspection/Service (1m/1y) 1501 | COMP | PM |
| Blower Inspection/Service (1m/1y) 1501 | COMP | PM |
| Bar Screen Inspection (1m) 1501 | COMP | PM |
| PANEL ALARM/DIALER TEST (1m) - 1501 | COMP | PM |
| PANEL ALARM/DIALER TEST (1m) - 1501 | COMP | PM |
| PANEL ALARM/DIALER TEST (1m) - 1501 | COMP | PM |
| PANEL ALARM/DIALER TEST (1m) - 1501 | COMP | PM |
| PANEL ALARM/DIALER TEST (1m) - 1501 | COMP | PM |
| PANEL ALARM/DIALER TEST (1m) - 1501 | COMP | PM |
| PANEL ALARM/DIALER TEST (1m) - 1501 | COMP | PM |
| Specific ECA - Bypass (3m) - 1501 | COMP | PM |
| Quarterly H&S Equipment Check (1m) - 1501 | COMP | PM |
| WISKI Monthly Review(1m) 1501 | COMP | PM |
| Workplace Inspection (1m) - 1501 | COMP | OPER |
| Casselman - WWT - 1501 - Cleaning SPS 6, 2 and 3 | COMP | OPER |
| Casselman - 1501 - WWT - Calibration of flow meters at SPS's and sewage plant by Capital Controls | COMP | OPER |
| MM- Parts for Blower Kaeser Casselman Sewage 1501 | COMP | CAP |
| MM - Casselman - 1501 - WWT - Generator maintenance for SPS's and Lagoon | COMP | CAP |
| MM - Casselman - 1501 - WWT - Replacement of H2S sensor at SPS #1 compactor room | APPR | CAP |
| Call Back - Casselman - 1501 - WWT - High level, low level and manifold low pressure, | COMP | CALL |
| Casselman Sewage 1501 -No comm/High Wet well sps6 | COMP | CALL |
| Casselman 1501 SPS6 High/Low level Foaming | COMP | CALL |

# Appendix C

## Locate Summary

# Casselman Monthly Locate Summary – October 2023

| Description | Status | Work Type |
|---|---|---|
| Locate Casselman WDS 1553 - 2023409029 - Principale St | COMP | OPER |
| Locate Casselman WDS 1553 - 2023403664 - 108 Argile St | COMP | OPER |
| Locate Casselman WDS 1553 - 20234013903 - HWY 417 | COMP | OPER |
| Locate Casselman WDS 1553 - 20234014190 - Richer Close | COMP | OPER |
| Locate Casselman WDS 1553 - 20234021933 - 304 Dore St | COMP | OPER |
| Locate Casselman WDS 1553 - 2023412944 - 722 St Joseph | COMP | OPER |
| Locate Casselman WDS 1553 - 20234111317 - 815 Principale St | COMP | OPER |
| Locate Casselman WDS 1553 - 20234111386 - Principale and Martin | COMP | OPER |
| Locate Casselman WDS 1553 - 20234111454 - Principale St | COMP | OPER |
| Locate Casselman WDS 1553 - 20234111769 - 8 Gagne St | COMP | OPER |
| Locate Casselman WDS 1553 - 20234114134 - 44 Boileau | COMP | OPER |
| Locate Casselman WDS 1553 - 20234116496 - 778 Brebeuf St | COMP | OPER |
| Locate Casselman WDS 1553 - 20234116506 - 608 St Isidore | COMP | OPER |
| Locate Casselman WDS 1553 - 20234118339 - 802 Laval St | COMP | OPER |
| Locate Casselman WDS 1553 - 20234119909 - 2 Brisson | COMP | OPER |
| Locate Casselman WDS 1553 - 2023423477 - 759 Dollard St | COMP | OPER |
| Locate Casselman WDS 1553 - 2023423656 - 31 Faucher | COMP | OPER |
| Locate Casselman WDS 1553 - 2023424651 - 1 Castonguay | COMP | OPER |
| Locate Casselman WDS 1553 - 20234210630 - 536 Barrage St | COMP | OPER |
| Locate Casselman WDS 1553 - 20234213252 - HWY 417 | COMP | OPER |
| Locate Casselman WDS 1553 - 20234217908 - 24 Industriel | COMP | CAP |
| Locate Casselman WDS 1553 - 20234222492 - 653 St Isidore | COMP | CAP |
| Locate Casselman WDS 1553 - 2023431718 - 652 Montcalm | COMP | CAP |
| Locate Casselman WDS 1553 - 20234120224 - 308 Dore St | COMP | CAP |
| Locate Casselman WDS 1553 - 2023435170 - 20 Brisson | COMP | CAP |
| Locate Casselman WDS 1553 - 20234310536 - 14 Sauve Terrace | COMP | CAP |
| Locate Casselman WDS 1553 - 20234313088 - 238 Argile St | COMP | CAP |
| Locate Casselman WDS 1553 - 20234319656 - St Isidore | COMP | CAP |
| Locate Casselman WDS 1553 - 20234319669 - 41 Racine | COMP | CAP |
| Locate Casselman WDS 1553 - 20234319699 - Maria and Argile | COMP | CAP |
| Locate Casselman WDS 1553 - 20234319706 - Route 500 | COMP | CAP |
| Locate Casselman WDS 1553 - 20234320547 - Dore St | COMP | CAP |
| Locate Casselman WDS 1553 - 20234321693 - 621 St Isidore | COMP | CAP |
| Total | | 33 |

# Appendix D

**AWQI Notification to MECP**

Ontario

Ministry of the Environment, Conservation and Parks

# Notices of Adverse Test Results and Issue Resolution (Schedule 16)

**Drinking Water Systems Regulation (O. Reg. 170/03)**

## Instructions

These Notice forms apply to drinking water system owners and operators (Owners/Operators) and Ministry of the Environment, Conservation and Parks (MECP) licensed laboratories (Licensed Laboratories) regulated by Drinking Water Systems Regulation, Ontario Regulation 170/03 (O. Reg. 170/03).

### Immediate Report of Adverse Results

Section 16-3(3) of Schedule 16 of O. Reg. 170/03 sets out the requirements for Owners/Operators and Licensed Laboratories to make an immediate report of adverse test results under O. Reg. 170/03 by speaking in person or by telephone to the MECP's Spills Action Centre (SAC), at 1-800-268-6060 or 416-325-3000, the local Medical Officer of Health/Health Unit (Health Unit) and the Owner/Operator (Immediate Report).
[Adverse test results for trihalomethanes (THMs) or haloacetic acids (HAAs) do not require an Immediate Report; see section below.]

### Written Notice within 24 hours of the Immediate Report

Within 24 hours of an Immediate Report, Section 16-7(3) of Schedule 16 requires that Owners/Operators and Licensed Laboratories also provide written notice to the MECP and the Health Unit, by fax or e-mail. Licensed Laboratories must complete and submit Sections 1 and 3 of this Notice. Owners/Operators must complete and submit Section 2A of this Notice. **Note:** Section 3 is not required to be completed for operational parameter incidents which have no correlating adverse results.

### Notice Within 7 Days of Issue Resolution

Within 7 days after the issue has been resolved, Section 16-9(1) of Schedule 16 requires that Owners/Operators must provide a written notice, Section 2B of this Notice, to SAC and the Health Unit, summarizing the actions taken and the results achieved. This written notice must also be sent to the interested authority for any designated facility (if applicable) within 30 days.

Owners and Operators must follow any additional corrective actions required by the Health Unit.

### Total Trihalomethanes (THMs) and Haloacetic Acids (HAAs)

As of January 2016 for THMs and January 2020 for HAAs, Sections 16-6 and 16-7 of Schedule 16 require that Owners/Operators and Licensed Laboratories calculate the running annual average (RAA) for THMs and HAAs and report any adverse test result in writing to the MECP and the Health Unit within 7 calendar days of the end of the calendar quarter that produced the adverse test result. The written notice is to be submitted using Section 2C of this Notice. RAA calculation is outlined in Schedule 13-6 of O. Reg. 170/03.

Immediate oral notification is no longer required for these parameters.

Licensed Laboratories that upload all the THM and HAA test results into the ministry's data system and provide the results to Owners/Operators within 48 hours of the test result being authorized at the laboratory, may be exempt from the RAA reporting requirements noted above.

**Note:** Small municipal residential systems and non-municipal year-round residential systems that serve designated facilities also must notify the operator of each designated facility served by their system.

The 'Trihalomethane and Haloacetic Acid Sampling and Reporting Requirements Technical Bulletin' provides full details on the changes to the reporting requirements and provides examples for calculating quarterly and running annual averages. The Technical Bulletin is available on the ministry's web page via the following link:
https://www.ontario.ca/page/total-trihalomethane-thm-reporting-requirements-technical-bulletin

  

**Fields marked with an asterisk (*) are mandatory.**

SAC fax: 1-800-268-6061 or 416-325-3011
SAC e-mail: AWQI.Reporting@ontario.ca

Provincial standards for water quality are set out in:

Safe Drinking Water Act, 2002

Ontario Regulation 169/03 (Water Quality Standards)

Ontario Regulation 170/03 (Drinking Water Systems)

Failure to notify these parties in accordance with the Regulation constitutes an offence under the *Safe Drinking Water Act*. A copy of this form may be acquired through the MECP public website (www.ontario.ca/drinkingwater) or by contacting any MECP office.

Collection of information on this form is done in accordance with the Safe Drinking Water Act, 2002 and its Regulations. Information gathered herein, including personal information, is governed by the *Freedom of Information and Protection of Privacy Act* (FIPPA) and may be disclosed to other government agencies (including municipal health unit employees) pursuant to 'Section 42' of the FIPPA for the consistent purpose of administering any Act or program that pertains to drinking water safety. For questions and concerns, please contact the MECP at 1-866-793-2588.

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Are you a *

☐ Licensed Laboratory ☑ DWS

Which Section(s) of the Form do you need today?

☐ Section 1 - Written Notice By Licensed Laboratory

☑ Section 2A - Written Notice By Drinking Water System

☐ Section 2B - Notice Of Issues Resolution

☐ Section 2C - Written Notice By Drinking Water System Owner - Reporting RAA for THMs and HAAs

☐ Section 3 - Adverse Analytical Results

Ontario

Ministry of the Environment, Conservation and Parks

# Notices of Adverse Test Results and Issue Resolution (Schedule 16)

Drinking Water Systems Regulation (O. Reg. 170/03)

**Fields marked with an asterisk (*) are mandatory.**

## Section 2A – Written Notice By Drinking Water System (DWS) Owner (For THM and HAA reporting see Section 2C)

### Indicators of Adverse Water Quality

AWQI Number *
163974

Is this a resample? *
☐ Yes ☑ No ☐ Unknown If Yes, then provide initial AWQI number

### Indicator of Adverse Results

☐ Microbiological * ☐ Chemical * ☐ Radiological * ☐ Operational * ☐ Licence/Order/Certificate Authority *

☐ Observations of Improperly disinfected water directed to water users

☐ Low Distribution Chlorine _____ mg/L

☐ High Turbidity _____ NTU

☑ Other Filter effluent Turbidity < 0.3 NTU 95%

Details of Adverse Result *

The monthly filter performance criteria (i.e. filter effluent turbidity < 0.3 NTU 95%) for Filter #2 was exceeded for the month of October 2023. Filter #1 effluent turbidity was below 0.3 NTU for 95.72% of the month and Filter #2 effluent turbidity was below 0.3 NTU for 91.81% of the month.

### DWS Information

| DWS Name * | DWS Number * |
|---|---|
| Casselman Drinking Water System | 210001219 |

| Last Name * | First Name * |
|---|---|
| Lamarche | Caroline |

Position *
Process and Compliance Technician

| Email Address | Telephone Number (including area code) |
|---|---|
| clamarche@ocwa.com | 613-448-3098 ext. |

Additional Comments

### Oral Notification to Health Unit - Person Contacted

Public Health Unit Name *
Eastern Ontario Health Unit

| Last Name * | First Name * |
|---|---|
| Lindenmann | Marie-Anne |

Position *
Receptionist

| Telephone Number (including area code) * | Fax Number (including area code) | Date (yyyy/mm/dd) * | Time (hh:mm) * |
|---|---|---|---|
| 800-267-7120 ext. | 613-933-7930 | 2023/11/06 | 10:10 AM |

| DWS Person Providing Oral Notification * | Email Address |
|---|---|
| Caroline Lamarche | clamarche@ocwa.com |

**Corrective Actions to be Taken by Owner/Operator**

| Corrective Actions | Required * | Completed | Comments |
|---|---|---|---|
| Resample and Test (including upstream, downstream and at AWQI location) | ☐ Yes ☑ No | ☐ Yes ☐ No ☑ N/A | |
| Disinfection Restored / Increased | ☐ Yes ☑ No | ☐ Yes ☐ No ☑ N/A | |
| Mains / Pipes Flushed | ☐ Yes ☑ No | ☐ Yes ☐ No ☑ N/A | |
| Signs Posted (Do Not Drink Water) | ☐ Yes ☑ No | ☐ Yes ☐ No ☑ N/A | |
| Users Advised to Boil Water / Seek Alternate Source | ☐ Yes ☑ No | ☐ Yes ☐ No ☑ N/A | |
| **Other** (Include any other Health Unit directions and any additional attachments) | | | |
| Other: | ☐ Yes ☑ No | ☐ Yes ☐ No ☑ N/A | |

**Oral Notification to Spills Action Centre (SAC) - Person Contacted**

| Last Name * | First Name * |
|---|---|
| McDonald | Haiden |

Position *
Environmental Officer

| DWS Person Providing Oral Notifying * | Date (yyyy/mm/dd) * | Time (hh:mm)* |
|---|---|---|
| Caroline Lamarche | 2023/11/06 | 11:15 AM |

Initial DWS Notification Prepared by *
Caroline Lamarche

| Signature | Date (yyyy/mm/dd) * |
|---|---|
| C Lamarche | 2023/11/07 |

Additional Comments

Idalia Milan an Environmental Health Analyst/Educator from the EOHU called back at 11:10 AM on November 6, 2023. No corrective actions required.

Do you have another adverse to report? * ☐ Yes ☑ No