

Monthly Operations Report

for the Municipality of Casselman's Water and
Wastewater Systems

December 2024



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 | ● | |
| <i>Actual Result</i> | | 0 | |
| Drinking Water | | | |
| Inspection Ratings (YTD) | 100 % | ● | |
| <i>Actual Result</i> | | 100 % | |
| AWQI's | 0 | ✗ | Filter turbidity exceedance |
| <i>Actual Result</i> | | 1 | |
| Number of Non-Compliances | 0 | ● | |
| <i>Actual Result</i> | | 0 | |
| Number of Water Main Breaks | 0 | ● | |
| <i>Actual Result</i> | | 0 | |
| Number of Complaints | 0 | ● | |
| <i>Actual Result</i> | | 0 | |
| Water Main Flushing | 0 | ● | |
| <i>Target Achieved</i> | | Y | |
| Wastewater | | | |
| Number of Non-Compliances | 0 | ● | |
| <i>Actual Result</i> | | 0 | |
| Number of Bypasses | 0 | ● | |
| <i>Actual Result</i> | | 0 | |
| Number of Sanitary Sewer Back-ups | 0 | ● | |
| <i>Actual Result</i> | | 0 | |
| Sanitary Collection System Flushing | 0 | ● | |
| <i>Target Achieved</i> | | Y | |
| Preventive Maintenance | | | |
| Work Orders Completed | >95% | ● | |
| <i>Target Achieved</i> | | 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 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 December 2024. 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 2, 2024 |
| Casselman Sewage | Jean-Francois Durocher | Awaiting Report | November 19, 2024 |

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 five after-hours call-in alarms

Wastewater Treatment & Collection

- Responded to two after-hours call-in alarms
- Lagoon discharge continued through December

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

- 10 locates were completed in December.

Water Treatment & Distribution

- Capital/Major Maintenance projects approved for 2024 were completed.
- Operations staff continued to work with Dr. Dallala and EVB on behalf of the Municipality.

Wastewater Treatment & Collection

- Capital/Major Maintenance projects approved for 2024 were completed.
- OCWA is experiencing ongoing issues with communication at the SPS's through Flygt Cloud. Redundancy through the use of OCWA's Outpost panels and/or installation of Falcon alarm dialers at these stations should be considered.

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: 2024
WATER SOURCE: NATION RIVER
DESIGN CAPACITY: 3182 m3/d
WORKS NUM.: 210001219

| MONTH | SYSTEM FLOWS (TREATED) | | | TREATED | | DISTRIBUTION | | RAW | | | | | TREATED | | | | | | DISTRIBUTION | | | |
|----------|------------------------|----------------|-------------------|-----------------------------|----------------------------|--------------------------------|--------------------------------|---------------------------------|-----------------------------|-----------------------|--------------------------|----------------------|-------------------------|-------------------------|---------------------------------|-----------------------------|-----------------------|--------------------------|----------------------|---------------------|---------------------|----------------------|
| | Total Flow (m³) | Avg. Flow (m³) | Max Day Flow (m³) | Min. Free Cl₂ Resid. (mg/L) | Max Free Cl₂ 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 | 33,460 | 1079 | 1400 | 1.26 | 2.35 | 0.36 | 2.41 | 8.30 | 8.30 | 279 | 0.07 | 0.10 | 0.25 | 0.36 | 3.80 | 3.80 | 277 | 0.05 | 0.07 | 41.0 | 25.7 | < 0.0009 |
| FEB | 31,549 | 1088 | 1356 | 1.25 | 2.00 | 1.11 | 2.28 | 6.30 | 6.30 | 339 | 0.09 | 0.12 | 0.26 | 0.36 | 3.30 | 3.30 | 327 | 0.05 | 0.07 | - | - | - |
| MAR | 33,671 | 1086 | 1269 | 1.20 | 1.93 | 1.15 | 2.26 | 7.10 | 8.10 | 243 | 0.11 | 0.21 | 0.33 | 0.97 | 4.00 | 4.10 | 226 | 0.05 | 0.09 | - | - | - |
| APR | 33,539 | 1118 | 1458 | 1.25 | 2.10 | 1.27 | 2.39 | 6.50 | 6.50 | 304 | 0.15 | 0.27 | 0.40 | 0.65 | 4.60 | 4.60 | 294 | 0.06 | 0.08 | 74.0 | 40.0 | 0.001 |
| MAY | 37887 | 1222 | 1679 | 0.65 | 2.30 | 0.63 | 2.48 | 8.20 | 9.80 | 266 | 0.09 | 0.13 | 0.48 | 0.65 | 1.60 | 3.30 | 268 | 0.04 | 0.07 | - | - | - |
| JUN | 39161 | 1305 | 1607 | 0.76 | 2.18 | 0.93 | 2.20 | 7.70 | 7.80 | 296 | 0.08 | 0.16 | 0.46 | 0.62 | 3.60 | 3.60 | 292 | 0.03 | 0.04 | - | - | - |
| JUL | 41919 | 1352 | 1708 | 0.67 | 2.50 | 0.60 | 2.32 | 8.70 | 8.80 | 283 | 0.08 | 0.11 | 0.35 | 0.48 | 3.80 | 3.80 | 256 | 0.04 | 0.06 | 120.00 | 75.30 | 2.000 |
| AUG | 43772 | 1412 | 2046 | 0.60 | 2.65 | 0.58 | 2.11 | 8.60 | 8.60 | 319 | 0.17 | 0.40 | 0.38 | 0.51 | 4.00 | 4.10 | 315 | 0.04 | 0.05 | - | - | - |
| SEP | 40851 | 1362 | 1616 | 0.63 | 2.40 | 0.62 | 1.80 | 9.80 | 10.20 | 297 | 0.11 | 0.15 | 0.39 | 0.42 | 4.90 | 5.10 | 292 | 0.03 | 0.04 | - | - | - |
| OCT | 41983 | 1354 | 1754 | 0.77 | 2.26 | 0.84 | 2.15 | 7.40 | 7.20 | 296 | 0.10 | 0.22 | 0.43 | 0.54 | 3.70 | 3.70 | 294 | 0.04 | 0.05 | 119.00 | 90.30 | 0.0009 |
| NOV | 39090 | 1303 | 1530 | 0.85 | 2.50 | 1.06 | 1.96 | 6.60 | 9.00 | 282 | 0.08 | 0.11 | 0.41 | 0.47 | 3.50 | 5.90 | 277 | 0.04 | 0.06 | - | - | - |
| DEC | 38236 | 38236 | 1482 | 1.13 | 2.25 | 1.26 | 2.05 | 6.50 | 7.10 | 307 | 0.07 | 0.10 | 0.38 | 0.63 | 4.20 | 4.90 | 285 | 0.08 | 0.37 | - | - | - |
| TOTAL | 455,118 | | | | | | | | | | | | | | | | | | | | | |
| AVG | | 4,327 | | | | | | 7.64 | 8.14 | 293 | 0.10 | | 0.38 | | 3.75 | 4.18 | 284 | 0.05 | | 88.5 | 57.8 | 0.0010 |
| MAX | | | 2,046 | | 2.65 | | 2.48 | | | | | 0.40 | | 0.97 | | | | | 0.37 | | | |
| MIN | | | | 0.60 | | 0.36 | | | | | | | | | | | | | | | | |
| 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 | | Max. Coliform Count | Max. E. coli Count |
| | | | | | | | | | | | | | | | | | Treated | Distribution | Treated | Distribution | | |
| | | | | | | | | | | | | | | | | | | | | | | |
| JAN | 41,605 | 1342 | 1659 | 1950.0 | 0.12 | 0.70 | 0.12 | 0.31 | 99.88 | 99.99 | 7 | 3 | 0.36 | 1.45 | 63 | 79 | 5 | 15 | 0 | 0 | 16,000 | 32 |
| FEB | 40,331 | 1391 | 1725 | 2204.6 | 0.18 | 0.65 | 0.11 | 0.26 | 99.63 | 100.00 | 33 | 6 | 0.47 | 2.00 | 53 | 80 | 4 | 12 | 0 | 0 | 19,800 | 88 |
| MAR | 40,408 | 1303 | 1910 | 2102.0 | 0.24 | 0.51 | 0.12 | 0.39 | 98.26 | 99.54 | 3 | 6 | 0.18 | 1.55 | 63 | 80 | 4 | 12 | 0 | 0 | 39,000 | 67 |
| APR | 40,854 | 1362 | 2006 | 2260.0 | 0.16 | 0.62 | 0.15 | 0.39 | 98.79 | 99.46 | 8 | 7 | 0.18 | 0.32 | 72 | 74 | 5 | 15 | 0 | 0 | 31,000 | 57 |
| MAY | 44,572 | 1438 | 1889 | 2144 | 0.17 | 0.74 | 0.17 | 0.68 | 97.42 | 98.77 | 50 | 7 | 0.22 | 0.60 | 72 | 70 | 4 | 12 | 0 | 0 | 2,800 | 140 |
| JUN | 44,971 | 1499 | 1939 | 2134 | 0.16 | 0.59 | 0.16 | 0.68 | 98.52 | 98.52 | 8 | 3 | 0.28 | 2.28 | 78 | 70 | 4 | 12 | 0 | 0 | 8,000 | 290 |
| JUL | 47,034 | 1517 | 1809 | 1910 | 0.15 | 0.42 | 0.15 | 0.36 | 99.96 | 99.73 | 3 | 4 | 0.26 | 1.50 | 65 | 66 | 5 | 15 | 0 | 0 | 8,000 | 56 |
| AUG | 50,633 | 1633 | 2443 | 1911 | 0.16 | 0.77 | 0.15 | 0.59 | 99.44 | 99.45 | 4 | 4 | 0.30 | 1.48 | 65 | 66 | 4 | 12 | 0 | 0 | 9,000 | 86 |
| SEP | 47,620 | 1587 | 1910 | 1701 | 0.19 | 0.51 | 0.19 | 0.74 | 97.61 | 97.43 | 35 | 7 | 0.31 | 1.20 | 50 | 60 | 4 | 12 | 0 | 0 | 7,200 | 132 |
| OCT | 48,375 | 1560 | 1986 | 2195 | 0.22 | 0.47 | 0.22 | 0.57 | 94.90 | 97.80 | 8 | 8 | 0.33 | 1.01 | 66 | 43 | 5 | 15 | 0 | 0 | 370 | 34 |
| NOV | 47,442 | 1581 | 1912 | 2148 | 0.24 | 0.93 | 0.24 | 0.64 | 90.00 | 91.48 | 24 | 9 | 0.32 | 0.92 | 68 | 59 | 4 | 12 | 0 | 0 | 1,900 | 16 |
| DEC | 46,080 | 1486 | 1877 | 2185 | 0.18 | 0.74 | 0.19 | 0.73 | 76.37 | 78.42 | 27 | 3 | 0.21 | 0.73 | 80 | 44 | 5 | 15 | 0 | 0 | 60,000 | 136 |
| TOTAL | 539,925 | | | | | | | | | | | | | | | | 53 | 159 | 0 | 0 | | |
| AVG | | 1,475 | | | 0.18 | | 0.16 | | 95.90 | 96.72 | 18 | 6 | 0.29 | | | | | | | | | |
| MAX | | | 2,443 | 2,260 | | 0.93 | | 0.74 | | | 50 | 9 | | 2.28 | | | | | | | 60,000 | 290 |
| MIN | | | | | | | | | | | | | | | 50 | 43 | | | | | | |
| CRITERIA | | | 3,182 | 2,205 | | <1 | | <1 | >95% | >95% | <25 | <25 | | <5 | >40 | | | | | | | |

COMMENTS:
 *UVT - No Flow to UVT analyzer from 11:35 pm on February 10th to 10:55 am on February 12th.

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: 2024
 WATER COURSE: NATION RIVER
 DESIGN CAPACITY: 2,110 m³/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 | 45,794 | 1,477 | 1,923 | 128.14 | 347 | 360 | 55.4 | 6.21 | 59,408 | 1,916 | 1,966 | 3.4 | 7.0 | 1.85 | 0.10 | 3.5 | 5.5 | 0.12 | 6 |
| FEB | 45,995 | 1,586 | 1,805 | 112.90 | 219 | 366 | 38.0 | 4.71 | 64,482 | 2,224 | 2,926 | 3.8 | 7.0 | 7.71 | 0.20 | 10.8 | 6.7 | 0.05 | 4 |
| MAR | 60,051 | 1,937 | 2,293 | 86.81 | 361 | 650 | 43.8 | 5.45 | 110,786 | 3,574 | 3,904 | 3.8 | 9.0 | 4.78 | 0.21 | 7.5 | 13.1 | 0.30 | 6 |
| APR | 58,249 | 1,942 | 2,235 | 70.3 | 292 | 516 | 49.0 | 6.52 | 132,579 | 4,419 | 4,752 | 4.2 | 11.4 | 0.14 | 0.18 | 2.1 | 13.8 | 0.06 | 6 |
| MAY | 51,003 | 1,645 | 1,860 | 57.16 | 180 | 420 | 58.7 | 7.40 | 59,851 | 4,604 | 4,752 | 3.0 | 3.5 | 0.10 | 0.40 | 1.6 | 9.8 | 0.05 | 4 |
| JUN | 47,282 | 1,576 | 1,805 | 53.23 | 213 | 225 | 57.1 | 5.86 | | | | | | | | | | | |
| JUL | 57,725 | 1,862 | 2,198 | 58.61 | 215 | 260 | 51.7 | 5.74 | | | | | | | | | | | |
| AUG | 55,615 | 1,794 | 2,085 | 64.94 | 187 | 355 | 48.2 | 5.65 | | | | | | | | | | | |
| SEPT | 39,841 | 1,328 | 1,510 | 77.10 | 153 | 220 | 51.2 | 6.34 | | | | | | | | | | | |
| OCT | 38,194 | 1,232 | 1,394 | 77.56 | 152 | 330 | 55.5 | 4.92 | 35,229 | 2,072 | 2,111 | <3 | 8.3 | 0.44 | 0.20 | 2.97 | 4.21 | 0.05 | 7 |
| NOV | 34,762 | 1,159 | 1,294 | 78.21 | 206 | 290 | 50.5 | 5.70 | 61,257 | 2,042 | 2,111 | <3 | 6.8 | 0.20 | 0.18 | 2.55 | 5.79 | 0.48 | 3 |
| DEC | 42,153 | 1,360 | 1,652 | 81 | 282 | 310 | 58.1 | 6.18 | 73,600 | 2,374 | 2,404 | 3.0 | 5.8 | 2.77 | 0.26 | 5.38 | 5.33 | 1.07 | |
| TOTAL | 576,664 | | | | | | | | 597,192 | | | | | | | | | | |
| AVG | | 1,575 | | 79 | 234 | 359 | 51.4 | 5.89 | | 2,903 | | 3.5 | 7.3 | 2.2 | 0.22 | 4.5 | 8.0 | 0.27 | 5 |
| MAX | | | 2,293 | | 361 | 650 | 58.7 | 7.40 | | | 4,752 | 4.2 | 11.4 | 7.7 | 0.40 | 10.8 | 13.8 | 1.07 | 7 |
| CRITERIA | | | | | | Fall Discharge | | | 267,650 | 2,909 | | | | | | | | | |
| A | | | | | | Winter/Spring Dircharge | | | 502,500 | 3,722 | 5,000 | | | | | | | | |

| | | | | | | | | | | | | | | | | | | | |
|------------|--|--|--|--|--|--|--|--|--|--|-----|--|--|--|--|--|--|--|--|
| COMPLIANCE | | | | | | | | | | | YES | | | | | | | | |
|------------|--|--|--|--|--|--|--|--|--|--|-----|--|--|--|--|--|--|--|--|

| MONTH | FALSE | | | | 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 | 8.0 | 0.05 | 0.07 | 3.0 | 5.0 | 0.05 | 0.05 |
| FEB | - | - | - | - | - | - | - | - |
| MAR | 3.0 | 15.5 | 0.08 | 0.08 | 3.0 | 18.0 | 0.07 | 0.09 |
| APR | 3.0 | 17.3 | 0.10 | 0.07 | 3.00 | 20.3 | 0.08 | 0.07 |
| MAY | 3.0 | 6.0 | 0.05 | 0.06 | 3.0 | 49.5 | 0.12 | 0.14 |
| JUN | | | | | | | | |
| JUL | | | | | | | | |
| AUG | | | | | | | | |
| SEPT | | | | | | | | |
| OCT | 3.0 | 9.3 | 0.09 | 0.08 | 3.0 | 6.667 | 0.067 | 0.063 |
| NOV | 3.0 | 5.8 | 0.20 | 0.08 | 3.0 | 13.25 | 0.08 | 0.08 |
| DEC | 3.0 | 7.8 | 0.09 | 0.07 | 3.0 | 7.0 | 0.08 | 0.06 |
| TOTAL | | | | | | | | |
| AVG | 3.0 | 9.9 | 0.09 | 0.07 | 3.0 | 17.1 | 0.08 | 0.08 |
| MAX | 3.0 | 17.3 | 0.20 | 0.08 | 3.0 | 49.5 | 0.12 | 0.14 |
| CRITERIA | | | | | | | | |

Comments:

*No Upstream/Downstream Samples required to be collected when downstream sampling is not feasible due to ice cover on the Nation River. (January 9, 16, 23, 30 & February 2024)

Appendix B

Work Order Summary Reports



Monthly Work Order Summary – December 2024

Casselman Drinking Water System

| Description | Status | Work Type |
|--|--------|-----------|
| 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 |
| Generator Inspection (1m) 5971 | COMP | PM |
| Mixer Chemical Inspection (3m) 5971 | COMP | PM |
| PANEL ALARM/DIALER TEST (1m) - 5971 | COMP | PM |
| Relief Valve UV Room Inspection (3m) 5971 | COMP | OPER |
| UV Light Bank Insp/Service (1m) - 5971 | COMP | PM |
| Workplace Inspection - DS Silica- 1m - 5971 | COMP | OPER |
| Monthly H&S Equipment Check (1m) - 5971 | COMP | PM |
| Client Reports (1m) - Casselman 5971 | APPR | 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 |
| WISKI Monthly Review(1m) 5971 | COMP | PM |
| Overtime - Casselman - 5971 - WTP - Fix PAX XL-1900 Coagulation for Filter 95% | COMP | CORR |
| UV Sensor Reference Check/Calibration (1m) - 5971 | COMP | PM |
| Spare burglary alarm | COMP | CALL |
| Power Failure Casselman WWTP WTP | COMP | CALL |
| 5971-WTCA-F - Zone 19 and 20 spare alarm | COMP | CALL |
| High Actiflow water level alarm Casselman WTP | COMP | CALL |
| Air backwash alarms | COMP | CALL |

Monthly Work Order Summary – December 2024
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 SPS#4 (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 SPS#6 (1m) - 1501 | COMP | PM |
| PANEL ALARM/DIALER TEST SPS#3 (1m) - 1501 | COMP | PM |
| PANEL ALARM/DIALER TEST SPS#2 (1m) - 1501 | COMP | PM |
| PANEL ALARM/DIALER TEST SPS#5 (1m) - 1501 | COMP | PM |
| PANEL ALARM/DIALER TEST SPS#1 (1m) - 1501 | COMP | PM |
| PANEL ALARM/DIALER TEST LAGOON (1m) - 1501 | COMP | PM |
| Workplace Inspection (1m) - 1501 | COMP | OPER |

| | | |
|---|------|------|
| WISKI Monthly Review(1m) 1501 | COMP | PM |
| 1501-05 Casselman Sewage WWTP Blower Parts and Maintenance-MM Ordered parts | COMP | CAP |
| SPS call in, Communication error | COMP | CALL |
| 2024-2025 MECP Inspection - Casselman WWT | COMP | OPER |
| 1501-06 Casselman Sewage Building and Grounds-MM- Washer and Dryer | COMP | CAP |
| 1501-WWCA - All Stations Communication Cloud Loss | COMP | CALL |

Appendix C

Locate Summary



Casselman Monthly Locate Summary – December 2024

| Description | Status | Work Type |
|--|--------|-----------|
| Locate Casselman WDS 1553 - 20244716914 - Brisson St | COMP | OPER |
| Locate Casselman WDS 1553 - 2024489320 - Richer Crescent | COMP | OPER |
| Locate Casselman WDS 1553 - 2024498320 - Laurier end | COMP | OPER |
| Locate Casselman WDS 1553 - 20244812232 - Boreholes Racine | COMP | OPER |
| Locate Casselman WDS 1553 - 2024497252 - Fillion Hydrants | COMP | OPER |
| Locate Casselman WDS 1553 - 2024497233 - 650 St Joseph | COMP | OPER |
| Locate Casselman WDS 1553 - 2024504714 - 769 St Jean | COMP | OPER |
| Locate Casselman WDS 1553 - 2024507354 - Richer Crescent 2 | COMP | OPER |
| Locate Casselman WDS 1553 - 2024512241 - HWY 417 | COMP | OPER |
| Locate Casselman WDS 1553 - 2024504060 - Richer Crescent 3 | COMP | OPER |
| Total | 10 | |

Appendix D

AWQI Notification to MECP



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.

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

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 *

167154

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%) was exceeded for the month of December 2024. Filter #1 effluent turbidity was below 0.3 NTU for 76.37%, and Filter #2 effluent turbidity was below 0.3 NTU for 78.42% of the month.

DWS Information

DWS Name *

Casselman Drinking Water System

DWS Number *

210001219

Last Name *

Payne

First Name *

Brandon

Position *

Operator

Email Address

bpayne@ocwa.com

Telephone Number (including area code)

343-575-4944

ext.

Additional Comments

Oral Notification to Health Unit - Person Contacted

Public Health Unit Name *

Eastern Ontario Health Unit

Last Name *

Isidoro

First Name *

Fatima

Position *

Public Health Inspector

Telephone Number (including area code) *

800-267-7120

ext.

Fax Number (including area code)

613-933-7930

Date (yyyy/mm/dd) *

2025/01/03

Time (hh:mm) *

2:50 PM

Fields marked with an asterisk (*) are mandatory.

Section 2A continued

DWS Person Providing Oral Notification *

Brandon Payne

Email Address

bpayne@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) | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A | |
| Disinfection Restored / Increased | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A | |
| Mains / Pipes Flushed | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A | |
| Signs Posted (Do Not Drink Water) | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A | |
| Users Advised to Boil Water / Seek Alternate Source | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A | |

Other (Include any other Health Unit directions and any additional attachments)

| | | | |
|--------|---|--|--|
| Other: | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A | |
|--------|---|--|--|

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

| | |
|-------------|--------------|
| Last Name * | First Name * |
| Campos | Edhivia |

Position *
Environmental Officer

DWS Person Providing Oral Notifying *

Brandon Payne

Date (yyyy/mm/dd) *

2024/11/04

Time (hh:mm) *

3:00 PM

Initial DWS Notification Prepared by *

Brandon Payne

Signature



Date (yyyy/mm/dd) *

2025/01/03

Additional Comments

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

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 2B – Notice of Issue Resolution – Section 16-9 (O. Reg. 170/03)

DWS Information

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

DWS Contact Name

| | |
|-------------|--------------|
| Last Name * | First Name * |
| Payne | Brandon |

| | | |
|--|----------------------------------|-----------------|
| Telephone Number (including area code) * | Fax Number (including area code) | Email Address |
| 343-575-4944 ext. | | bpayne@ocwa.com |

| | | |
|------------------------------------|------------------------------|--|
| Initial AWQI Number ¹ * | Date Resolved (yyyy/mm/dd) * | Date Resolution Notice Provided (yyyy/mm/dd) * |
| 167154 | | 2025/01/03 |

Are there previous resample AWQI numbers? *

☐ Yes ☒ No

If known, please provide All Other Resample AWQI numbers²

Summary of action taken and results achieved (include test results showing water quality is no longer adverse) *

Issue with changing water conditions and chemical dosages had to be changed

adjusted chemical dosages to meet requirements of water intake.

Turbidity below 0.3 NTU on filtered side

| | | |
|---|---------------|--------------------------|
| Was an advisory issued by the Health Unit? * | Advisory Type | Date Issued (yyyy/mm/dd) |
| <input type="checkbox"/> Yes | | |
| <input checked="" type="checkbox"/> No <input type="checkbox"/> Self Imposed Advisory | | |

If rescinded, please select date the advisory was rescinded

Date Rescinded (yyyy/mm/dd)


Other (Include Health Unit directions and any additional attachments)

| Attached File Name | Created | Modified | Size (MB) | Remove Selected File |
|-----------------------|---------|----------|-----------|--------------------------|
| | | | | <input type="checkbox"/> |
| Number of attachments | | | 0 | |

Notification/Report Provided By

Fields marked with an asterisk (*) are mandatory.

Section 2B continued

| | |
|---|---------------------|
| Last Name * | First Name * |
| Brandon | Payne |
| Position * | |
| Operator | |
| Signature | Date (yyyy/mm/dd) * |
|  | 2025/01/03 |
| Additional Comments | |

Do you have another adverse to report? ☐ Yes ☒ No

¹ The original adverse test result.

² When resolving an AWQI state all resample AWQI numbers associated with the initial AWQI. For example, an adverse test result of total coliform requires the corrective action of resampling. If any of the resamples come back adverse, then you must continue resampling until the test results for two consecutive sets of samples taken 24 to 48 hours apart are clear or as directed by the Health Unit. Submit the AWQI form and include all related AWQI numbers (Initial AWQI number and any Resample AWQI number) on the same Section 2B. This eliminates the requirement to submit a Section 2B form for every adverse test result associated with one incident. If the first resample test result is clear then this section does not apply. For THMs and HAAs drinking water system owners/operators are not required to take resamples as part of the prescribed corrective actions; unless directed by the Health Unit.