

Monthly Operations Report

for the Municipality of Casselman's Water and
Wastewater Systems

January 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	●	
<i>Actual Result</i>		0	
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	Y	●	
<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

There were no compliance issues to report for Casselman’s water and wastewater treatment systems.

The most recent MECP inspections are listed below:

Location	Inspector	Inspection Rating (%)	Date
Casselman Water	Jean-Francois Durocher	Awaiting Report	February 2, 2024
Casselman Sewage	<i>*OCWA has no recent sewage system inspections on file.</i>		

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 9 after-hours call-in alarms
- Ottawa Compressor onsite to replace oil sensor in air compressor at WTP
- Cleaned out Coagulant Tank #4
- Installed new sight glass and bulb on UVT analyzer
- Replaced backwash valve on Actiflo #1

Wastewater Treatment & Collection

- Responded to 1 after-hours call-in alarm
- Replaced chain and guide on Pump #2 and chain on Pump #1 at SPS #5
- Lagoon discharge continued through January

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

- 3 locates were completed in January.

Water Treatment & Distribution

- Capital/Major Maintenance projects approved for 2024 are underway.
- EOHU staff toured the WTP
- Operations staff continued to work with Dr. Dallala on behalf of the Municipality

Wastewater Treatment & Collection

- Capital/Major Maintenance projects approved for 2024 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: 2024
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 Cl ₂ Resid. (mg/L)	Max Combined Cl ₂ 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) quarterly	HAA (µg/L) quarterly	NDMA (µg/L) quarterly
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																						
MAR																						
APR																						
MAY																						
JUN																						
JUL																						
AUG																						
SEP																						
OCT																						
NOV																						
DEC																						
TOTAL	33,460																					
AVG		1,079						8.30	8.30	279	0.07		0.25		3.80	3.80	277	0.05		41.0	25.7	0.0009
MAX			1,400		2.35		2.41					0.10		0.36					0.07			
MIN				1.26		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. Count	Max. Count
																	Treated	Distribution	Treated	Distribution		
JAN	41,605	1342	1659	1950	0.12	0.70	0.12	0.31	99.88	99.99	7	3	0.36	1.45	63	79	5	10	0	0	16,000	32
FEB																						
MAR																						
APR																						
MAY																						
JUN																						
JUL																						
AUG																						
SEP																						
OCT																						
NOV																						
DEC																						
TOTAL	41,605																5	10	0	0		
AVG		1,342			0.12		0.12		99.88	99.99	7	3	0.36									
MAX			1,659	1,950		0.70		0.31			7	3		1.45							16,000	32
MIN															63	79						
CRITERIA			3,182	2,205		<1	<1		>95%	>95%	<25	<25		<5	>40							

COMMENTS:

Appendix B

Work Order Summary Reports



Monthly Work Order Summary – January 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
Meter Level Inspection/Service (3m) 5971	APPR	PM
Pump Submersible ACTIFLO Inspection (3m) 5971	COMP	PM
PANEL ALARM/DIALER TEST (1m) - 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	APPR	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
JHSC Meeting (3m) - 5971	APPR	PM
WISKI Monthly Review(1m) 5971	COMP	PM
UPS Battery Replacement 3 years Casselman Water - 5971	APPR	PM
UV Sensor Reference Check/Calibration (1m) - 5971	COMP	PM
Workplace Inspection (1m) - 5971	COMP	OPER
5971-15 Casselman Valve replacement Capital Backwash Valve Actiflo 1	COMP	CAP
5971-07 Casselman Compressor/Dryer/Blower Maintenance -Compressor Switch repair	COMP	CAP
5971-06 Casselman UV System Parts & Repairs - Quartz Cell For UVT Analyzer	COMP	CAP
5971-02 Casselman Electrical/Instrumentation Upgrades MM - Mixer pump fail (polymer)	COMP	CAP
Casselman - 1553 - WD - Turn Off/On Water Service - 840 Principal St	COMP	CAP
Call Back - Casselman - 5971 - WTP - Back to back backwashes for filters	COMP	CALL
Casselman - 5971 - WTP - High pressure differential issues for filter 1 and filter 2 shutdown	COMP	CALL
Call Back - Casselman WTP - 5971 - Filter #1 High Level	COMP	CALL
Call Back - Casselman WTP - 5971 - Filter #1 High Level	COMP	CALL
Casselman 5971 Actiflo 1 Backwash process	COMP	CALL
Casselman 5971 Actiflo 1 Backwash process	COMP	CALL
Call Back - Casselman - 5971 - WTP - Backwash valve failure for filter 1	COMP	CALL
CallBack - Casselman - 5971 - WTP - Actiflo2 High Pressure Diff	COMP	CALL
Casselman 1553 Distribution High Chlorine Alarm	COMP	CALL

Monthly Work Order Summary – January 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
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
Specific ECA - Bypass (3m) - 1501	COMP	PM
Quarterly H&S Equipment Check (1m) - 1501	COMP	PM
WISKI Monthly Review(1m) 1501	COMP	PM
UPS Battery Replacement 3 years Casselman Sewage - 1501	APPR	PM
Workplace Inspection (1m) - 1501	COMP	OPER
1501 Casselman sewage SPS5 Pump overload. Emergency repair	COMP	CALL

Appendix C

Locate Summary



Casselman Monthly Locate Summary – January 2024

Description	Status	Work Type
Locate Casselman WDS 1553 - 2024014947 - Zachari St	COMP	OPER
Locate Casselman WDS 1553 - 2024032193 - Route 500 and Laurier St	COMP	OPER
Locate Casselman WDS 1553 - 2024047689 - HWY 417	COMP	OPER
Total		3