WASAGA BEACH
WATER POLLUTION CONTROL PLANT

PERFORMANCE REPORT

For the period of

JANUARY 1, 2024 to MAY 31, 2024

Ontario Clean Water Agency
Agence Ontarienne Des Eaux

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Note: This report may not represent the most recent available data. Any missing data will be added in the following months report.

1. Process Performance & Regulatory Compliance

1.1 Summary of Compliance Limit and Objective Exceedances & Non-Compliances

From **January 1, 2024** to **May 31, 2024:**

- Number of Regulatory Limit Exceedances = **0**
- Number of Regulatory Objective Exceedances = **1**
- Number of Non-Compliances = **0**

The Wasaga Beach WPCP performed within the regulatory limits set out in:

- Environmental Compliance Approval (ECA) #0766-CM9RQA
- The Federal Wastewater Systems Effluent Regulation (WSER)

2024	ECA Limit Exceedance	ECA Objective Exceedance	Non-Compliances
January	0	1	0
February	0	0	0
March	0	0	0
April	0	0	0
May	0	0	0
June			
July			
August			
September			
October			
November			
December			

1.1.1 Description of Single Sample Exceedances

The following is a summary of any environmental compliance approval limit and objective exceedances, their respective cause; as well as the measures that were taken to correct the issue:

Exceedance(s)	Cause	Corrective Actions
Jan 17,2024 sample TSS 6 mg/L > Objective 5 mg/L	Higher phosphurous loading in raw sewage	Jan 2 and Jan 15, 2024 Increased Aluminum sulphate dosage

1.1.2 Description of Non-Compliances

The following is a summary of the requirements of the wastewater systems effluent regulation, the environmental compliance approvals, and any orders applicable to the system that were not met at any time during the time period covered by this report; as well as the duration of the failure and the measures that were taken to correct the failure:

Non-Compliance(s)	Duration	Required Actions & Corrective Actions
N/A	N/A	N/A

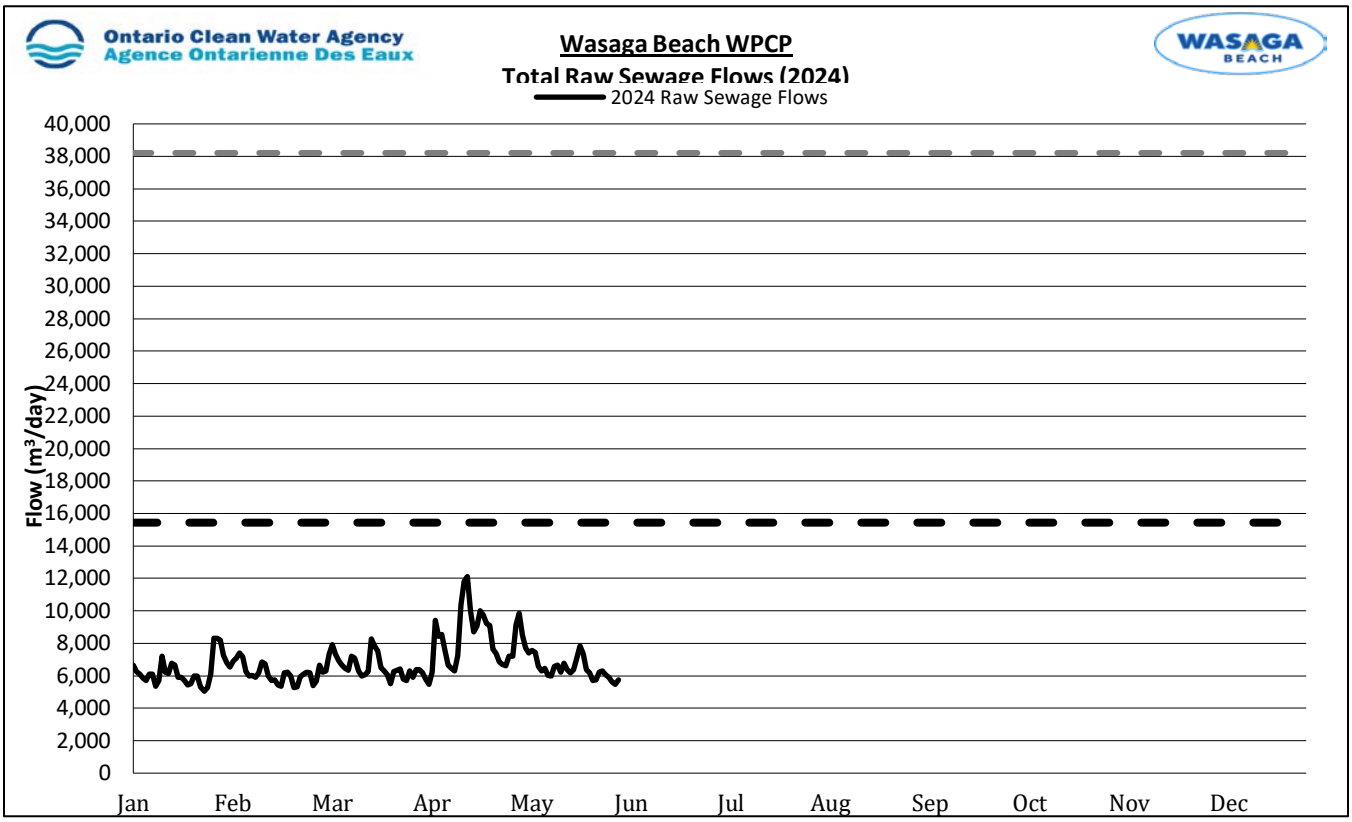
1.2 Summary of Process Performance

1.2.1 Raw Flow – Current Year

January to May 2024, Wasaga Beach WPCP operated within Rated Capacity and Peak Design Flow.

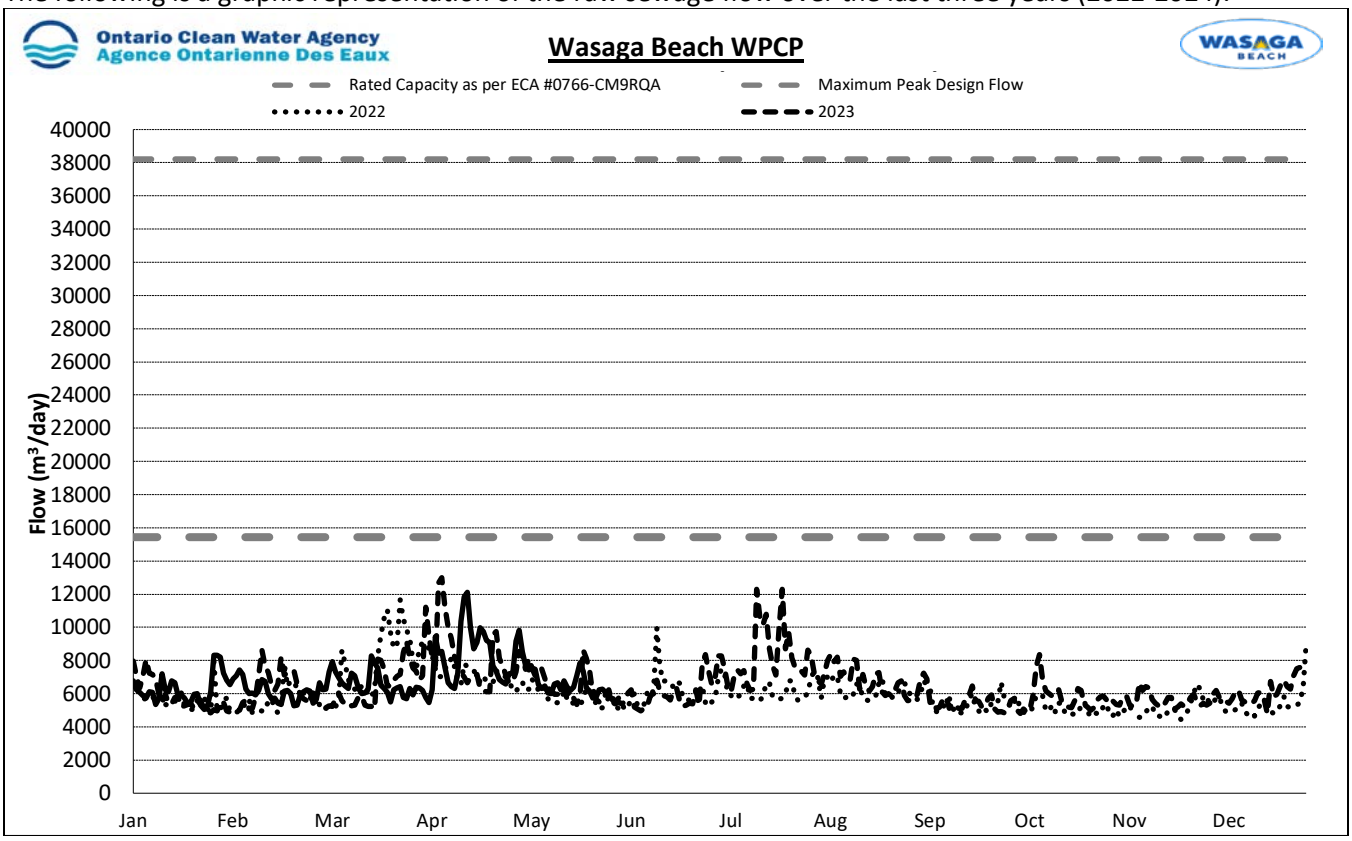
2024	Maximum Daily Raw Sewage Flow (m^3/d)	% of Rated Capacity	Within Rated Capacity *(15,433 m^3/d)*	% of Peak Design Flow Rate	Within Peak Design Flow Rate *(38,210 m^3/d)*
January	8319	46.76	Yes	18.89	Yes
February	7,418	48.07	Yes	19.41	Yes
March	8,267	53.57	Yes	21.64	Yes
April	12,110	78.47	Yes	31.69	Yes
May	8,519	55.20	Yes	22.30	Yes
June					
July					
August					
September					
October					
November					
December					

The following is a graphic representation of 2024 raw sewage flow compared to Rated Capacity and Maximum Peak Design Flow Rate:



1.2.2 Raw Flow – Comparison with Previous Years

The following is a graphic representation of the raw sewage flow over the last three years (2022-2024):



In May 2024 total raw sewage flows (202,760 m^3) for Wasaga Beach WPCP was more than 2023 (200,751 m^3) and more than 2022 (181,568 m^3).

1.2.3 Weather Conditions

- January 2024 had 68.9 mm of precipitation (compared to 69.5 mm in January 2023), and an average temperature of -4.2°C (compared with -1.1°C in January 2023) with a minimum of -19.4°C and a maximum of 5.9°C (compared with 3.5°C in January 2023).
- February 2024 had 38.2 mm of precipitation (compared to 53.2 mm in February 2023), and an average temperature of -2.9°C (compared with -5.4°C in February 2023) with a minimum of -18.9°C and a maximum of 13.7°C (compared with 10.6°C in February 2023).
- March 2024 had 13.8 mm of precipitation (compared to 14.0 mm in March 2023), and an average temperature of 15.9°C (compared with-1.8°C in March 2023) with a minimum of 1.8°C and a maximum of 15.8°C (compared with 8.4°C in March 2023).
- April 2024 had 195.9 mm of precipitation (compared to 103.7 mm in April 2023), and an average temperature of 6.4°C (compared with -8.4°C in April 2023) with a minimum of -4.0°C and a maximum of 21.1°C (compared with 29.6°C in April 2023).

- May 2024 had 106.4 mm of precipitation (compared to 14.7 mm in May 2023), and an average temperature of 13.9°C (compared with 11.4°C in May 2023) with a minimum of 1.8°C (compared with -3.2°C in May 2023) and a maximum of 27.8°C (compared with 28.9°C in May 2023).
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**Weather Data from Environment Canada (Historical Weather Database)*

1.2.4 Effluent Quality

1.2.4.1 Effluent Quality vs. ECA Compliance Limits & Objectives

2024	$CBOD_5$				Suspended Solids			
	Monthly Average (mg/L)	**Annual Average** (mg/L)	**Within Limits** *(10 mg/L)*	**Within Objectives** *(5.0 mg/L)*	**Monthly Average** (mg/L)	**Annual Average** (mg/L)	**Within Limits** *(10 mg/L)*	**Within Objectives** *(5.0 mg/L)*
January	<3.00	<2.20	Yes	Yes	4.00	3.51	Yes	Yes
February	<2.00				<3.00			
March	<2.00				3.67			
April	<2.00				3.50			
May	<2.00				3.36			
June								
July								
August								
September								
October								
November								
December								

2024	Total Phosphorous			E.Coli+		
	Monthly Average (mg/L)	**Within Limits** *(0.20 mg/L)*	**Within Objectives** *(0.15 mg/L)*	**Monthly Geometric Mean Density** *(orgs/100 mL)*	**Within Limits** *(200 orgs/100 mL)*	**Within Objectives** *(150 orgs/100 mL)*
January	0.08	Yes	Yes	2.00	Yes	Yes
February	0.05	Yes	Yes	2.00	Yes	Yes
March	0.06	Yes	Yes	2.00	Yes	Yes
April	0.05	Yes	Yes	2.00	Yes	Yes
May	0.06	Yes	Yes	2.00	Yes	Yes
June						
July						
August						
September						
October						
November						
December						

+ Based on a monthly geometric mean density of E.Coli lab results from weekly sampling.

2023	Ammonia (Dec 1 – Apr 30)			Ammonia (May 1 – Nov 30)		
	Maximum Daily (mg/L)	**Within Limits** *(5.0 mg/L)*	**Within Objectives** *(4.0 mg/L)*	**Maximum Daily** (mg/L)	**Within Limits** *(1.1 mg/L)*	**Within Objectives** *(1.0 mg/L)*
January	<0.10	Yes	Yes	-	-	-
February	<0.10	Yes	Yes	-	-	-
March	<0.10	Yes	Yes	-	-	-
April	<0.20	Yes	Yes	-	-	-
May	-	-	-	<0.23	Yes	Yes
June	-	-	-			
July	-	-	-			
August	-	-	-			
September	-	-	-			
October	-	-	-			
November	-	-	-			
December				-	-	-

1.3 Sludge Haulage

The hauling and spreading of sludge from the Wasaga Beach WPCP occurs as required (storage capacity). Sludge haulage and agricultural land application is contracted to Region of Huronia Environmental Services.

As required by the Nutrient Management Act, chemical analyses of the sludge storage tanks contents are to be completed and the results sent to the contractor prior to haulage and spreading. Samples are taken on a monthly basis and sent for chemical analysis.

Agriculture, Food and Rural Affairs (OMAFRA) approved Non-Agricultural Source Material Plans (NASM Plans) and Certificates of Approval based on Ontario Regulation 338/09 made under the Nutrient Management Act, 2002. NASM Plans under the Nutrient Management Act are issued to the owner (farmer) who is responsible for managing the plan with assistance from the NASM Plan Developer.

1.3.1 Volume of Biosolids

From **January 1, 2024** to **May 31, 2024**:

- Total Sludge Haulage (2024) to date = 12,731.1 m^3

2024	Monthly Sludge Haulage Volume (m^3)	NASM Disposal Site
January	0	N/A
February	0	N/A
March	2,669	ROHES Lagoons
April	2,991	ROHES Lagoons
May	7,7071	Fields
June		
July		
August		
September		

2024	Monthly Sludge Haulage Volume (m^3)	NASM Disposal Site
October		
November		
December		

1.4 Reportable Events: Spills & By-Pass/Overflow Events

From **January 1, 2024** to **May 31, 2024**:

- Number of Reportable Events to date= 0

2024	Date (yyyy/mm/dd)	Event	Details
January	N/A	N/A	N/A
February	N/A	N/A	N/A
March	N/A	N/A	N/A
April	N/A	N/A	N/A
May	N/A	N/A	N/A
June			
July			
July			
August			
September			
October			
November			
December			

1.5 Report Submissions

A summary of the reports submitted by OCWA on behalf of the Municipality are summarized in the table below:

Report	Submission Frequency	Submitted To	Last Submission Date	Next Report Due
Annual Performance Report	Annual (March 31st)	MECP – District Manager	March 28, 2024 (2023 Report)	March 31, 2025 (2024 Report)
Discharge Data Reports	45 days after the Quarter	MECP	May 15 , 2024 (2024 Q1 Report)	August 15, 2024 (2024 Q2 Report)
Monitoring Reports – Wastewater Systems Effluent Regulation (WSER)	45 days after the Quarter	Environment Canada – Effluent Regulatory Reporting Information System (ERRIS)	May 8, 2024 (2024 Q1 Report)	August 15, 2024 (2024 Q2 Report)

1.5.1 Annual Performance Report

An Annual Performance Report is submitted as required by the ECA for the Wasaga Beach WPCP within 90 days following the end of the period being reported upon. The most recent Annual Performance

Report was submitted as per ECA #0766-CM9RQA. The following items are required to be included in the report:

(a) a summary and interpretation of all Influent, and Imported Sewage monitoring data, and a review of the historical trend of the sewage characteristics and flow rates;
(b) a summary and interpretation of all Final Effluent monitoring data, including concentration, flow rates, loading and a comparison to the design objectives and compliance limits in this Approval, including an overview of the success and adequacy of the Works;
(c) a summary of all operating issues encountered and corrective actions taken;
(d) a summary of all normal and emergency repairs and maintenance activities carried out on any major structure, equipment, apparatus or mechanism forming part of the Works;
(e) a summary of any effluent quality assurance or control measures undertaken;
(f) a summary of the calibration and maintenance carried out on all Influent, Imported Sewage and Final Effluent monitoring equipment to ensure that the accuracy is within the tolerance of that equipment as required in this Approval or recommended by the manufacturer;
(g) a summary of efforts made to achieve the design objectives in this Approval, including an assessment of the issues and recommendations for pro-active actions if any are required under the following situations:
    i. when any of the design objectives is not achieved more than 50% of the time in a year, or there is an increasing trend in deterioration of Final Effluent quality;
    ii. when the Annual Average Daily Influent Flow reaches 80% of the Rated Capacity;
(h) a tabulation of the volume of sludge generated, an outline of anticipated volumes to be generated in the next reporting period and a summary of the locations to where the sludge was disposed;
    (i) a summary of any complaints received and any steps taken to address the complaints;
    (j) a summary of all Bypasses, Overflows, other situations outside Normal Operating Conditions and spills within the meaning of Part X of EPA and abnormal discharge events;
    (k) a summary of all Notice of Modifications to Sewage Works completed under Paragraph 1.d. of Condition 10, including a report on status of implementation of all modification.
    (l) a summary of efforts made to achieve conformance with Procedure F-5-1 including but not limited to projects undertaken and completed in the sanitary sewer system that result in overall Bypass/Overflow elimination including expenditures and proposed projects to eliminate Bypass/Overflows with estimated budget forecast for the year following that for which the report is submitted;
    (m) any changes or updates to the schedule for the completion of construction and commissioning operation of major process(es) / equipment groups in the Proposed Works;
    (n) a summary of any deviation from the monitoring schedule and reasons for the current reporting year and a schedule for the next reporting year;

1.5.2 Discharge Data Report (MECP)

The Ontario Clean Water Agency (OCWA) has an agreement with the Ministry of Environment, Conservation and Parks (MECP) to submit quarterly discharge data for all OCWA operated municipal sewage treatment facilities 45 days at the end of each quarter. Monitoring data is submitted via the Ministry of Environment Wastewater System (MEWS). The MECP stores these reports in a shared location where MECP Inspectors can obtain and review them. There are no limits/objectives for the quarterly Discharge Data Report.

1.5.3 Monitoring Reports (WSER)

A monitoring report required under the Wastewater Systems Effluent Regulation (WSER) is submitted on a quarterly basis to Environment Canada via the Effluent Regulatory Reporting Information System (ERRIS). The quarterly monitoring report requires that the following information be reported for the Wasaga Beach WPCP:

- Number of days effluent was deposited
- Total volume of effluent deposited
- Average CBOD (limit of 25 mg/L)
- Average concentration of suspended solids (limit of 25 mg/L)
- Acute Toxicity (limit of 50% mortality rate)

1.6 Third-Party Inspections & Results

There have been no third party inspections performed during the reporting period. The last MECP Inspection was performed on **January 10, 2019**.

2. Operations & Maintenance

2.1 Major Maintenance, Repair & Capital

2024	Maintenance, Repair & Capital Summary
January	• Monthly Facility Inspections- Clarifier, H&S, Panels, Genset, Valve Gate, UV, Compressor, MCC, O&M Inspections (PM) • WPCP UV Replacement Project In-progress (CAP) • WPCP Biosolids Upgrades Project In-progress (CAP) • WPCP Barscreen Replacement Design In-progress (CAP) • WPCP Grit Pump Repair Complete (CAP) • WPCP Low Lift 2 Refurbishment In-progress (CAP) • Chemical Storage and Aeration Building Misc. Repairs In-progress (CAP) • WPCP Inlet Building Fixed Gas Sensor Repairs (CAP) • WPCP Admin Building Envelope Repairs In-progress (CAP) • WPCP Biosolids and Chemical Storage Buildings Door Replacements In-progress (CAP) • WPCP UV/Filter Building Rooftop HVAC Replacement Complete (CAP) • WPCP RAS#1 Flow Meter Replacement In-progress (CAP) • SPS#1 Pump Replacement In-progress (CAP) • SPS#2 Pump Replacement In-progress (CAP) • SPS#6 Pump Repair In-progress (CAP) • SPS#14 Pump 2 Repair In-progress (CAP) • SPS#17 Pump Replacements In-progress (CAP)
February	• Monthly Facility Inspections- Clarifier, H&S, Panels, Genset, Valve Gate, UV, Compressor, MCC, O&M Inspections (PM) • WPCP UV Replacement Project In-progress (CAP) • WPCP Biosolids Upgrades Project In-progress (CAP) • WPCP Barscreen Replacement Design In-progress (CAP) • WPCP Low Lift 2 Refurbishment In-progress (CAP) • Chemical Storage and Aeration Building Misc. Repairs In-progress (CAP)

2024	Maintenance, Repair & Capital Summary
	• WPCP Inlet Building Fixed Gas Sensor Repairs (CAP) • WPCP Admin Building Envelope Repairs In-progress (CAP) • WPCP Biosolids and Chemical Storage Buildings Door Replacements In-progress (CAP) • WPCP UV/Filter Building Rooftop HVAC Replacement Complete (CAP) • WPCP RAS#1 Flow Meter Replacement In-progress (CAP) • SPS#1 Pump Replacement In-progress (CAP) • SPS#2 Pump Replacement In-progress (CAP) • SPS#6 Pump Repair In-progress (CAP) • SPS#14 Pump 2 Repair In-progress (CAP) • SPS#17 Pump Replacements In-progress (CAP)
March	• Monthly Facility Inspections- Clarifier, H&S, Panels, Genset, Valve Gate, UV, Compressor, MCC, O&M Inspections (PM) • WPCP UV Replacement Project In-progress (CAP) • WPCP Biosolids Upgrades Project In-progress (CAP) • WPCP Barscreen Replacement Design In-progress (CAP) • WPCP Low Lift 2 Refurbishment In-progress (CAP) • Chemical Storage and Aeration Building Misc. Repairs In-progress (CAP) • WPCP Inlet Building Fixed Gas Sensor Repairs (CAP) • WPCP Admin Building Envelope Repairs In-progress (CAP) • WPCP Biosolids and Chemical Storage Buildings Door Replacements In-progress (CAP) • WPCP RAS#1 Flow Meter Replacement Completed(CAP) • SPS#1 Pump Replacement In-progress (CAP) • SPS#2 Pump Replacement In-progress (CAP) • SPS#6 Pump Repair Completed (CAP) • SPS#14 Pump 2 Repair Completed (CAP) • SPS#17 Pump Replacements Completed (CAP) • Inlet Building Air Handling Unit Repairs (CAP) • Effluent Building HVAC Duct Cleaning Completed (CAP)
April	• Monthly Facility Inspections- Clarifier, H&S, Panels, Genset, Valve Gate, UV, Compressor, MCC, O&M Inspections (PM) • WPCP UV Replacement Project In-progress (CAP) • WPCP Biosolids Upgrades Project In-progress (CAP) • WPCP Barscreen Replacement Design In-progress (CAP) • WPCP Low Lift 2 Refurbishment In-progress (CAP) • Chemical Storage and Aeration Building Misc. Repairs In-progress (CAP) • WPCP Inlet Building Fixed Gas Sensor Repairs (CAP) • WPCP Admin Building Envelope Repairs Completed (CAP) • WPCP Biosolids and Chemical Storage Buildings Door Replacements In-progress (CAP) • WPCP RAS#1 Flow Meter Replacement Completed(CAP) • SPS#1 Pump Replacement In-progress (CAP) • SPS#2 Pump Replacement In-progress (CAP)
May	• Monthly Facility Inspections- Clarifier, H&S, Panels, Genset, Valve Gate, UV, Compressor, MCC, O&M Inspections (PM) • WPCP UV Replacement Project In-progress (CAP) • WPCP Biosolids Upgrades Project In-progress (CAP)

2024	Maintenance, Repair & Capital Summary
	• WPCP Barscreen Replacement Design In-progress (CAP) • WPCP Low Lift 2 Refurbishment In-progress (CAP) • Chemical Storage and Aeration Building Misc. Repairs In-progress (CAP) • WPCP Inlet Building Fixed Gas Sensor Repairs (CAP) • WPCP Admin Building Envelope Repairs Completed (CAP) • WPCP Biosolids and Chemical Storage Buildings Door Replacements Competed (CAP) • SPS#1 Pump Replacement In-progress (CAP) • SPS#2 Pump Replacement In-progress (CAP) • WPCP RAS Building Lifting Device Repairs (CAP) • WPCP RAS Pump 4 Inspection for Repairs In-progress (CAP) • Pump Station Genset Annual PMs – PS 3,9,13,15,20,21 (PM) • WPCP Genset Annual PM (PM)
June	
July	
August	
September	
October	
November	
December	

Where, PM is Preventive Maintenance, CAP is Capital, CORR is Corrective

2.2 Call-Ins

2024	# of Call-Ins	Details of Call-Ins
January	2	• Jan 3, WPCP – Contractor locked in compound • Jan 12, WPCP - UV ALARM
February	5	• Feb 10, Pump Station 1 – Power outage generator running as required X 2 • Feb 27, Pump Station 9 – RSP 2 faulted, over current • Feb 28, Pump Station 6 – Power outage, generator running as required • Feb 28, Pump Station 1 - Power outage, generator running as required
March	5	• Mar 4, Pump Station 19 – Intrusion alarm • Mar 11, Pump Station 17 – HMI displaying desk top, entered password • Mar 25, Pump Station 9 – Power outage, generator running as required • Mar 26, Pump Station 10 – Wetwell level out of miltronics range, low • Mar 30, Pump Station 19 – Communication Alarm
April	16	• Apr 2, WPCP - Filter inlet High Level Alarm • Apr 2, Pump Station 3 – RSP 1 & 2 Leak/Temp Fault • Apr 3, Pump Station 19 – Power Failure Alarm • Apr 3, Pump Station 10 – High Level Alarm • Apr 3, WPCP – Filter Inlet High Level • Apr 6, Pump Station 1, 2, 3, 7, 8, 9, 12, 13 – Power Failure Alarms

2024	# of Call-Ins	Details of Call-Ins
		• Apr 6, WPCP – Power Failure, multiple Alarms • Apr 6, WPCP – Equalization Tanks Filling Alarm • Apr 6, WPCP – Filter Inlet Channel High Level • Apr 7, Pump Station 20 – Power Outage • Apr 9, WPCP - Aeration Blower Fail Alarm • Apr 13, Pump Station 9 –RSP 1 Fail Alarm, power bump • Apr 13, Pump Station 3 – RSP 1 & 2 Fail Alarm, power bump • Apr 23, WPCP – WAS2 High Level, Disc Filter Alarm • Apr 28, WPCP – Biosolids Blower Fail Alarm • Apr 28, Pump Station 10 – High Level Alarm
May	5	• May 1, WPCP – WAS2 High Level Alarm • May 5, Power Bump, Multiple Alarms: o Pump Station 9 General Alarm - RSP2 over current; o Pump Station 20 Pump 1 Starter Fault - RSP1 phase imbalance; o Pump Station 16 AC failure • May 20, WPCP – Disc Filter Influent Box High Level (2 alarms) • May 21, WPCP - Disc Filter Influent Box High Level • May 21, Power Bump, Multiple Alarms: o Pump Station 19 – RSP2 faulted; o Pump Station 3 - RSP1 Drive Fail o WPCP – Turbo Blower Over Current
June		
July		
August		
September		
October		
November		
December		

2.3 Community Complaints/Inquires

2024	# of Comm. Complaints	Details of Community Complaints/Inquires
January	0	• N/A
February	1	• Inquiry regarding septage safe handling practices
March	0	• N/A
April	0	• N/A
May	0	• N/A

2024	# of Comm. Complaints	Details of Community Complaints/Inquires
June		
July		
August		
September		
October		
November		
December		

3. Health & Safety

3.1 Health & Safety Incidents

From **January 1, 2024** to **May 31, 2024**:

- Number of Health & Safety Incidents Reported = **0**

2024	Health & Safety Incidents	
	# Reported	Details
January	0	NA
February	0	NA
March	0	NA
April	0	NA
May	0	NA
June		
July		
August		
September		
October		
November		
December		

3.2 Health & Safety Training

The following safety training and safety topics were provided to staff:

2024	H&S Topics
January	• Monthly Safety Topic: Preventing Winter Slips, Trips and Falls • Weekly Health & Safety Topic: Hierarchy of Controls • Weekly Health & Safety Topic: Be a Safety Leader • Weekly Health & Safety Topic: Bell Let's Talk • Weekly Health & Safety Topic: Personal Hygiene
February	• Monthly Safety Topic: Importance of Hazard Identification • Weekly Health & Safety Topic: Backing up safety • Weekly Health & Safety Topic: Heart Healthy

2024	H&S Topics
	• Weekly Health & Safety Topic: Preventing Slips, Trips & Falls • Weekly Health & Safety Topic: Repetitive Strain Injury
March	• Monthly Safety Topic: Lock Out/Tag Out: Controlling Hazardous Energy • Weekly Health & Safety Topic: Spring Forward – Daylight Savings Time • Weekly Health & Safety Topic: How Climate Change Relates to Health and Safety • Weekly Health & Safety Topic: Pressure Washer Safety • Weekly Health & Safety Topic: Spring Vehicle Safety Tips
April	• Monthly Safety Topic: Why Proper Rest is important for Preventing Fatigue at Work • Weekly Health & Safety: Solar Eclipse Safety • Weekly Health & Safety: Distracted Driving Reminders • Weekly Health & Safety: Mandatory Personal Protective Equipment • Weekly Health & Safety: Reminder to Drive Defensively
May	• Monthly Safety Topic: Roles and Responsibilities Refresher • Weekly Health & Safety Topic: Emergency Preparedness • Weekly Health & Safety Topic: Working in Hot Environments • Weekly Health & Safety Topic: Working in Hot Environments • Weekly Health & Safety Topic: S – Stop and Assess; T – Think of Risks and Controls; O – Organize the work; P – Proceed
June	
July	
August	
September	
October	
November	
December	