



TOWNSHIP OF EDWARDSBURGH CARDINAL INFORMATION ITEM

Committee: Public Works, Environmental Services & Facilities

Date: April 19, 2021

Department: Operations

Topic: 2021 Operations First Quarter Report

SECTION 1: PUBLIC WORKS

1.1 Loose and Hardtop Maintenance

- Gravel Roads grading continues with spot gravel additions
- Cold patching continues– Increase in demand due to hard freeze and thaws
- Seasonal load restriction signage erected throughout portions of the Township

1.2 Winter Control

- 14 weather related Call-ins

1.3 Miscellaneous

- Culvert Thawing and removal of obstructions
- Sign maintenance ie: straightening, replacing
- Roadside garbage pick-up
- Roadside Brush and tree removal
- Several fallen trees removed from road allowances
- Repaired catch basin in Cardinal
- Connell Road culvert CCTV inspected (Ventnor)
- Sidewalk Sweeping in both Cardinal and Spencerville in collaboration with Counties
- 72 service requests issued. 5 outstanding (as of Apr 7th)

SECTION 2: WASTE DISPOSAL

- 140 vehicles attended the site over the 13 Saturdays in the quarter
- Punch card sales through office: \$ 165.00
- Punch card sales through Cardinal Library: \$ 0.00
- Punch Card sales Burchell's \$ 252.00
- Punch Card sales through PayPal: \$ 540.00
- Total punch card sales for this quarter: \$ 957.00
- Staff limiting public entry to Transfer Station
- Spring leaf and brush Pick-up planned for May

SECTION 3: ENVIRONMENTAL SERVICES

3.1 2021 First Quarter WTP Flows Summary

<u>Cardinal Water Treatment Plant Flows</u>				
<u>Month</u>	<u>Monthly Flow</u> <u>(m³)</u>	<u>Minimum Daily</u> <u>Flow (m³)</u>	<u>Maximum Daily</u> <u>Flow (m³)</u>	<u>Average Daily</u> <u>Flow (m³)</u>
January	11922	282	518	385
February	11498	292	535	411
March	12248	334	773	395

3.2 2021 First Quarter WTP Operational Parameters

<u>Summary of Operational Parameters for the Cardinal Water Treatment Plant</u>									
	UV Transmittance	Filter 1A	Filter 1B	Filter 2A	Filter 2B	pH	Pres	Raw Chlorine	Post Chlorine
Average	49.68	0.02	0.06	0.07	0.06	8.15	69.3	1.68	2.63
Unit	mJ/cm²	NTU	NTU	NTU	NTU		PSI	mg/L	mg/L
Compliance	40	1	1	1	1	6.5- 8.5	>20		>0.20

3.3 2021 First Quarter WTP Microbial Testing

Microbiological Testing for the Cardinal Water System				
	<u>Number of Samples</u>	<u>Total Coliform</u>	<u>E. coli</u>	<u>HPC (min-max)</u>
January - March	52	0	0	<2-8
Compliance for TC/EC is zero. HPC guideline is less than 500.				

3.4 2021 First Quarter Summary Report for the Industrial Park

Microbiological Testing- Industrial Park				
	Number of Samples	Total Coliform	E. coli	HPC (min-max)
January - March	13	0	0	<2 -2
Compliance for TC/EC is zero. HPC guideline is less than 500.				

Description	Prysmian Chlorine Residual	Greenfield Chlorine Residual	Pressure (PSI)
Quarterly Average	1.03	0.76	73.6
Units	mg/L	mg/L	PSI
Compliance	>0.05	>0.05	>20

Reilly Station chlorine residuals collected from March 22-29. Average reading was 1.43 mg/L.

3.5: 2021 First Quarter Report for Windmill Pumping Station

Month	<i>Total Flow (m³)</i>	<i>Minimum Daily Flow (m³)</i>	<i>Maximum Daily Flow (m³)</i>	<i>Average Daily Flow (m³)</i>
January	43975	1162	1828	1419
February	37688	1187	1796	1346
March	43757	665	1739	1412

3.6: 2021 First Quarter Report for Spencerville Lagoons

Month	<i>Total Flow (m³)</i>	<i>Minimum Daily Flow (m³)</i>	<i>Maximum Daily Flow (m³)</i>	<i>Average Daily Flow (m³)</i>
January	4716	124	241	152
February	3294	84	143	118
March	9437	137	561	304

3.7: 2021 First Quarter Report for Cardinal WWTP

Month	<i>Total Flow (m³)</i>	<i>Minimum Daily Flow (m³)</i>	<i>Maximum Daily Flow (m³)</i>	<i>Average Daily Flow (m³)</i>
January	21203	513	975	684
February	12142	369	569	434
March	36297	526	2364	1171

2021 First Quarter Report for Cardinal WWTP

January to March	BOD (mg/L)	Suspended Solids (mg/L)	Total Phosphorus (mg/L)	Ammonia (mg/L)	<i>E.Coli</i>
Average	3	3.1	0.10	0.50	5
Units	mg/L	mg/L	mg/L	mg/L	CFU
Compliance	25	25	1		
Objective	<15	<15	< 1	<4	<200

Month	BOD Removal	Suspended Solids Removal	Phosphorus Removal	Ammonia Removal
January	94%	94%	96%	99%
February	96%	96%	97%	96%
March	95%	95%	96%	97%



Director of Operations