



## TOWNSHIP OF EDWARDSBURGH CARDINAL INFORMATION ITEM

**Committee:** Committee of the Whole PW/ES/Facilities

**Date:** July 19, 2021

**Department:** Operations

**Topic:** Operations Second Quarter Report

### **SECTION 1: PUBLIC WORKS**

**1.1 Loose and Hardtop Maintenance** - 2021 Gravel Maintenance program complete. 7000 Tonnes of gravel applied to approximately 26km of Township gravel roads, (see attached listing). 184,627 liters of CaCl<sub>2</sub>, (calcium chloride) applied to all Township gravel roads.

**1.2 Culverts** – Installed 2 farm entrance culverts (18 meters in length each) on Weir and Chambers Rd., 2 residential entrance culverts in Johnstown and 5 road crossing culverts, (Rooney, Patterson, Noe, Millar Rd. x 2). Locates have been issued for 3 more road crossing culverts.

**1.3 Signage** – Roadside sign inspection by Advantage Data Collection complete. Awaiting final report. Curves ahead sign replaced on Campbell Rd.

**1.4 Miscellaneous-** Street sweeping of Township hard surface roads and parking lots complete.  
Roadside Spraying for noxious weeds coordinated by Counties is complete.  
Staff will be following up with spot spraying as required.  
Staff completed Part 2, (Practical), of Grader training by ProTec  
Brush head for Township Shovel received.  
Sidewalk inspections in Cardinal and Spencerville by Safe Sidewalks.  
Canada Inc. scheduled for the week of July 19<sup>th</sup>.  
106 Service requests this quarter. 85 completed, (80%).

## **SECTION 2: WASTE DISPOSAL**

- 543 vehicles attended the site over the 13 Saturdays in the quarter
- Punch card sales through office: \$ 100.00
- Punch Card sales through Library \$ 145.00
- Punch Card sales through PayPal: \$ 130.00
- Burchells Hardware Store \$ 4167.00
- Total punch card sales for this quarter: \$ 4542.00

### **Waste Disposal con't**

- Staff limiting public entry to Transfer Station to ensure proper social distancing is maintained.
- Free Spring leaf and brush drop off held in May.
- Approximately 400 tires removed from Transfer Station site by Trillium Environmental. (Coming July 15<sup>th</sup> for another load).
- Four registered Leaf and Brush burns undertaken at the Transfer Site.
- Contract Administration agreement with J2pg for ECA preparation and submission to MECP accepted.

## **SECTION 3: Environmental Services**

### **3.1 2021 Second Quarter WTP Flows Summery**

<b><u>Cardinal Water Treatment Plant Flows</u></b>				
<b>Month</b>	<b>Monthly Flow (m<sup>3</sup>)</b>	<b>Minimum Daily Flow (m<sup>3</sup>)</b>	<b>Maximum Daily Flow (m<sup>3</sup>)</b>	<b>Average Daily Flow (m<sup>3</sup>)</b>
April	12938	325	718	431
May	13833	259	713	446
June	15039	319	1089*	501

\* Maximum daily flow in June due to the haulage of water for a structure fire.

### 3.2 2021 Second Quarter WTP Operational Parameters

Summary of Operational Parameters for the Cardinal Water Treatment Plant									
April to June	UV Transmittance	Filter 1A	Filter 1B	Filter 2A	Filter 2B	pH	Pressure	Raw Chlorine	Post Chlorine
Average	50.26	0.03	0.06	0.08	0.03	8.07	69.27	1.56	2.50
Unit	MJ/cm <sup>2</sup>	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 Second Quarter WTP Microbial Testing

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

### 3.4 2021 Second Quarter Summary Report for the Industrial Park

<u>Microbiological Testing- Industrial Park</u>				
	<u>Number of Samples</u>	<u>Total Coliform</u>	<u><i>E. coli</i></u>	<u>HPC (min-max)</u>
April-June	13	0	0	<2 - 4
Compliance for TC/EC is zero. HPC guideline is less than 500.				

<b>Description</b>	<b>Prysmian Chlorine Residual</b>	<b>Greenfield Chlorine Residual</b>	<b>Pressure (PSI)</b>
Quarterly Average	1.05	0.85	71.6
<b>Units</b>	mg/L	mg/L	PSI
<b>Compliance</b>	>0.05	>0.05	>20

### 3.5: 2021 Second Quarter Report for Windmill Pumping Station

<b>Month</b>	<b>Total Flow (m<sup>3</sup>)</b>	<b>Minimum Daily Flow (m<sup>3</sup>)</b>	<b>Maximum Daily Flow (m<sup>3</sup>)</b>	<b>Average Daily Flow (m<sup>3</sup>)</b>
April	48675	1299	1923	1622
May	53064	*0	2071	1712
June	48263	*0	2325	1609

\* Greenfield semi-annual shutdown-May 30-June 3<sup>rd</sup>.

### 3.6: 2021 Second Quarter Report for Spencerville Lagoons

<b>Month</b>	<b>Total Flow (m<sup>3</sup>)</b>	<b>Minimum Daily Flow (m<sup>3</sup>)</b>	<b>Maximum Daily Flow (m<sup>3</sup>)</b>	<b>Average Daily Flow (m<sup>3</sup>)</b>
April	5980	133	387	199
May	5083	97	388	164
June	3124	91	118	104

### 3.7: 2021 Second Quarter Report for Cardinal WWTP

<b>Month</b>	<b>Total Flow (m<sup>3</sup>)</b>	<b>Minimum Daily Flow (m<sup>3</sup>)</b>	<b>Maximum Daily Flow (m<sup>3</sup>)</b>	<b>Average Daily Flow (m<sup>3</sup>)</b>
April	29920	697	1570	997
May	26067	492	1928	841
June	13902	382	610	463

**2021 Second Quarter Report for Cardinal WWTP con't**

<b>April to June</b>	<b>BOD (mg/L)</b>	<b>Suspended Solids (mg/L)</b>	<b>Total Phosphorus (mg/L)</b>	<b>Ammonia (mg/L)</b>	<b><i>E.Coli</i></b>
<b>Average</b>	3.1	3.6	0.09	1.27	4.5
<b>Units</b>	<b>mg/L</b>	<b>mg/L</b>	<b>mg/L</b>	<b>mg/L</b>	<b>CFU</b>
<b>Compliance</b>	25	25	1	N/A	N/A
<b>Objective</b>	<15	<15	< 1	<4	<200

<b>Month</b>	<b>BOD Removal</b>	<b>Suspended Solids Removal</b>	<b>Phosphorus Removal</b>	<b>Ammonia Removal</b>
April	92	95	95	98
May	95	97	97	99
June	96	95	97	86



Director of Operations