



Essex-Windsor Solid Waste Authority

# Essex-Windsor Regional Landfill

## Quarterly Operations Report

Report Date Range: Q2 - April – June, 2020

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This document is available in other formats upon request.

# Essex-Windsor Regional Landfill

## Quarterly Operations Report for Q2: April – June, 2020

### 1 Introduction

The Essex-Windsor Regional Landfill Site is located in part of Lot 14, 15, and 16, Concession 7, in the Town of Essex. The Site is licensed by the Ontario Ministry of Environment under Environmental Compliance Approval No. A011101 (September 28, 1995).

### 2 Compliance

There were no incidents of non-compliance during the second quarter of 2020.

### 3 Waste Disposal Operations

#### 3.1 Waste Quantities

The waste quantities disposed of during the second quarter of 2019 and 2020 were as follows:

**Table 1A: Waste Quantities and Average Daily Waste for 2019 and 2020**

Month	2019 Waste (Tonnes)	2019 Daily Waste (average)	2020 Waste (Tonnes)	2020 Daily Waste (average)
April	27,017.07	1,081	16,996.48	679.9
May	43,607.19	1,677	20,147.80	805.9
June	37,401.31	1,496	23,337.65	897.6
Total	108,025.57		60,481.93	829.32

**Table 1B: Waste Vehicles by Month and Daily Average for 2019 and 2020**

Month	2019 Waste Vehicles	2019 Vehicles/Day (average)	2020 Waste Vehicles	2020 Vehicles/Day (average)
April	1,738	72	2127	85
May	2,594	100	1434	57

Month	2019 Waste Vehicles	2019 Vehicles/Day (average)	2020 Waste Vehicles	2020 Vehicles/Day (average)
June	2,209	85	1652	64
Total	6,541		5213	69

### 3.2 Special Waste

The special waste quantities disposed of during the second quarter of 2020 were as follows:

**Table 2: Special Waste Loads for 2020**

Month	Bleaching Clay Loads
April	9
May	2
June	13

**Table 3A: Sewage Sludge Tonnes for 2020**

Municipality	April 2020	May 2020	June 2020
Essex	43.56	32.98	30.79
Amherstburg	149.86	126.28	120.68
Leamington	0.00	0.00	0.00
Kingsville	114.79	116.61	145.13
Total Sewage Sludge:	308.21	275.87	296.6

**Table 3B: Sewage Sludge Tonnes for 2019**

Municipality	April 2019	May 2019	June 2019
Essex	67.46	38.46	0.00
Amherstburg	114.81	114.28	84.93
Leamington	0.00	0.00	0.00
Kingsville	103.88	148.44	123.07
Total Sewage Sludge:	286.15	301.18	208.00

The following loads of Asbestos were disposed of at the Regional Landfill during the second quarter:

## April 2020

There were 13 loads of Asbestos during the month of April. WDS brought four loads, two of those were from residences in Windsor, one from Newlands Flowers in Leamington, and one from their yard in Windsor. Coxon Towing brought seven loads, five from Windsor residences, and one from the University of Windsor. Environmental Disposal Service brought two loads, one from a residence in Windsor, and one from R.C White.

## May 2020

There was 1 load of Asbestos disposed of in May. WDS brought one load from Ford Canada in Windsor.

## June 2020

There was a total of 4 loads disposed of at the Landfill during June. Coxon Towing brought all four loads, one from Belle River Highschool in Lakeshore, one from University of Windsor, and two from Windsor residences.

### 3.3 Waste Diversion from Refuse

The Scale Clerk, Waste Inspector and the equipment operators are required to question waste haulers about the nature of the wastes being disposed of, and to look for suspicious, unauthorized, or banned materials present in a load. If waste of this type is brought to the site by a licensed commercial hauler the material is not landfilled. It is removed and diverted to either the MHSW area or appropriate onsite storage/collection area.

**Table 4: Waste Units Refused April – June 2020**

Source of Loads	Material Type	April	May	June
Oak Farms	Tires	4		
Amico Farms	Appliances or Electronics	1		
Restore Construction	Tires		2	
Town of Essex	Tires		1	
Transfer Station 1	Tires		1	1
Transfer Station 1	Appliances or Electronics		1	
Transfer Station 1	Car Battery		1	
Double Diamond	Appliances or Electronics		1	
WDS	Tires	2	2	8
WDS	Fire Extinguisher			1

# Essex-Windsor Regional Landfill Quarterly Report, Q2 April–June 2020

Source of Loads	Material Type	April	May	June
WDS	Propane Tank			1
WDS	Appliances or Electronics	1	1	
Total Units Banned:		8	10	11

MHSW = Municipal Hazardous and Special Waste (examples include fluorescent tubes, paint, and propane tanks).

**Table 5A: 2020 Waste Stream Analysis by Month**

Material Type	April	May	June
Municipally Delivered Refuse	2175.54	2264.68	2356.58
Municipal Clean Up	8.82	4.14	3.93
Recycling Fibre Residual	254.52	344.25	314.81
Pollution Control Grit	148.95	125.16	129.36
Municipal Sewage Sludge	308.21	275.87	296.6
Residentially delivered Refuse	1.04	1.16	6.96
Res. Construction/Demolition	1.89	0	0.91
Residential – Shingles	0	0	0
Charitable Organizations	8.08	9.34	6.58
Contaminated Soil	989.22	20.13	1112.26
Vines-Greenhouse	1978.79	3665.46	2606.5
Greenhouse - Waste	447.34	633.72	508.36
IC&I Delivered Refuse	2209.42	3525.27	5000.63
IC&I Construction/Demolition	339.62	478.46	425.2
IC&I Shingles	0	0	40.79
Asbestos	24.53	0.47	15.02
Transfer Stations	8100.51	8799.69	10513.16
Grand Totals:	16,996.48	20,147.80	23,337.65

Table 5A Notes: Transfer Station refuse includes Windsor Transfer Station 1 and Kingsville Transfer Station 2.

**Table 5B: 2020 Waste Stream Analysis by Quarter and Percent**

<b>Material Type</b>	<b>Q2 Tonnes</b>	<b>Percent of Total Waste</b>
Municipally Delivered Refuse	6,796.80	11.24%
Municipal Clean Up	16.89	0.03%
Recycling Fibre Residual	913.58	1.51%
Pollution Control Grit	403.47	0.67%
Municipal Sewage Sludge	880.68	1.46%
Residentially delivered Refuse	9.16	0.02%
Res. Construction/Demolition	2.80	0.00%
Residential – Shingles	0.00	0.00%
Charitable Organizations	24.00	0.04%
Contaminated Soil	2,121.61	3.51%
Vines-Greenhouse	8,250.75	13.64%
Greenhouse - Waste	1,589.42	2.63%
IC&I Delivered Refuse	10,735.32	17.75%
IC&I Construction/Demolition	1,243.28	2.06%
IC&I Shingles	40.79	0.07%
Asbestos	40.02	0.07%
Transfer Stations	27,413.36	45.32%
<b>Grand Totals:</b>	<b>60,481.93</b>	<b>100%</b>

Table 5B Notes: Transfer Station refuse includes Windsor Transfer Station 1 and Kingsville Transfer Station 2.

### 3.4 Compaction

The compaction rate performance criterion is 600 kg/m<sup>3</sup>. The compaction rates and relation to the performance criteria is as follows:

**Table 6: Compaction Results for Second Quarter 2020**

<b>Month</b>	<b>Compaction kg/m3</b>	<b>Criteria Percentage</b>
April	635.46	+ 5.9%
May	632.30	+ 5.4%
June	644.06	+ 7.3%



## 4 Complaints

There were no complaints during the second quarter of 2020.

## 5 Site Development and Maintenance

### 5.1 Development of Disposal Areas

Disposal operations were conducted in Cell 3 South.

### 5.2 Vegetation

Grass cutting was carried out beginning in April and has continued through June.

### 5.3 Drainage

There was no unscheduled activity during this quarter.

### 5.4 Roads and Site Maintenance

The water truck and the front end loader were used as required to maintain the roads during the months of April through June.

### 5.5 Composting Area

There were 293 loads of compost brought in April totalling 1,944.16 tonnes, 305 loads in May totalling 2,687.04 tonnes and 187 loads in June totalling 2,626.09 tonnes.

### 5.6 Cover Material

The site received the following quantities to use as cover material during this quarter:

**Table 7A: 2020 Cover Material Tonnage for Second Quarter**

Cover Material Type	April	May	June
Auto Shredder Fluff	1459.01	1581.50	2819.29
Alternate Daily Cover	494.74	464.05	185.73
Total Tonnes:	1,953.75	2,045.55	3,005.02

**Table 7B: 2020 Cover Material Loads for Second Quarter**

Cover Material Type	April	May	June
Auto Shredder Fluff	40	43	77
Alternate Daily Cover	35	31	13
Total Loads:	75	74	90

## 5.7 Other Activities

There were no other activities during this quarter.

# 6 Leachate Management

## 6.1 Leachate Quantities

There were 13,176.06 tonnes leachate hauled off site in April; 13,690.52 tonnes hauled off site during May and 8,248.55 tonnes during the month of June.

## 6.2 Leachate System Maintenance

There was no unscheduled system maintenance required during this quarter.

## 6.3 Leachate Land Application

Both the West Cell Leachate Land Application System (WCLLAS) and the Greenfield Leachate Land Application Systems were prepared for summer application during this quarter.

The West Cell Leachate Land Application System was in full operation on June 9 and started full application on June 10, 2020. It was run for 8 days and a total of 764m<sup>3</sup> was applied to the two 1 hectare blocks.

# 7 Monitoring Programs

## 7.1 Ground Water and Surface Water Monitoring

There were no storm events during this quarter. Sampling was completed following a precipitation of 30.7mm June 27. Ground water levels were monitored March 30-31, as well as June 15-16, 2020 and the groundwater wells sampling was completed April 1 through 29 and June 17, 2020 by WSP.

## 7.2 Leachate Monitoring

Leachate level samples were collected on March 31, May 25 and June 18, 2020 by WSP.

## 7.3 Precipitation Monitoring

The precipitation quantities were as follows:

**Table 8: Precipitation Comparison 2019 and 2020**

Month	2019 millimetres	2020 millimetres	Percent Change
April	109.6	49.4	-54.9%
May	103.8	63.6	-38.7%
June	66.9	56.8	-15.1%

## 7.4 Other Monitoring Programs

Pond chemistry was monitored March 31, May 25 and June 18, 2020. Pump Station sampling was taken April 30, 2020; leachate levels were done March 31, 2020; Well samples were taken April 1-29, and June 17, 2020, sediment samples on May 1 and ambient air screening was done on March 31, 2020 by WSP.

## Public Relations

There were no public relations events during the second quarter.

## Bird Control Program

A propane bird cannon is being used in conjunction with pyro-technics to deter birds as part of The Bird Control System for the Regional Landfill. Due to the location of the active tip face, use of overhead bird wires has not been practical in this area.

**Tom Marentette**

Manager, Waste Disposal

A handwritten signature in black ink, appearing to read 'Tom Marentette', with a large, stylized loop at the end.

**Dan Van Horn**

Supervisor, Waste Disposal

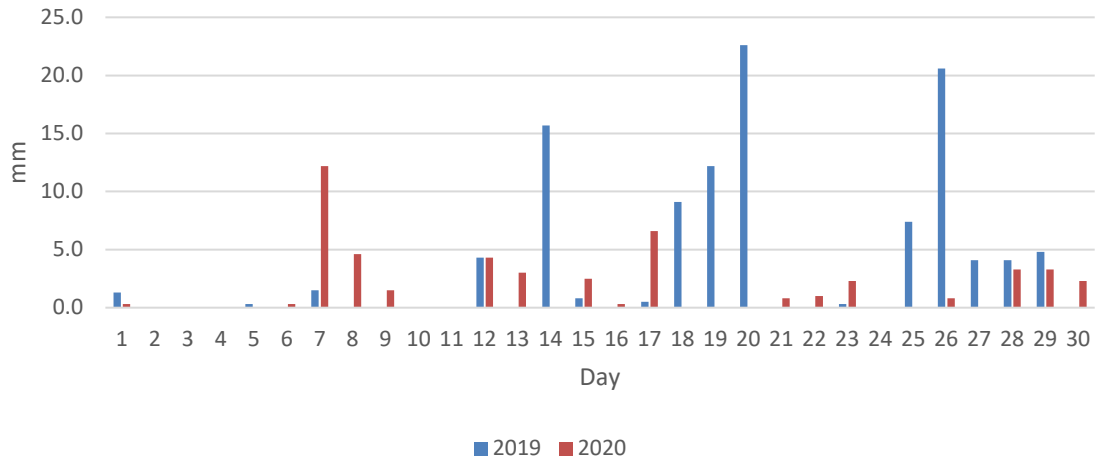
A handwritten signature in black ink, appearing to read 'Dan Van Horn', with a large, stylized loop at the end.

Report prepared by: **Dee Blais**, Administrative Assistant

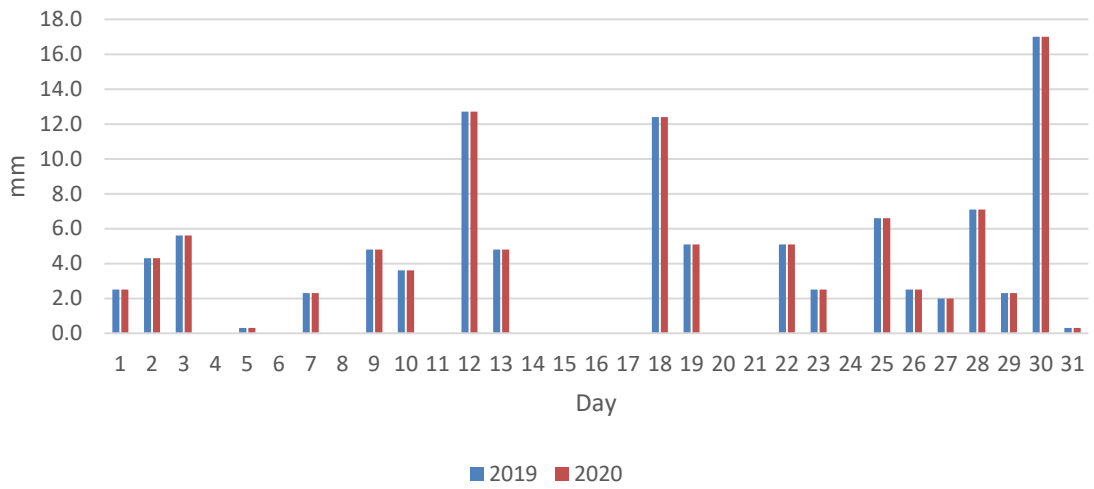
# Appendix A

- Precipitation Monitoring
- Report Distribution

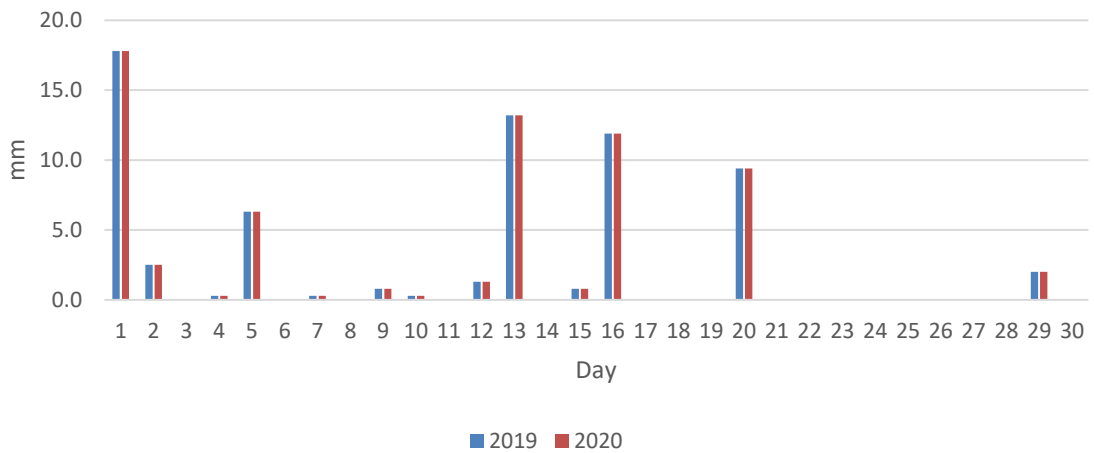
### April Precipitation Comparison



### May Precipitation Comparison



### June Precipitation Comparison



# Report Distribution

- Landfill Liaison Committee Chairperson
- WSP Canada, Inc.