

HTW BCT, July 17, 2020

## April - June 2020 Key Events for OU2 Landfills

- TTU Operations
- Erosion Maintenance
- 14 New Raptor Perches Installed
- Annual Compliance Probe VOC Monitoring
- TTU Source Test
- MCHD Cancelled Quarterly Inspection

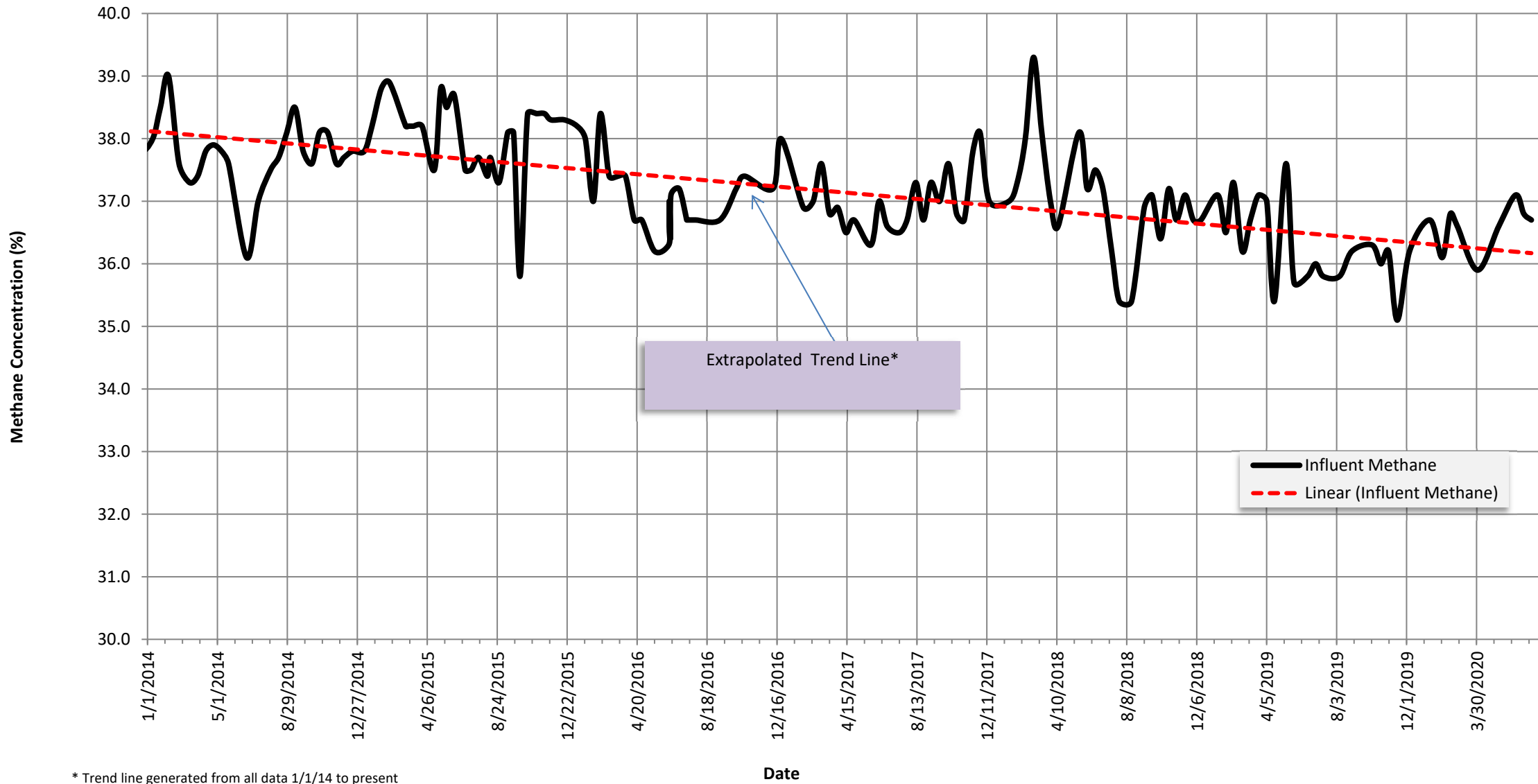
## July/August 2020 Key Events for OU2 Landfills

- TTU Operations
- Rodent Trapping
- Mowing Plan/Mowing
- MCHD Inspection



Ahtna

Methane Concentration Time Series Plot  
Thermal Treatment Unit Influent  
01/01/2014 to present



\* Trend line generated from all data 1/1/14 to present

### Field Measurements Perimeter Probes June 2020

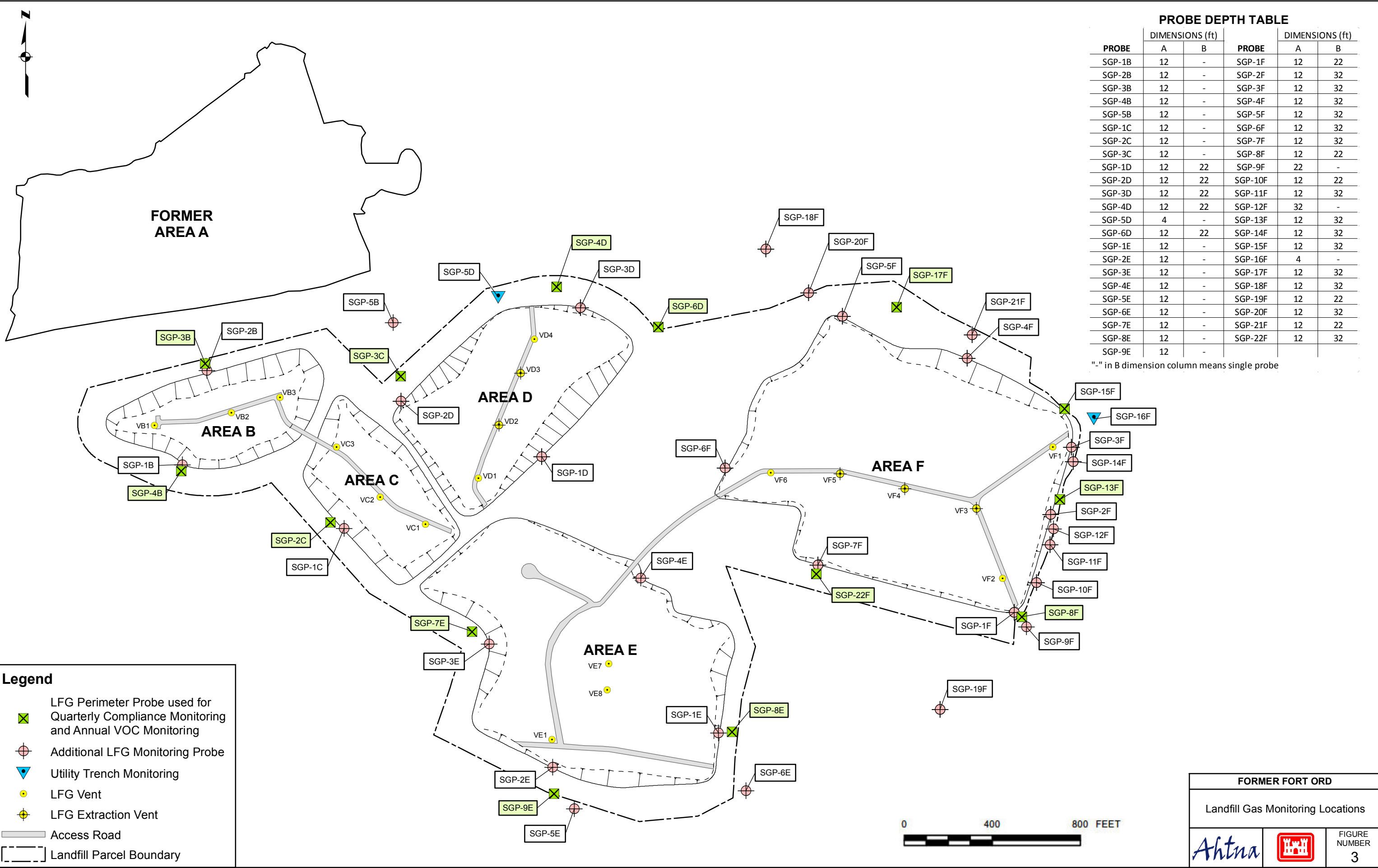
AREA	PROBE IDENTIFICATION	DEPTH(feet)	SAMPLE IDENTIFICATION	DATE	BAROMETRIC PRESSURE (mm Mercury)	METHANE (%v)	CARBON DIOXIDE (%v)	OXYGEN (%v)	BALANCE GAS (%v)
B	2B	12	OU2GM6118	6/5/2020	752.35	4.7	13.6	0	81.7
B	3B	12	OU2GM6080	6/3/2020	755.4	0	2.6	16.2	81.2
B	4B	12	OU2GM6081	6/3/2020	755.14	0	1.8	17.1	81.1
C	2C	12	OU2GM6082	6/3/2020	754.89	0	4	15.1	80.9
C	3C	12	OU2GM6083	6/3/2020	755.14	0	1.6	17.5	80.9
D	1D	12	OU2GM6124	6/5/2020	752.09	1.2	16.7	0.3	81.8
D	1D	22	OU2GM6125	6/5/2020	752.09	2	16.4	0.5	81.1
D	4D	12	OU2GM6084	6/3/2020	754.89	0	1.8	18.4	79.8
D	4D	22	OU2GM6085	6/3/2020	754.89	0	2.7	17.1	80.2
D	6D	12	OU2GM6086	6/3/2020	755.14	0	1.1	19.4	79.5
D	6D	22	OU2GM6087	6/3/2020	750.32	0	1.6	18.5	79.9
E	1E	12	OU2GM6121	6/5/2020	751.33	9.6	19.2	0	71.2
E	2E	12	OU2GM6120	6/5/2020	750.82	9.7	20.1	1.6	68.6
E	3E	12	OU2GM6119	6/5/2020	751.83	4.3	13.9	3.9	77.9
E	4E	12	OU2GM6126	6/5/2020	751.33	8.3	7	11.6	73.1
E	7E	12	OU2GM6088	6/3/2020	754.37	0	2.5	16.8	80.7
E	8E	12	OU2GM6089	6/3/2020	753.87	0	3.6	16.5	79.9
E	9E	12	OU2GM6090	6/3/2020	790.19	0	1.7	18.9	79.4
F	11F	32	OU2GM6122	6/5/2020	752.35	0	4.1	15.5	80.4
F	13F	12	OU2GM6095	6/3/2020	754.89	0	2.5	18.5	79
F	13F	12	OU2GM6094	6/3/2020	754.89	0	2.5	18.5	79
F	13F	32	OU2GM6096	6/4/2020	750.82	0	4.7	15.4	79.9
F	15F	12	OU2GM6097	6/4/2020	751.08	0	3.2	16.5	80.3
F	15F	12	OU2GM6098	6/4/2020	751.08	0	3.2	16.5	80.3
F	15F	32	OU2GM6099	6/4/2020	751.08	0	5.1	13.9	81
F	17F	12	OU2GM6100	6/4/2020	750.82	0	1	19.5	79.5
F	17F	32	OU2GM6101	6/4/2020	751.08	0	1	19.3	79.7
F	22F	12	OU2GM6102	6/4/2020	751.08	0	3.8	15.6	80.6
F	22F	32	OU2GM6103	6/4/2020	751.33	0	3.2	16.5	80.3
F	4F	12	OU2GM6123	6/5/2020	753.1	3.2	7.8	10.7	78.3
F	8F	12	OU2GM6091	6/3/2020	754.89	0	2.6	17.9	79.5
F	8F	12	OU2GM6092	6/3/2020	754.89	0	2.6	17.9	79.5
F	8F	22	OU2GM6093	6/3/2020	754.89	0	2.1	18.8	79.1

**Notes:**

%v          percent volume in air  
mm          millimeter

OU2GM5687

 = compliance perimeter probes for methane



**PROBE DEPTH TABLE**

PROBE	DIMENSIONS (ft)		PROBE	DIMENSIONS (ft)	
	A	B		A	B
SGP-1B	12	-	SGP-1F	12	22
SGP-2B	12	-	SGP-2F	12	32
SGP-3B	12	-	SGP-3F	12	32
SGP-4B	12	-	SGP-4F	12	32
SGP-5B	12	-	SGP-5F	12	32
SGP-1C	12	-	SGP-6F	12	32
SGP-2C	12	-	SGP-7F	12	32
SGP-3C	12	-	SGP-8F	12	22
SGP-1D	12	22	SGP-9F	22	-
SGP-2D	12	22	SGP-10F	12	22
SGP-3D	12	22	SGP-11F	12	32
SGP-4D	12	22	SGP-12F	32	-
SGP-5D	4	-	SGP-13F	12	32
SGP-6D	12	22	SGP-14F	12	32
SGP-1E	12	-	SGP-15F	12	32
SGP-2E	12	-	SGP-16F	4	-
SGP-3E	12	-	SGP-17F	12	32
SGP-4E	12	-	SGP-18F	12	32
SGP-5E	12	-	SGP-19F	12	22
SGP-6E	12	-	SGP-20F	12	32
SGP-7E	12	-	SGP-21F	12	22
SGP-8E	12	-	SGP-22F	12	32
SGP-9E	12	-			

"-" in B dimension column means single probe

**Legend**

- LFG Perimeter Probe used for Quarterly Compliance Monitoring and Annual VOC Monitoring
- Additional LFG Monitoring Probe
- Utility Trench Monitoring
- LFG Vent
- LFG Extraction Vent
- Access Road
- Landfill Parcel Boundary

**FORMER FORT ORD**

Landfill Gas Monitoring Locations

FIGURE NUMBER  
**3**

**Thermal Treatment Unit  
Operation Summary  
2006 - 2020**

<b>TREATMENT SYSTEM OPERATION SUMMARY</b>	
<b>Treatment System Start Date:</b>	<b>6/4/2001</b>
<b>TTU Start Date:</b>	<b>4/4/2006</b>
<b>Last Reading Date/Time:</b>	<b>7/2/2020 19:55</b>
<b>Historical through 2019 (TTU only):</b>	
Total TTU Hours:	<b>120,432</b>
Total TTU Hours Operated:	<b>35,094</b>
% TTU Operation:	<b>29.1%</b>
Total Pounds of Methane Removed:	<b>3,623,172</b>
<b>Current Year 2020:</b>	
Total Hours:	<b>4,392</b>
Total Hours Operated:	<b>615</b>
% TTU Operation:	<b>14%</b>
Total Pounds of Methane Removed:	<b>53,104</b>
<b>Cumulative (since TTU startup in 2006):</b>	
% TTU Operation:	<b>28.6%</b>
Total Pounds of Methane Removed:	<b>3,676,276</b>

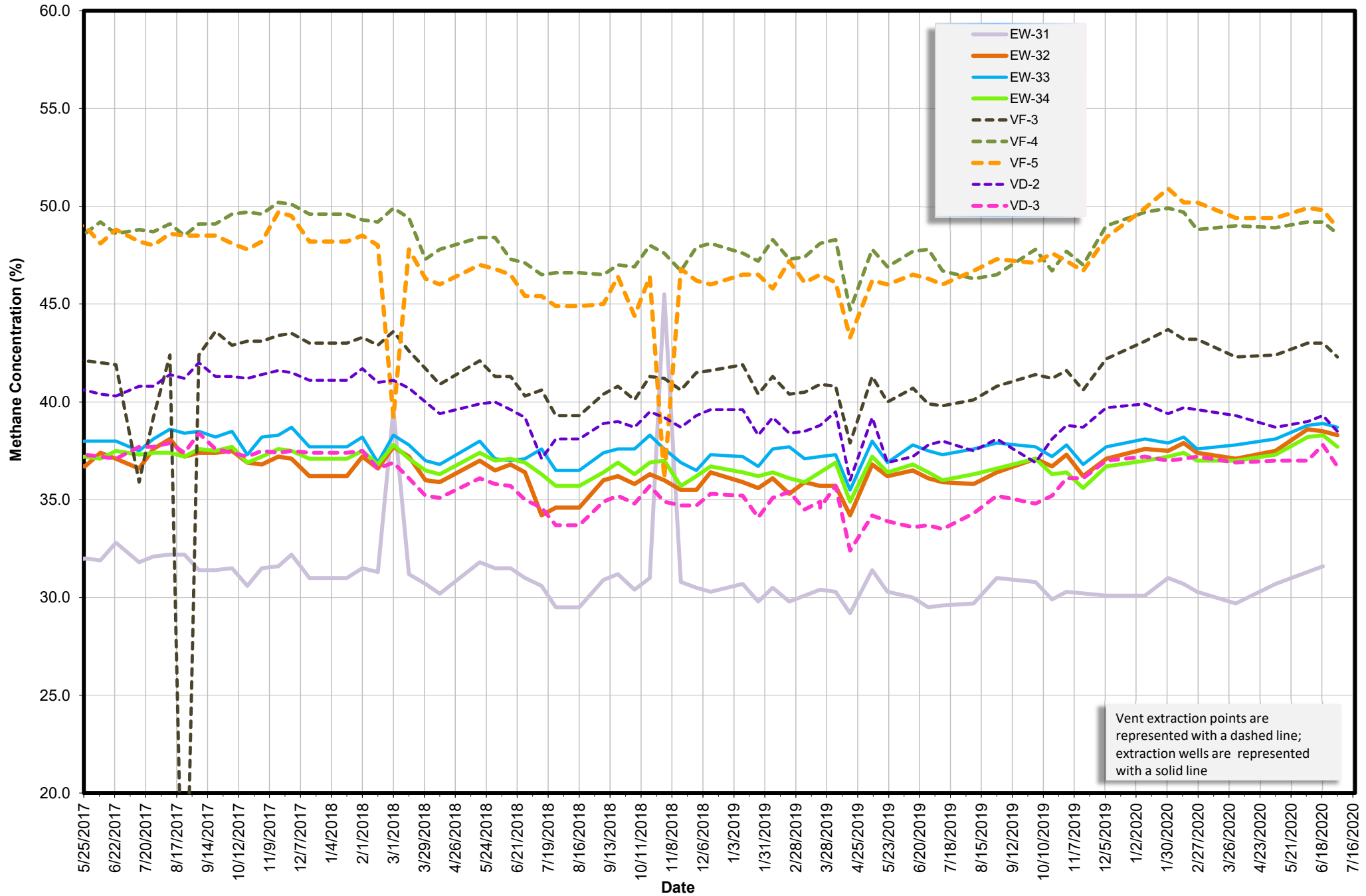
**Thermal Treatment Unit  
Operation Summary  
2006 - 2020**

Year	Operating Hours	Change from Previous Year	Methane			OU2 Groundwater COCs	
			Pounds Removed	Change from Previous Year	Pounds/week	Pounds Removed	Change from Previous Year
2007	4,035		<b>532,130</b>		<b>10,205</b>	<b>6.2</b>	
2008	2,838	<b>-30%</b>	<b>288,458</b>	<b>-46%</b>	<b>5,532</b>	<b>3.1</b>	<b>-51%</b>
2009	4,493	<b>58%</b>	<b>448,154</b>	<b>55%</b>	<b>8,595</b>	<b>3.4</b>	<b>11%</b>
2010	2,421	<b>-46%</b>	<b>212,681</b>	<b>-53%</b>	<b>4,079</b>	<b>1.4</b>	<b>-60%</b>
2011	2,543	<b>5%</b>	<b>228,082</b>	<b>7%</b>	<b>4,374</b>	<b>1.4</b>	<b>0%</b>
2012	2,509	<b>-1%</b>	<b>229,397</b>	<b>1%</b>	<b>4,399</b>	<b>1.2</b>	<b>-13%</b>
2013	2,116	<b>-16%</b>	<b>187,779</b>	<b>-18%</b>	<b>3,601</b>	<b>1.1</b>	<b>-8%</b>
2014	1,961	<b>-7%</b>	<b>174,427</b>	<b>-7%</b>	<b>3,345</b>	<b>1.0</b>	<b>-11%</b>
2015	2,653	<b>35%</b>	<b>237,571</b>	<b>36%</b>	<b>4,556</b>	<b>1.3</b>	<b>29%</b>
2016	2,039	<b>-23%</b>	<b>178,645</b>	<b>-25%</b>	<b>3,426</b>	<b>0.9</b>	<b>-28%</b>
2017	1,554	<b>-24%</b>	<b>135,711</b>	<b>-24%</b>	<b>2,603</b>	<b>0.6</b>	<b>-33%</b>
2018	1,661	<b>-19%</b>	<b>145,174</b>	<b>-19%</b>	<b>2,784</b>	<b>0.6</b>	<b>-9%</b>
2019	1,227	<b>-21%</b>	<b>113,443</b>	<b>-16%</b>	<b>2,176</b>	<b>0.6</b>	<b>9%</b>
2020	876		<b>53,104</b>		<b>2,020</b>		

**Thermal Treatment Unit  
Operation Summary  
2006 - 2020**

<b>EXTRACTION SYSTEM (2020)</b>						
<b>Location</b>	<b>Last Instantaneous Methane Reading (%)</b>	<b>Last Instantaneous Flow Rate Reading (scfm)</b>	<b>Current Methane Removal Rate (lbs/day)</b>	<b>2020 % Operation</b>	<b>2020 Methane Removed (Lbs)</b>	<b>% Contribution of Each Extraction Source</b>
<b>Area E</b>						
EP-36	34.2	25.0	504.3	3%	13218.8	25%
<b>Area F</b>						
EW-31	31.0	1.0	18.3	2%	1611.3	3%
EW-32	38.3	16.2	366.0	3%	9,589	18%
EW-33	38.7	15.8	360.7	3%	10,230	20%
EW-34	37.7	18.6	413.6	3%	8,116	16%
VF-3	42.3	5.2	129.7	3%	3549.9	7%
VF-4	48.6	5.1	146.2	3%	701.9	1%
VF-5	48.9	4.1	118.3	3%	2931.9	6%
<b>Area D</b>						
VD-2	38.5	4.7	106.7	3%	1501.7	3%
VD-3	36.7	1.0	21.6	3%	631.5	1%
<b>MIXED</b>						
MIXED	36.7	96.0	2078.1	3%	53103.7	100%

Methane Concentration Time Series Plot  
OU2 Landfill Individual Extraction Sources  
5/2017 to present





Methane Concentration Time Series Plot  
OU2 Landfill Extraction Legs  
5/2017 to present

