



*ENGINEERS • SCIENTISTS • SURVEYORS • PLANNERS*  
P.O. BOX 6160 • 9560 KINGS CHARTER DRIVE • ASHLAND, VA 23005  
(804) 550-9200 • FAX (804) 550-9259

## **SITE INFORMATION**

Owner/Permittee: Goochland County  
Landfill ID: Goochland County Sanitary Landfill  
Landfill Permit No.: 179  
Location: Route 665, Goochland County, Virginia  
Site Status: Closed  
Resource Project Number: 97007.09

## **INSPECTION DATA**

Date of Inspection: January 19, 2016  
Arrival Time: 10:16  
Departure Time: 13:30  
Log Book: Goochland County Landfill - No. 3  
Sampling Technician: Justin Weiser  
Site Contact: Leigh Dunn, Environmental Planner  
Weather: Sunny, 31° F  
Barometric Pressure (begin): 30.00" Hg  
Barometric Pressure (end): 29.96" Hg

## **SITE CONDITIONS**

Number of monitoring probes: 19  
On-site structures with crawl spaces: None  
On-site structures with basements: None  
Distance to nearest off-site structure  
with basement or crawlspace: Approximately 100 feet  
Building occupants/operator comments  
regarding odor, headaches, etc.: None

## **SAMPLING EQUIPMENT**

Type of Meter: LANDTEC GEM 2000  
Date of last Calibration: January 19, 2016

## **SAMPLING PROCEDURES**

- Visually inspect probe integrity, including foundation pad, and note any unusual odors
- Unlock casing to expose probe, note any unusual conditions
- Attach gas meter inlet hose to probe
- Open stopcock, record pressure and gas concentrations, close stopcock

- Lock probe casing

## GAS MONITORING RESULTS

The % LEL indicates the percentage of the Lower Explosive Limit of methane (CH<sub>4</sub>). The Virginia Solid Waste Management Regulations state that compliance is achieved when the concentration of methane at the property boundary is less than 100% of the LEL. 100% of the LEL is reached when the concentration of methane in air is 5%.

### Gas Probes:

| Probe #      | Probe locked upon arrival? | Pressure (in. of Water) | % O <sub>2</sub> | %LEL | Additional comments |
|--------------|----------------------------|-------------------------|------------------|------|---------------------|
| GP-01        | Yes                        | -0.09                   | 19.2             | 0    |                     |
| GP-02        | Yes                        | -0.09                   | 19.3             | 0    |                     |
| GP-03        | Yes                        | -0.08                   | 19.6             | 0    |                     |
| GP-04        | Yes                        | -0.07                   | 17.1             | 0    |                     |
| GP-05        | Yes                        | -0.09                   | 19.6             | 0    |                     |
| GP-06        | Yes                        | -0.08                   | 19.6             | 0    |                     |
| GP-07        | Yes                        | -0.09                   | 19.2             | 0    |                     |
| GP-08R       | Yes                        | -0.08                   | 20.1             | 0    |                     |
| GP-09        | Yes                        | -0.07                   | 19.8             | 0    |                     |
| GP-10        | Yes                        | -0.09                   | 19.7             | 0    |                     |
| GP-11        | Yes                        | -0.09                   | 20.3             | 0    |                     |
| GP-12        | Yes                        | -0.10                   | 20.1             | 0    |                     |
| GP-14        | Yes                        | -0.05                   | 20.2             | 0    |                     |
| GP-15        | Yes                        | -0.01                   | 19.7             | 0    |                     |
| GP-16        | Yes                        | -0.00                   | 19.7             | 0    |                     |
| GP-17 red    | Yes                        | -0.06                   | 20.3             | 0    |                     |
| GP-17 yellow |                            | -0.05                   | 20.3             | 0    |                     |
| GP-18 red    | Yes                        | -0.03                   | 20.4             | 0    |                     |
| GP-18 yellow |                            | +0.04                   | 20.3             | 0    |                     |

### Nested Probe Data:

GP 17, 18 & 19

Red probe is at a depth of 9-13' (17A, 18A, 19A)

Yellow probe is at a depth of 23-26' (17B, 18B, 19B)

### Legend:

GP Gas Probe

**Offsite Gas Probe:**

| <b>Probe #</b> | <b>Probe locked upon arrival?</b> | <b>Pressure (in. of Water)</b> | <b>% O<sub>2</sub></b> | <b>%LEL</b> | <b>Additional comments</b> |
|----------------|-----------------------------------|--------------------------------|------------------------|-------------|----------------------------|
| GP-19 red      | Yes                               | -0.08                          | 19.8                   | 0           |                            |
| GP-19 yellow   |                                   | -0.07                          | 19.8                   | 0           |                            |

**Structures:**

The % LEL indicates the percentage of the Lower Explosive Limit of methane (CH<sub>4</sub>). The Virginia Solid Waste Management Regulations state that compliance is achieved when the concentration of methane inside property structures is less than 25 % of the LEL. 25% of the LEL is reached when the concentration of methane in air is 1.25%.

| <b>Structure</b>                                       | <b>% O<sub>2</sub></b> | <b>% LEL</b> |
|--|------------------------|--------------|
| Animal Shelter   | 19.9                   | 0            |
| Dept. of Parks & Recreation Equipment Storage Building | 19.8                   | 0            |
| Attendant's Building at Convenience Center             | 19.8                   | 0            |



Technician Signature

January 19, 2016