



RESOURCE INTERNATIONAL, LTD.

Gas Monitoring Report Sanitary Landfill Compliance

ENGINEERS • SCIENTISTS • SURVEYORS • PLANNERS
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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: April 28, 2015
Arrival Time: 09:24
Departure Time: 11:40
Log Book: Goochland County Landfill - No. 3
Sampling Technician: Ashley Elliott
Site Contact: Leigh Dunn, Environmental Planner
Weather: Sunny; mid 40s° F
Barometric Pressure (begin): 29.59" Hg
Barometric Pressure (end): 29.62" 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: April 9, 2015

SAMPLING PROCEDURES

- X Visually inspect probe integrity, including foundation pad, and note any unusual odors
- X Unlock casing to expose probe, note any unusual conditions
- X Attach gas meter inlet hose to probe

- X Open stopcock, record pressure and gas concentrations, close stopcock
- X Lock probe casing

GAS MONITORING RESULTS

The % LEL indicates the percentage of the Lower Explosive Limit of methane (CH₄). 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 ₂	%LEL	Additional comments
GP-01	Yes	+0.150	19.6	0	
GP-02	Yes	+0.128	18.6	0	
GP-03	Yes	+0.010	19.0	0	
GP-04	Yes	+0.041	19.5	0	
GP-05	Yes	+0.056	19.9	0	
GP-06	Yes	+0.075	19.5	0	
GP-07	Yes	+0.222	18.4	0	
GP-08R	Yes	+0.230	20.4	0	
GP-09	Yes	+0.248	20.0	0	
GP-10	Yes	+0.252	19.9	0	
GP-11	Yes	+0.012	19.6	0	
GP-12	Yes	+0.015	19.8	0	
GP-14	Yes	+0.198	19.6	0	
GP-15	Yes	+0.199	19.7	0	
GP-16	Yes	+0.211	19.8	0	
GP-17 red	Yes	+0.288	19.8	0	
GP-17 yellow		+0.289	19.8	0	
GP-18 red	Yes	+0.292	19.7	0	
GP-18 yellow		+0.294	19.8	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:

Probe #	Probe locked upon arrival?	Pressure (in. of Water)	% O ₂	%LEL	Additional comments
GP-19 red	Yes	+0.237	19.9	0	
GP-19 yellow		+0.239	19.9	0	

Structures:

The % LEL indicates the percentage of the Lower Explosive Limit of methane (CH₄). 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%.

Structure	%O ₂	% LEL
Animal Shelter	20.4	0
Dept. of Parks & Recreation Equipment Storage Building	20.3	0
Attendant's Building at Convenience Center	20.3	0



Technician Signature

April 28, 2015