

# FORM K GAS MANAGEMENT

Prepared 11/2002; Rev 06/2003, 03/2012, 09/2012, 04/2014, 09/2014, 07/2017, 11/2017,  
05/2018, 02/2022, 05/2022

This Form K provides revisions to the Gas Monitoring Probes to facilitate a proposed new entrance for the landfill.

## Form K - Table of Contents

FORM K (Rev 05/2022) .....	This Permit Modification (Page 1 only)
Attachment K-1 (Rev 11/2017).....	Form K Narrative Responses
Attachment K-2.....	Form K Gas Management Calculations
Attachment K-3 (Rev 05/2022) .....	Landfill Gas Monitoring and Control Plan
Attachment K-4.....	Estimate of Future Gas Generation with Co-Disposal of Shale Drilling Wastes
Attachment K-5 (Rev 11/2017) .....	LFG Collection and Control System Operation and Maintenance Plan
Attachment K-6 (Rev 05/2018) .....	High BTU LFG Processing Plant Narrative High BTU LFG Processing Plant PPC Plan



Date Prepared/Revised Rev 11/02, 06/03, 03/12, 09/12, 04/14, 09/14, 07/2017, 11/17, 05/18, 05/2022
<b>DEP USE ONLY</b>
Date Received

## FORM K GAS MANAGEMENT

This form must be fully and accurately completed. All required information must be typed or legibly printed in the spaces provided. If additional space is necessary, identify each attached sheet as Form K, reference the item number and identify the date prepared. The "date prepared/revised" on any attached sheets needs to match the "date prepared/revised" on this page.

General References: 273.171, 273.292, 273.293/277.171, 277.292, 288.262, 288.263, 289.282, 289.283

### SECTION A. SITE IDENTIFIER

Applicant/permittee: *Westmoreland Sanitary Landfill, LLC*

Site Name: *Sanitary Landfill*

Facility ID (as issued by DEP): *100277*

### SECTION B.

**Instructions:** All questions must be answered in the columns to the right. In addition, all responses must be addressed in a written narrative or on the submitted maps and/or plans. Attach appropriate documentation referencing this form number and title.

	Yes	No
1. Is this application for:		
a. landfill gas recovery wells/system	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. landfill gas control vents	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c. landfill gas monitoring vents	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. natural gas or oil well not associated with the landfill	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e. construction of gas vents not drilled	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2. Is the proposed gas management system for a/an:		
a. Permitted Inactive Landfill	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Permitted Active Landfill - In Compliance	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Permitted Active Landfill - Not in Compliance	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d. Unpermitted Landfill	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e. New Application	<input type="checkbox"/>	<input checked="" type="checkbox"/>
3. Will the well(s) intersect a workable coal seam?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
4. If the answer to 1(d) or 3 above is "yes" you must also apply to the Bureau of Oil & Gas Management. Have you done so?	<i>N/A</i>	<i>N/A</i>
5. If the gas management operator is an entity other than the landfill permittee, a copy of the contractual agreement between the gas management operator, the solid waste permittee, and the landowner acknowledging liability for the various aspects of the project must be submitted with the application. This agreement shall clearly show that the solid waste disposal site permittee is ultimately responsible for maintaining compliance with the solid waste permit and environmental statutes at the site. The agreement shall also indicate that the parties thereto will not conduct any activities inconsistent with the DEP permit or authorizations to which the other parties are bound. Has a copy of this agreement been attached?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
6. Is the drilling activity limited both horizontally and vertically to the mass of the deposited waste?	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**THE FOLLOWING CHANGES ARE PRESENTED HERE FOR  
FORM K Attachment K-3**

1. Replace the Form K Attachment K-3 cover page with that included here.
2. Replace the last page of Table No. K-3.1 with that included here.

**FORM K – GAS MANAGEMENT**

**ATTACHMENT K-3**

**LANDFILL GAS MONITORING AND CONTROL PLAN**

**Existing Gas Probes GMP-47, 48, 49, 50, 51, 52, 53 and 54 will be impacted and removed as part of the new entrance road construction. Probes GMP-47, 49, 51 and 53 will be relocated and Probes GMP-48, 50, 52 and 54 will not be re-installed to provide a spacing similar to the other portions of the approved expansion area for this facility.**

<b>TABLE No. K-3.1 (cont.)</b>						
<b>EXISTING GAS MONITORING PROBE SCHEDULE</b>						
<b>Monitoring Probe</b>	<b>Ground Surface Elevation (1)</b>	<b>Shallow Probe Bottom Elevation (1)</b>	<b>Medium Probe Bottom Elevation (1)</b>	<b>Deep Probe Bottom Elevation (1)</b>	<b>Lowest Adjacent Waste Elevation (3)</b>	<b>Installation Date</b>
GMP-46	1004.23		992.83	988.23	1050.0	07/11/1991
GMP-47R	980.16			957.64	1050.0	(5)
GMP-48	Probe removed as part of 05/2022 Minor Permit Modification					
GMP-49R	1019.02			961.68	1045.0	(5)
GMP-50	Probe removed as part of 05/2022 Minor Permit Modification					
GMP-51R	1005.84			951.06	1030.0	(5)
GMP-52	Probe removed as part of 05/2022 Minor Permit Modification					
GMP-53R	999.85			945.03	1016.0	(5)
GMP-54	Probe removed as part of 05/2022 Minor Permit Modification					
GMP-55	904.58	895.48	890.48	883.98	1014.0	07/10/1991
GMP-56	905.78	899.78	894.28	888.48	1008.0	07/10/1991
GMP-57	914.05	907.55	902.55	897.55	1006.0	07/11/1991
GMP-58	947.67	941.57	935.97	930.47	1006.0	07/11/1991
GMP-59	927.44	921.74	916.14	910.67	1006.0	07/11/1991
GMP-60	1111.8	1069.47	1036.35	996.03	N/A	06/22/1998
GMP-61	1091.27	1054.03	1025.53	997.94	1040.0	06/22/1998

(1) Monitoring probe elevations are based on field drilling logs as recorded by Paul C. Rizzo Associates, Inc., (1991) and The Hutchinson Group, Ltd., (1998).  
 (2) Elevation shown is located at the top of the steel casing.  
 (3) Elevation shown is located at the top of protective cover for the north and south landfill expansion.  
 (4) Monitoring probe to be decommissioned and removed for northern landfill expansion.  
 (5) Probes, GMP-47, 49, 51 and 53 are to be relocated as part of the new entrance road construction. The probe constructed will be completed in accordance with Detail B on Permit Drawing GAS MANAGEMENT DETAILS (SHEET 1 OF 2) – Drawing Sheet (2013-158)-59 LFG2. the proposed locations for these probes are shown on GAS MANAGEMENT PLAN - Drawing Sheet (2022-070)-58 LFG1