

Fact Sheet



For Final Renewal Permitting Action Under 45CSR30 and Title V of the Clean Air Act

Permit Number: **R30-08100155-2018**
Application Received: **September 5, 2017**
Plant Identification Number: **081-00155**
Permittee: **Raleigh County Solid Waste Authority**
Facility Name: **Raleigh County Sanitary Landfill**
Mailing Address: **200 Fernandez Drive, Beckley WV 25801**

Revised: NA

Physical Location: Beckley, Raleigh County, West Virginia
UTM Coordinates: 485.50 km Easting • 4186.39 km Northing • Zone 17
Directions: From State Route 19 near Beckley, WV, take County Route 8 (Ragland Road) to Fernandez Drive. The landfill entrance is the first road on the right off Fernandez Drive.

Facility Description

The Raleigh County Sanitary Landfill is a municipal solid waste (MSW) management facility that operates under SIC Code 4953. The landfill accepts municipal solid waste, construction and demolition debris and approved residual waste streams. Landfill gas is collected through a number of extraction wells and controlled by two landfill gas-to-electricity engine/generator sets.

Emissions Summary

Plantwide Emissions Summary [Tons per Year]		
Regulated Pollutants	Potential Emissions	2016 Actual Emissions
Carbon Monoxide (CO)	97.3	19.5
Nitrogen Oxides (NO _x)	17.8	3.2
Particulate Matter (PM _{2.5})	10.6	1.8
Particulate Matter (PM ₁₀)	49.1	10.6
Total Particulate Matter (TSP)	196.3	47.6
Sulfur Dioxide (SO ₂)	2.6	0.9
Volatile Organic Compounds (VOC)	14.1	8.4
<i>PM₁₀ is a component of TSP.</i>		
Hazardous Air Pollutants	Potential Emissions	2016 Actual Emissions
Total Aggregated HAPs (<i>All individual HAPS are < 10 TPY</i>)	10.7	5.7
<i>Some of the above HAPs may be counted as PM or VOCs.</i>		
Other Regulated Pollutants	Potential Emissions	2016 Actual Emissions
NMOC	43.5	27.3

Non-methane organic compounds (NMOC) – The current emission rate estimate (calculated for year 2017) is 25.06 Mg/yr. The projected closure year is 2069 with a projected maximum NMOC emission rate estimate greater than 39.50* Mg/yr. The NMOC emission rate estimates were calculated using EPA’s Landfill Gas Emissions Model (LandGEM) software. The values used for k and L_o were 0.050 year⁻¹ and 170 m³/Mg respectively. The site specific NMOC concentration used in the model was 318 ppmv, as determined by Tier 2 testing in April/May 2017.

*The actual closure date exceeds LandGEM’s 80-year waste acceptance limit. The landfill closure year with the 80-year limit is projected to be 2053 with NMOC emissions estimated at 39.50 Mg/yr.

Title V Program Applicability Basis

This facility has a design capacity over 2.5 million megagrams and 2.5 million cubic meters. Due to this facility's design capacity, the Raleigh County Sanitary Landfill is required to have an operating permit pursuant to Title V of the Federal Clean Air Act as amended and 45CSR30.

Legal and Factual Basis for Permit Conditions

The State and Federally-enforceable conditions of the Title V Operating Permits are based upon the requirements of the State of West Virginia Operating Permit Rule 45CSR30 for the purposes of Title V of the Federal Clean Air Act and the underlying applicable requirements in other state and federal rules.

This facility has been found to be subject to the following applicable rules:

Federal and State:

45CSR6	To Prevent And Control Air Pollution From Combustion of Refuse.
45CSR11	Standby plans for emergency episodes.
45CSR13	Permits For Construction, Modification, Relocation and Operation of Stationary Sources
45CSR23	To Prevent And Control Emissions From Municipal Solid Waste Landfills
WV Code § 22-5-4 (a) (14)	The Secretary can request any pertinent information such as annual emission inventory reporting.
45CSR30	Operating permit requirement.
40 C.F.R. Part 60, Subpart WWW	Standards of Performance for Municipal Solid Waste Landfills
40 C.F.R. Part 61	Asbestos inspection and removal
40 C.F.R. Part 82, Subpart F	Ozone depleting substances

State Only:

45CSR4	No objectionable odors.
45CSR17	To Prevent And Control Particulate Matter Air Pollution From Materials Handling, Preparation, Storage And Other Sources Of Fugitive Particulate Matter

Each State and Federally-enforceable condition of the Title V Operating Permit references the specific relevant requirements of 45CSR30 or the applicable requirement upon which it is based. Any condition of the Title V permit that is enforceable by the State but is not Federally-enforceable is identified in the Title V permit as such.

The Secretary's authority to require standards under 40 C.F.R. Part 60 (NSPS), 40 C.F.R. Part 61 (NESHAPs), and 40 C.F.R. Part 63 (NESHAPs MACT) is provided in West Virginia Code §§ 22-5-1 *et seq.*, 45CSR16, 45CSR34 and 45CSR30.

Active Permits/Consent Orders

Permit or Consent Order Number	Date of Issuance	Permit Determinations or Amendments That Affect the Permit (<i>if any</i>)
R13-2671A	December 6, 2007	

Conditions from this facility's Rule 13 permit(s) governing construction-related specifications and timing requirements will not be included in the Title V Operating Permit but will remain independently enforceable under the applicable Rule 13 permit(s). All other conditions from this facility's Rule 13 permit(s) governing the source's operation and compliance have been incorporated into this Title V permit in accordance with the "General Requirement Comparison Table," which may be downloaded from DAQ's website.

Determinations and Justifications

This is the renewal of the Title V permit which was issued on March 12, 2013. Changes to the most recent version of the Title V Permit consist of the following:

1) Title V Boilerplate changes

- **Conditions 3.5.3., 3.5.5. and 3.5.6.** - These conditions were revised to require electronic submittal of the Title V compliance certifications (annual and semi-annual), self-monitoring reports (MACT, GACT, NSPS, etc.), stack tests and protocols to the WV DAQ.

2) Condition 1.1. - Emission Units Table

- The control device for 01-P2 has been revised to include a statement that the landfill gas (LFG) is sent to a private entity and that the flare (31C) is used as a backup control device. A note at the end of the table has been added to explain that the LFG is sent to Seven Islands Environmental Solutions, LLC (SIES) to fuel two engine/generator sets.
 - SIES is a separately owned company. The two LFG fueled engine/generator sets are owned and operated by SIES and are regulated under permit R13-3302. SIES leases property from the Raleigh County Solid Waste Authority where the engine/generator sets are housed. The Raleigh County Sanitary Landfill (RCSL) is subject to 40 CFR 60, Subpart WWW. Since the NMOC emissions are less than 50 megagrams per year, RCSL is not required to have a collection and control system. However, to control odors, the RCSL has in place an active gas collection system to extract the LFG generated from the landfill waste mass. The LFG is routed from the LFG blower/treatment system to the SIES engine/generator plant. The LFG can also be routed to a backup flare which is owned and operated by RCSL.

SIES and RCSL are not considered to be part of the same “major source” under Title V. Although SIES leases property on the RCSL site, each entity belongs to a different industrial grouping and are not under common control of the same person. Notwithstanding the fact that RCSL sends the LFG to SIES for destruction, RCSL maintains a flare as a backup to destroy the LFG. RCSL is independent of SIES and is not dependent on SIES for the LFG destruction. The flare is owned and operated by RCSL. Likewise, the engine/generator sets are owned and operated by SIES. (*Refer to EPA’s “Common Control determination” letter dated April 30, 2018 to the Secretary of the Pennsylvania Department of Environmental Protection, The Honorable Patrick McDonnell, and signed by USEPA’s Assistant Administrator for Air and Radiation, William L. Wehrum.*)

Non-Applicability Determinations

The following requirements have been determined not to be applicable to the subject facility due to the following:

- 40 C.F.R. §60.757 (a)(3)** The design capacity of this facility is greater than 2.5 million megagrams and 2.5 million cubic meters. Therefore, amended design capacity reports are not required. [40 C.F.R. §60.752 (a)]
- 40 C.F.R. Part 64** The facility does not have any pollutant specific emissions units (PSEU) that satisfy all of the applicability criteria requirements of 40 CFR §64.2(a). [(1) have pre-control regulated pollutant potential emissions (PTE) equal to or greater than the “major” threshold limits to be classified as a major source; 2) are subject to an emission

limitation or standard and; 3) have a control device to achieve compliance with such emission limitation or standard.] Therefore, the facility is not subject to the Compliance Assurance Monitoring (CAM) rule.

**40 C.F.R. Part 63
Subpart AAAA**

National Emission Standards for Hazardous Air Pollutants: Municipal Solid Waste Landfills. This facility is not subject to 40 C.F.R. Part 63 Subpart AAAA since the facility is not a major source of HAPs, nor is it collocated with a major source, nor is it an area source landfill that has a design capacity equal to or greater than 2.5 million megagrams (Mg) and 2.5 million cubic meters (m³) and has estimated uncontrolled emissions equal to or greater than 50 megagrams per year (Mg/yr) NMOC.

40 C.F.R. §61.154

The facility does not receive asbestos-containing waste material from sources covered under 40 C.F.R. §61.149, §61.150, or §61.155.

**40 C.F.R. 60
Subpart Kb**

The Leachate Tanks VOL vapor pressures are less than 3.5 kPa.

Request for Variances or Alternatives

None.

Insignificant Activities

Insignificant emission unit(s) and activities are identified in the Title V application.

Comment Period

Beginning Date: Thursday, June 7, 2018
Ending Date: Monday, July 9, 2018

Point of Contact

All written comments should be addressed to the following individual and office:

Frederick Tipane
West Virginia Department of Environmental Protection
Division of Air Quality
601 57th Street SE
Charleston, WV 25304
Phone: 304/926-0499 ext. 1215 • Fax: 304/926-0478
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Procedure for Requesting Public Hearing

During the public comment period, any interested person may submit written comments on the draft permit and may request a public hearing, if no public hearing has already been scheduled. A request for public hearing shall be in writing and shall state the nature of the issues proposed to be raised in the hearing. The Secretary shall grant such a request for a hearing if he/she concludes that a public hearing is appropriate. Any public hearing shall be held in the general area in which the facility is located.

Response to Comments (Statement of Basis)

Not applicable.