

Fact Sheet



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

Permit Number: **R30-07900105-2021**
Application Received: **02/06/2020**
Plant Identification Number: **03-54-079-00105**
Permittee: **Allied Waste Sycamore Landfill, LLC**
Facility Name: **Sycamore Landfill**
Mailing Address: **3475 Sycamore Ridge Road, Hurricane, WV 25526**

Physical Location:	Hurricane, Putnam County, West Virginia
UTM Coordinates:	410.4 km Easting • 4250.3 km Northing • Zone 17
Directions:	Interstate 64 to Hurricane exit, South on WV State Route 34 for approximately 2 miles; turn right onto Sycamore Landfill entrance road.

Facility Description

The Sycamore Landfill is a municipal solid waste landfill (MSWL) that operates under SIC Code 4953 and has a design capacity of 6,502,932 Megagrams (Mg). The landfill accepts municipal solid waste, places it into active cells, compacts and covers it with soil. The landfill gas generated by the decomposition of the waste is collected via vertical and horizontal wells and routed to a flare where it is burned prior to being vented to the atmosphere.

Emissions Summary

Plantwide Emissions Summary [Tons per Year]		
Regulated Pollutants	Potential Emissions	2019 Actual Emissions
Carbon Monoxide (CO)	73.0	13.71
Nitrogen Oxides (NO _x)	13.4	2.52
Particulate Matter (PM _{2.5})	1.4	0.26
Particulate Matter (PM ₁₀)	1.4	0.26
Total Particulate Matter (TSP)	1.4	0.26
Sulfur Dioxide (SO ₂)	12.1	0.49
Volatile Organic Compounds (VOC)	1.0	0.06
<i>PM₁₀ is a component of TSP.</i>		
Hazardous Air Pollutants	Potential Emissions	2019 Actual Emissions
Total HAP	2.8	0.06
<i>Some of the above HAPs may be counted as PM or VOCs.</i>		
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
NMOC	61.17 TPY (55.61Mg/yr)	

Non-methane organic compounds (NMOC) – The current emission rate estimate (calculated for year 2020) is 22.4 Mg/yr. The projected closure year is 2059 with a projected maximum NMOC emission rate estimate of 23.91* Mg/yr. The projected NMOC emission rate of 34 Mg/yr, triggering the requirements for the construction of a collection and control system, is estimated to never occur based on current waste acceptance rates. The NMOC emission rate estimates were calculated using EPA’s Landfill Gas Emissions Model (LandGEM) software. The values used for k and Lo were “0.050 year⁻¹” and “170 m³/Mg” respectively. The site specific NMOC concentration used in the model was 89.4 ppmv as hexane, as determined by Tier 2 testing in October 2019.

*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 2051 with NMOC emissions estimated at 23.91 Mg/yr.

Note: Since the NMOC emissions are less than 34 Mg/yr, the existing landfill gas collection and control system is not currently required for the control of any emissions.

Title V Program Applicability Basis

This facility has the potential to emit over 2.5 million megagrams and over 2.5 million cubic meters. Due to this facility’s design capacity, the Sycamore 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	Open burning prohibited.
	45CSR10	Control of Sulfur Dioxide Emissions from Indirect Heat Exchangers.
	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.
State Only:	45CSR30	Operating permit requirement.
	40 C.F.R. Part 61	Asbestos inspection and removal.
	40 C.F.R. Part 82, Subpart F	Ozone depleting substances.
	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>)
R13-2242B	April 10, 2012	

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 a renewal of the Title V permit which was issued on August 18, 2015. Changes to the most recent version of the Title V Permit consist of the following:

1) Title V Section 3 changes

- Wording within sections 3.4.1, 3.5.3, 3.5.5, and 3.5.6 was modified, the DAQ and EPA contact information was updated, and the DAQ Compliance and Enforcement contact information was added.
- Conditions 3.4.2, 3.4.3, 3.4.4, and 3.4.5 were rearranged to match the newest boilerplate
- Condition 3.7.2 was updated since the facility is no longer subject to 40 CFR 60 Subpart WWW
- Conditions 3.1.10 and 3.1.11's citations were updated since 45CSR§17 is State-Enforceable only.

2) All of Title V permit section 4.0 had to be changed due to changes to 40 CFR 60 Subpart WWW published on March 26, 2020 and changes to 45CSR23 effective on June 1, 2018

- The Sycamore Landfill is a MSWL that commenced construction, reconstruction, or modification on or after May 30, 1991, but before July 14, 2014 and is subject to the requirements of 40 CFR 60 Subpart WWW. According to 40CFR§60.750(d), an affected facility must continue to comply with 40 CFR 60 Subpart WWW until it becomes subject to the more stringent requirements in an approved and effective state or federal plan that implements 40 CFR 60 Subpart Cf or it modifies or reconstructs after July 17, 2014 and becomes subject to 40 CFR 60 Subpart XXX. 45CSR23, effective on June 1, 2018 implements 40 CFR 60 Subpart Cf, so the Sycamore Landfill is now subject to the requirements of 45CSR23 instead of 40 CFR 60 Subpart WWW. Therefore, Title V permit Section 4.0's former conditions from 40 CFR 60 Subpart WWW were replaced with the conditions from 45CSR§23-7. Conditions within 45CSR§23-7 for a MSWL having a design capacity less than 2.5 million megagrams or 2.5 million cubic meters were not included because the Sycamore Landfill exceeds these design limits.
- This facility is not required to install an active collection system and control device because of their NMOC emissions; however, they have already installed an active collection system. They are currently Tier 2 with NMOC emissions of 6.72 Mg/yr. NMOC emissions must be reported annually or a 5 year-projection must be provided in lieu of the annual report in accordance with condition 4.5.2.c.
- The report required under conditions 4.5.1 and 4.5.2 was submitted on May 28, 2019.

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 Subpart Kb

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

40 C.F.R. 63 Subpart AAAA

This facility is not a major source of HAPs, nor is it collocated with a major source. It is 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) but its estimated uncontrolled emissions are not equal to or greater than 50 megagrams per year (Mg/yr) NMOC

40 C.F.R. 64

The facility does not have a pollutant specific emissions unit with a control device to meet an applicable standard or limit. Therefore, the facility is not subject to the Compliance Assurance monitoring (CAM) rule.

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:	November 26, 2020
Ending Date:	December 28, 2020

Point of Contact

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

Nikki B. Moats
West Virginia Department of Environmental Protection
Division of Air Quality
601 57th Street SE
Charleston, WV 25304
Phone: 304/926-0499 ext. 41282
Nikki.B.Moats@wv.gov

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.