

Fact Sheet



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

Permit Number: **R30-05500123-2024**
Application Received: **November 6, 2023**
Plant Identification Number: **03-54-055-00123**
Permittee: **Mercer County Solid Waste Authority**
Mailing Address: **749 Frontage Road, Princeton, WV 24739**

Revised: *NA*

Physical Location: 749 Frontage Road, Princeton, WV
UTM Coordinates: 488.9 km Easting • 4131.4 km Northing • Zone 17
Directions: Approximately 1 mile southwest of the intersection of US-19 S and US-460 W, turn left onto Frontage Road in Princeton.

Facility Description

The Mercer 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.

Emissions Summary

Plantwide Emissions Summary [Tons per Year]		
Regulated Pollutants	Potential Emissions	2023 Actual Emissions
Carbon Monoxide (CO)	3.34	1.87
Nitrogen Oxides (NO _x)	0	0
Particulate Matter (PM _{2.5})	0.21	0.20
Particulate Matter (PM ₁₀)	2.04	2.03

Plantwide Emissions Summary [Tons per Year]		
Regulated Pollutants	Potential Emissions	2023 Actual Emissions
Total Particulate Matter (TSP)	6.43	6.39
Sulfur Dioxide (SO ₂)	0	0
Volatile Organic Compounds (VOC)	11.65	4.54
Hazardous Air Pollutants		
Toluene	3.06	1.71
Other HAPs	5.9	3.07
Total HAPs	8.96	4.78

Some of the above HAPs may be counted as PM or VOCs.

Non-methane organic compounds (NMOC) – The current emission rate estimate (calculated for year 2023) is 8.93 Mg/yr. The projected closure year is 2070. The projected NMOC emission rate of 34 Mg/yr, triggering the requirements for the construction of a collection and control system will not occur prior to facility closure. 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 238.5 ppmv as hexane, as determined by Tier 2 testing in August and September 2023.

Title V Program Applicability Basis

This facility has a design capacity greater than or equal to 2.5 million megagrams and 2.5 million cubic meters. Due to this facility's design capacity, Mercer County Solid Waste Authority 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.
	45CSR11	Standby plans for emergency episodes.
	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.
State Only:	40 C.F.R. Part 61, Subpart M	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>)
N/A	N/A	N/A

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 initial Title V permit for Mercer County Solid Waste Authority's Mercer County Sanitary Landfill.

Section 4.0

45CSR23 (To Prevent and Control Emissions from Municipal Solid Waste Landfills)

45CSR23 establishes emission standards applicable for Municipal Solid Waste (MSW) Landfills.

This facility is an existing MSW Landfill (constructed, reconstructed, or modified before July 17, 2014) that is larger than 2.5 million megagrams or 2.5 million cubic meters; therefore, this facility is subject to Section 7 of 45CSR23.

All applicable requirements under Section 7 of 45CSR23 have been included in permit section 4.0. This facility is not currently required to have an active collection system and control device installed because of NMOC emissions. They are currently Tier 2 with NMOC emissions of 8.93 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 reports under conditions 4.5.1 and 4.5.2 were submitted in March 2017 and February 2024 respectively.

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. 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. 60
Subpart Kb**

The Leachate Tank’s VOL vapor pressure is 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: September 12, 2024

Ending Date: October 15, 2024

Point of Contact

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

Nikki Moats
West Virginia Department of Environmental Protection
Division of Air Quality
601 57th Street SE
Charleston, WV 25304
Phone: 304/414-1282
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)

The following boilerplate changes have been made to the permit. These changes to the boilerplate became effective September 23, 2024.

- Condition 3.1.6 - Revised the citation to refer to the current version of the WV Code.
- Condition 3.3.1. - Revised the citation to refer to the current version of the WV Code.
- Condition 3.3.1.b. - Added “If a testing method is specified or approved which effectively replaces a test method specified in the permit, the permit shall be revised in accordance with 45CSR§30-6.4 or 45CSR§30-6.5 as applicable.”