

Fact Sheet



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

Permit Number: **R30-00900053-2022**
Application Received: **February 16, 2022**
Plant Identification Number: **03-54-009-00053**
Permittee: **Valero Terrestrial Corporation**
Facility Name: **dba Brooke County Sanitary Landfill**
Mailing Address: **1118 Petrillo Rd, Colliers, WV 26035**

Physical Location:	Colliers, Brooke County, West Virginia
UTM Coordinates:	535.865 km Easting • 4469.677 km Northing • Zone 17
Directions:	From the city of New Martinsville, take Route 2 south one mile. Make a left onto Rt. 180 to the landfill. Following US Route 22 West from Pittsburgh, PA towards Weirton, WV, exit onto Harmon Creek Rd (County Rd 1), and travel south (left off of ramp) approximately 1 mile. Look for signs on right for Brooke County Sanitary Landfill and turn right onto Petrillo Road (County Road 1/1). Follow this road about 1 mile to the top of the hill to scale house.

Facility Description

The Valero Terrestrial Corporation dba Brooke County Sanitary Landfill (BCSL) is a non-hazardous municipal solid waste (MSW) landfill that began operation in the 1970's. It has a North American Industry Classification System (NAICS) code of 562212 and a Standard Industrial Classification (SIC) code of 4953. The facility is a 196-acre municipal solid waste landfill that has a disposal area of 180 acres. The BCSL has a maximum tonnage rate of 20,000 tons municipal solid waste per month. The landfill accepts residential, commercial, industrial, construction/demolition debris, non-hazardous industrial waste, institutional waste, autoclaved or sterilized waste, and petroleum contaminated soil.

Emissions Summary

Plantwide Emissions Summary [Tons per Year]		
Regulated Pollutants	Potential Emissions	2021 Actual Emissions
Carbon Monoxide (CO)	31.1	1.19
Nitrogen Oxides (NO _x)	12.73	3.51
Particulate Matter (PM _{2.5})	11.71	7.67
Particulate Matter (PM ₁₀)	78.1	7.67
Total Particulate Matter (TSP)	78.1	7.67
Sulfur Dioxide (SO ₂)	51.33	<0.01
Volatile Organic Compounds (VOC)	72.25	1.77

PM₁₀ is a component of TSP.

Hazardous Air Pollutants	Potential Emissions	2021 Actual Emissions
Acrylonitrile	1.39	0.10
Benzene	0.28	0.04
Xylene	2.50	0.37
Methyl Isobutyl Ketone	0.23	0.06
Toluene	7.03	1.05
Vinyl Chloride	0.89	<0.01

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

Non-methane organic compounds (NMOC) – The current emission rate estimate is 8.0 Mg/yr. The projected closure year is 2060 with a projected maximum NMOC emission rate estimate of ~20 Mg/yr. The projected NMOC emission rate of 34 Mg/yr, triggering the requirements for the construction of a collection and control system will not occur within the lifespan of the landfill. 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 80.4 ppmv as hexane, as determined by Tier 2 testing on November 13 and 16, 2018.

Title V Program Applicability Basis

This facility has a design capacity over 2.5 million megagrams and 2.5 million cubic meters. Therefore, Valero Terrestrial Corporation dba Brooke County Sanitary Landfill (BCSL) 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 45CSR11 45CSR7 45CSR13 WV Code § 22-5-4 (a) (14) 45CSR16 45CSR23 45CSR30 45CSR34 40 C.F.R. Part 60 Subpart OOO 40 C.F.R. Part 61 40 C.F.R. Part 63 Subpart ZZZZ 40 C.F.R. Part 82, Subpart F	Open burning prohibited. Standby plans for emergency episodes. To prevent and control particulate air pollution from manufacturing process operations. Construction permit requirement. The Secretary can request any pertinent information such as annual emission inventory reporting. Standards of Performance for New Stationary Sources Pursuant to 40 C.F.R. Part 60 To Prevent and Control Emissions from Municipal Solid Waste Landfills Operating permit requirement. Emission Standards for Hazardous Air Pollutants Standards of Performance for nonmetallic mineral processing plants Asbestos inspection and removal National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines Ozone depleting substances
State Only:	45CSR4 45CSR17	No objectionable odors. 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 (if any)
R13-2475B	August 18, 2011	
R13-2480	February 26, 2003	

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 29, 2017. Changes to the most recent version of the Title V permit consist of the following:

- Section 3.0
 - The Title V Boilerplate was updated.
- Title V permit section 4.0 had major changes due to 40 CFR 60 Subpart WWW changes that were published on March 26, 2020, and changes to 45CSR23 effective on June 1, 2021.
 - The Brooke County Sanitary 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, 2021 implements 40 CFR 60 Subpart Cf, so the Brooke County Sanitary 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 Brooke County Sanitary Landfill exceeds these design limits.
 - This facility is not currently required to have an active collection system and control device installed because of their NMOC emissions. They are currently Tier 2 with NMOC emissions of 8.0 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 required under conditions 4.5.1 and 4.5.2 were submitted in 2019.
- Section 5.0
 - Former conditions 5.1.10, 5.2.2, 5.4.2, and 5.4.3 were removed from the permit since the facility is now subject to 45CSR23 instead of 40 CFR 60 Subpart WWW due to the changes published to Subpart WWW on March 26, 2020.
 - Former conditions 5.1.16, 5.1.17, 5.4.4, and 5.4.5 were removed from the permit because the facility is no longer subject to 40 CFR 63 Subpart AAAA and no longer required to have a gas collection and control system (GCCS) plan. The facility started using Tier 2 procedures in January 2019 which lowered their NMOC emissions to below 50 Mg/yr.

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 XXX - Standards of Performance for Municipal Solid Waste Landfills That Commenced Construction, Reconstruction, or Modification After July 17, 2014. This subpart does not apply to the facility since it has not been constructed, reconstructed or modified after July 17, 2014.

40 C.F.R. Part 64 - This is the fourth permit renewal for this facility. The facility was found not to be subject to Compliance Assurance Monitoring (CAM) at the time of the first, second, and third renewals since the facility did not

have any pollutant specific emissions units (PSEU) that satisfied all of the applicability criteria requirements of 40 CFR § 64.2 (a). There have been no changes to any PSEUs at the facility since the first, second, and third renewals that have resulted in a source satisfying the applicability requirements of 40 C.F.R. § 64.2 (a) and becoming subject to CAM.

Request for Variances or Alternatives

None.

Insignificant Activities

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

None.

Comment Period

Beginning Date: November 11, 2022

Ending Date: December 12, 2022

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
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.