

Fact Sheet



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

Permit Number: **R30-03900461-2015**
Application Received: **June 29, 2015**
Plant Identification Number: **039-00461**
Permittee: **City of Charleston**
Facility Name: **City of Charleston Sanitary Landfill**
Mailing Address: **P. O. Box 2749, Charleston, WV 25330**

Revised: N/A

Physical Location: Charleston, Kanawha County, West Virginia
UTM Coordinates: 445.92 km Easting • 4240.52 km Northing • Zone 17
Directions: From the City of Charleston take I 64 east to Exit 98 (35th St.). Turn right off of 35th St. onto SR61 (MacCorkle Ave. SE) and go approximately 0.15 miles. Turn left onto South Park Road. Follow South Park Road to the landfill.

Facility Description

The Charleston Sanitary Landfill is a municipal solid waste (MSW) management facility that operates under SIC Code 4953. The landfill accepts municipal solid waste, construction/demolition/debris (CDD), and approved residual waste streams. The Landfill is comprised of three disposal areas commonly referred to as Areas C1, A, and C. Area C is the only active disposal area.

The Landfill also has a Landfill Gas Collection and Control System (GCCS) and Landfill Gas (LFG) electricity generating plant. The primary purpose of the GCCS at the Charleston Landfill is that the LFG is to be converted to electricity by the use of reciprocating internal combustion engines. In this process, the LFG will serve as the fuel for the engines. This process also includes the use of a high efficiency flare (23C), which is used to destroy LFG through incineration while the engines are not in use. This is in addition to the 20 flares currently permitted under R13-2667A.

Emissions Summary

Plantwide Emissions Summary [Tons per Year]		
Regulated Pollutants	Potential Emissions	2013 Actual Emissions
Carbon Monoxide (CO)	97.24	11.03
Nitrogen Oxides (NO _x)	18.40	4.74
Particulate Matter (PM _{2.5})	39.75	8.16
Particulate Matter (PM ₁₀)	39.75	24.38
Total Particulate Matter (TSP)	144.5	117.65
Sulfur Dioxide (SO ₂)	4.29	1.35
Volatile Organic Compounds (VOC)	17.47	10.28

PM₁₀ is a component of TSP.

Hazardous Air Pollutants	Potential Emissions	2013 Actual Emissions
Total HAPs	10.20	7.56

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

Non-methane organic compounds (NMOC) – City of Charleston Landfill reported NMOC emissions of 12.81 Mg for 2014.

Title V Program Applicability Basis

This landfill has a design capacity over 2.5 million megagrams and 2.5 million cubic meters, which is the Title V applicability threshold set forth by 40 C.F.R. §60.752(b). Due to this facility's design capacity, the City of Charleston 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	Open burning prohibited.
	45CSR11	Standby plans for emergency episodes.
	45CSR13	Construction permit requirement.
	WV Code § 22-5-4 (a) (14)	The Secretary can request any pertinent information such as annual emission inventory reporting.
	45CSR16	Standards of Performance for New Stationary Sources Pursuant to 40 CFR Part 60
	45CSR17	To Prevent and Control Fugitive Particulate Matter
	45CSR23	To Prevent and Control Emissions From Municipal Solid Waste Landfills

	45CSR30	Operating permit requirement.
	45CSR34	Emission Standards for Hazardous Air Pollutants
	40 C.F.R. Part 61	Asbestos inspection and removal
	40 C.F.R. Part 82, Subpart F	Ozone depleting substances
	40CFR60 Subpart WWW	Standards of Performance for Municipal Solid Waste Landfills
	40CFR60 Subpart JJJJ	Standards of Performance for Stationary Spark Ignition Internal Combustion Engines
	40CFR60 Subpart Kb	Standards of Performance for Volatile Organic Liquid Storage Vessels
	40CFR63 Subpart ZZZZ	Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines
State Only:	45CSR4	No objectionable odors.

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>)
R13-2667A	7/1/2009	

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

Except for the addition of a leachate tank (TK14), there were no equipment or process changes made at this facility since the previous Title V permit renewal. With the exception of boilerplate changes made to the permit, the following minor revisions and additions were made with this permit renewal:

- The new Leachate Tank (TK14) was added to the Emission Units Table and the heading for Section 7.0.
- The installation dates for a Refuse Gas Incinerator and the engines (Emission Unit IDs: 08-20C, 21C, and 22C) were updated. Previously the dates were listed as "TBD", and the dates are now listed as "2010" for all three units.
- Applicable emission limits from Table 1 of 40 CFR 60, Subpart JJJJ were added to condition 6.2.1.

- Condition 6.2.3 was added to this permit. This condition addresses operation and maintenance of air-to-fuel ratio controllers, as specified in 40CFR§60.4243(g).

The following language, which has been deemed not applicable to this facility, was removed from this permit:

- Condition 4.4.2 and Appendix A from the previous Title V permit was removed from this Renewal. Recordkeeping requirements of the visible emission checks required under condition 4.2.1 were already included under condition 4.4.4.
- Condition 6.2.2 from the previous Title V permit was removed from this Renewal. The engines are not modified or reconstructed.
- Condition 6.2.2 from the previous Title V permit was removed from this Renewal. The engines are not subject to standards that reference 40CFR§1048.101.
- Conditions 6.3.1 and 6.4.1.b.1 from the previous Title V permit were removed from this Renewal. This permit language addressed engines of less than 500 hp. The engines at this facility are rated above 500 hp.
- Conditions 6.3.3 and 6.6.1.b from the previous Title V permit were removed from this Renewal. This permit language addressed emergency engines. The engines at this facility are non-emergency engines.

Non-Applicability Determinations

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

40 CFR §60.657(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 CFR 63, Subpart AAAA—NESHAP for Municipal Solid Waste Landfills: This facility is not subject to AAAA because:

1. This MSW landfill is not a major source of HAPs.
2. The MSW landfill is not collocated with a major source of HAPs.
3. The MSW landfill is an area source with 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 less than 50 megagrams per year (Mg/yr) NMOC.
4. This MSW landfill does not include a bioreactor, as defined in 40 C.F.R §63.1990.

40 CFR 64—Compliance Assurance Monitoring: No changes have been made at this facility since the previous CAM determination. Therefore, CAM still does not apply.

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: Friday, September 4, 2015
Ending Date: Monday, October 5, 2015

Point of Contact

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

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Division of Air Quality
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Charleston, WV 25304
Phone: 304/926-0499 ext. 1209 • Fax: 304/926-0478
Rex.E.Compston@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.