

STATEMENT OF BASIS for SALEM COUNTY SOLID WASTE FACILITY

TITLE V OPERATING PERMIT SIGNIFICANT MODIFICATION

Program Interest (PI): 65582 / Permit Activity Number: BOP230001

I. FACILITY INFORMATION

Salem County Solid Waste Facility is located at 52 Mckillip Rd, Alloway, Salem County, NJ 08001 and consists of a solid waste landfill with associated equipment. The facility is owned by Salem County Improvement Authority and is operated by Salem County Solid Waste Facility.

The facility is classified as a major facility based on its potential to emit 6727 tons per year of Methane.

This permit allows individual hazardous air pollutant to be emitted at a rate to not exceed: 560 pounds per year of Acrylonitrile, 240 pounds per year of Benzene, 400 pounds of Ethylidene dichloride, 8 pounds per year of Formaldehyde, 2000 pounds per year of Methylene chloride, 0.1 pounds per year of Mercury Compounds, 6020 pounds per year of Tetrachloroethane, 320 pounds per year of 1,1,2,2-Tetrachloroethane, 6020 pounds per year of Toluene and 80 pounds per year of Vinyl chloride.

II. AREA ATTAINMENT CLASSIFICATION

The Federal Clean Air Act (CAA) sets National Ambient Air Quality Standards (NAAQS) for six common air pollutants. These commonly found air pollutants (also known as "criteria pollutants") are particulate matter, ground-level ozone, carbon monoxide (CO), sulfur dioxide (SO₂), nitrogen dioxide (NO₂), and lead. The US Environmental Protection Agency (USEPA) also classifies areas as "attainment" or "nonattainment" for each criteria pollutant, based on the magnitude of an area's problem. Nonattainment classifications are used to specify what air pollution reduction measures an area must adopt, and when the area must reach attainment. Currently, the entire State of New Jersey is designated as nonattainment for the 8-hour ozone NAAQS. New Jersey is designated attainment for all other pollutants. For nonattainment classification refer to <https://www.epa.gov/green-book/green-book-national-area-and-county-level-multi-pollutant-information>.

III. BACKGROUND AND HISTORY

The equipment that emits air contaminants from this facility include: Active municipal solid waste landfill venting to an enclosed flare and one diesel emergency generator.

A Facility-Wide Risk Assessment will be conducted during the next Operating Permit Renewal process. Health Risk Assessment was not conducted with this permit modification, since no changes were made to Air Toxics (including HAPs) emissions.

This permit also incorporates one general operating permit (Activity # BOP210001) that the facility obtained for an emergency generator with a heat input rate of 1.63 MMBTU/hr (HHV).

This is a Permit Modification and includes the following changes:

The facility would like to add a Waste Shredder to their Title V permit for the Salem County Solid Waste Facility. The waste shredder will be used to shred waste prior to waste disposal in order to increase waste density and extend the life of the landfill.

This modification will also change the facility-wide emission limits as listed in the following table:

Allowable Emission Limits	Facility's Potential Emissions (tons per year)*									
	eh	NO _x	CO	SO ₂	TSP (total)	PM ₁₀ (total)	PM _{2.5} (total)	Pb	HAPs (total)	CO _{2e} (total)
Current Permit	0.45	7.93	26.34	12	0.004	0.004	0.004	N/A	7.82	164,650
Proposed Permit	0.62	11.01	29.42	12	1.484	0.764	0.4	N/A	7.83	164,650
Change (+ / -)	+0.17	+3.08	+3.08	0	+1.48	+0.76	+0.396	N/A	+0.01	0

VOC Volatile Organic Compounds
NO_x Nitrogen Oxides

PM₁₀ Particulates under 10 microns
PM_{2.5} Particulates under 2.5 microns

STATEMENT OF BASIS for SALEM COUNTY SOILD WASTE FACILITY

TITLE V OPERATING PERMIT SIGNIFICANT MODIFICATION

Program Interest (PI): 65582 / Permit Activity Number: BOP230001

CO	Carbon Monoxide	Pb	Lead
SO ₂	Sulfur Dioxide	HAPs	Hazardous Air Pollutants
TSP	Total Suspended Particulates	CO ₂ e	Carbon Dioxide equivalent
* Other	Any other air contaminant regulated under the Federal Clean Air Act.		

IV. CASE-BY-CASE DETERMINATIONS

No case-by-case determinations were required for this modification.

V. EMISSION OFFSET REQUIREMENTS

This modification is not subject to Emission Offset requirements.

VI. BASIS FOR MONITORING AND RECORDKEEPING REQUIREMENTS

The facility's operating permit includes monitoring, recordkeeping and reporting requirements that are sufficient to demonstrate the facility's continued compliance with the applicable requirements consistent with the following:

1. Provisions to implement the testing and monitoring requirements of N.J.A.C. 7:27-22.18, the recordkeeping and reporting requirements of N.J.A.C. 7:27-22.19, and all emissions monitoring and analysis procedures or compliance assurance methods required under the applicable requirements, including any procedures and methods promulgated pursuant to 40 CFR 64; and
2. Where the applicable requirement does not require direct periodic monitoring of emissions, the Department requires periodic monitoring of surrogate parameters sufficient to yield reliable data from the relevant time period that are representative of the facility's compliance with the permit.

This permit requires the surface methane concentration monitoring, perimeter H₂S concentration monitoring, landfill gas sampling and analyzing on a quarterly basis, temperature and gas flow rate monitoring for the 1000 cfm enclosed flare (E1/U1) and fuel use monitoring for emergency generator (E8/U8).

3. In some cases, direct periodic monitoring of emissions and/or surrogate parameters is not required due to one or more of the following:
 - Equipment size and capacity limitations,
 - Subject equipment being permitted at the maximum rated capacity,
 - There is no specific state or Federal standard that applies to this piece of equipment,
 - Not a pollutant of concern for this piece of equipment,
 - Agreements with EPA on the frequency of testing and monitoring for combustion sources.

VII. APPLICABLE STATE AND FEDERAL RULES

This modification is subject to New Jersey Air Pollution Control Regulations, codified in N.J.A.C. 7:27-1 through 34, as applicable. A complete text of these regulations is available at:
<http://www.nj.gov/dep/aqm/rules27.html>

This modification is also subject to Federal regulations listed below.

NSPS Subpart A	General Provisions;
NSPS Subpart IIII	Standards of Performance for Stationary Compression Ignition Internal Combustion Engines
NSPS Subpart XXX	Municipal Solid Waste Landfills That Commenced Construction, Reconstruction, or Modification After July 17, 2014;
MACT Subpart A:	General Provisions
MACT Subpart AAAA	Municipal Solid Waste Landfills.
MACT Subpart ZZZZ	National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines

STATEMENT OF BASIS for SALEM COUNTY SOILD WASTE FACILITY

TITLE V OPERATING PERMIT SIGNIFICANT MODIFICATION

Program Interest (PI): 65582 / Permit Activity Number: BOP230001

The Greenhouse Gas (GHG) emissions from this facility are 164,649.57 TPY CO₂e and there is no GHG emissions increase. This modification is not subject to PSD rules at 40 CFR 52.21.

VIII. FACILITY'S COMPLIANCE STATUS

The Responsible Official at the facility has certified that the facility currently meets all applicable requirements of the Federal Clean Air Act and the New Jersey Air Pollution Control Act. Based on this certification, the Department's evaluation of the information included in the facility's application, and a review of the facility's compliance status, the Department has concluded that this air pollution control operating permit should be approved.

This operating permit includes a permit shield, pursuant to the provisions of N.J.A.C. 7:27-22.17. A permit shield provides that compliance with the relevant conditions of the operating permit shall be deemed compliance with the specific applicable requirements that are in effect on the date of issuance of the draft operating permit, and which form the basis for the conditions in the operating permit.

Prior to the expiration of the Operating Permit's five-year term, the facility will be required to apply for a renewal, at which time the Department will evaluate the facility and issue a public notice with its findings.

IX. EXEMPT ACTIVITIES

The facility's operating permit does not include exempt activities such as office and interior maintenance activities, maintenance shop activities, food preparation facilities, cafeterias and dining rooms, etc. A complete list of exempt activities, as allowed by the Operating Permit rule, can be found at N.J.A.C. 7:27-22.1.

FACILITY NAME (FACILITY ID NUMBER)
BOP050001

Activity Number assigned
by the Department

New Jersey Department of Environmental Protection Facility Specific Requirements

Emission Unit Number
assigned by the Facility

Brief description of
emission unit

Emission Unit: U40 Sewage Sludge Incinerators
Operating Scenario: OS Summary

OR

OS2 Fluidized Bed Incinerator

OS Summary lists all rules and requirements that apply to an emission unit. An emission unit may contain one or more pieces of equipment and corresponding operating scenarios.

OSX denotes the operating scenario number and lists the rules and requirements that apply to a scenario. An operating scenario represents various ways (or scenarios) a piece of equipment is permitted to operate.

Item
Number

Description of applicable
requirement

Monitoring method to
ensure compliance

Recordkeeping to show
facility's compliance

Actions and submittals
required for the facility

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
3	The permittee shall conduct an annual performance test for each pollutant in Table 2 of 40CFR62 Subpart LLL between 11 and 13 calendar months after the previous performance test or within 60 days of a process change. [40 CFR 62.16000(a)]	Other: Conduct the performance test using the test methods, averaging methods and minimum sampling volumes or durations as specified in 40CFR62 Subpart LLL and according to the testing, monitoring and calibration requirements specified in 40 CFR 62.16015(a). [40 CFR 62.16000(a)].	Other: (1) Maintain records of the results of initial, annual and any subsequent performance tests conducted to determine compliance with the emission limits and standards and/or to establish operating limits, as applicable. [40 CFR 62.16025(e)].	Submit a report: Annually to the Administrator and to the Department. The permittee shall submit an annual compliance report as specified in 40 CFR 62. [40 CFR 62.16000(d)]

Rule citation for
applicable requirement

Rule citation for
monitoring requirement

Rule citation for
recordkeeping requirement

Rule citation for submittal/
action requirement

Explanation Sheet for Facility Specific Requirements