

West Virginia Department of Environmental Protection
Division of Air Quality

Jim Justice
Governor

Austin Caperton
Cabinet Secretary

Permit to Operate



Pursuant to
Title V
of the Clean Air Act

Issued to:

Valero Terrestrial Corporation
dba Brooke County Sanitary Landfill
Colliers, WV
R30-00900053-2017

A handwritten signature in blue ink, appearing to read "William F. Durham", written over a horizontal line.

William F. Durham

Director

Issued: August 29, 2017 • Effective: September 12, 2017
Expiration: August 29, 2022 • Renewal Application Due: February 28, 2022

Permit Number: **R30-00900053-2017**
Permittee: **Valero Terrestrial Corporation**
Facility Name: **dba Brooke County Sanitary Landfill**
Permittee Mailing Address: **1118 Petrillo Rd., Colliers, WV 26035**

This permit is issued in accordance with the West Virginia Air Pollution Control Act (West Virginia Code §§ 22-5-1 et seq.) and 45CSR30 — Requirements for Operating Permits. The permittee identified at the above-referenced facility is authorized to operate the stationary sources of air pollutants identified herein in accordance with all terms and conditions of this permit.

Facility Location:	Colliers, Brooke County, West Virginia
Telephone Number:	(304)748-0005
Type of Business Entity:	Corporation
Facility Description:	The Brooke County Sanitary Landfill is comprised of eight disposal areas that have a total design capacity of 15.2 Million Mg.
SIC Codes:	4953
UTM Coordinates:	535.865 km Easting • 4469.677 km Northing • Zone 17

Permit Writer: Robert Mullins

Any person whose interest may be affected, including, but not necessarily limited to, the applicant and any person who participated in the public comment process, by a permit issued, modified or denied by the Secretary may appeal such action of the Secretary to the Air Quality Board pursuant to article one [§§ 22B-1-1 et seq.], Chapter 22B of the Code of West Virginia. West Virginia Code §22-5-14.

Issuance of this Title V Operating Permit does not supersede or invalidate any existing permits under 45CSR13, 14 or 19, although all applicable requirements from such permits governing the facility's operation and compliance have been incorporated into the Title V Operating Permit.

Table of Contents

1.0	Emission Units and Active R13, R14, and R19 Permits	3
2.0	General Conditions	6
3.0	Facility-Wide Requirements	15
4.0	Landfill Operations [emission point ID(s): 01-CL1, 01-A1 through 01-A4]	22
5.0	Flare Operations [emission point ID(s): 01-FL1]	29
6.0	Rock Crushing and Screening Operations [emission point ID(s): C1, S1, 24E, BC1 - BC4, OS1 - OS3, OS5, OS6, DG1, VT1, VT2, TP1 - TP10, and TP1A - TP10A]	34
7.0	Active Composting [emission point ID(s): (1E through 6E)]	42
	ATTACHMENT A	47
	ATTACHMENT B	48
	ATTACHMENT C	49
	ATTACHMENT D	50
	ATTACHMENT E	51

1.0 Emission Units and Active R13, R14, and R19 Permits

1.1 Emission Units

Emission Unit ID	Emission Point ID	Emission Unit Description	Year Installed	Design Capacity	Control Device
LANDFILL					
01	01-CL1	Closure Area – Closed and capped	Pre 1993	1,325,118 Mg	01-FL1
01	01-A1	F-1 - Active	1993	666,000 Mg	01-FL1
01	01-A2	F-2 - Active	1996	153,600 Mg	01-FL1
01	01-A3	F-3 - Active	1999	247,800 Mg	01-FL1
01	01-A4	F- 4 Through F - 8	Future	7,194,000 Mg	01-FL1
FLARE					
01	01-FL1	Enclosed Flare System by John Zink Company	2003	2,400 scfm	None
OTHERS					
01	01-T1	Leachate Treatment Tank	1998	30,000 gals	None
01	01-T2	Leachate Treatment Tank	1998	30,000 gals	None
01	01-T3	Leachate Treatment Tank	1998	30,000 gals	None
HAULROADS					
01	01-P1	Paved Road	Pre 1999	≈2,000 FT	None
01	01-UP1	Unpaved Road	N/A	≈7,500 FT	None
CRUSHING and SCREENING					
Transfer Points					
1S	TP1	Bulldozer pushing material to pile OS1	1993	200 TPH and 30,000 TPY	MC
3S	TP2	OS-1 to Hopper via Front End Loader	1993	200 TPH and 30,000 TPY	MC
6S	TP3	Jaw Crusher to BC2	1993	200 TPH and 30,000 TPY	MC
8S	TP4	BC2 to Screen	1993	200 TPH and 30,000 TPY	MC
10S	TP5	Screen to BC4	1993	200 TPH and 30,000 TPY	MC
11S	TP6	Screen to BC3	1993	200 TPH and 30,000 TPY	MC
14S	TP7	OS3 from BC4	1993	200 TPH and 30,000 TPY	MC
15S	TP8	OS2 from BC3	1993	200 TPH and 30,000 TPY	MC
18S	TP9	OS3 to Trucks via Front End Loader	1993	200 TPH and 30,000 TPY	MC
19S	TP10	OS2 to Trucks via Front End Loader	1993	200 TPH and 30,000 TPY	MC
TP1A	TP1A	Rock Truck to Ground	2011	100 TPH and 50,000 TPY	MC
TP2A	TP2A	Front End Loader to Pre-Screen (24S) Pile	2011	100 TPH and 50,000 TPY	MC
TP3A	TP3A	Front End Loader to Screen (24S)	2011	100 TPH and 50,000 TPY	MC
TP4A	TP4A	Screen (24S) to Ground	2011	50 TPH and 25,000 TPY	MC

Emission Unit ID	Emission Point ID	Emission Unit Description	Year Installed	Design Capacity	Control Device
TP5A	TP5A	Screen (24S) to Attached Conveyer	2011	50 TPH and 25,000 TPY	MC
TP6A	TP6A	Attached Screen (24S) Conveyer to Ground	2011	50 TPH and 25,000 TPY	MC
TP7A	TP7A	Front End Loader to Pile (OS5)	2011	50 TPH and 25,000 TPY	MC
TP8A	TP8A	Front End Loader to Pile (OS6)	2011	50 TPH and 25,000 TPY	MC
TP9A	TP9A	Front End Loader to Truck	2011	50 TPH and 25,000 TPY	MC
TP10A	TP10A	Front End Loader to Truck	2011	50 TPH and 25,000 TPY	MC
Screening Operations					
9S	S1	Double Deck Screen	1993	200 TPH and 30,000 TPY	MC
24S	24E	Portable Rock Screen w/ attached Belt Conveyer	2011	50 TPH and 50,000 TPY	MC
Crushing Operations					
5S	C1	Jaw Crusher	1993	200 TPH and 30,000 TPY	MC
Belt Conveyors					
4S	BC1	Hopper to Jaw Crusher	1993	200 TPH and 30,000 TPY	MC
7S	BC2	Jaw Crusher to Screen	1993	200 TPH and 30,000 TPY	MC
12S	BC3	Screen to OS3	1993	200 TPH and 30,000 TPY	MC
13S	BC4	Screen to OS2	1993	200 TPH and 30,000 TPY	MC
Open Stockpiles					
2S	OS1	Unprocessed Material Storage Pile	1993	30,000 Tons	MC
17S	OS2	Oversize - Large Material Storage Pile	1993	30,000 Tons	MC
16S	OS3	Screened - Small Material Storage Pile	1993	30,000 Tons	MC
OS5	OS5	Large Rock/Rip Rap Stockpile	2011	400 ft ²	Water Spray
OS6	OS6	¾ Inch Stone Stockpile	2011	400 ft ²	Water Spray
Miscellaneous					
21S	VT1	OS2 via Rock Trucks on Unpaved Haul Roads	1993	200 TPH and 30,000 TPY	Water Spray
20S	VT2	OS3 via Rock Trucks on Unpaved Haul Roads	1993	200 TPH and 30,000 TPY	Water Spray
N/A	Fugitive	Delivery Trucks Associated with Portable Screening (24S) Operations	2011	100 TPH and 50,000 TPY	Water Spray
N/A	Fugitive	Front End Loader Mobile Work Area Associated with Portable Screening (24S) Operations	2011	n/a	Water Spray
22S	DG1	250 hp diesel engine to power crusher/screener operation	1993	250 hp	None
COMPOSTING OPERATIONS					
1S	1E thru 4E	Active composting	1997	5,000 Wet Tons per month	1C & 2C Biofilter

Emission Unit ID	Emission Point ID	Emission Unit Description	Year Installed	Design Capacity	Control Device
2S	1E thru 4E	Window Building Work Area	1997	5,000 Wet Tons per month	1C & 2C Biofilter
3S	3E & 4E	Sludge Receiving and Mixing Screening	1997	10,000 Wet Tons per month	1C & 2C Biofilter
4S	5E	Final Product Compost Curing	2002		3C - Biofilter
5S	6E	Fugitive Dust Emissions	2002		4C – Water Roads
PT Biofilter	1E thru 4E	Pretreatment Biofilter	1997	6,900 sq. ft.	1C
1C	1E and 2E	West Biofilter	1997	62,000 sq. ft.	Not Applicable
2C	3E and 4E	North Biofilter	1997	51,000 sq. ft.	Not Applicable
3C	5E	Compost Curing Building Biofilter	2002	14,000 sq. ft.	Not Applicable

Method of Control MC – inherent moisture content.

1.2. Active R13, R14, and R19 Permits

The underlying authority for any conditions from R13, R14, and/or R19 permits contained in this operating permit is cited using the original permit number (e.g. R13-1234). The current applicable version of such permit(s) is listed below.

Permit Number	Date of Issuance
R13-2475B	August 18, 2011
R13-2480	February 26, 2003

2.0 General Conditions

2.1 Definitions

- 2.1.1. All references to the "West Virginia Air Pollution Control Act" or the "Air Pollution Control Act" mean those provisions contained in W.Va. Code §§ 22-5-1 to 22-5-18.
- 2.1.2. The "Clean Air Act" means those provisions contained in 42 U.S.C. §§ 7401 to 7671q, and regulations promulgated thereunder.
- 2.1.3. "Secretary" means the Secretary of the Department of Environmental Protection or such other person to whom the Secretary has delegated authority or duties pursuant to W.Va. Code §§ 22-1-6 or 22-1-8 (45CSR§30-2.12.). The Director of the Division of Air Quality is the Secretary's designated representative for the purposes of this permit.
- 2.1.4. Unless otherwise specified in a permit condition or underlying rule or regulation, all references to a "rolling yearly total" shall mean the sum of the monthly data, values or parameters being measured, monitored, or recorded, at any given time for the previous twelve (12) consecutive calendar months.

2.2. Acronyms

CAAA	Clean Air Act Amendments	NSPS	New Source Performance Standards
CBI	Confidential Business Information	PM	Particulate Matter
CEM	Continuous Emission Monitor	PM₁₀	Particulate Matter less than 10µm in diameter
CES	Certified Emission Statement	pph	Pounds per Hour
C.F.R. or CFR	Code of Federal Regulations	ppm	Parts per Million
CO	Carbon Monoxide	PSD	Prevention of Significant Deterioration
C.S.R. or CSR	Codes of State Rules	psi	Pounds per Square Inch
DAQ	Division of Air Quality	SIC	Standard Industrial Classification
DEP	Department of Environmental Protection	SIP	State Implementation Plan
FOIA	Freedom of Information Act	SO₂	Sulfur Dioxide
HAP	Hazardous Air Pollutant	TAP	Toxic Air Pollutant
HON	Hazardous Organic NESHAP	TPY	Tons per Year
HP	Horsepower	TRS	Total Reduced Sulfur
lbs/hr or lb/hr	Pounds per Hour	TSP	Total Suspended Particulate
LDAR	Leak Detection and Repair	USEPA	United States Environmental Protection Agency
m	Thousand	UTM	Universal Transverse Mercator
MACT	Maximum Achievable Control Technology	VEE	Visual Emissions Evaluation
mm	Million	VOC	Volatile Organic Compounds
mmBtu/hr	Million British Thermal Units per Hour		
mmft³/hr or mmcf/hr	Million Cubic Feet Burned per Hour		
NA or N/A	Not Applicable		
NAAQS	National Ambient Air Quality Standards		
NESHAPS	National Emissions Standards for Hazardous Air Pollutants		
NO_x	Nitrogen Oxides		

2.3. Permit Expiration and Renewal

- 2.3.1. Permit duration. This permit is issued for a fixed term of five (5) years and shall expire on the date specified on the cover of this permit, except as provided in 45CSR§30-6.3.b. and 45CSR§30-6.3.c.
[45CSR§30-5.1.b.]
- 2.3.2. A permit renewal application is timely if it is submitted at least six (6) months prior to the date of permit expiration.
[45CSR§30-4.1.a.3.]
- 2.3.3. Permit expiration terminates the source's right to operate unless a timely and complete renewal application has been submitted consistent with 45CSR§30-6.2. and 45CSR§30-4.1.a.3.
[45CSR§30-6.3.b.]
- 2.3.4. If the Secretary fails to take final action to deny or approve a timely and complete permit application before the end of the term of the previous permit, the permit shall not expire until the renewal permit has been issued or denied, and any permit shield granted for the permit shall continue in effect during that time.
[45CSR§30-6.3.c.]

2.4. Permit Actions

- 2.4.1. This permit may be modified, revoked, reopened and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition.
[45CSR§30-5.1.f.3.]

2.5. Reopening for Cause

- 2.5.1. This permit shall be reopened and revised under any of the following circumstances:
- a. Additional applicable requirements under the Clean Air Act or the Secretary's legislative rules become applicable to a major source with a remaining permit term of three (3) or more years. Such a reopening shall be completed not later than eighteen (18) months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions has been extended pursuant to 45CSR§30-6.6.a.1.A. or B.
 - b. Additional requirements (including excess emissions requirements) become applicable to an affected source under Title IV of the Clean Air Act (Acid Deposition Control) or other legislative rules of the Secretary. Upon approval by U.S. EPA, excess emissions offset plans shall be incorporated into the permit.
 - c. The Secretary or U.S. EPA determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit.
 - d. The Secretary or U.S. EPA determines that the permit must be revised or revoked and reissued to assure compliance with the applicable requirements.

[45CSR§30-6.6.a.]

2.6. Administrative Permit Amendments

- 2.6.1. The permittee may request an administrative permit amendment as defined in and according to the procedures specified in 45CSR§30-6.4.
[45CSR§30-6.4.]

2.7. Minor Permit Modifications

- 2.7.1. The permittee may request a minor permit modification as defined in and according to the procedures specified in 45CSR§30-6.5.a.
[45CSR§30-6.5.a.]

2.8. Significant Permit Modification

- 2.8.1. The permittee may request a significant permit modification, in accordance with 45CSR§30-6.5.b., for permit modifications that do not qualify for minor permit modifications or as administrative amendments.
[45CSR§30-6.5.b.]

2.9. Emissions Trading

- 2.9.1. No permit revision shall be required, under any approved economic incentives, marketable permits, emissions trading, and other similar programs or processes for changes that are provided for in the permit and that are in accordance with all applicable requirements.
[45CSR§30-5.1.h.]

2.10. Off-Permit Changes

- 2.10.1. Except as provided below, a facility may make any change in its operations or emissions that is not addressed nor prohibited in its permit and which is not considered to be construction nor modification under any rule promulgated by the Secretary without obtaining an amendment or modification of its permit. Such changes shall be subject to the following requirements and restrictions:
- a. The change must meet all applicable requirements and may not violate any existing permit term or condition.
 - b. The permittee must provide a written notice of the change to the Secretary and to U.S. EPA within two (2) business days following the date of the change. Such written notice shall describe each such change, including the date, any change in emissions, pollutants emitted, and any applicable requirement that would apply as a result of the change.
 - c. The change shall not qualify for the permit shield.
 - d. The permittee shall keep records describing all changes made at the source that result in emissions of regulated air pollutants, but not otherwise regulated under the permit, and the emissions resulting from those changes.
 - e. No permittee may make any change subject to any requirement under Title IV of the Clean Air Act (Acid Deposition Control) pursuant to the provisions of 45CSR§30-5.9.

- f. No permittee may make any changes which would require preconstruction review under any provision of Title I of the Clean Air Act (including 45CSR14 and 45CSR19) pursuant to the provisions of 45CSR§30-5.9.

[45CSR§30-5.9.]

2.11. Operational Flexibility

- 2.11.1. The permittee may make changes within the facility as provided by § 502(b)(10) of the Clean Air Act. Such operational flexibility shall be provided in the permit in conformance with the permit application and applicable requirements. No such changes shall be a modification under any rule or any provision of Title I of the Clean Air Act (including 45CSR14 and 45CSR19) promulgated by the Secretary in accordance with Title I of the Clean Air Act and the change shall not result in a level of emissions exceeding the emissions allowable under the permit.

[45CSR§30-5.8]

- 2.11.2. Before making a change under 45CSR§30-5.8., the permittee shall provide advance written notice to the Secretary and to U.S. EPA, describing the change to be made, the date on which the change will occur, any changes in emissions, and any permit terms and conditions that are affected. The permittee shall thereafter maintain a copy of the notice with the permit, and the Secretary shall place a copy with the permit in the public file. The written notice shall be provided to the Secretary and U.S. EPA at least seven (7) days prior to the date that the change is to be made, except that this period may be shortened or eliminated as necessary for a change that must be implemented more quickly to address unanticipated conditions posing a significant health, safety, or environmental hazard. If less than seven (7) days notice is provided because of a need to respond more quickly to such unanticipated conditions, the permittee shall provide notice to the Secretary and U.S. EPA as soon as possible after learning of the need to make the change.

[45CSR§30-5.8.a.]

- 2.11.3. The permit shield shall not apply to changes made under 45CSR§30-5.8., except those provided for in 45CSR§30-5.8.d. However, the protection of the permit shield will continue to apply to operations and emissions that are not affected by the change, provided that the permittee complies with the terms and conditions of the permit applicable to such operations and emissions. The permit shield may be reinstated for emissions and operations affected by the change:

- a. If subsequent changes cause the facility's operations and emissions to revert to those authorized in the permit and the permittee resumes compliance with the terms and conditions of the permit, or
- b. If the permittee obtains final approval of a significant modification to the permit to incorporate the change in the permit.

[45CSR§30-5.8.c.]

- 2.11.4. "Section 502(b)(10) changes" are changes that contravene an express permit term. Such changes do not include changes that would violate applicable requirements or contravene enforceable permit terms and conditions that are monitoring (including test methods), recordkeeping, reporting, or compliance certification requirements.

[45CSR§30-2.39]

2.12. Reasonably Anticipated Operating Scenarios

- 2.12.1. The following are terms and conditions for reasonably anticipated operating scenarios identified in this permit.
- a. Contemporaneously with making a change from one operating scenario to another, the permittee shall record in a log at the permitted facility a record of the scenario under which it is operating and to document the change in reports submitted pursuant to the terms of this permit and 45CSR30.
 - b. The permit shield shall extend to all terms and conditions under each such operating scenario; and
 - c. The terms and conditions of each such alternative scenario shall meet all applicable requirements and the requirements of 45CSR30.

[45CSR§30-5.1.i.]

2.13. Duty to Comply

- 2.13.1. The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the West Virginia Code and the Clean Air Act and is grounds for enforcement action by the Secretary or USEPA; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application.

[45CSR§30-5.1.f.1.]

2.14. Inspection and Entry

- 2.14.1. The permittee shall allow any authorized representative of the Secretary, upon the presentation of credentials and other documents as may be required by law, to perform the following:
- a. At all reasonable times (including all times in which the facility is in operation) enter upon the permittee's premises where a source is located or emissions related activity is conducted, or where records must be kept under the conditions of this permit;
 - b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
 - c. Inspect at reasonable times (including all times in which the facility is in operation) any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit;
 - d. Sample or monitor at reasonable times substances or parameters to determine compliance with the permit or applicable requirements or ascertain the amounts and types of air pollutants discharged.

[45CSR§30-5.3.b.]

2.15. Schedule of Compliance

- 2.15.1. For sources subject to a compliance schedule, certified progress reports shall be submitted consistent with the applicable schedule of compliance set forth in this permit and 45CSR§30-4.3.h., but at least every six (6) months, and no greater than once a month, and shall include the following:
- a. Dates for achieving the activities, milestones, or compliance required in the schedule of compliance, and dates when such activities, milestones or compliance were achieved; and
 - b. An explanation of why any dates in the schedule of compliance were not or will not be met, and any preventative or corrective measure adopted.

[45CSR§30-5.3.d.]

2.16. Need to Halt or Reduce Activity not a Defense

- 2.16.1. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit. However, nothing in this paragraph shall be construed as precluding consideration of a need to halt or reduce activity as a mitigating factor in determining penalties for noncompliance if the health, safety, or environmental impacts of halting or reducing operations would be more serious than the impacts of continued operations.

[45CSR§30-5.1.f.2.]

2.17. Emergency

- 2.17.1. An "emergency" means any situation arising from sudden and reasonably unforeseeable events beyond the control of the source, including acts of God, which situation requires immediate corrective action to restore normal operation, and that causes the source to exceed a technology-based emission limitation under the permit, due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent caused by improperly designed equipment, lack of preventative maintenance, careless or improper operation, or operator error.

[45CSR§30-5.7.a.]

- 2.17.2. Effect of any emergency. An emergency constitutes an affirmative defense to an action brought for noncompliance with such technology-based emission limitations if the conditions of 45CSR§30-5.7.c. are met.

[45CSR§30-5.7.b.]

- 2.17.3. The affirmative defense of emergency shall be demonstrated through properly signed, contemporaneous operating logs, or other relevant evidence that:

- a. An emergency occurred and that the permittee can identify the cause(s) of the emergency;
- b. The permitted facility was at the time being properly operated;
- c. During the period of the emergency the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards, or other requirements in the permit; and

- d. Subject to the requirements of 45CSR§30-5.1.c.3.C.1, the permittee submitted notice of the emergency to the Secretary within one (1) working day of the time when emission limitations were exceeded due to the emergency and made a request for variance, and as applicable rules provide. This notice, report, and variance request fulfills the requirement of 45CSR§30-5.1.c.3.B. This notice must contain a detailed description of the emergency, any steps taken to mitigate emissions, and corrective actions taken.

[45CSR§30-5.7.c.]

- 2.17.4. In any enforcement proceeding, the permittee seeking to establish the occurrence of an emergency has the burden of proof.

[45CSR§30-5.7.d.]

- 2.17.5. This provision is in addition to any emergency or upset provision contained in any applicable requirement.

[45CSR§30-5.7.e.]

2.18. Federally-Enforceable Requirements

- 2.18.1. All terms and conditions in this permit, including any provisions designed to limit a source's potential to emit and excepting those provisions that are specifically designated in the permit as "State-enforceable only", are enforceable by the Secretary, USEPA, and citizens under the Clean Air Act.

[45CSR§30-5.2.a.]

- 2.18.2. Those provisions specifically designated in the permit as "State-enforceable only" shall become "Federally-enforceable" requirements upon SIP approval by the USEPA.

2.19. Duty to Provide Information

- 2.19.1. The permittee shall furnish to the Secretary within a reasonable time any information the Secretary may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the Secretary copies of records required to be kept by the permittee. For information claimed to be confidential, the permittee shall furnish such records to the Secretary along with a claim of confidentiality in accordance with 45CSR31. If confidential information is to be sent to USEPA, the permittee shall directly provide such information to USEPA along with a claim of confidentiality in accordance with 40 C.F.R. Part 2.

[45CSR§30-5.1.f.5.]

2.20. Duty to Supplement and Correct Information

- 2.20.1. Upon becoming aware of a failure to submit any relevant facts or a submittal of incorrect information in any permit application, the permittee shall promptly submit to the Secretary such supplemental facts or corrected information.

[45CSR§30-4.2.]

2.21. Permit Shield

- 2.21.1. Compliance with the conditions of this permit shall be deemed compliance with any applicable requirements as of the date of permit issuance provided that such applicable requirements are included and are specifically identified in this permit or the Secretary has determined that other requirements specifically identified are not applicable to the source and this permit includes such a determination or a concise summary thereof.

[45CSR§30-5.6.a.]

2.21.2. Nothing in this permit shall alter or affect the following:

- a. The liability of an owner or operator of a source for any violation of applicable requirements prior to or at the time of permit issuance; or
- b. The applicable requirements of the Code of West Virginia and Title IV of the Clean Air Act (Acid Deposition Control), consistent with § 408 (a) of the Clean Air Act.
- c. The authority of the Administrator of U.S. EPA to require information under § 114 of the Clean Air Act or to issue emergency orders under § 303 of the Clean Air Act.

[45CSR§30-5.6.c.]

2.22. Credible Evidence

- 2.22.1. Nothing in this permit shall alter or affect the ability of any person to establish compliance with, or a violation of, any applicable requirement through the use of credible evidence to the extent authorized by law. Nothing in this permit shall be construed to waive any defenses otherwise available to the permittee including but not limited to any challenge to the credible evidence rule in the context of any future proceeding.

[45CSR§30-5.3.e.3.B. and 45CSR38]

2.23. Severability

- 2.23.1. The provisions of this permit are severable. If any provision of this permit, or the application of any provision of this permit to any circumstance is held invalid by a court of competent jurisdiction, the remaining permit terms and conditions or their application to other circumstances shall remain in full force and effect.

[45CSR§30-5.1.e.]

2.24. Property Rights

- 2.24.1. This permit does not convey any property rights of any sort or any exclusive privilege.

[45CSR§30-5.1.f.4]

2.25. Acid Deposition Control

- 2.25.1. Emissions shall not exceed any allowances that the source lawfully holds under Title IV of the Clean Air Act (Acid Deposition Control) or rules of the Secretary promulgated thereunder.

- a. No permit revision shall be required for increases in emissions that are authorized by allowances acquired pursuant to the acid deposition control program, provided that such increases do not require a permit revision under any other applicable requirement.
- b. No limit shall be placed on the number of allowances held by the source. The source may not, however, use allowances as a defense to noncompliance with any other applicable requirement.
- c. Any such allowance shall be accounted for according to the procedures established in rules promulgated under Title IV of the Clean Air Act.

[45CSR§30-5.1.d.]

- 2.25.2. Where applicable requirements of the Clean Air Act are more stringent than any applicable requirement of regulations promulgated under Title IV of the Clean Air Act (Acid Deposition Control), both provisions shall be incorporated into the permit and shall be enforceable by the Secretary and U. S. EPA.
[45CSR§30-5.1.a.2.]

3.0 Facility-Wide Requirements

3.1 Limitations and Standards

- 3.1.1. **Open burning.** The open burning of refuse by any person is prohibited except as noted in 45CSR§6-3.1.
[45CSR§6-3.1.]
- 3.1.2. **Open burning exemptions.** The exemptions listed in 45CSR§6-3.1 are subject to the following stipulation: Upon notification by the Secretary, no person shall cause or allow any form of open burning during existing or predicted periods of atmospheric stagnation. Notification shall be made by such means as the Secretary may deem necessary and feasible.
[45CSR§6-3.2.]
- 3.1.3. **Asbestos.** The permittee is responsible for thoroughly inspecting the facility, or part of the facility, prior to commencement of demolition or renovation for the presence of asbestos and complying with 40 C.F.R. § 61.145, 40 C.F.R. § 61.148, and 40 C.F.R. § 61.150. The permittee, owner, or operator must notify the Secretary at least ten (10) working days prior to the commencement of any asbestos removal on the forms prescribed by the Secretary if the permittee is subject to the notification requirements of 40 C.F.R. § 61.145(b)(3)(i). The USEPA, the Division of Waste Management and the Bureau for Public Health - Environmental Health require a copy of this notice to be sent to them.
[40 C.F.R. §61.145(b) and 45CSR34]
- 3.1.4. **Odor.** No person shall cause, suffer, allow or permit the discharge of air pollutants which cause or contribute to an objectionable odor at any location occupied by the public.
[45CSR§4-3.1 State-Enforceable only.]
- 3.1.5. **Standby plan for reducing emissions.** When requested by the Secretary, the permittee shall prepare standby plans for reducing the emissions of air pollutants in accordance with the objectives set forth in Tables I, II, and III of 45CSR11.
[45CSR§11-5.2]
- 3.1.6. **Emission inventory.** The permittee is responsible for submitting, on an annual basis, an emission inventory in accordance with the submittal requirements of the Division of Air Quality.
[W.Va. Code § 22-5-4(a)(14)]
- 3.1.7. **Ozone-depleting substances.** For those facilities performing maintenance, service, repair or disposal of appliances, the permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 C.F.R. Part 82, Subpart F, except as provided for Motor Vehicle Air Conditioners (MVACs) in Subpart B:
- a. Persons opening appliances for maintenance, service, repair, or disposal must comply with the prohibitions and required practices pursuant to 40 C.F.R. §§ 82.154 and 82.156.
 - b. Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to 40 C.F.R. § 82.158.

- c. Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to 40 C.F.R. § 82.161.

[40 C.F.R. 82, Subpart F]

- 3.1.8. **Risk Management Plan.** Should this stationary source, as defined in 40 C.F.R. § 68.3, become subject to Part 68, then the owner or operator shall submit a risk management plan (RMP) by the date specified in 40 C.F.R. § 68.10 and shall certify compliance with the requirements of Part 68 as part of the annual compliance certification as required by 40 C.F.R. Part 70 or 71.

[40 C.F.R. 68]

- 3.1.9. No person shall cause, suffer, allow or permit fugitive particulate matter to be discharged beyond the boundary lines of the property on which the discharge originates or at any public or residential location, which causes or contributes to statutory air pollution.

[45CSR§17-3.1., State-Enforceable only.]

- 3.1.10. The permitted facility shall be constructed and operated in accordance with the plans and specifications filed in Permit Application R13-2475, R13-2475A and any modifications, administrative updates, or amendments thereto. The Secretary may suspend or revoke a permit if the plans and specifications upon which the approval was based are not adhered to.

[45CSR13, R13-2475, 2.5.1.]

3.2. Monitoring Requirements

- 3.2.1. None.

3.3. Testing Requirements

- 3.3.1. **Stack testing.** As per provisions set forth in this permit or as otherwise required by the Secretary, in accordance with the West Virginia Code, underlying regulations, permits and orders, the permittee shall conduct test(s) to determine compliance with the emission limitations set forth in this permit and/or established or set forth in underlying documents. The Secretary, or his duly authorized representative, may at his option witness or conduct such test(s). Should the Secretary exercise his option to conduct such test(s), the operator shall provide all necessary sampling connections and sampling ports to be located in such manner as the Secretary may require, power for test equipment and the required safety equipment, such as scaffolding, railings and ladders, to comply with generally accepted good safety practices. Such tests shall be conducted in accordance with the methods and procedures set forth in this permit or as otherwise approved or specified by the Secretary in accordance with the following:

- a. The Secretary may on a source-specific basis approve or specify additional testing or alternative testing to the test methods specified in the permit for demonstrating compliance with 40 C.F.R. Parts 60, 61, and 63, if applicable, in accordance with the Secretary's delegated authority and any established equivalency determination methods which are applicable.
- b. The Secretary may on a source-specific basis approve or specify additional testing or alternative testing to the test methods specified in the permit for demonstrating compliance with applicable requirements which do not involve federal delegation. In specifying or approving such alternative testing to the test methods, the Secretary, to the extent possible, shall utilize the same equivalency criteria as would be used in approving such changes under Section 3.3.1.a. of this permit.

- c. All periodic tests to determine mass emission limits from or air pollutant concentrations in discharge stacks and such other tests as specified in this permit shall be conducted in accordance with an approved test protocol. Unless previously approved, such protocols shall be submitted to the Secretary in writing at least thirty (30) days prior to any testing and shall contain the information set forth by the Secretary. In addition, the permittee shall notify the Secretary at least fifteen (15) days prior to any testing so the Secretary may have the opportunity to observe such tests. This notification shall include the actual date and time during which the test will be conducted and, if appropriate, verification that the tests will fully conform to a referenced protocol previously approved by the Secretary.
- d. The permittee shall submit a report of the results of the stack test within 60 days of completion of the test. The test report shall provide the information necessary to document the objectives of the test and to determine whether proper procedures were used to accomplish these objectives. The report shall include the following: the certification described in paragraph 3.5.1; a statement of compliance status, also signed by a responsible official; and, a summary of conditions which form the basis for the compliance status evaluation. The summary of conditions shall include the following:
 1. The permit or rule evaluated, with the citation number and language.
 2. The result of the test for each permit or rule condition.
 3. A statement of compliance or non-compliance with each permit or rule condition.

[WV Code §§ 22-5-4(a)(14-15) and 45CSR13]

3.4. Recordkeeping Requirements

- 3.4.1. **Monitoring information.** The permittee shall keep records of monitoring information that include the following:
 - a. The date, place as defined in this permit and time of sampling or measurements;
 - b. The date(s) analyses were performed;
 - c. The company or entity that performed the analyses;
 - d. The analytical techniques or methods used;
 - e. The results of the analyses; and
 - f. The operating conditions existing at the time of sampling or measurement.

[45CSR§30-5.1.c.2.A., 45CSR13, R13-2475, 4.1.1 and 5.3.1]

- 3.4.2. **Retention of records.** The permittee shall retain records of all required monitoring data and support information for a period of at least five (5) years from the date of monitoring sample, measurement, report, application, or record creation date. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports

required by the permit. Where appropriate, records may be maintained in computerized form in lieu of the above records.

[45CSR§30-5.1.c.2.B.]

3.4.3. **Odors.** For the purposes of 45CSR4, the permittee shall maintain a record of all odor complaints received, any investigation performed in response to such a complaint, and any responsive action(s) taken.

[45CSR§30-5.1.c. State-Enforceable only.]

3.4.4. **Record of Maintenance of Air Pollution Control Equipment.** For all pollution control equipment listed in Section 1.0, the permittee shall maintain accurate records of all required pollution control equipment inspection and/or preventative maintenance procedures.

[45CSR13, R13-2475, 4.1.2. and 5.3.2.]

3.4.5. **Record of Malfunctions of Air Pollution Control Equipment.** For all air pollution control equipment listed in Section 1.0, the permittee shall maintain records of the occurrence and duration of any malfunction or operational shutdown of the air pollution control equipment during which excess emissions occur. For each such case, the following information shall be recorded:

- a. The equipment involved.
- b. Steps taken to minimize emissions during the event.
- c. The duration of the event.
- d. The estimated increase in emissions during the event.

For each such case associated with an equipment malfunction, the additional information shall also be recorded:

- e. The cause of the malfunction.
- f. Steps taken to correct the malfunction.
- g. Any changes or modifications to equipment or procedures that would help prevent future recurrences of the malfunction.

[45CSR13, R13-2475, 4.1.3. and 5.3.3.]

3.5. Reporting Requirements

3.5.1. **Responsible official.** Any application form, report, or compliance certification required by this permit to be submitted to the DAQ and/or USEPA shall contain a certification by the responsible official that states that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate and complete.

[45CSR§§30-4.4. and 5.1.c.3.D.]

3.5.2. A permittee may request confidential treatment for the submission of reporting required under 45CSR§30-5.1.c.3. pursuant to the limitations and procedures of W.Va. Code § 22-5-10 and 45CSR31.

[45CSR§30-5.1.c.3.E.]

- 3.5.3. Except for the electronic submittal of the annual compliance certification and semi-annual monitoring reports to the DAQ and USEPA as required in 3.5.5 and 3.5.6 below, all notices, requests, demands, submissions and other communications required or permitted to be made to the Secretary of DEP and/or USEPA shall be made in writing and shall be deemed to have been duly given when delivered by hand, or mailed first class or by private carrier with postage prepaid to the address(es), or submitted in electronic format by e-mail as set forth below or to such other person or address as the Secretary of the Department of Environmental Protection may designate:

DAQ:

Director
WVDEP
Division of Air Quality
601 57th Street SE
Charleston, WV 25304

US EPA:

Associate Director
Office of Air Enforcement and Compliance
Assistance (3AP20)
U. S. Environmental Protection Agency
Region III
1650 Arch Street
Philadelphia, PA 19103-2029

DAQ Compliance and Enforcement¹:

DEPAirQualityReports@wv.gov

¹For all self-monitoring reports (MACT, GACT, NSPS, etc.), stack tests and protocols, Notice of Compliance Status reports, Initial Notifications, etc.

- 3.5.4. **Certified emissions statement.** The permittee shall submit a certified emissions statement and pay fees on an annual basis in accordance with the submittal requirements of the Division of Air Quality. [45CSR§30-8.]
- 3.5.5. **Compliance certification.** The permittee shall certify compliance with the conditions of this permit on the forms provided by the DAQ. In addition to the annual compliance certification, the permittee may be required to submit certifications more frequently under an applicable requirement of this permit. The annual certification shall be submitted to the DAQ and USEPA on or before March 15 of each year, and shall certify compliance for the period ending December 31. The permittee shall maintain a copy of the certification on site for five (5) years from submittal of the certification. The annual certification shall be submitted in electronic format by e-mail to the following addresses:

DAQ:
DEPAirQualityReports@wv.gov

US EPA:
R3_APD_Permits@epa.gov

[45CSR§30-5.3.e.]

- 3.5.6. **Semi-annual monitoring reports.** The permittee shall submit reports of any required monitoring on or before September 15 for the reporting period January 1 to June 30 and on or before March 15 for the reporting period July 1 to December 31. All instances of deviation from permit requirements must be clearly identified in such reports. All required reports must be certified by a responsible official consistent with 45CSR§30-

4.4. The semi-annual monitoring reports shall be submitted in electronic format by e-mail to the following address:

DAQ:
DEPAirQualityReports@wv.gov

[45CSR§30-5.1.c.3.A.]

3.5.7. **Emergencies.** For reporting emergency situations, refer to Section 2.17 of this permit.

3.5.8. **Deviations.**

a. In addition to monitoring reports required by this permit, the permittee shall promptly submit supplemental reports and notices in accordance with the following:

1. Any deviation resulting from an emergency or upset condition, as defined in 45CSR§30-5.7., shall be reported by telephone or telefax within one (1) working day of the date on which the permittee becomes aware of the deviation, if the permittee desires to assert the affirmative defense in accordance with 45CSR§30-5.7. A written report of such deviation, which shall include the probable cause of such deviations, and any corrective actions or preventative measures taken, shall be submitted and certified by a responsible official within ten (10) days of the deviation.
2. Any deviation that poses an imminent and substantial danger to public health, safety, or the environment shall be reported to the Secretary immediately by telephone or telefax. A written report of such deviation, which shall include the probable cause of such deviation, and any corrective actions or preventative measures taken, shall be submitted by the responsible official within ten (10) days of the deviation.
3. Deviations for which more frequent reporting is required under this permit shall be reported on the more frequent basis.
4. All reports of deviations shall identify the probable cause of the deviation and any corrective actions or preventative measures taken.

[45CSR§30-5.1.c.3.C.]

b. The permittee shall, in the reporting of deviations from permit requirements, including those attributable to upset conditions as defined in this permit, report the probable cause of such deviations and any corrective actions or preventive measures taken in accordance with any rules of the Secretary.

[45CSR§30-5.1.c.3.B.]

3.5.9. **New applicable requirements.** If any applicable requirement is promulgated during the term of this permit, the permittee will meet such requirements on a timely basis, or in accordance with a more detailed schedule if required by the applicable requirement.

[45CSR§30-4.3.h.1.B.]

3.6. Compliance Plan

3.6.1. None.

3.7. Permit Shield

- 3.7.1. The permittee is hereby granted a permit shield in accordance with 45CSR§30-5.6. The permit shield applies provided the permittee operates in accordance with the information contained within this permit.
- 3.7.2. The following requirements specifically identified are not applicable to the source based on the determinations set forth below. The permit shield shall apply to the following requirements provided the conditions of the determinations are met.
 - a. **40 C.F.R. §60.757(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.
 - b. **40 C.F.R. Part 64** - This is the third permit renewal for this facility. The facility was found not to be subject to Compliance Assurance Monitoring (CAM) at the time of the first and second 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 and second renewals that have resulted in a source satisfying the applicability requirements of 40 C.F.R. § 64.2 (a) and becoming subject to CAM.

4.0 Landfill Operations [emission point ID(s): 01-CL1, 01-A1 through 01-A4]

4.1. Limitations and Standards

4.1.1. Each owner or operator of an MSW landfill having a design capacity equal to or greater than 2.5 million megagrams and 2.5 million cubic meters, shall either comply with 40 C.F.R. §60.752(b)(2) or calculate an NMOC emission rate for the landfill using the procedures specified in 40 C.F.R. §60.754. The NMOC emission rate shall be recalculated annually, except as provided in 40 C.F.R. §60.757(b)(1)(ii). The owner or operator of an MSW landfill subject to 40 C.F.R. Part 60 Subpart WWW with a design capacity greater than or equal to 2.5 million megagrams and 2.5 million cubic meters is subject to part 70 or 71 permitting requirements.

[45CSR23, 40 C.F.R. §60.752(b)]

4.1.2. If the calculated NMOC emission rate is equal to or greater than 50 megagrams per year, the owner or operator shall install a collection and control system that captures the gas generated within the landfill as required by Section 4.1.2 [40 C.F.R. §60.752(b)(2)(ii)(A)] and 40 C.F.R. §60.752(b)(2)(iii) within 30 months after the first annual report in which the emission rate equals or exceeds 50 megagrams per year of NMOC, unless Tier 2 or Tier 3 sampling demonstrates that the emission rate is less than 50 megagrams per year, as specified in 40 C.F.R. §§60.757(c)(1) or (2).

An active collection system shall:

- a. Be designed to handle the maximum expected gas flow rate from the entire area of the landfill that warrants control over the intended use period of the gas control or treatment system equipment;
- b. Collects gas from each area, cell or group of cells in which initial solid waste has been in place for a period of:
 - i. 5 years or more if active; or
 - ii. 2 years or more if closed or at final grade;
- c. Collects gas at a sufficient extraction rate;
- d. Is designed to minimize off-site migration of subsurface gas;

[45CSR23, 40 C.F.R. §§ 60.752(b)(2)(ii) and (2)(ii)(A)]

4.1.3. The permittee shall operate the collection system with negative pressure at each wellhead except under the following:

- a. A fire or increased well temperature. The owner or operator shall record instances when positive pressure occurs in efforts to avoid a fire. These records shall be submitted with the annual reports as provided in Section 4.5.2.a [40 C.F.R. §60.757(f)(1)];
- b. A decommissioned well. A well may experience a static positive pressure after shut down to accommodate for declining flows. All design changes shall be approved by the Administrator;

[45CSR23, 40 C.F.R. §§60.753(b)(1) and (3)]

- 4.1.4. The permittee shall operate each interior wellhead in the collection system with a landfill gas temperature less than 55°C and with either nitrogen level less than 20 percent or an oxygen level less than 5 percent. The owner or operator may establish higher value if they show supporting data that the elevated parameter does not cause fires or significantly inhibit anaerobic decomposition by killing methanogens.
- a. The nitrogen level shall be determined using Method 3C, unless an alternative test method is established as allowed by 40 C.F.R. §60.752(b)(2)(i).
 - b. Unless an alternative test method is established as allowed by 40 C.F.R. §60.752(b)(2)(i), the oxygen shall be determined by an oxygen meter using Method 3A or 3C except that:
 - i. The span shall be set so that the regulatory limit is between 20 and 50 percent of the span;
 - ii. A data recorder is not required;
 - iii. Only two calibration gases are required, a zero and span, and ambient air may be used as the span;
 - iv. A calibration error check is not required;
 - v. The allowable sample bias, zero drift, and calibration drift are ±10 percent.

[45CSR23, 40 C.F.R. §60.753(c)]

- 4.1.5. The permittee shall operate the collection system so that the methane concentration is less than 500 parts per million above background at the surface of the landfill. To determine if this level is exceeded, the owner or operator shall conduct surface testing around the perimeter of the collection area and along a pattern that traverses the landfill at 30 meter intervals and where visual observations indicate elevated concentrations of landfill gas, such as distressed vegetation and cracks or seeps in the cover. The owner or operator may establish an alternative traversing pattern that ensures equivalent coverage. A surface monitoring design plan shall be developed that includes a topographical map with the monitoring route and the rationale for any site-specific deviations from the 30 meter intervals. Areas with steep slopes or other dangerous areas may be excluded from the surface testing.

[45CSR23, 40 C.F.R. §60.753(d)]

- 4.1.6. The permittee shall operate the system such that all collected gases are vented to a control system designed and operated in compliance with 40 C.F.R. §60.752(b)(2)(iii). In the event the collection or control system is inoperable; the gas mover system shall be shut down and all valves in the collection and control system contributing to venting of the gas to the atmosphere shall be closed within 1 hour.

[45CSR23, 40 C.F.R. §60.753(e)]

- 4.1.7. The permittee shall operate the control or treatment system at all times when the collected gas is routed to the system.

[45CSR23, 40 C.F.R. §60.753(f)]

- 4.1.8. For purposes of compliance with 40 C.F.R. §60.753(a), each owner or operator of a controlled landfill shall place each well or design component as specified in the approved design plan as provided in 40 C.F.R. §60.752(b)(2)(i). Each well shall be installed no later than 60 days after the date on which the initial solid waste has been in place for a period of:

- a. 5 years or more if active; or
- b. 2 years or more if closed or at final grade.

[45CSR23, 40 C.F.R. §60.755(b)]

4.1.9. See Sections 5.1.16 and 5.1.17 for landfill collection system design plan.

4.2. Monitoring Requirements

4.2.1. For the purpose of demonstrating whether the gas collection system flow rate is sufficient to determine compliance with Section 4.1.2.c [40 C.F.R. §60.752(b)(2)(ii)(A)(3)], the owner or operator shall measure gauge pressure in the gas collection header at each individual well, monthly. If a positive pressure exists, action shall be initiated to correct the exceedance within 5 calendar days, except for the three conditions allowed under 40 C.F.R. §60.753(b). If negative pressure cannot be achieved without excess air infiltration within 15 calendar days of the first measurement, the gas collection system shall be expanded to correct the exceedance within 120 days of the initial measurement of positive pressure. Any attempted corrective measure shall not cause exceedances of other operational or performance standards. An alternative timeline for correcting the exceedance may be submitted to the Administrator for approval.
[45CSR23, 40 C.F.R. §60.755(a)(3)]

4.2.2. Owners or operators are not required to expand the system as required in Section 4.2.1 [40 C.F.R. §60.755(a)(3)] during the first 180 days after gas collection system startup.
[45CSR23, 40 C.F.R. §60.755(a)(4)]

4.2.3. For the purpose of identifying whether excess air infiltration into the landfill is occurring, the owner or operator shall monitor each well monthly for temperature and nitrogen or oxygen as provided in Section 4.1.4 [40 C.F.R. § 60.753 (c)]. If a well exceeds one of these operating parameters, action shall be initiated to correct the exceedance within 5 calendar days. If correction of the exceedance cannot be achieved within 15 calendar days of the first measurement, the gas collection system shall be expanded to correct the exceedance within 120 days of the initial exceedance. Any attempted corrective measure shall not cause exceedances of other operational or performance standards. An alternative timeline for correcting the exceedance may be submitted to the Administrator for approval.
[45CSR23, 40 C.F.R. §60.755(a)(5)]

4.2.4. Each owner or operator seeking to comply with Section 4.1.2 [40 C.F.R. §60.752(b)(2)(ii)(A)] for an active gas collection system shall install a sampling port and a thermometer, other temperature measuring device, or an access port for temperature measurements at each wellhead and:

- a. Measure the gauge pressure in the gas collection header on a monthly basis as provided in Section 4.2.1 [40 C.F.R. §60.755(a)(3)]; and
- b. Monitor nitrogen or oxygen concentration in the landfill gas on a monthly basis as provided in Section 4.2.3 [40 C.F.R. §60.755(a)(5)]; and
- c. Monitor temperature of the landfill gas on a monthly basis as provided in Section 4.2.3 [40 C.F.R. § 60.755(a)(5)].

[45CSR23, 40 C.F.R. §60.756(a)]

4.2.5. The following procedures shall be used for compliance with the surface methane operational standard as provided in Section 4.1.5 [40 C.F.R. §60.753(d)].

- a. After installation of the collection system, the owner or operator shall monitor surface concentrations of methane along the entire perimeter of the collection area and along a pattern that traverses the landfill at 30 meter intervals (or a site-specific established spacing) for each collection area on a quarterly basis using an organic vapor analyzer, flame ionization detector, or other portable monitor meeting the specifications provided in Section 4.2.6 [40 C.F.R. §60.755(d)].
- b. The background concentration shall be determined by moving the probe inlet upwind and downwind outside the boundary of the landfill at a distance of at least 30 meters from the perimeter wells.
- c. Surface emission monitoring shall be performed in accordance with 40 C.F.R. Part 60 Appendix A, Section 4.3.1 of Method 21, except that the probe inlet shall be placed within 5 to 10 centimeters of the ground. Monitoring shall be performed during typical meteorological conditions.
- d. Any reading of 500 parts per million or more above background at any location shall be recorded as a monitored exceedance and the actions specified in Section 4.2.5.d.i-v [40 C.F.R. §§60.755(c)(4)(i) through (v)] shall be taken. As long as the specified actions are taken, the exceedance is not a violation of the operational requirements of Section 4.1.5 [40 C.F.R. §60.753(d)].
 - i. The location of each monitored exceedance shall be marked and the location recorded.
 - ii. Cover maintenance or adjustments to the vacuum of the adjacent wells to increase the gas collection in the vicinity of each exceedance shall be made and the location shall be re-monitored within 10 calendar days of detecting the exceedance.
 - iii. If the re-monitoring of the location shows a second exceedance, additional corrective action shall be taken and the location shall be monitored again within 10 days of the second exceedance. If the re-monitoring shows a third exceedance for the same location, the action specified in Section 4.2.5.d.v [40 C.F.R. §60.755(c)(4)(v)] shall be taken, and no further monitoring of that location is required until the action specified in Section 4.2.5.d.v [40 C.F.R. §60.755(c)(4)(v)] has been taken.
 - iv. Any location that initially showed an exceedance but has a methane concentration less than 500 ppm methane above background at the 10-day re-monitoring specified in Section 4.2.5.d.ii or iii [40 C.F.R. §§60.755(c)(4)(ii) or (iii)] shall be re-monitored 1 month from the initial exceedance. If the 1-month re-monitoring shows a concentration less than 500 parts per million above background, no further monitoring of that location is required until the next quarterly monitoring period. If the 1-month re-monitoring shows an exceedance, the actions specified in Section 4.2.5.d.iii or v [40 C.F.R. §§60.755(c)(4)(iii) or (v)] shall be taken.
 - v. For any location where monitored methane concentration equals or exceeds 500 parts per million above background three times within a quarterly period, a new well or other collection device shall be installed within 120 calendar days of the initial exceedance. An alternative remedy to the exceedance, such as upgrading the blower, header pipes or control device, and a corresponding timeline for installation may be submitted to the Administrator for approval.
- e. The owner or operator shall implement a program to monitor for cover integrity and implement cover repairs as necessary on a monthly basis.

[45CSR23, 40 C.F.R. §60.755(c)]

- 4.2.6. Each owner or operator seeking to comply with the provisions in Section 4.2.5 [40 C.F.R. §60.755(c)] shall comply with the following instrumentation specifications and procedures for surface emission monitoring devices:
- a. The portable analyzer shall meet the instrument specifications provided in 40 C.F.R. Part 60 Appendix A, Method 21, Section 3, except that “methane” shall replace all references to VOC.
 - b. The calibration gas shall be methane, diluted to a nominal concentration of 500 parts per million in air.
 - c. To meet the performance evaluation requirements in 40 C.F.R. Part 60 Appendix A, Method 21, Section 3.1.3, the instrument evaluation procedures of 40 C.F.R. Part 60 Appendix A, Method 21, Section 4.4 shall be used.
 - d. The calibration procedures provided in 40 C.F.R. Part 60 Appendix A, Method 21, Section 4.2 shall be followed immediately before commencing a surface monitoring survey.

[45CSR23, 40 C.F.R. §60.755(d)]

- 4.2.7. The provisions of 40 C.F.R. Part 60 Subpart WWW apply at all times, except during periods of start-up, shutdown, or malfunction, provided that the duration of start-up, shutdown, or malfunction shall not exceed 5 days for collection systems and shall not exceed 1 hour for treatment or control devices.

[45CSR23, 40 C.F.R. §60.755(e)]

4.3. Testing Requirements

- 4.3.1. See 40 C.F.R. § 60.754 for test methods and procedures.

4.4. Recordkeeping Requirements

- 4.4.1. Each owner or operator of a controlled landfill shall keep up-to-date, readily accessible records for the life of the control equipment of the data listed in Section 4.4.1.a [40 C.F.R. §§ 60.758(b)(1)] as measured during the initial performance test or compliance determination. Records of subsequent tests or monitoring shall be maintained for a minimum of 5 years. Records of the control device vendor specifications shall be maintained until removal.

- a. Where an owner or operator subject to the provisions of 40 C.F.R. Part 60 Subpart WWW seeks to demonstrate compliance with Section 4.1.2 [40 C.F.R. §60.752(b)(2)(ii)]:
 - i. The maximum expected gas generation flow rate as calculated in 40 C.F.R. §60.755(a)(1). The owner or operator may use another method to determine the maximum gas generation flow rate, if the method has been approved by the Administrator.
 - ii. The density of wells, horizontal collectors, surface collectors, or other gas extraction devices determined using the procedures specified in 40 C.F.R. §60.759(a)(1).

[45CSR23, 40 C.F.R. §§60.758(b) and (b)(1)]

- 4.4.2. Each owner or operator of a controlled landfill subject to the provisions of 40 C.F.R. Part 60 Subpart WWW shall keep for 5 years up-to-date, readily accessible continuous records of the equipment operating parameters

specified to be monitored in 40 C.F.R. §60.756 as well as up-to-date, readily accessible records for periods of operation during which the parameter boundaries established during the most recent performance test are exceeded.

[45CSR23, 40 C.F.R. §60.758(c)]

4.4.3. Each owner or operator subject to the provisions of 40 C.F.R. Part 60 Subpart WWW shall keep for the life of the collection system an up-to-date, readily accessible plot map showing each existing and planned collector in the system and providing a unique identification location label for each collector.

a. Each owner or operator subject to the provisions of 40 C.F.R. Part 60 Subpart WWW shall keep up-to-date, readily accessible records of the installation date and location of all newly installed collectors as specified under Section 4.1.8 [40 C.F.R. §60.755(b)].

b. Each owner or operator subject to the provisions of 40 C.F.R. Part 60 Subpart WWW shall keep readily accessible documentation of the nature, date of deposition, amount, and location of asbestos-containing or nondegradable waste excluded from collection as provided in 40 C.F.R. § 60.759(a)(3)(i) as well as any nonproductive areas excluded from collection as provided in 40 C.F.R. §60.759(a)(3)(ii).

[45CSR23, 40 C.F.R. §60.758(d)]

4.4.4. Each owner or operator subject to the provisions of 40 C.F.R. Part 60 Subpart WWW shall keep for at least 5 years up-to-date, readily accessible records of all collection and control system exceedances of the operational standards in 40 C.F.R. § 60.753, the reading in the subsequent month whether or not the second reading is an exceedance, and the location of each exceedance.

[45CSR23, 40 C.F.R. §60.758(e)]

4.5. Reporting Requirements

4.5.1. Closure Report - The permittee shall submit a closure report to the Division of Air Quality within 30 days of the date the MSW landfill stopped accepting waste.

[45CSR23, 40 C.F.R. §60.757(d)]

4.5.2. Each owner or operator of a landfill seeking to comply with 40 C.F.R. §60.752(b)(2) using an active collection system designed in accordance with Section 4.1.2 [40 C.F.R. §60.752(b)(2)(ii)] shall submit to the Administrator annual reports (see Section 5.4.4) of the recorded information in Section 4.5.2.a through 4.5.2.f [40 C.F.R. §§60.757(f)(1) through (f)(6)]. For enclosed combustion devices and flares, reportable exceedances are defined under 40 C.F.R. §60.758(c).

a. Value and length of time for exceedance of applicable parameters monitored under Sections 4.2.4 and 5.2.2 [40 C.F.R. §§60.756(a) and (c)] and 40 C.F.R. §§60.756(b) and (d).

b. Description and duration of all periods when the gas stream is diverted from the control device through a bypass line or the indication of bypass flow as specified under 40 C.F.R. §60.756.

c. Description and duration of all periods when the control device was not operating for a period exceeding 1 hour and length of time the control device was not operating.

d. All periods when the collection system was not operating in excess of 5 days.

- e. The location of each exceedance of the 500 parts per million methane concentration as provided in 40 C.F.R. §60.753(d) and the concentration recorded at each location for which an exceedance was recorded in the previous month.
- f. The date of installation and the location of each well or collection system expansion added pursuant to 40 C.F.R. §§60.755(a)(3), (b), and (c)(4).

Note:

Permittee may follow the reporting period and report submittal deadlines as stated in the Section 3.5.6 for the reports required under [45CSR23, 40 C.F.R. §60.757(f)].

[45CSR23, 40 C.F.R. §60.757(f)]

4.6. Compliance Plan

- 4.6.1. None.

5.0 Flare Operations [emission point ID(s): 01-FL1]

5.1. Limitations and Standards

5.1.1. Flare emissions to the atmosphere shall not exceed the following limits:

Pollutant	Maximum Emissions	
	LBs/hour	tons/year
Volatile Organic Compounds (VOC)	0.04	0.16
Carbon Monoxide (CO)	2.57	11.26
Sulfur Dioxide (SO ₂)	11.72	51.33
Nitrogen Oxide (NO _x)	2.57	11.26
Particulate Matter (PM)	0.55	2.40
Particulate Matter less than 10 microns (PM ₁₀)	0.14	0.60

Compliance with this requirement will demonstrate compliance with the less stringent 45CSR§6-4.1 hourly Particulate Matter (PM) emission limit.

[45CSR13, R13-2475, 6.1.1., 45CSR§6-4.1.]

5.1.2. Only landfill gas generated from the municipal solid waste contained in the Brooke County Sanitary Landfill shall be routed to and combusted in the flare.

[45CSR13, R13-2475, 6.1.2.]

5.1.3. The permittee shall install, calibrate, maintain, and operate according to the manufacturer's specifications an ultra violet monitor at the pilot light or the flame itself to indicate the continuous presence of a flame. When the heat sensing device detects failure of the flame, the flare system shall automatically attempt to re-ignite the flame. In the event that the pilot flame fails, re-ignition will be attempted 3 times with 1-2 minutes between attempts. If the flame goes out, the flare, the flame will need to be manually restarted.

[45CSR13, R13-2475, 6.1.3.]

5.1.4. The Flare System shall be designed to achieve a minimum destruction efficiency of 98% for volatile organic compounds (VOCs).

[45CSR13, R13-2475, 6.1.4.]

5.1.5. The amount of landfill gas consumed/fed to the flare shall not exceed 2400 scf/min and 1261.44 mmscf/yr.

[45CSR13, R13-2475, 6.1.5.]

5.1.6. Visible particulate matter emissions from open flare shall not exceed twenty (20%) percent opacity.

[45CSR§6-4.3.]

5.1.7. The provisions of Section 5.1.6 [45CSR§6-4.3.] shall not apply to smoke which is less than forty (40%) percent opacity, for a period or periods aggregating no more than eight (8) minutes per start-up.

[45CSR§6-4.4., 45CSR13, R13-2475, 6.1.6.]

5.1.8. The emission of particles of unburned or partially burned refuse or ash from the flare which are large enough to be individually distinguished in the open air shall not be allowed or permitted.

[45CSR§6-4.5., 45CSR13, R13-2475, 6.1.7.]

- 5.1.9. The flare, including all associated equipment and grounds, shall be designed, operated and maintained so as to prevent the emission of objectionable odors.
[45CSR§6-4.6., 45CSR13, R13-2475, 6.1.8.]
- 5.1.10. If the calculated NMOC emission rate is equal to or greater than 50 megagrams per year, the owner or operator shall route all the collected gas to a control system that complies with the requirements in 40 C.F.R. § 60.752(b)(2)(iii)(A).
- a. An open flare designed and operated in accordance with 40 C.F.R. § 60.18.
[45CSR23, 40 C.F.R. §60.752(b)(2) and (b)(2)(iii)(A), 45CSR13, R13-2475, 6.1.9.]
- 5.1.11. Flares shall be designed for and operated with no visible emissions as determined by the methods specified in 40 C.F.R. §60.18(f), except for periods not to exceed a total of 5 minutes during any 2 consecutive hours.
[45CSR16, 40 C.F.R. §60.18(c)(1), 45CSR13, R13-2475, 6.1.10.]
- 5.1.12. Flares shall be operated with a flame present at all times, as determined by the methods specified in 40 C.F.R. §60.18(f).
[45CSR16, 40 C.F.R. §60.18(c)(2), 45CSR13, R13-2475, 6.1.11.]
- 5.1.13. The non-assisted open flare shall have a net heating value of the gas being combusted being 7.45 MJ/scm (200 Btu/scf) or greater. The net heating value of the gas being combusted shall be determined by the methods specified in 40 C.F.R. §60.18(f)(3).
[45CSR16, 40 C.F.R. §60.18(c)(3)(ii), 45CSR13, R13-2475, 6.1.12.]
- 5.1.14. The non-assisted open flare shall be designed for and operated with an exit velocity, as determined by the methods specified in 40 C.F.R. §60.18(f)(4), less than 18.3 m/sec (60 ft/sec), except as provided in 40 C.F.R. §§60.18(c)(4)(ii) and (iii).
[45CSR16, 40 C.F.R. §60.18(c)(4)(i), 45CSR13, R13-2475, 6.1.13.]
- 5.1.15. Flares used to comply with provisions of 40 C.F.R. Part 60 Subpart A shall be operated at all times when emissions may be vented to them.
[45CSR16, 40 C.F.R. §60.18(e), 45CSR13, R13-2475, 6.1.14.]
- 5.1.16. For approval of collection and control systems that include any alternatives to the operational standards, test methods, procedures, compliance measures, monitoring, recordkeeping or reporting provisions, you must follow the procedures in 40 C.F.R. §60.752(b)(2). If alternatives have already been approved under 40 C.F.R. Part 60 Subpart W or the Federal plan, or EPA approved and effective State or tribal plan, these alternatives can be used to comply with 40 C.F.R. Part 63 Subpart A, except that all affected sources must comply with the start-up, shutdown, and malfunction (SSM) requirements in 40 C.F.R. Part 63 Subpart A as specified in Table 1 of 40 C.F.R. Part 63 Subpart A and all affected sources must submit compliance reports every 6 months as specified in 40 C.F.R. §§63.1980(a) and (b), including information on all deviations that occurred during the 6-month reporting period. Deviations for continuous emission monitors or numerical continuous parameter monitors must be determined using a 3 hour monitoring block average.
[45CSR34, 40 C.F.R. §63.1955(c), 45CSR13, R13-2475, 6.1.15.]

5.1.17. Compliance is determined in the same way it is determined for 40 C.F.R. Part 60 Subpart WWW, including performance testing, monitoring of the collection system, continuous parameter monitoring, and other credible evidence. In addition, continuous parameter monitoring data, collected under 40 C.F.R. §§60.756(b)(1), (c)(1), and (d), are used to demonstrate compliance with the operating conditions for control systems. If a deviation occurs, the facility has failed to meet the control device operating conditions described in 40 C.F.R. Part 63 Subpart AAAA and have deviated from the requirements of 40 C.F.R. Part 63 Subpart AAAA. Finally, the facility must develop a written SSM plan according to the provisions in 40 C.F.R. §63.6(e)(3). A copy of the SSM plan must be maintained on site. Failure to write or maintain a copy of the SSM plan is a deviation from the requirements of 40 C.F.R. Part 63 Subpart AAAA.
[45CSR34, 40 C.F.R. §63.1960, 45CSR13, R13-2475, 6.1.16.]

5.1.18. For Startup, Shutdown, and Malfunction (SSM) Plan requirements see 40 C.F.R. §63.6(e).
[45CSR13, R13-2475, 6.1.17.]

5.2. Monitoring Requirements

5.2.1. For the purpose of determining compliance with the opacity limits, visible emission checks of the flare shall be conducted using 40 C.F.R. Part 60, Appendix A, Method 22. The visible emission check shall determine the presence or absence of visible emissions. At a minimum, the observer must be trained and knowledgeable regarding the effects of background contrast, ambient lighting, observer position relative to lighting, wind, and the presence of uncombined water (condensing water vapor) on the visibility of emissions. This training may be obtained from written materials found in the Reference 1 and 2 from 40 C.F.R Part 60, Appendix A, Method 22 or from the lecture portion of the 40 C.F.R. Part 60, Appendix A, Method 9 certification course.

Visible emission checks shall be conducted at least once per calendar month with a maximum of forty-five (45) days between consecutive readings. These checks shall be performed at each source flare for a sufficient time interval, but no less than one (1) minute, to determine if any visible emissions are present. Visible emission checks shall be performed during periods of facility operation and appropriate weather conditions.

If visible emissions are present at a source(s) for three (3) consecutive monthly checks, the permittee shall conduct an opacity reading at that source(s) using the procedures and requirements of Method 9 as soon as practicable, but within seventy-two (72) hours of the final visual emission check. A Method 9 observation at a source(s) restarts the count of the number of consecutive readings with the presence of visible emissions. If Method 9 shows a noncompliant result, the facility shall take appropriate remedial action to correct the situation.

[45CSR13, R13-2475, 6.2.1.]

5.2.2. Each owner or operator seeking to comply with 40 C.F.R. §60.752(b)(2)(iii) using an open flare shall install, calibrate, maintain, and operate according to the manufacturer's specifications the following equipment:

- a. A heat sensing device, such as an ultraviolet beam sensor or thermocouple, at the pilot light or the flame itself to indicate the continuous presence of a flame.
- b. A device that records flow to or bypass of the flare. The owner or operator shall either:
 - i. Install, calibrate, and maintain a gas flow rate measuring device that shall record the flow to the control device at least every 15 minutes; or

- ii. Secure the bypass line valve in the closed position with a car-seal or a lock-and-key type configuration. A visual inspection of the seal or closure mechanism shall be performed at least once every month to ensure that the valve is maintained in the closed position and that the gas flow is not diverted through the bypass line.

[45CSR23, 40 C.F.R. §60.756(c), 45CSR13, R13-2475, 6.2.2.]

5.3. Testing Requirements

- 5.3.1. At such reasonable times as the Director may designate, the operator of any incinerator shall be required to conduct or have conducted stack tests for the flares to determine the particulate matter loading, by using 40 C.F.R. Part 60, Appendix A, Method 5 or other equivalent EPA approved method approved by the Director, in exhaust gases. Such tests shall be conducted in such manner as the Director may specify and be filed on forms and in a manner acceptable to the Director. The Director, or the Director's authorized representative, may at the Director's option witness or conduct such stack tests. Should the Director exercise his option to conduct such tests, the operator will provide all the necessary sampling connections and sampling ports to be located in such manner as the Director may require, power for test equipment and the required safety equipment such as scaffolding, railings and ladders to comply with generally accepted good safety practices. [45CSR§6-7.1., 45CSR13, R13-2475, 6.3.1.]

5.4. Recordkeeping Requirements

- 5.4.1. The permittee shall maintain records of all monitoring data for opacity, documenting the date and time of each visible emission check, the emission point or equipment/source identification number, the name or means of identification of the observer, the results of the check(s), whether the visible emissions are normal for the process, and, if applicable, all corrective measures taken or planned. The permittee shall also record the general weather conditions (i.e. sunny, approximately 80°F, 6 - 10 mph NE wind) during the visual emission check(s). Should a visible emission observation be required to be performed per the requirements specified in Method 9, the data records of each observation shall be maintained per the requirements of Method 9. For an emission unit out of service during the normal monthly evaluation, the record of observation may note "out of service" (O/S) or equivalent. [45CSR13, R13-2475, 6.4.1.]
- 5.4.2. Each owner or operator of a controlled landfill shall keep up-to-date, readily accessible records for the life of the control equipment of the data listed in 40 C.F.R. §60.758(b)(4) as measured during the initial performance test or compliance determination. Records of subsequent tests or monitoring shall be maintained for a minimum of 5 years. Records of the control device vendor specifications shall be maintained until removal.
 - a. Where an owner or operator subject to the provisions of 40 C.F.R. Part 60 Subpart WWW seeks to demonstrate compliance with Section 5.1.10 [40 C.F.R. §60.752(b)(2)(iii)(A)] through use of an open flare, the flare type (i.e., steam-assisted, air-assisted, or non-assisted), all visible emission readings, heat content determination, flow rate or bypass flow rate measurements, and exit velocity determinations made during the performance test as specified in 40 C.F.R. §60.18; continuous records of the flare pilot flame or flare flame monitoring and records of all periods of operations during which the pilot flame of the flare flame is absent.

[45CSR23, 40 C.F.R. §§60.758(b) and (b)(4), 45CSR13, R13-2475, 6.4.2.]

- 5.4.3. Each owner or operator seeking to comply with the provisions of 40 C.F.R. Part 60 Subpart WWW by use of an open flare shall keep up-to-date, readily accessible continuous records of the flame or flare pilot flame monitoring specified under Section 5.2.2 [40 C.F.R. §60.756(c)], and up-to-date, readily accessible records of all periods of operation in which the flame or flare pilot flame is absent.
[45CSR23, 40 C.F.R. §60.758(c)(4), 45CSR13, R13-2475, 6.4.3.]
- 5.4.4. Keep records and reports as specified in 40 C.F.R. Part 60 Subpart WWW or EPA approved State plan that implements 40 CFR Part 60 Subpart Cc, whichever applies to your landfill, with one exception: You must submit the annual report described in Section 4.5.2 [40 C.F.R. §60.757(f)] every 6 months.
[45CSR34, 40 C.F.R. §63.1980(a), 45CSR13, R13-2475, 6.4.4.]
- 5.4.5. You must also keep records and reports as specified in the general provisions of 40 C.F.R. Part 60 and 40 C.F.R. Part 63 Subpart AAAA, Table 1. Applicable records in the general provisions include items such as SSM plans and the SSM plan reports.
[45CSR34, 40 C.F.R. §63.1980(b), 45CSR13, R13-2475, 6.4.5.]
- 5.4.6. For the purpose of demonstrating compliance with the emission limits and throughput limits set forth in 5.1.1 and 5.1.5, the permittee shall maintain accurate records of the amount of landfill gas consumed/fed to the flare system. Compliance with the annual consumption limit shall be determined using a 12-month rolling total. A 12-month rolling total shall mean the sum of natural gas consumed at any given time for the previous twelve (12) calendar months. Said records shall be maintained on site for a period of five (5) years. Said records shall be made available to the Director of the Division of Air Quality or his/her duly authorized representative upon request and shall be certified by a responsible official upon the submittal.
[45CSR13, R13-2475, 6.4.6.]

5.5. Reporting Requirements

- 5.5.1. Any violation(s) of the allowable visible emission requirement for any emission source discovered during observations using 40 C.F.R. Part 60, Appendix A, Method 9 must be reported in writing to the Director of the Division of Air Quality as soon as practicable, but within ten (10) calendar days, of the occurrence and shall include, at a minimum, the following information: the results of the visible determination of opacity of emissions, the cause or suspected cause of the violation(s), and any corrective measures taken or planned.
[45CSR13, R13-2475, 6.5.1.]
- 5.5.2. The permittee shall follow the procedure for submitting SSM semi-annual reports, see 40 C.F.R. §§ 63.10 (a) (5) and (d) (5).
[45CSR13, R13-2475, 6.5.2.]

5.6. Compliance Plan

- 5.6.1. None.

6.0 Rock Crushing and Screening Operations [emission point ID(s): C1, S1, 24E, BC1 - BC4, OS1 - OS3, OS5, OS6, DG1, VT1, VT2, TP1 - TP10, and TP1A - TP10A]

6.1. Limitations and Standards

- 6.1.1. The rock crushing and screening operations, as identified under Section 6.1.3 below, shall not exceed 200 tons per hour (TPH) and 30,000 tons per year (TPY). The annual rock crushing and screening rate shall be determined on a rolling twelve month total.
[45CSR13, R13-2475, 5.1.1.]
- 6.1.2. The 250 horsepower diesel engine (Equipment ID No. DG1) shall not operate more than 150 hours per year based upon a rolling twelve month total.
[45CSR13, R13-2475, 5.1.2.]
- 6.1.3. In accordance with the information filed in Permit Application R13-2475, the following equipment shall be installed, maintained, and operated so as to minimize particulate matter (PM) emissions:

Equipment Description	Emission Point ID
Transfer Points	
Bulldozer pushing material into pile OS1.	TP1
Front end loader loading hopper.	TP2
Batch drop from crusher onto BC2.	TP3
Batch drop from BC2 onto screener.	TP4
Batch drop screened material onto BC4.	TP5
Batch drop oversized material onto BC3.	TP6
Batch drop screened material onto OS3 from BC4.	TP7
Batch drop oversized material onto OS2 from BC3.	TP8
Front end loader loading screened material.	TP9
Front end loader loading oversized	TP10
Screening Operations	
Screening	S1
Crushing Operations	
Crushing	C1
Belt Conveyors	
Belt conveyor to crusher.	BC1
Belt conveyor from crusher to screener.	BC2
Oversized material belt conveyor to stockpile.	BC3
Screened material belt conveyor to stockpile.	BC4
Open Stockpiles	
Unprocessed material stockpile.	OS1
Oversized material stockpile.	OS2
Screened material stockpile.	OS3
Miscellaneous	
Unpaved haul roads.	VT1, VT2
250 HP diesel engine to power crusher/screener operation.	DG1

[45CSR13, R13-2475, 5.1.3.]

- 6.1.4. Emissions to the atmosphere from the 250 HP diesel engine (Emission Point ID No. DG1) shall not exceed the following:

Pollutant	Emissions Limit	
	PPH	TPY
NO _x	7.75	0.59
CO	1.67	0.13
SO ₂	0.52	0.04
PM ₁₀	0.55	0.05
VOC	0.62	0.05

[45CSR13, R13-2475, 5.1.4.]

- 6.1.5. Fugitive emissions to the atmosphere from transfer points TP3, TP4, TP5, TP6, TP7, and TP8, from screening operations S1, from belt conveyors BC1, BC2, BC3, and BC4 from open stockpiles OS1, OS2, and OS3, and from unpaved haul roads VT1 and VT2 shall not exceed 10 percent opacity. Fugitive emissions to the atmosphere from crushing operations C1 shall not exceed 15 percent opacity.

[45CSR16, 40 C.F.R. §60.672(b), 45CSR13, R13-2475, 5.1.5]

- 6.1.6. Fugitive particulate dust control system(s) shall be properly designed, installed, operated, and maintained in such a manner so as to minimize the generation and entrainment of fugitive particulate emissions. Such system(s) at a minimum shall include, but not be limited to:

- a. The permittee shall maintain functional water sprays to apply water or a mixture of water and an environmentally acceptable dust control additive (solution) to haulroads and work areas where mobile equipment is used. The water sprays shall be equipped with commercially available spray nozzles of sufficient size and number so as to provide adequate coverage to the area being treated. The water sprays shall be capable of delivering an adequate quantity of water or solution at a sufficient pressure to ensure the minimization of atmospheric entrainment of fugitive particulate emissions generated from haulroads, work areas, and stockpiles. The water sprays shall be in operation at all times when fugitive particulate emissions from haulroads, work areas, and stockpiles are generated as a result of activity or wind.
- b. All water sprays shall employ properly designed, installed, and maintained winterization systems in such a manner so that all fugitive particulate dust control systems remain functional when ambient temperatures are below 32 degrees Fahrenheit (°F).

[45CSR13, R13-2475, 5.3.7.]

- 6.1.7. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any process source operation which is greater than twenty (20) percent opacity, except as noted in 45CSR§§7-3.2 (Section 6.1.8.), 3.3, 3.4, 3.5, 3.6, and 3.7.

[45CSR§7-3.1., 45CSR13, R13-2475, 5.1.9.]

- 6.1.8. The provisions of Section 6.1.7 [45CSR§7-3.1.] shall not apply to smoke and/or particulate matter emitted from any process source operation which is less than forty (40) percent opacity for any period or periods aggregating no more than five (5) minutes in any sixty (60) minute period.

[45CSR§7-3.2., 45CSR13, R13-2475, 5.1.10.]

- 6.1.9. No person shall cause, suffer, allow or permit particulate matter to be vented into the open air from any type source operation or duplicate source operation, or from all air pollution control equipment installed on any type source operation or duplicate source operation in excess of the quantity specified under the appropriate source operation type in Table 45-7A found at the end of 45CSR7.
[45CSR§7-4.1., 45CSR13, R13-2475, 5.1.11.]
- 6.1.10. No person shall cause, suffer, allow or permit any manufacturing process or storage structure generating fugitive particulate matter to operate that is not equipped with a system, which may include, but not be limited to, process equipment design, control equipment design or operation and maintenance procedures, to minimize the emissions of fugitive particulate matter. To minimize means such system shall be installed, maintained and operated to ensure the lowest fugitive particulate matter emissions reasonably achievable.
[45CSR§7-5.1., 45CSR13, R13-2475, 5.1.12.]
- 6.1.11. The owner or operator of a plant shall maintain particulate matter control of the plant premises, and plant owned, leased or controlled access roads, by paving, application of asphalt, chemical dust suppressants or other suitable dust control measures. Good operating practices shall be implemented and when necessary particulate matter suppressants shall be applied in relation to stockpiling and general material handling to minimize particulate matter generation and atmospheric entrainment.
[45CSR§7-5.2., 45CSR13, R13-2475, 5.1.13.]
- 6.1.12. Due to unavoidable malfunction of equipment, emissions exceeding those set forth in 45CSR7 [Section 6.1.9.] may be permitted by the Director for periods not to exceed ten (10) days upon specific application to the Director. Such application shall be made within twenty-four (24) hours of the malfunction. In cases of major equipment failure, additional time periods may be granted by the Director provided a corrective program has been submitted by the owner or operator and approved by the Director.
[45CSR§7-9.1., 45CSR13, R13-2475, 5.1.16.]
- 6.1.13. **Operation and Maintenance of Air Pollution Control Equipment.** The permittee shall, to the extent practicable, install, maintain, and operate all pollution control equipment listed in Section 1.0 and associated monitoring equipment in a manner consistent with safety and good air pollution control practices for minimizing emissions, or comply with any more stringent limits set forth in this permit or as set forth by any State rule, Federal regulation, or alternative control plan approved by the Secretary.
[45CSR13, R13-2475, 5.1.17.]
- 6.1.14. In accordance with the information filed in Permit Application R13-2475B, the portable rock screening operation throughput shall not exceed 100 TPH or 50,000 TPY (Compliance with the annual throughput limit shall be based on a on a rolling twelve month total). The following authorized equipment utilized in the portable rock screening operation shall be installed, maintained, and operated so as to minimize particulate matter (PM) emissions:

Equipment Description	Equipment ID No.
<i>Transfer Points</i>	
Rock Truck to Ground	TP1A ⁽¹⁾
Front End Loader to Pile	TP2A ⁽¹⁾
Front End Loader to Screen (24S)	TP3A ⁽¹⁾
Screen (24S) to Ground	TP4A ⁽¹⁾
Screen to Attached Conveyer	TP5A ⁽¹⁾
Conveyer to Ground	TP6A ⁽¹⁾
Front End Loader to Pile (OS5)	TP7A ⁽¹⁾

Equipment Description	Equipment ID No.
Front End Loader to Pile (OS6)	TP8A ⁽¹⁾
Front End Loader to Truck	TP9A ⁽¹⁾
Front End Loader to Truck	TP10A ⁽¹⁾
<i>Screening Operations</i>	
Screening	24S
<i>Belt Conveyors</i>	
Conveyer Attached to Screen	24S
<i>Open Stockpiles</i>	
Screen Reject: Large Rock/Rip Rap Stockpile	OS5
Screen Pass-Through: ¾ Inch Stone Stockpile	OS6
<i>Miscellaneous</i>	
Trucking Haulroad	n/a
Front End Loader Mobile Work Area	

(1) Transfer points are identified here with an “A” to distinguish them from other transfer points at the facility with the same number.

[45CSR13, R13-2475, 5.1.6.]

- 6.1.15. The Open Stockpiles identified under Section 6.1.14 as OS5 and OS6 shall each not exceed a maximum base area of 400 ft² and shall utilize water sprays as often as necessary to minimize wind erosion.

[45CSR13, R13-2475, 5.1.7.]

- 6.1.16. The portable rock screening operation – specifically the screen and the attached belt conveyer - is subject to the applicable limitations and standards under 40 C.F.R. Part 60 Subpart OOO, including the requirements given below under (a) and (b).

- a. Affected facilities must meet the fugitive emission limits and compliance requirements in Table 3 of 40 C.F.R. Part 60 Subpart OOO within 60 days after achieving the maximum production rate at which the affected facility will be operated, but not later than 180 days after initial startup as required under 40 C.F.R. § 60.11. The requirements in Table 3 of 40 C.F.R. Part 60 Subpart OOO apply for fugitive emissions from affected facilities without capture systems and for fugitive emissions escaping capture systems.
- b. Truck dumping of nonmetallic minerals into any screening operation, feed hopper, or crusher is exempt from the requirements of this section.

[45CSR13, R13-2475, 5.1.8, 45CSR16; 40 C.F.R. §§60.672(b) and (d)]

- 6.1.17. The Permittee shall comply with all applicable requirements of 40 C.F.R. Part 63 Subpart ZZZZ, Stationary Reciprocating Internal Combustion Engines by May 3, 2013 for the 250 HP diesel engine (DG1).

[45CSR34, 40 C.F.R. §63.6595(a)(1)] (22S)

6.1.18. As stated in 40 C.F.R. § 63.6603, the permittee must comply with the following requirements from 40 C.F.R. 63 Subpart ZZZZ, Table 2d for existing stationary RICE located at area sources of HAP emissions:

For each . . .	The permittee must meet the following requirements, except during periods of startup . . .	During periods of startup you must...
1. Non-emergency, non-black start CI stationary RICE ≤300 HP	Change oil and filter every 1,000 hours of operation or annually, whichever comes first; ¹	Minimize the engine's time spent at idle and minimize the engine's startup time at startup to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the non-startup emission limitations apply.
	Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first, and replace as necessary;	
	Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.	

¹ Sources have the option to utilize an oil analysis program as described in 40 C.F.R. § 63.6625 (i) in order to extend the specified oil change requirement in Table 2d of 40 C.F.R. Part 63 Subpart ZZZZ.

[45CSR34, 40 C.F.R. § 63.6603 (a), and Table 2d of 40 C.F.R. 63 Subpart ZZZZ] (22S)

6.1.19. The permittee shall comply with the following requirements:

- a. The permittee must be in compliance with the emission limitations, operating limitations, and other requirements in 40 C.F.R. Part 63 Subpart ZZZZ that apply to the permittee at all times.
- b. At all times the permittee must operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require the permittee to make any further efforts to reduce emissions if required levels have been achieved. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.

[45CSR34, 40 C.F.R. § 63.6605](22S)

6.1.20. The permittee shall demonstrate continuous compliance by doing the following:

- a. The permittee must demonstrate continuous compliance with each emission limitation, operating limitation, and other requirements in Table 2d of 40 C.F.R. 63 Subpart ZZZZ that apply to the permittee according to methods specified in Table 6 of 40 C.F.R. 63 Subpart ZZZZ.

Table 6 states that for work or management practices, the permittee shall operate and maintain the stationary RICE according to the manufacturer's emission related operation and maintenance instructions; or develop and follow their own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions.

- b. The permittee must report each instance in which they did not meet each emission limitation or operating limitation in Table 2d of 40 C.F.R. 63 Subpart ZZZZ. These instances are deviations from the emission

and operating limitations. These deviations must be reported according to the requirements in 40 C.F.R. § 63.6650.

- c. The permittee must also report each instance in which the applicable requirements in Table 8 of 40 C.F.R. 63 Subpart ZZZZ were not met.

[45CSR34, 40 C.F.R. §§63.6640(a), (b) and (e)](22S)

- 6.1.21. The permittee shall meet the applicable general provisions specified in Table 8 of 40 C.F.R. Part 63 Subpart ZZZZ with the exception of 40 C.F.R. §§ 63.7 (b) and (c), 63.8 (e), (f) (4) and (f) (6), 63.9 (b) – (e), (g) and (h) which do not apply per 40 C.F.R. § 63.6645 (a) (5).

[45CSR34, 40 C.F.R. §§63.6665 and 63.6645(a)(5)](22S)

6.2. Monitoring Requirements

- 6.2.1. For the purpose of determining compliance with the opacity limits set forth in Section 6.1.7, the permittee shall perform monthly Method 9 tests of all rock crushing and screening operations at the facility during any month in which the operation is in use. The permittee shall perform these tests in accordance with the test methods and procedures as described in 40 C.F.R. § 60.675 Subpart OOO. The permittee shall maintain records of these opacity tests utilizing the forms given in 40 C.F.R. Part 60 Appendix A. These records shall be maintained on-site for a period of not less than five (5) years and made available upon request to the Director or his designated representatives.

[45CSR13, R13-2475, 5.3.6.]

- 6.2.2. As the owner or operator of an existing non-emergency, non-black start stationary CI RICE with a site rating less than or equal to 300 HP located at an area source of HAP emissions, you must operate and maintain the stationary RICE and after-treatment control device (if any) according to the manufacturer's emission-related written instructions or develop your own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions.

[45CSR34, 40 C.F.R. §63.6625(e)(4)](22S)

- 6.2.3. If you own or operate a stationary CI engine that is subject to the work, operation or management practices in item 1 of Table 2d to 40 C.F.R. Part 63 Subpart ZZZZ, you have the option of utilizing an oil analysis program in order to extend the specified oil change requirement in Table 2d to 40 C.F.R. Part 63 Subpart ZZZZ. The oil analysis must be performed at the same frequency specified for changing the oil in Table 2d to 40 C.F.R. Part 63 Subpart ZZZZ. The analysis program must at a minimum analyze the following three parameters: Total Base Number, viscosity, and percent water content. The condemning limits for these parameters are as follows: Total Base Number is less than 30 percent of the Total Base Number of the oil when new; viscosity of the oil has changed by more than 20 percent from the viscosity of the oil when new; or percent water content (by volume) is greater than 0.5. If all of these condemning limits are not exceeded, the engine owner or operator is not required to change the oil. If any of the limits are exceeded, the engine owner or operator must change the oil within 2 business days of receiving the results of the analysis; if the engine is not in operation when the results of the analysis are received, the engine owner or operator must change the oil within 2 business days or before commencing operation, whichever is later. The owner or operator must keep records of the parameters that are analyzed as part of the program, the results of the analysis, and the oil changes for the engine. The analysis program must be part of the maintenance plan for the engine.

[45CSR34, 40 C.F.R. §63.6625(i)](22S)

6.3. Testing Requirements

- 6.3.1. At such reasonable times as the Director may designate, the operator of any manufacturing process source operation may be required to conduct or have conducted stack tests to determine the particulate matter loading in exhaust gases. Such tests shall be conducted in such manner as the Director may specify and be filed on forms and in a manner acceptable to the Director. The Director, or his duly authorized representative, may at his option witness or conduct such stack tests. Should the Director exercise his option to conduct such tests, the operator will provide all the necessary sampling connections and sampling ports to be located in such manner as the Director may require, power for test equipment and the required safety equipment such as scaffolding, railings and ladders to comply with generally accepted good safety practices.
[45CSR§7-8.1., 45CSR13, R13-2475, 5.1.14.]
- 6.3.2. The Director, or his duly authorized representative, may conduct such other tests as he or she may deem necessary to evaluate air pollution emissions.
[45CSR§7-8.2., 45CSR13, R13-2475, 5.1.15.]
- 6.3.3. The permittee shall meet all applicable testing requirements under 45CSR7 and 40 C.F.R. Part 60 Subpart OOO.
[45CSR13, R13-2475, 5.2.1]

6.4. Recordkeeping Requirements

- 6.4.1. For the purpose of determining compliance with the maximum hourly and annual processing rate set forth in Sections 6.1.1 and 6.1.14, the permittee shall maintain hourly, monthly, and yearly records utilizing the forms given in Attachments A and B of the Appendix. These records shall be maintained on-site for a period of not less than five (5) years and made available upon request to the Director or his designated representatives.
[45CSR13, R13-2475, 5.3.4.]
- 6.4.2. For the purpose of determining compliance with the maximum annual operating limit set forth in Section 6.1.2, the permittee shall maintain hourly, monthly, and yearly records utilizing the forms given in Attachments C and D in the Appendix. These records shall be maintained on-site for a period of not less than five (5) years and made available upon request to the Director or his designated representatives.
[45CSR13, R13-2475, 5.3.5.]
- 6.4.3. The permittee shall meet all applicable record-keeping requirements under 45CSR7 and 40 C.F.R. Part 60 Subpart OOO.
[45CSR13, R13-2475, 5.3.8. and 5.4.1]
- 6.4.4. If the permittee must comply with the emission and operating limitations, the permittee must keep the following records:
- a. A copy of each notification and report submitted to comply with 40 C.F.R. Part 63 Subpart ZZZZ, including all documentation supporting any Initial Notification or Notification of Compliance Status submitted, according to the requirement in 40 C.F.R. § 63.10 (b) (2) (xiv).
 - b. Records of the occurrence and duration of each malfunction of operation (i.e., process equipment) or the air pollution control and monitoring equipment.

- c. Records of performance tests and performance evaluations as required in 40 C.F.R. § 63.10 (b) (2) (viii).
- d. Records of all required maintenance performed on the air pollution control and monitoring equipment.
- e. Records of actions taken during periods of malfunction to minimize emissions in accordance with 40 C.F.R. § 63.6605 (b), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation.

[45CSR34, 40 C.F.R. § 63.6655 (a)](22S)

6.4.5. You must keep the records required in Table 6 of 40 C.F.R. Part 63 Subpart ZZZZ to show continuous compliance with each emission or operating limitation that applies to you.

For each . . .	Complying with the requirement to . . .	You must demonstrate continuous compliance by . . .
9. Existing non-emergency stationary CI RICE ≤300 HP located at an area source of HAP.	a. Work or Management practices	i. Operating and maintaining the stationary RICE according to the manufacturer's emission-related operation and maintenance instructions; or ii. Develop and follow your own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions.

[45CSR34, 40 C.F.R. § 63.6655 (d) and Table 6](22S)

6.4.6. As the owner or operator of an existing stationary RICE located at an area source of HAP emissions subject to management practices as shown in Table 2d to 40 C.F.R. Part 63 Subpart ZZZZ, you must keep records of the maintenance conducted on the stationary RICE in order to demonstrate that you operated and maintained the stationary RICE and after-treatment control device (if any) according to your own maintenance plan.

[45CSR34, 40 C.F.R. §§ 63.6655 (e) and (e)(3)](22S)

6.5. Reporting Requirements

6.5.1. None.

6.6. Compliance Plan

6.6.1. None.

7.0 Active Composting [emission point ID(s): (1E through 6E)]

7.1. Limitations and Standards

7.1.1. Emissions to the atmosphere from the composting of sewage sludge shall not exceed emission limits as set forth in the following table:

Emission Point	Source Description	Control Device	Pollutant	Emission Limits	
				lb/hr	TPY
1E and 2E	1S Active Composting	6,900-sf Pretreatment Biofilter	VOC	0.77	3.35
			Carbon Disulfide*	0.03	0.12
			Triethylamine*	0.68	2.97
	2S Windrow Building Work Area	62,000-sf West Biofilter (1C)	Ammonia	1.44	6.28
Hydrogen Sulfide			0.04	0.16	
3E and 4E	3S Sludge receiving, Mixing, and screening	6,900-sf Pretreatment Biofilter	VOC	0.58	2.50
			Carbon Disulfide*	0.03	0.11
	51,000-sf North Biofilter (2C)	Triethylamine*	0.46	1.98	
		Ammonia	0.54	2.37	
5E	4S Final Product Compost Curing	14,000-sf Compost Curing Building Biofilter (3C)	Hydrogen Sulfide	0.03	0.11
			VOC	0.19	0.80
			Carbon Disulfide*	0.01	0.03
			Triethylamine*	0.16	0.66
			Ammonia	0.25	1.10
			Hydrogen Sulfide	0.01	0.04

* Hazardous Air Pollutant (HAP)

[45CSR13, R13-2480, A.1.]

7.1.2. The permittee shall not process more than 10,000 wet tons of sewage sludge per month at the sewage sludge composting facility.

[45CSR13, R13-2480, A.2.]

7.1.3. When a process or operation results in the discharge of an air pollutant or pollutants which causes or contributes to an objectionable odor, an acceptable control program shall be developed and offered to the Director by the person responsible for the discharge of such air pollutant or pollutants. This control program shall be submitted in the manner prescribed by the Director and within such time as shall be fixed by the Director. If such a control program has been approved by the Director by the issuance of a variance, the person responsible for said discharge shall not be considered to be in violation of 45CSR4 in connection with said discharge so long as the program is observed.

[45CSR§4-6.1, 45CSR13, R13-2480, B.6.]

- 7.1.4. The permittee shall not cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any process source operation which is greater than twenty (20) percent opacity, except as noted in 45CSR§§7-3.2 (Section 7.1.5.), 3.3, 3.4, 3.5, 3.6, and 3.7.
[45CSR§7-3.1, 45CSR13, R13-2480, B.7.]
- 7.1.5. The provisions of Section 7.1.4 [45CSR§7-3.1.] shall not apply to smoke and/or particulate matter emitted from any process source operation which is less than forty (40) percent opacity for any period or periods aggregating no more than five (5) minutes in any sixty (60) minute period.
[45CSR§7-3.2, 45CSR13, R13-2480, B.7.]
- 7.1.6. The permittee shall not cause, suffer, allow or permit any manufacturing process or storage structure generating fugitive particulate matter to operate that is not equipped with a system, which may include, but not be limited to, process equipment design, control equipment design or operation and maintenance procedures, to minimize the emissions of fugitive particulate matter. To minimize means such systems shall be installed, maintained and operated to ensure the lowest fugitive particulate matter emissions reasonably achievable.
[45CSR§7-5.1, 45CSR13, R13-2480, B.7.]
- 7.1.7. The permittee shall maintain particulate matter control of the plant premises, and plant owned, leased or controlled access roads, by paving, application of asphalt, chemical dust suppressants or other suitable dust control measures. Good operating practices shall be implemented and when necessary particulate matter suppressants shall be applied in relation to stockpiling and general material handling to minimize particulate matter generation and atmospheric entrainment.
[45CSR§7-5.2, 45CSR13, R13-2480, B.7.]
- 7.1.8. No person shall cause, suffer, allow or permit particulate matter to be vented into the open air from any type source operation or duplicate source operation, or from all air pollution control equipment installed on any type source operation or duplicate source operation in excess of the quantity specified under the appropriate source operation type in Table 45-7A found at the end of 45CSR7. The allowable particulate matter that can be vented from the 1E through 2E is 41.8 LB/hr.
[45CSR§7-4.1, 45CSR13, R13-2480, B.7.]
- 7.1.9. The permitted facility shall be constructed and operated in accordance with information filed in Permit Application R13-2480 and any amendments thereto. The Director may suspend or revoke a permit if the plans and specifications upon which the approval was based are not adhered to.
[45CSR13, R13-2480, C.3.]

7.2. Monitoring Requirements

- 7.2.1. The permittee shall, on a daily basis, perform the following monitoring:
- a. Check all windrow and biofilter fans and air ducts for leaks and operational problems.
 - b. Check all sewers and leachate and condensate sumps for proper operation.
 - c. Check biofilter irrigation system for leaks, low pressure, and spray pattern to assure proper moisture is maintained in the biofilter media.
 - d. Check the biofilter media for wet and/or dry spots.

- e. Check humidity and temperature of the odorous air entering the biofilter.
- f. Check ammonia levels at the work area, biofilter intake, and biofilter surface.
- g. Time, duration, and tonnage of sludge mixing operations.
- h. Time, duration, and tonnage of screening operations.
- i. Total daily tons of sludge and wood chips processed.
- j. Check all compost windrow temperatures.

[45CSR13, R13-2480, B.1.a-j]

- 7.2.2. The permittee shall, on a monthly basis, record the air pressure at the biofilter fans and air distribution system monitoring locations.

[45CSR13, R13-2480, B.2.b.]

7.3. Testing Requirements

- 7.3.1. The permittee shall, on a monthly basis, perform such tests necessary to verify the biofilter surface emission velocity falls within the design value range for the biofilter, usually 3 to 5 cubic feet per minute (cfm) per square foot (sf). Areas of the biofilter with low emission velocity shall have the biofilter media fluffed or replaced to increase porosity and velocity. High velocity areas shall be compacted or watered to reduce media porosity and as a consequence the emission velocity from those areas.

[45CSR13, R13-2480, B.2.a.]

- 7.3.2. The permittee shall, on a quarterly basis, perform the following tests:

- a. Pull air samples from each biofilter inlet and surface using five-liter Tedlar bags with polypropylene ports or alternate sampling methods as the laboratory may require for the parameter being measured.
- b. Analyze the collected air sample for ammonia, dimethyl sulfide, dimethyl disulfide, carbon disulfide, butyl mercaptan, ethyl mercaptan, methyl mercaptan, hydrogen sulfide, and triethylamine.

[45CSR13, R13-2480, B.3.a-b]

7.4. Recordkeeping Requirements

- 7.4.1. The permittee shall, on a daily basis, keep the following records:

- a. Keep daily operation logs noting the results of all checks made in Section 7.2.1, unusual occurrences, and actions taken. All entries into the operation log shall be dated and initialed by the operator who makes the entry.
- b. Keep biofilter daily operation logs noting all readings, equipment outages, unusual occurrences, and actions taken. All entries into the operation log shall be dated and initialed by the operator who makes the entry.

- c. Keep daily records of all compost windrows, including:
 - i. Daily sludge process tracking log.
 - ii. Daily windrow temperature log showing temperature probe identification, location, temperature, time, and windrow mean temperature.
 - iii. Daily activity report.

[45CSR13, R13-2480, B.1.j-l]

- 7.4.2. The permittee shall, on a monthly basis, keep monthly operation logs noting the results of all checks made in Sections 7.2.2 and 7.3.1, unusual occurrences, and actions taken. All entries into the operation log shall be dated and initialed by the operator who makes the entry.

[45CSR13, R13-2480A, B.2.c.]

- 7.4.3. The permittee shall maintain in a spreadsheet format all quarterly air sample test results required by Section 7.3.2.

[45CSR13, R13-2480, B.3.e.]

- 7.4.4. The permittee shall keep accurate records of the amount of sewage sludge received by the composting facility on a daily basis. These records shall include, at a minimum, the following information:

- a. Time of receipt of each shipment of sewage sludge.
- b. Tons of sludge received for each shipment.
- c. Total daily tons of sludge received.

All entries into the shipment record shall be dated and initialed by the operator who makes the entry.

[45CSR13, R13-2480, B.4.]

- 7.4.5. All records required by Section 7.0 shall be maintained onsite for a period of not less than five (5) years from the date generated. Certified copies of these records shall be made available to the Director of the Division of Air Quality or his or her duly authorized representative upon request.

[45CSR13, R13-2480, B.5.]

- 7.4.6. The permittee shall record biofilter media pH and moisture content on a quarterly basis.

[45CSR13, R13-2480, B.3.c.]

7.5. Reporting Requirements

- 7.5.1. The permittee shall prepare and submit a report to the Director of the Division of Air Quality showing the results of the quarterly air sampling required by Section 7.3.2, removal rate for each pollutant, and summary of the daily monitoring log.

[45CSR13, R13-2480, B.3.d.]

7.6. Compliance Plan

7.6.1. None.

ATTACHMENT A

DAILY/MONTHLY ROCK CRUSHING AND SCREENING OPERATIONS PROCESSING RATE ^{1,2}

Valero Terrestrial Corporation
dba Brooke County Sanitary Landfill
Plant ID No.: 009-00053
Permit No.: R13-2475B

Month: _____ Year: _____

Date	Daily Tons Processed (TPD)	Hours of Operation (hr/day)	Hourly Processing Rate ³ (TPH)	Date	Daily Tons Processed (TPD)	Hours of Operation (hr/day)	Hourly Processing Rate ³ (TPH)
1				17			
2				18			
3				19			
4				20			
5				21			
6				22			
7				23			
8				24			
9				25			
10				26			
11				27			
12				28			
13				29			
14				30			
15				31			
16							
MONTHLY TOTAL							

- ¹ Upon the request of the Director or his/her authorized representatives the CERTIFICATION OF DATA ACCURACY statement appearing on the reverse side of this form must be completed.
- ² This record shall be maintained on site for a period of not less than five (5) years. Certified copies shall be made available, upon request, to the Director or his/her authorized representative.
- ³ Hourly processing rates (TPH) shall be determined by dividing the Daily Tons Crushed (TPD) by the Hours of Operation (hours per day) and shall not exceed 200 TPH.

ATTACHMENT B

**ANNUAL ROCK CRUSHING AND SCREENING OPERATIONS
PROCESSING RATE ^{1, 2}**

**Valero Terrestrial Corporation
dba Brooke County Sanitary Landfill
Plant ID No.: 009-00053
Permit No.: R13-2475B**

Year: _____

MONTH	Monthly Tons Processed (TPM)
January	
February	
March	
April	
May	
June	
July	
August	
September	
October	
November	
December	
TOTAL	
PERMIT LIMIT	30,000 tons

¹ Upon the request of the Director or his/her authorized representatives the CERTIFICATION OF DATA ACCURACY statement appearing on the reverse side of this form must be completed.

² This record shall be maintained on site for a period of not less than five (5) years. Certified copies shall be made available, upon request, to the Director or his/her authorized representative.

ATTACHMENT C

DAILY/MONTHLY 250 HORSEPOWER DIESEL ENGINE USAGE ^{1,2}

**Valero Terrestrial Corporation
dba Brooke County Sanitary Landfill
Plant ID No.: 009-00053
Permit No.: R13-2475B**

Month: _____ Year: _____

Date	Hours of Operation (hr/day)	Date	Hours of Operation (hr/day)
1		17	
2		18	
3		19	
4		20	
5		21	
6		22	
7		23	
8		24	
9		25	
10		26	
11		27	
12		28	
13		29	
14		30	
15		31	
16			
MONTHLY TOTAL			

- ¹ Upon the request of the Director or his/her authorized representatives the CERTIFICATION OF DATA ACCURACY statement appearing on the reverse side of this form must be completed.
- ² This record shall be maintained on site for a period of not less than five (5) years. Certified copies shall be made available, upon request, to the Director or his/her authorized representative.

ATTACHMENT D

ANNUAL 250 HORSEPOWER DIESEL ENGINE USAGE ^{1,2}

**Valero Terrestrial Corporation
dba Brooke County Sanitary Landfill
Plant ID No.: 009-00053
Permit No.: R13-2475B**

Year: _____

MONTH	HOURS OF OPERATION
January	
February	
March	
April	
May	
June	
July	
August	
September	
October	
November	
December	
TOTAL	
PERMIT LIMIT	150 hours

¹ Upon the request of the Director or his/her authorized representatives the CERTIFICATION OF DATA ACCURACY statement appearing on the reverse side of this form must be completed.

² This record shall be maintained on site for a period of not less than five (5) years. Certified copies shall be made available, upon request, to the Director or his/her authorized representative.

ATTACHMENT E

CERTIFICATION OF DATA ACCURACY

I, the undersigned, hereby certify that all information contained in the attached _____, representing the period beginning _____ and ending _____, and any supporting documents appended hereto, is true and correct to the best of my knowledge and that all reasonable efforts have been made to provide the most comprehensive information possible.

Name (Type or Print): _____

Signature ¹: _____

Title: _____

Date: _____

Telephone No.: _____

Fax No.: _____

¹ This form shall be signed by a "Responsible Official." "Responsible Official" means one of the following:

- I. For a corporation: the president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation, or a duly authorized representative of such person if the representative is responsible for the overall operation of one or more manufacturing, production, or operating facilities applying for or subject to a permit and either (i) the facilities employ more than 250 persons or have a gross annual sales or expenditures exceeding \$25 million (in second quarter 1980 dollars), or (ii) the delegation of authority to such representative is approved by the Director;
- II. For a partnership or sole proprietorship; a general partner or the proprietor, respectively;
- III. For a municipality, State, Federal, or other public entity: either a principal executive officer or ranking elected official. For the purposes of this part, a principal executive officer of a Federal agency includes the chief executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., a Regional Administrator of U.S. EPA); or
- IV. The designated representative delegated with such authority and approved in advance by the *Director*.