# Indian River County, Solid Waste Disposal District
# Indian River County Landfill

Facility ID No. 0610015
Indian River County

## Title V Air Operation Permit Renewal

Permit No. 0610015-005-AV
(Renewal of Title V Air Operation Permit No. 0610015-004-AV)

**Permitting Authority:**

State of Florida
Department of Environmental Protection
Division of Air Resource Management
Office of Permitting and Compliance
2600 Blair Stone Road
Mail Station #5505
Tallahassee, Florida 32399-2400

Telephone: (850) 717-9000
Email: DARM_Permitting@dep.state.fl.us

**Compliance Authority:**

Florida Department of Environmental Protection
Southeast District Air Program
3301 Gun Club Rd. MSC7210-1
West Palm Beach FL 33406-3007
Telephone: 561/681-6782
Email: sed_air@dep.state.fl.us

# Title V Air Operation Permit Renewal

Permit No. 0610015-005-AV

## Table of Contents

**Section** **Page Number**

Placard Page ..... 1

I. Facility Information.
A. Facility Description. ..... 2
B. Summary of Emissions Units. ..... 2
C. Applicable Regulations. ..... 2

II. Facility-wide Conditions. ..... 4

III. Emissions Units and Conditions.
A. EU 003 – Municipal Solid Waste Landfill ..... 6
B. EU 004 – Emergency Standby Generator (805 HP) ..... 13
C. EU 005 – Landfill Gas Utility Flare ..... 16

IV. Appendices. ..... See Appendices Document
Appendix A, Glossary.
Appendix I, List of Insignificant Emissions Units and/or Activities.
Appendix NESHAP 40 CFR 61, Subpart A – General Provisions.
Appendix NESHAP 40 CFR 61, Subpart M – National Emissions Standards for Asbestos
Appendix NSPS, 40 CFR 60, Subpart A – General Provisions.
Appendix NSPS, 40 CFR 60, Subpart WWW – Standards of Performance for Municipal Solid Waste Landfills.
Appendix NSPS, 40 CFR 60, Subpart IIII – Standards of Performance for Stationary Compression Ignition Internal Combustion Engines
Appendix RR, Facility-wide Reporting Requirements.
Appendix TR, Facility-wide Testing Requirements.
Appendix TV, Title V General Conditions.

Referenced Attachments. ..... Separate Document (At End)
Table H, Permit History.

# Florida Department of Environmental Protection

Bob Martinez Center
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

Rick Scott
Governor

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Lt. Governor

Ryan E. Matthews
Interim Secretary

**PERMITTEE:**
Indian River County, Solid Waste Disposal District
1325 74th Avenue Southwest
Vero Beach, Florida 32968

Permit No. 0610015-005-AV
Indian River County Landfill
Facility ID No. 0610015
Title V Air Operation Permit Renewal

The purpose of this permit is to renew the Title V air operation permit for the above referenced facility. The existing Indian River County Landfill is located in Indian River County at 1325 74th Avenue S.W., Vero Beach, Florida. UTM Coordinates are: Zone 17, 551.28 East and 3050.79 North. Latitude is: 27° 34' 48" North, and Longitude is: 80° 28' 49" West.

The Title V air operation permit is issued under the provisions of Chapter 403, Florida Statutes (F.S.), and Florida Administrative Code (F.A.C.) Chapters 62-4, 62-210, and 62-213. The above named permittee is hereby authorized to operate the facility in accordance with the terms and conditions of this permit.

Executed in Tallahassee, Florida.

0610015-005-AV Effective Date: June 1, 2017
Renewal Application Due Date: October 19, 2021
Expiration Date: June 1, 2022

David Lyle Read, P.E.
2017.06.01 12:40:48 -04'00'

*For:*
Syed Arif, P.E., Program Administrator
Office of Permitting and Compliance
Division of Air Resource Management

SA/dlr

## SECTION I. FACILITY INFORMATION.

### Subsection A. Facility Description.

The Indian River County Landfill, located in southeastern Indian River County, is engaged in active landfilling of solid waste generated within Indian River County. Initial waste acceptance at the site occurred in 1978. The total site area encompasses approximately 276 acres and consists of Class I disposal areas, a construction and demolition (C&D) debris cell, a biosolids dewatering facility, yard waste processing area, household hazardous waste transfer facility, a recovered materials transfer facility, tire storage, and necessary site ancillary infrastructure (including stormwater management pond and a borrow pond area). The total permitted Class I waste design capacity of the site exceeds 2.5 million megagrams (Mg) or 2.5 million cubic meters ($m^3$), making it a Title V major source under 40 CFR 60 Subpart WWW.

The Class I disposal area (EU 003) consists of three Class I (municipal waste) segments and an infill Class I area between Segments 1 and 2. Landfilling of Class I and C&D waste occurs in active disposal Segment 3, located directly east and adjacent to Segment 2 with integrated infrastructure. There is a C&D debris cell devoted to landfilling clean concrete. Landfilling operations began in 1978 in the Segment 1 area of the site, currently closed. Current landfilling of Class I and C&D waste in Segment 3, Cell 1, proceeds at a rate of approximately 151,000 Mg yearly (approximately 530 tons per day). At final build out Segment 3 is permitted to contain 8 total disposal cells, construction has been approved for all eight cells. Waste in place exceeds 2.5 million Mg; waste in place at the end of 2016 was estimated at 4 million Mg (4.41 million tons); it is estimated, based on anticipated waste acceptance rates, by the end of 2021 waste in place will approximate 4.82 million Mg (5.3 million tons).

An active gas collection and control system (GCCS), installed voluntarily in 2004, consisting of a network of vertical and horizontal extraction wells, manifold piping, three blowers, and an open utility flare for gas combustion, serves Segment 1, Segment 2, and the infill area. Prior to combustion in the flare (EU 005), landfill gas (LFG) is routed through a knockout pot for condensate and particulate removal. After installation of the GCCS, Tier 2 sampling to determine the site-specific landfill gas concentration of non-methane organic compounds (NMOC) was performed. An emergency generator (EU 004) is used to provide power to the biosolids dewatering facility located on site, which accepts biosolids residuals from the Indian River County West Regional Wastewater Treatment Plant (WRWTP). No portion of the site operates as a bioreactor. Asbestos containing wastes are also accepted at the site and disposed with Class I wastes in Segment 3, Cell 1 through daily operations.

### Subsection B. Summary of Emissions Units.

| EU No. | Brief Description |
|---|---|
| *Regulated Emissions Units* | |
| 003 | Municipal Solid Waste Landfill |
| 004 | Emergency Standby Generator (805 horsepower (HP)) |
| 005 | Landfill Gas Utility Flare |

Also included in this permit are miscellaneous insignificant emissions units and/or activities ancillary to the solid waste collection and disposal operations at the site (see below and Appendix I, List of Insignificant Emissions Units and/or Activities and Appendix U, List of unregulated Emissions Units and/or Activities).

### Subsection C. Applicable Regulations.

Based on the Title V air operation permit renewal application received on December 29, 2016, this facility is not a major source of hazardous air pollutants (HAP). The existing facility is not a Prevention of Significant Deterioration (PSD) major source of air pollutants in accordance with Rule 62-212.400, F.A.C. A summary of applicable regulations is shown in the following table.

| Regulation | EU No(s). |
|---|---|
| *Federal Rule Citations* | |
| 40 CFR 60, Subpart A, New Source Performance Standards (NSPS) General Provisions | 003, 004 |
| 40 CFR 60, Subpart WWW, Standards of Performance for Municipal Solid Waste | 003 |
| 40 CFR 60, Subpart IIII, Standards of Performance for Stationary Compression Ignition Internal Combustion Engines | 004 |
| 40 CFR 61, Subpart A, National Emission Standards of Hazardous Air Pollutants (NESHAP) General Provisions | 003 |
| 40 CFR 61, Subpart M, National Emission Standard for Asbestos | 003 |
| *State Rule Chapter Citations* | |
| Chapter 62-4, F.A.C., Permits | All |
| Chapter 62-204, F.A.C., Air Pollution Control − General Provisions | 003, 004 |
| Chapter 62-210, F.A.C., Stationary Sources − General Requirements | 003, 005 |
| Chapter 62-213, F.A.C., Operation Permits for Major Sources of Air Pollution | All |
| Chapter 62-296, F.A.C., Stationary Sources – Emission Standards | All |
| Chapter 62-297, F.A.C., Stationary Sources − Emissions Monitoring | All |

Table of Contents

**The following conditions apply facility-wide to all emission units and activities:**

**FW1.** Appendices. The permittee shall comply with all documents identified in Section IV, Appendices, listed in the Table of Contents. Each document is an enforceable part of this permit unless otherwise indicated. [Rule 62-213.440, F.A.C.]

**Emissions and Controls**

**FW2.** **Not federally Enforceable.** Objectionable Odor Prohibited. No person shall cause, suffer, allow or permit the discharge of air pollutants, which cause or contribute to an objectionable odor. An "objectionable odor" means any odor present in the outdoor atmosphere which by itself or in combination with other odors, is or may be harmful or injurious to human health or welfare, which unreasonably interferes with the comfortable use and enjoyment of life or property, or which creates a nuisance. [Rule 62-296.320(2) and 62-210.200(Definitions), F.A.C.]

**FW3.** Odor Remediation Plan. The facility shall be operated to control objectionable odors in accordance with subsection 62-296.320(2), F.A.C. After being notified by the Department that objectionable odors have been confirmed beyond the landfill property boundary, the permittee shall:

a. Immediately take steps to reduce the objectionable odors. Such steps may include applying or increasing initial cover, reducing the size of the working face, and ceasing operations in the areas where odors have been detected;
b. Submit to the Department for approval an odor remediation plan for the gas releases. The plan shall describe the nature and extent of the problem and the proposed long-term remedy. The remedy shall be initiated within 30 days of approval.
c. Implement a routine odor monitoring program to determine the timing and extent of any off-site odors, and to evaluate the effectiveness of the odor remediation plan.

[Rule 62-701.530(3)(b), F.A.C.]

**FW4.** General Volatile Organic Compounds (VOC) Emissions or Organic Solvents (OS) Emissions. The permittee shall allow no person to store, pump, handle, process, load, unload or use in any process or installation, volatile organic compounds or organic solvents without applying known and existing vapor emission control devices or systems deemed-necessary and ordered by the Department. [Rule 62-296.320(1), F.A.C.]

*{Permitting Note: Nothing is deemed necessary and ordered at this time.}*

**FW5.** General Visible Emissions. No person shall cause, let, permit, suffer or allow to be discharged into the atmosphere the emissions of air pollutants from any activity equal to or greater than 20% opacity. This regulation does not impose a specific testing requirement. [Rule 62-296.320(4)(b), F.A.C.]

**FW6.** Unconfined Particulate Matter. No person shall cause, let, permit, suffer or allow the emissions of unconfined particulate matter from any activity, including vehicular movement; transportation of materials; construction; alteration; demolition or wrecking; or industrially related activities such as loading, unloading, storing or handling; without taking reasonable precautions to prevent such emissions. Reasonable precautions to prevent emissions of unconfined particulate matter at this facility include:

a. Paving and maintenance of roads, parking areas, and yards.
b. Application of water to control emissions from such activities as traffic on unpaved roads, landfilling operations, and exposed areas of the landfill cells.
c. Removal of particulate matter from roads and other paved areas to prevent re-entrainment.
d. Landscaping inactive areas of landfill cells and stormwater runoff conveyance systems.

[Rule 62-296.320(4)(c), F.A.C.; and, proposed by applicant in Title V air operation permit renewal application received December 29, 2016.]

**Reports and Fees**

See Appendix RR, Facility-wide Reporting Requirements, for additional details and requirements.

**FW7.** Electronic Annual Operating Report and Title V Annual Emissions Fees. The information required by the Annual Operating Report for Air Pollutant Emitting Facility [Including Title V Source Emissions Fee Calculation] (DEP Form No. 62-210.900(5)) shall be submitted by April 1 of each year, for the previous calendar year, to the Department of Environmental Protection's Division of Air Resource Management. Each Title V source shall submit the annual operating report using the DEP's Electronic Annual Operating Report (EAOR) software, unless the Title V source claims a technical or financial hardship by submitting DEP Form No. 62-210.900(5) to the DEP Division of Air Resource Management instead of using the reporting software. Emissions shall be computed in accordance with the provisions of subsection 62-210.370(2), F.A.C. Each Title V source must pay between January 15 and April 1 of each year an annual emissions fee in an amount determined as set forth in subsection 62-213.205(1), F.A.C. The annual fee shall only apply to those regulated pollutants, except carbon monoxide (CO) and greenhouse gases, for which an allowable numeric emission-limiting standard is specified in the source's most recent construction permit or operation permit. Upon completing the required EAOR entries, the EAOR Title V Fee Invoice can be printed by the source showing which of the reported emissions are subject to the fee and the total Title V Annual Emissions Fee that is due. The submission of the annual Title V emissions fee payment is also due (postmarked) by April 1st of each year. A copy of the system-generated EAOR Title V Annual Emissions Fee Invoice and the indicated total fee shall be submitted to: **Major Air Pollution Source Annual Emissions Fee, P.O. Box 3070, Tallahassee, Florida 32315-3070.** Additional information is available by accessing the Title V Annual Emissions Fee On-line Information Center at the following Internet web site: http://www.dep.state.fl.us/air/emission/tvfee.htm. [Rules 62-210.370(3), 62-210.900 & 62-213.205, F.A.C.; and, Section 403.0872(11), Florida Statutes (2013)]

*{Permitting Note: Resources to help you complete your AOR are available on the electronic AOR (EAOR) website at: http://www.dep.state.fl.us/air/emission/eaor. If you have questions or need assistance after reviewing the information posted on the EAOR website, please contact the Department by phone at (850) 717-9000 or email at eaor@dep.state.fl.us.}*

*{Permitting Note: The Title V Annual Emissions Fee form (DEP Form No. 62-213.900(1)) has been repealed.* ***A separate Annual Emissions Fee form is no longer required to be submitted by March 1st each year.****}*

**FW8.** Annual Statement of Compliance. The permittee shall submit an annual statement of compliance to the compliance authority at the address shown on the cover of this permit and to the US. EPA at the address shown below within 60 days after the end of each calendar year during which the Title V air operation permit was effective. (See also Appendix RR, Conditions RR1 and RR7.) [Rules 62-213.440(3)(a)2. & 3. and (b), F.A.C.]

U.S. Environmental Protection Agency, Region 4
Atlanta Federal Center
61 Forsyth Street, SW
Atlanta, Georgia 30303
Attn: Air Enforcement Branch

**FW9.** Prevention of Accidental Releases (Section 112(r) of CAA). If, and when, the facility becomes subject to 112(r), the permittee shall:

a. Submit its Risk Management Plan (RMP) to the Chemical Emergency Preparedness and Prevention Office (CEPPO) RMP Reporting Center. Any Risk Management Plans, original submittals, revisions or updates to submittals, should be sent electronically through EPA's Central Data Exchange system at the following address: https://cdx.epa.gov. Information on electronically submitting risk management plans using the Central Data Exchange system is available at: http://www2.epa.gov/rmp. The RMP Reporting Center can be contacted at: RMP Reporting Center, Post Office Box 10162, Fairfax, VA 22038, Telephone: (703) 227-7650.

b. Submit to the permitting authority Title V certification forms or a compliance schedule in accordance with Rule 62-213.440(2), F.A.C.

[40 CFR 68]

**FW10.** Semi-Annual Monitoring Reports. The permittee shall monitor compliance with the terms and conditions of this permit and shall submit reports of any deviations from the requirements of these conditions at least every six (6) months. All instances of deviations from permit requirements must be clearly identified in such reports, including reference to the specific requirement and the duration of such deviation. All reports shall be accompanied by a certification by a responsible official, pursuant to subsection 62-213.420(4), F.A.C. (See also Conditions RR2. – RR4. of Appendix RR, Facility-wide Reporting Requirements, for additional reporting requirements related to deviations.) [Rule 62-213.440(1)(b)3.a., F.A.C.]

*{Permitting Note: EPA has clarified that, pursuant to 40 CFR 70.6(a)(3), the word "monitoring" is used in a broad sense and means monitoring (i.e., paying attention to) the compliance of the source with all emissions limitations, standards, and work practices specified in the permit.}*

**Table of Contents**

## Subsection A. Emissions Unit 003

**The specific conditions in this section apply to the following emissions unit:**

| EU No. | Brief Description |
|---|---|
| 003 | Municipal Solid Waste Landfill |

This emissions unit (EU 003) consists of three total Class I waste closed and active disposal segments and one infill area. Segment 1 is a 20-acre, unlined disposal unit and is the earliest constructed disposal area; waste acceptance began in 1978 and the Segment was initially closed in 1991 with an 8-12-inch compacted clay cap. The infill area is approximately 7.5-acres in area, which bridges the divide that runs north-south between disposal Segments 1 and 2. A C&D debris side slope expansion (north, west, and south slopes) was constructed and filled in 2005 and closed with a 2-ft layer of soil and vegetation. Segment 2, a partially closed 38-acre area east of Segment 1, was constructed in 1988 with a geomembrane bottom liner. Permitted Segment 3 is 76 acres, as planned at build-out it will be constructed in a series of 8 approximately equal sized cells, with bottom liner and leachate collection system tie-in planned for future cell construction and operation. Cell 1 of this segment, directly adjacent to Segment 2, was constructed in 2013, employs a double liner, and is the active Class I disposal unit on site accepting waste in daily operations. The design capacity of the landfill exceeds 2.5 million Mg and as such it is subject to NSPS 40 CFR 60 Subpart WWW, Standards of Performance for Municipal Solid Waste Landfills. An unlined C&D cell is active and operates on an additional 19-acre area on the eastern portion of the site, clean concrete is currently the only material disposed in the cell; additional C&D debris is landfilled along with MSW in Cell 1 of Segment 3. Waste filling operations proceed at a rate of approximately 348 tons per day MSW and 119 tons per day C&D debris, both disposed in the site's active Class I cell (Segment 3, Cell 1).

An active GCCS was installed voluntarily (calculated uncontrolled potential NMOC emissions are below the 50 Mg/year threshold implicating mandatory GCCS installation under 40 CFR 60, Subpart WWW) in 2004. The system was expanded in 2006 when nine additional vertical extraction wells were installed and connected to the flare station and again in 2009 as part of partial closure of Segments 1 and 2B. Currently, LFG is collected from Segments 1, 2, and the infill area and routed to an open utility flare; the GCCS is equipped with three 1,000 standard cubic feet per minute (scfm) capacity blowers to generate vacuum and facilitate gas movement. The mean LFG flow rate to the flare station for 2016 was approximately 311 scfm.

The results of the Tier 2 sampling, conducted on October 20 and 21, 2016, were used to determine a weighted average (considering the relative contributions of disposal areas) site-specific concentration of 176.1 parts per million by volume (ppmv) NMOC in landfill gas generated at Class I areas of the Indian River County Landfill (i.e., excluding the C&D cell). The study results were used by the facility to estimate a NMOC generation rate of 22.43 Mg/year for 2016, below the regulatory threshold of 50 Mg/year, therefore the site is not subject to the gas collection and control requirements of 40 CFR 60, Subpart WWW. Projected NMOC generation for 2021, anticipating waste acceptance rates increasing at a constant rate, was estimated to be 25.22 Mg/year.

The active landfilling of asbestos containing materials subjects the site to compliance with 40 CFR 61, Subpart M, National Emissions Standards for Asbestos.

*{Permitting Note: This emissions unit is regulated pursuant to 40 CFR 60, Subpart A – General Provisions, adopted and incorporated by reference in Rule 62-204.800(8)(d), F.A.C., and 40 CFR Part 60, Subpart WWW – Standards of Performance for Municipal Solid Waste Landfills, adopted and incorporated by reference in Rule 62-204.800(7)(b)76, F.A.C. Because asbestos-containing waste is accepted at this landfill, the facility is also subject to regulation under 40 CFR 61, Subpart M – National Emissions Standards for Asbestos, adopted and incorporated by reference in Rule 62-204.800(10)(b)8., F.A.C. This landfill is not subject to regulation under 40 CFR 63, Subpart AAAA - National Emission Standards for Hazardous Air Pollutants (NESHAP) from Municipal Solids Waste Landfills since current (and near future projections) emissions of NMOC emissions are less than 50 Mg/year.}*

**Essential Potential to Emit (PTE) Parameters**

**A.1.** Hours of Operation. This emissions unit may operate continuously (8,760 hours/year). [Rule 62-210.200(PTE), F.A.C.]

**A.2.** Emissions Unit Operating Rate Limitation After Testing. See the related testing provisions in Appendix TR, Facility-wide Testing Requirements. [Rule 62-297.310(3), F.A.C.]

**Operational Standards**

**A.3.** Operational Standards for Active Asbestos Waste Disposal. Because this facility receives asbestos-containing waste material from: asbestos mills; manufacturing, fabricating, demolition, renovation, and spraying operations; and operations that convert asbestos-containing waste material into non-asbestos (asbestos-free) material, the permittee shall meet the following requirements:

a. Either there must be no visible emissions to the outside air from any active waste disposal site where asbestos-containing waste material has been deposited, or the requirements of paragraph c. or d. of this condition must be met.

b. Unless a natural barrier adequately deters access by the general public, either warning signs and fencing must be installed and maintained as follows, or the requirements of paragraph c.(1) of this condition must be met.

(1) Warning signs must be displayed at all entrances and at intervals of 100 meters (330 feet) or less along the property line of the site or along the perimeter of the sections of the site where asbestos-containing waste material is deposited. The warning signs must:

(a) Be posted in such a manner and location that a person can easily read the legend; and

(b) Conform to the requirements of 51 centimeters (cm) × 36 cm (20 inches×14 inches) upright format signs specified in 29 CFR 1910.145(d)(4) and this paragraph; and
[Note: 29 CFR 1910.145(d)(4) *Caution signs*. The standard color of the background shall be yellow; and the panel, black with yellow letters. Any letters used against the yellow background shall be black. The colors shall be those of opaque glossy samples as specified in Table 1 of ANSI Z53.1-1967 or Table 1 of ANSI Z535.1-2006(R2011), incorporated by reference in 29 CFR 1910.6. Link to 29 CFR 1910.145]

(c) Display the following legend in the lower panel with letter sizes and styles of a visibility at least equal to those specified in this paragraph.

| Legend | Notation |
|---|---|
| Asbestos Waste Disposal Site | 2.5 cm (1 inch) Sans Serif, Gothic or Block. |
| Do Not Create Dust | 1.9 cm (3/4 inch) Sans Serif, Gothic or Block. |
| Breathing Asbestos is Hazardous to Your Health | 14 Point Gothic. |

Spacing between any two lines must be at least equal to the height of the upper of the two lines.

(2) The perimeter of the disposal site must be fenced in a manner adequate to deter access by the general public.

(3) Upon request and supply of appropriate information, the Department will determine whether a fence or a natural barrier adequately deters access by the general public.

c. Rather than meet the no visible emission requirement of paragraph a. of this condition, at the end of each operating day, or at least once every 24-hour period while the site is in continuous operation, the asbestos-containing waste material that has been deposited at the site during the operating day or previous 24-hour period shall:

(1) Be covered with at least 15 cm (6 inches) of compacted non-asbestos-containing material, or

(2) Be covered with a resinous or petroleum-based dust suppression agent that effectively binds dust and controls wind erosion. Such an agent shall be used in the manner and frequency recommended for the particular dust by the dust suppression agent manufacturer to achieve and maintain dust control. Other equally effective dust suppression agents may be used upon prior approval by the Department. For purposes of this paragraph, any used, spent, or other waste oil is not considered a dust suppression agent.

d. Rather than meet the no visible emission requirement of paragraph a. of this condition, use an alternative emissions control method that has received prior written approval by the EPA. As prescribed by 40 CFR 61.149(c)(2), to obtain approval for an alternative method, a written application must be submitted to the EPA demonstrating that the following criteria are met:
   (1) The alternative method will control asbestos emissions equivalent to currently required methods.
   (2) The suitability of the alternative method for the intended application.
   (3) The alternative method will not violate other regulations.
   (4) The alternative method will not result in increased water pollution, land pollution, or occupational hazards.

e. For all asbestos-containing waste material received, the permittee shall:
   (1) Maintain waste shipment records, using a form similar to that shown in Figure 4 of 40 CFR 61.149 [Link to 40 CFR 61.149], and include the following information:
      (a) The name, address, and telephone number of the waste generator.
      (b) The name, address, and telephone number of the transporter(s).
      (c) The quantity of the asbestos-containing waste material in $m^3$ (cubic yards).
      (d) The presence of improperly enclosed or uncovered waste, or any asbestos-containing waste material not sealed in leak-tight containers. Report in writing to the local, State, or EPA Regional office responsible for administering the asbestos NESHAP program for the waste generator (identified in the waste shipment record), and, if different, the local, State, or EPA Regional office responsible for administering the asbestos NESHAP program for the disposal site, by the following working day, the presence of a significant amount of improperly enclosed or uncovered waste. Submit a copy of the waste shipment record along with the report.
      (e) The date of the receipt.
   (2) As soon as possible and no longer than 30 days after receipt of the waste, send a copy of the signed waste shipment record to the waste generator.
   (3) Upon discovering a discrepancy between the quantity of waste designated on the waste shipment records and the quantity actually received, attempt to reconcile the discrepancy with the waste generator. If the discrepancy is not resolved within 15 days after receiving the waste, immediately report in writing to the local, State, or EPA Regional office responsible for administering the asbestos NESHAP program for the waste generator (identified in the waste shipment record), and, if different, the local, State, or EPA Regional office responsible for administering the asbestos NESHAP program for the disposal site. Describe the discrepancy and attempts to reconcile it, and submit a copy of the waste shipment record along with the report.
   (4) Retain a copy of all records and reports required by this paragraph for at least five years.

f. Maintain, until closure, records of the location, depth and area, and quantity in cubic meters (cubic yards) of asbestos-containing waste material within the disposal site on a map or diagram of the disposal area.

g. Upon closure, comply with all the provisions of 40 CFR 61.151.

h. Submit to the Department, upon closure of the facility, a copy of records of asbestos waste disposal locations and quantities.

i. Furnish upon request, and make available during normal business hours for inspection by the Department, all records required under this permit.

j. Notify the Department in writing at least 45 days prior to excavating or otherwise disturbing any asbestos-containing waste material that has been deposited at a waste disposal site and is covered. If the excavation will begin on a date other than the one contained in the original notice, notice of the new start

date must be provided to the Department at least ten working days before excavation begins and in no event shall excavation begin earlier than the date specified in the original notification. Include the following information in the notice:

(1) Scheduled starting and completion dates.
(2) Reason for disturbing the waste.
(3) Procedures to be used to control emissions during the excavation, storage, transport, and ultimate disposal of the excavated asbestos-containing waste material. If deemed necessary, the Department may require changes in the emission control procedures to be used.
(4) Location of any temporary storage site and the final disposal site.

[29 CFR 1910.145(d)(4), 40 CFR 61.149(c)(2), and 40 CFR 61.154]

**Emission Standards**

**A.4.** NMOC Emission Rate. The permittee shall calculate an NMOC emission rate for the landfill using the procedures specified in 40 CFR 60.754 (see **Specific Condition A.5**)

a. If the calculated NMOC emission rate is less than 50 Mg/year, the permittee shall:
   (1) Submit an annual NMOC emissions rate report to the compliance authority, except as provided in 40 CFR60.757(b)(1)(ii) (see **Specific Condition A.7a.**).
   (2) Recalculate the NMOC emission rate annually using the procedures specified in 40 CFR 60.754(a)(1) (see **Specific Condition A.5**) until such time as the calculated NMOC emission rate is equal to or greater than 50 Mg/year, or the landfill is closed.
      (a) If the NMOC emission rate, upon recalculation, is equal to or greater than 50 Mg/year, the permittee shall install a collection and control system in compliance with 40 CFR 60.752(b)(2). [Link to 40 CFR 60.752]
      (b) If the landfill is permanently closed, a closure notification shall be submitted to the Department as provided for in 40 CFR 60.757(d).
b. If the calculated NMOC emission rate is equal to or greater than 50 Mg/year, the permittee shall:
   (1) Submit a collection and control system design plan (see **Specific Condition A.7**) prepared by a professional engineer to the Department within 1-year that meets the requirements of 40 CFR 752(b)(2)(i). (Link to 40 CFR 60.752)
   (2) Install a collection and control system that captures the gas generated within the landfill as required by 40 CFR60.752(b)(2)(ii)(A) or (B) and (b)(2)(iii) within 30 months after the first annual report in which the emission rate equals or exceeds 50 Mg/year, unless Tier 2 or Tier 3 sampling demonstrates that the emission rate is less than 50 Mg/year, as specified in 40 CFR 60.757(c)(1) or (2). (see **Specific Condition A.7**)

[40 CFR 60.752(b)]

**Test Methods and Procedures**

**A.5.** Calculation of the NMOC Emission Rate. The landfill permittee shall calculate the NMOC emission rate using the following equation:

$$M_{NMOC} = \sum_{i=1}^{n} 2\,k\,L_o M_i \left(e^{-kt_i}\right)\left(C_{NMOC}\right)\left(3.6\times10^{-9}\right)$$

Where,
$M_{NMOC}$ = Total NMOC emission rate from the landfill, Mg/year
K = methane generation rate constant, year$^{-1}$ = 0.05
$L_o$ = methane generation potential, m$^3$/Mg solid waste = 170 cm/Mg
$M_i$ = mass of solid waste in the i$^{th}$ section, Mg
$t_i$ = age of the i$^{th}$ section, years
$C_{NMOC}$ = concentration of NMOC, ppmv as hexane = 4000 ppmv as hexane

$3.6 \times 10^{-9}$ = conversion factor

The mass of non-degradable solid waste may be subtracted from the total mass of solid waste in a particular section of the landfill when calculating the value for $M_i$ if documentation of the nature and amount of such wastes is maintained. [40 CFR 60.754(a)(1)(i)]

**Recordkeeping and Reporting Requirements**

**A.6.** Reporting Schedule. The following reports and notifications shall be submitted to the Compliance Authority:

| Report | Reporting Deadline | Related Condition(s) |
|---|---|---|
| NMOC Emission Rate Reports | Initially and annually thereafter | **A.7** |
| Collection and Control System Design Plan | Within 1-year of exceeding 50 Mg NMOC generation | **A.8** |
| Facility Closure Report | Within 30 days of Waste Acceptance Cessation | **A.9** |
| Asbestos Disturbance Notice | 45 days prior to disturbance | **A.10** |

[Rule 62-213.440(1)(b), F.A.C.]

**A.7.** NMOC Emission Rate Reports. The permittee shall submit an NMOC emission rate report to the Department annually, except as provided for in in **paragraphs a.** or **c.** of this condition. The Department may request such additional information as may be necessary to verify the reported NMOC emission rate.

a. The NMOC emission rate report shall contain an annual or 5-year estimate of the NMOC emission rate calculated using the formula and procedures provided in **Specific Condition A.5.** If the estimated NMOC emission rate as reported in the annual report to the Department is less than 50 Mg/year in each of the next 5 consecutive years, the permittee may elect to submit an estimate of the NMOC emission rate for the next 5-year period in lieu of the annual report. This estimate shall include the current amount of solid waste-in-place and the estimated waste acceptance rate for each year of the 5-years for which an NMOC emission rate is estimated. All data and calculations upon which this estimate is based shall be provided to the Department. This estimate shall be revised at least once every 5-years. If the actual waste acceptance rate exceeds the estimated waste acceptance rate in any year reported in the 5-year estimate, a revised 5-year estimate shall be submitted to the Department. The revised estimate shall cover the 5-year period beginning with the year in which the actual waste acceptance rate exceeded the estimated waste acceptance rate.

b. The NMOC emission rate report shall include all the data, calculations, sample reports and measurements used to estimate the annual or 5-year emissions.

c. The permittee is exempted from the requirements of **paragraphs a.** and **b.** of this condition, after the installation of a collection and control system in compliance with 40 CFR60.752(b)(2) (see **Specific Condition A.4**), during such time as the collection and control system is in operation and in compliance with 40 CFR 60.753 and 60.755.

[40 CFR 60.757(b)]

**A.8.** Collection and Control System Design Plan. The permittee subject to the provisions of 40 CFR 60.752(b)(2)(i) (see **Specific Condition A.4b.(1)**) shall submit a collection and control system design plan to the Department within 1 year of the first report required under 40 CFR 60.757(b) (see **Specific Condition A.7**) in which the emission rate equals or exceeds 50 Mg/year, except as follows:

a. If the permittee elects to recalculate the NMOC emission rate after Tier 2 NMOC sampling and analysis as provided in 40 CFR 60.754(a)(3) and the resulting rate is less than 50 Mg/year, annual periodic reporting shall be resumed, using the Tier 2 determined site-specific NMOC concentration, until the

calculated emission rate is equal to or greater than 50 Mg/year or the landfill is closed. The revised NMOC emission rate report, with the recalculated emission rate based on NMOC sampling and analysis, shall be submitted within 180 days of the first calculated exceedance of 50 Mg/year. [Link to 40 CFR 60, Subpart WWW]

b. If the permittee elects to recalculate the NMOC emission rate after determining a site-specific methane generation rate constant (k), as provided in Tier 3 in 40 CFR 60.754(a)(4), and the resulting NMOC emission rate is less than 50 Mg/year, annual periodic reporting shall be resumed. The resulting site-specific methane generation rate constant (k) shall be used in the emission rate calculation until such time as the emissions rate calculation results in an exceedance. The revised NMOC emission rate report based on the provisions of 40 CFR 60.754(a)(4) and the resulting site-specific methane generation rate constant (k) shall be submitted to the Department within 1 year of the first calculated emission rate exceeding 50 Mg/year.

[40 CFR 60.757(c)]

**A.9.** Facility Closure Report. The permittee shall submit a closure report to the Department within 30 days of waste acceptance cessation. The Department may request additional information as may be necessary to verify that permanent closure has taken place in accordance with the requirements of 40 CFR 258.60. Link to 40 CFR 258.60. If a closure report has been submitted to the Department, no additional wastes may be placed into the landfill without filing a notification of modification as described under 40 CFR 60.7(a)(4).
[40 CFR 60.757(d)]

**A.10.** Asbestos Disturbance Notification. The permittee must notify the compliance office in writing at least 45 days prior to excavating or otherwise disturbing any asbestos-containing waste material that has been deposited at a waste disposal site and is covered. (See **Specific Condition A.3.j.**) If the excavation will begin on a date other than the one contained in the original notice, notice of the new start date must be provided to the compliance office at least 10 working days before excavation begins and in no event shall excavation begin earlier than the date specified in the original notification. Include the following information in the notice:

a. Scheduled starting and completion dates.
b. Reason for disturbing the waste.
c. Procedures to be used to control emissions during the excavation, storage, transport, and ultimate disposal of the excavated asbestos-containing waste material. If deemed necessary, the Department may require changes in the emission control procedures to be used.
d. Location of any temporary storage site and the final disposal site.

[40 CFR 61.154(j)]

**A.11.** Records Retention. The permittee shall keep for at least 5 years up-to-date, readily accessible, on-site records of the design capacity report that subjected the landfill to the requirements of 40 CFR Part 60, Subpart WWW, the current amount of solid waste in-place, and the year-by-year waste acceptance rate. Off-site records may be maintained if they are retrievable within 4 hours. Either paper copy or electronic formats are acceptable. [40 CFR 60.758(a)]

**A.12.** Asbestos Records and Reports. Permittee shall maintain records and reports in accordance with 40 CFR 61.154(e) (see **Specific Condition A.3**) and for a period of at least 5-years. [40 CFR 61.154(e)]

**A.13.** Asbestos Location Records. The permittee shall maintain, until closure, location records of the asbestos containing waste subject to 40 CFR 61.154 in accordance with 40 CFR 61.154(f) (see **Specific Condition A.3**). [40 CFR 61.154(f)]

**A.14.** Other Reporting Requirements. See Appendix RR, Facility-Wide Reporting Requirements, for additional reporting requirements. [Rule 62-213.440(1)(b), F.A.C.]

**Additional Permitting Requirements**

**A.15.** 40 CFR 60, Subpart A – General Provisions. In addition to the above requirements, the permittee must also comply with the requirements contained in 40 CFR 60, Subpart A - General Provisions. [Rule 62-213.440, F.A.C. and 40 CFR 60, Subpart A] Link to 40 CFR 60, Subpart A

**A.16.** 40 CFR 61, Subpart A – General Provisions. In addition to the above requirements, the permittee must also comply with the requirements contained in 40 CFR 61, Subpart A - General Provisions. [Rule 62-213.440, F.A.C. and 40 CFR 61, Subpart A] Link to 40 CFR 61, Subpart A

**Table of Contents**

**The specific conditions in this section apply to the following emissions unit:**

| EU No. | **Brief Description** |
|---|---|
| 004 | Emergency Standby Generator (805 HP) |

EU 004 is an 805 HP (605 kilowatt (kW)) Emergency Standby Generator used to provide electricity during power outages to the on-site bio-solids dewatering facility through combustion of diesel fuel with a heat content of approximately 137 MMBtu per 1,000 gallons. EU 004 is not part of a demand response program and is not to be used for peak shaving or planned for non-emergency operation, except that non-emergency and non-maintenance operation will not exceed 500 hours/year for each engine.

The following table provides important information about the engines:

| Engine Brake HP (kW) | Model Year | Displacement liters/cylinder (l/c) | Engine Manufacturer | Model No./ Serial No. |
|---|---|---|---|---|
| 805 HP (605 kW) | 2008 | 18.1 | Caterpillar | C18 |

*{Permitting Note: This stationary emergency compression ignition reciprocating internal combustion engine (CI RICE) is regulated under 40 CFR 63, Subpart ZZZZ, NESHAP for Stationary RICE and 40 CFR 60, Subpart IIII, NSPS for Stationary CI RICE, adopted in Rules 62.204.800(11)(b) & (8)(b), F.A.C., respectively. This permit section addresses a "new" stationary emergency CI RICE with a displacement of greater than or equal to 10 liters per cylinder and less than 30 liters per cylinder, located at an area source of HAP, that has been modified, reconstructed or commenced construction on or after 6/12/2006, and that has a post-2007 model year. In accordance with the provisions of 40 CFR 63.6590(c)(1), meeting the requirements of 40 CFR 60, Subpart IIII, satisfies compliance with the requirements of Subpart ZZZZ.}*

**Essential Potential to Emit (PTE) Parameters**

**B.1.** Authorized Fuel. These Stationary RICE must use diesel fuel that meets the following requirements for non-road diesel fuel:

a. *Sulfur Content*. The sulfur content shall not exceed = 15 ppm = 0.0015% by weight (ultra low sulfur).
b. *Cetane and Aromatic*. The fuel must have a minimum cetane index of 40 or must have a maximum aromatic content of 35 volume percent.

[40 CFR 60.4207(b) and 40 CFR 80.510(b)]

**B.2.** Restricted Hours of Operation.

a. *Emergency Situations*. There is no time limit on the use of emergency stationary RICE in emergency situations.
b. *Maintenance and Testing*. This RICE is authorized to operate for the purpose of maintenance checks and readiness testing, provided that the tests are recommended by federal, state or local government, the manufacturer, the vendor, or the insurance company associated with the engine. Maintenance checks and readiness testing of such units is limited to 100 hours per year. The owner or operator may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that Federal, State, or local standards require maintenance and testing of emergency RICE beyond 100 hours per year. [Rule 62-204.800(8)(b)80, F.A.C.; and, 40 CFR 60.4211(f)(2)(i)]
c. *Non-emergency Situations*. These engines may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing and emergency demand response provided in paragraph b., above. The 50 hours per year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to supply power to an electric

grid or otherwise supply power as part of a financial arrangement with another entity. [40 CFR 60.4211(f)(3)]
[40 CFR 60.4211(f)(3)]

**Emissions Standards**

**B.3.** NMHC + $NO_X$ Emissions. Emissions of non-methane hydrocarbons (NMHC) plus nitrogen oxide ($NO_X$) shall not exceed: 6.4 grams per kilowatt hour (g/kW-hour), (Tier 2).
[40 CFR 60.4205(b), 40 CFR 60.4202(a)(2) and 40 CFR 89.112(a)]

**B.4.** CO Emissions. CO emissions shall not exceed: 3.5 g/kW-hour, (Tier 2).
[40 CFR 60.4205(b), 40 CFR 60.4202(a)(2) and 40 CFR 89.112(a)]

**B.5.** PM Emissions. Particulate matter (PM) emissions shall not exceed: 0.20 g/kW-hour, (Tier 3).
[40 CFR 60.4205(b), 40 CFR 60.4202(a)(2) and 40 CFR 89.112(a)]

**Monitoring Requirements**

**B.6.** Hour Meter. The permittee must install a non-resettable hour meter on each engine if one is not already installed. [40 CFR 60.4209(a)]

**Testing and Compliance Requirements**

**B.7.** Operation and Maintenance. The permittee must operate and maintain these engines according to the manufacturer's emission-related written instructions. In addition, owners and operators may only change those settings that are permitted by the manufacturer. This RICE must be maintained and operated to meet the emissions limits in **Specific Conditions B.3 - B.5** over the entire life of the engine.
[40 CFR 60.4206 & 4211(a)]

**B.8.** Engine Certification Requirements. The permittee must comply with the emissions standards specified in **Specific Conditions B.3 - B.5** by having purchased an engine certified by the manufacturer to meet those limits. The engine must have been installed and configured according to the manufacturer's emission-related specifications, except as permitted in **Specific Condition B.9.** [40 CFR 60.4211(c)]

**B.9.** Compliance Requirements Due to Loss of Certification. If you do not install, configure, operate, and maintain your engine and control device according to the manufacturer's emission-related written instructions, or you change emission-related settings in a way that is not permitted by the manufacturer, you must keep a maintenance plan and records of conducted maintenance and must, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. In addition, you must conduct an initial performance test to demonstrate compliance with the applicable emission standards within 1-year of startup, or within 1-year after an engine and control device is no longer installed, configured, operated, and maintained in accordance with the manufacturer's emission-related written instructions, or within 1-year after you change emission-related settings in a way that is not permitted by the manufacturer. You must conduct subsequent performance testing every 8,760 hours of engine operation or 3 years, whichever comes first, thereafter to demonstrate compliance with the applicable emission standards.
[40 CFR 60.4211(c) & (g)(3)]

**B.10.** Testing Requirements. In the event performance tests are required pursuant to **Specific Condition B.9.**, the following requirements shall be met:

a. *Testing Procedures*. The performance test must be conducted according to the in-use testing procedures in 40 CFR Part 1042, Subpart F. Link to Subpart F

b. *NTE Standards*. Exhaust emissions from these engines must not exceed the not-to-exceed (NTE) numerical requirements, rounded to the same number of decimal places as the applicable standard (STD) in **Specific Conditions B.3. - B.5.**, determined from the following equation:

**NTE Requirement for Each Pollutant = (1.25) x (STD) (Eq. 1)**

[40 CFR 60.4212(a) & (c)]

**B.11.** Common Testing Requirements. Unless otherwise specified, tests shall be conducted in accordance with the requirements and procedures specified in Appendix TR, Facility-Wide Testing Requirements, of this permit. [Rule 62-297.310, F.A.C.]

**Records and Reports**

**B.12.** Testing Notification. At such time that the requirements of **Specific Condition B.10.** become applicable, the permittee shall notify the compliance authority of the date by which the initial compliance test must be performed. [Rule 62-213.440(1), F.A.C.]

**B.13.** Hours of Operation Records. The permittee must keep records of the operation of the engine in emergency and non-emergency services that are recorded through the non-resettable hour meter. The permittee must record the time of operation of the engine and the reason the engine was in operation during that time.
[Rule 62-204.800(8)(b)80, F.A.C.; and, 40 CFR 60.4214(b)]

**B.14.** Maintenance Records. To demonstrate conformance with the manufacturer's written instructions for maintaining the certified engine and to document when compliance testing must be performed pursuant to **Specific Conditions B.8, B.9, & B.10.**, the permittee must keep the following records:

a. Engine manufacturer documentation and certification indicating compliance with the standards.
b. A copy of the manufacturer's written instructions for operation and maintenance of the certified engine.
c. A written maintenance log detailing the date and type of maintenance performed on the engine, as well as any deviations from the manufacturer's written instructions.

[Rule 62-213.440(1), F.A.C.; and, 40 CFR 60.4211(c) & (g)]

**B.15.** Other Reporting Requirements. See Appendix RR, Facility-Wide Reporting Requirements, for additional reporting requirements. [Rule 62-213.440(1)(b), F.A.C.]

**General Provisions**

**B.16.** 40 CFR 60 Subpart A, General Provisions. The permittee shall comply with the applicable requirements of 40 CFR 60 Subpart A, General Provisions, as specified below. Link to 40 CFR 60, Subpart A - General Provisions.

| General Provisions Citation | Subject of Citation |
|---|---|
| 40 CFR 60.1 | General applicability of the General Provisions |
| 40 CFR 60.2 | Definitions (see also 40 CFR 60.4219) |
| 40 CFR 60.3 | Units and abbreviations |
| 40 CFR 60.4 | Address |
| 40 CFR 60.5 | Determination of construction or modification |
| 40 CFR 60.6 | Review of plans |
| 40 CFR 60.9 | Availability of information |
| 40 CFR 60.10 | State Authority |
| 40 CFR 60.12 | Circumvention |
| 40 CFR 60.14 | Modification |
| 40 CFR 60.15 | Reconstruction |
| 40 CFR 60.16 | Priority list |
| 40 CFR 60.17 | Incorporations by reference |
| 40 CFR 60.19 | General notification and reporting requirements |

[40 CFR 60.4218]

**Table of Contents**

**The specific conditions in this section apply to the following emissions unit:**

| EU No. | Brief Description |
|---|---|
| 005 | Landfill Gas Utility Flare |

The 3,000 scfm open, non-assisted candlestick-type utility flare, manufactured by LFG Specialties, Inc., is used to control gaseous emissions from the landfill (EU 003). The flare controls odor, VOC, HAP, and NMOC and is designed to achieve 98% destruction of NMOC and VOC. The flare is equipped with a temperature and LFG flow monitoring system manufactured by Yokogawa, that records temperature, LFG flow rate, flare on and off time and blower run time and a Dwyer-Magnehelic differential pressure indicator. The flare is equipped with three HSI centrifugal exhaust landfill gas blowers with a maximum design flow rate of 1,000 scfm (at a pressure loss of 40 inches of water column) each, a condensate knockout pot, valves, interconnected piping, a Flame-Trol III automatic flare controller and a device used to monitor landfill gas flow rate to the flare. Flare stack height is 41 feet with a 12-inch diameter designed to combust LFG at approximately 1,400 degrees Fahrenheit (°F). All landfill gas collected from the landfill is routed to the flare through a network of collection wells and manifold piping. The flare entered service in 2004 and was relocated in 2012 to accommodate construction of Segment 3, Cell 1.

*{Permitting Note: The flare is not currently subject to the provisions for flares in the NSPS General Provisions in 40 CFR 60, Subpart A. If the landfill (EU 003) becomes subject to the requirement to install and operate a landfill gas collection and control system under a state plan referring to 40 CFR 60, Subpart Cf, or under the NSPS in 40 CFR 60, Subpart WWW, the flare will become subject to the flare requirements in 40 CFR 60, Subpart A.}*

**Essential Potential to Emit (PTE) Parameters**

**C.1.** Permitted Capacity. The maximum landfill gas flow rate shall not exceed 3,000 scfm of landfill gas. [Rule 62-210.200(PTE), F.A.C.; and Permit No. 0610015-006-AC]

**C.2.** Hours of Operation: The hours of operation are not restricted, i.e., 8,760 hours/year. [Rule 62-210.200(PTE), F.A.C.; and Permit No. 0610015-006-AC]

**C.3.** Circumvention. No person shall circumvent any air pollution control device, or allow the emission of air pollutants without the applicable air pollution control device operating properly. [Rule 62-210.650, F.A.C.]

**Emission Limitations and Standards**

**C.4.** General Visible Emissions. The flare shall not exceed 20% opacity. This condition does not impose a specific testing requirement; however, testing in accordance with **Specific Condition C.7** could be required if the Department has reason to believe that the general visible emissions rule is being exceeded. [Rule 62-296.320(4)(b), F.A.C.]

**Monitoring of Operations**

**C.5.** TRS Emissions Monitoring Requirement. The permittee shall continue to monitor total reduced sulfur (TRS) from the landfill gas after the 5-year actual emission reporting period. If it is determined that the landfill becomes a PSD major source for emissions of sulfur dioxide ($SO_2$), the permittee shall submit a minor air construction permit application within 180 days of discovery to install add-on controls to treat the landfill gas for sulfur (S) content prior to flaring. [Rule 62-4.070(3), F.A.C.; and Permit No. 0610015-006-AC]

**Test Methods and Procedures**

**C.6.** Landfill Gas Sulfur Content Tests. During each calendar year (January 1st to December 31st), the landfill gas shall be tested for TRS. [Rule 62-4.070(3), F.A.C.; and Permit No. 0610015-006-AC]

**C.7.** Special Compliance Tests. When the Department, after investigation, has good reason (such as complaints, increased visible emissions, or questionable maintenance of control equipment) to believe that any applicable emission standard contained in a Department rule or in a permit issued pursuant to those rules is being violated, it may require the permittee to conduct compliance tests which identify the nature and quantity of pollutant emissions from the emission unit and to provide a report on the results of said tests to the Department. [Rule 62-297.310(7)(b), F.A.C.]

**C.8.** Test Methods. Required tests shall be performed in accordance with the following reference methods.

| Method | Description of Method and Comments |
|---|---|
| 9 | Visual Determination of the Opacity of Emissions from Stationary Sources |
| ASTM D5504-12 or D7493 | Determination of Sulfur Compounds in Natural Gas and Gaseous Fuels |

The above methods are described in Appendix A of 40 CFR 60 and are adopted by reference in Rule 62-204.800, F.A.C. No other methods may be used unless prior written approval is received from the Department. [Rules 62-204.800, F.A.C.; and Appendix A of 40 CFR 60]

**C.9.** Common Testing Requirements. Unless otherwise specified, tests shall be conducted in accordance with the requirements and procedures specified in Appendix TR, Facility-Wide Testing Requirements, of this permit. [Rule 62-297.310, F.A.C.]

**Recordkeeping and Reporting Requirements**

**C.10.** Reporting Schedule. The following reports and notifications shall be submitted to the Compliance Authority:

| Report | Reporting Deadline | Related Condition(s) |
|---|---|---|
| Annual Reports | 30 days after the end of the annual period | **C.11** |
| Actual Emissions Reporting | 60 days after the end of each calendar year for 5-years | **C.12** |
| Compliance Test Reports | 45 days after test | **C.13** |

[Rule 62-213.440(1)(b), F.A.C.]

**C.11.** Annual Operating Report. The calculated emissions of $SO_2$ shall be included in the facility's Annual Operating Report. The $SO_2$ calculations shall be based on the landfill gas TRS measurements as required in **Specific Condition C.6**. [Rule 62-4.070(3), F.A.C.; and Permit No. 0610015-006-AC]

**C.12.** Actual Emissions Reporting. This permit is based on an analysis of the potential emissions from the flare and avoided the requirements of subsection 62-212.400(4) through (12), F.A.C. for $SO_2$. Therefore, pursuant to Rule 62-212.300(1)(e), F.A.C., the permittee is subject to the following monitoring, reporting and recordkeeping provisions.

a. The permittee shall monitor the emissions of any PSD pollutant that the Department identifies could increase as a result of the construction or modification and that is emitted by any emissions unit that could be affected; and, using the most reliable information available, calculate and maintain a record of the annual emissions, in tons/year on a calendar year basis, for a period of 5-years following resumption of regular operations after the change. Emissions shall be computed in accordance with the provisions in Rule 62-210.370, F.A.C., which are provided in Appendix TV of this permit.

b. The permittee shall report to the Department within 60 days after the end of each calendar year during the 5-year period setting out the unit's annual emissions during the calendar year that preceded submission of the report. The report shall contain the following:
   (1) The name, address and telephone number of the owner or operator of the major stationary source;
   (2) The annual emissions calculations pursuant to the provisions of 62-210.370, F.A.C., which are provided in Appendix TV of this permit;
   (3) If the emissions differ from the preconstruction projection, an explanation as to why there is a difference; and
   (4) Any other information that the permittee wishes to include in the report.

c. The information required to be documented and maintained pursuant to subparagraphs 62-212.300(1)(e)1 and 2, F.A.C., shall be submitted to the Department, which shall make it available for review to the general public.

d. The permittee shall compute and report annual emissions in accordance with Rule 62-210.370(2), F.A.C. as provided by Appendix TV of this permit. For this project, the permittee shall use the following methods in reporting the actual annual $SO_2$ emissions for the flare:
   (1) When calculating the actual annual emissions of $SO_2$ for the flare, the permittee shall use the following information: TRS concentration in the landfill gas as determined by ASTM D5504-12 or D7493 site-specific landfill gas testing; and the approximate capacity landfill gas flow rate of flare station. The total actual annual $SO_2$ emissions from the flare shall then be computed using the following equation:

$$\dot{M}_{SO_2} = \frac{(C_S)(Q_g)(MW_{SO_2})(2.2)}{(MW_S)(10^6)(8.205 * 10^{-5})(1000)(273 + T)(2000)}$$

   Where,
   $\dot{M}_{SO_2}$ = annual mass release emissions of pollutant $SO_2$, tons/year
   $Q_g$ = yearly actual volumetric landfill gas flow rate, $m^3$/year
   Cs = measured sulfur concentration determined in annual TRS testing, ppmv
   $MW_{SO2}$ = molecular weight $SO_2$, 64.0584 lb/lbmol
   $MW_S$ = molecular weight of sulfur, 32.065 lb/lbmol
   T = temperature of landfill gas, degree Celsius (°C) (if unknown use 25°C)
   $8.205*10^{-5}$ = ideal gas law constant, $m^3$- atmosphere (atm)/gram mol-Kelvin (K)
   1,000 = conversion factor, gram/kilogram (g/kg)
   2.2 = conversion factor, lb/kg
   2,000 = conversion factor, lb/ton
   $10^6$ = correction for ppm S concentration
   Source: US EPA. (1998). AP-42 2.4 Municipal Solid Waste Landfills.
   (2) As defined in Rule 62-210.370(2), F.A.C., the permittee shall use a more accurate methodology if it becomes available.

[Rules 62-4.070, 62-212.300(1)(e) and 62-210.370, F.A.C.; and Permit No. 0610015-006-AC]

**C.13.** Other Reporting Requirements. See Appendix RR, Facility-Wide Reporting Requirements, for additional reporting requirements. [Rule 62-213.440(1)(b), F.A.C.]

**Table of Contents**