Broward County Solid Waste and Recycling Services
Southwest Regional Landfill

Facility ID No. 0112370
Broward County

Title V Air Operation Permit Renewal

Permit No. 0112370-006-AV
Renewal of Title V Air Operation Permit No. 0112370-005-AV

Permitting & Compliance Authority:

State of Florida
Department of Environmental Protection
Air Resource Management, Southeast District

400 North Congress Avenue, 3rd Floor
West Palm Beach, Florida 33401-2913

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PERMITTEE:
Broward County Waste and Recycling Services
One North University Drive, Suite 400
Plantation, Florida 33324

Permit No. 0112370-006-AV
Southwest Regional Landfill
Facility Id No. 0112370
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 Southwest Regional Landfill is located in Broward County at 7101 SW 205 Avenue, Unincorporated Broward County, Florida. UTM Coordinates are: Zone 17, 557.94 East and 2880.14 North. Latitude is: 26° 3′ 40″ North; and, Longitude is: 80° 25′ 20″ 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, 62-213. The above named permittee is hereby authorized to operate the facility in accordance with the terms and conditions of this permit.

Effective Date: Pending
Renewal Application Due Date: Exp. DATE -225, 2003
Expiration Date: Eff. DATE + 5 years

_____ _____
Jill S. Creech, P.E. Date
Southeast District Director

JSC/JL/st/lh

SECTION I. FACILITY INFORMATION.

Subsection A. Facility Description.

This facility consists of a Municipal Solid Waste Facility and Gas Collection and Control System that was installed in 1993 and 1994 in Cells 1A, 1B, and 3A. The candlestick flare has an operating capacity of 750 scfm of landfill gas. The flare is operated and maintained in accordance with the manufacturer recommended practices. The landfill began accepting waste September 1988 at the time it was in operation under the name of Broward County Interim Contingency Landfill. On April 24, 2007 a construction permit was issued for the replacement of the 1,500 scfm flare with two 750 scfm. Later on September 8, 2008 a Title V Air Operation Permit was issued to operate the Municipal Solid Waste landfill and a Gas Collection System with a 750-scfm Candlestick open flare.

The landfill is subject to 40 CFR 60 Subpart WWW because the permitted build out capacity is greater than 2.5 million megagrams. The landfill is filling at rate such that the amount of nonmethane organic compounds (NMOC) produced is well below 50 megagrams per year, which is the threshold for the installation of a gas collection system and flare. The existing collection system and 750 scfm Candlestick flare is used for gas migration odor control only. The landfill will demonstrate compliance with Subpart WWW by monitoring the weight of incoming waste and projecting gas generation rates based on past and projected incoming waste rates. A gas collection system for the purpose of Subpart WWW will not be required until it is demonstrated that NMOC generation rate is greater than 50 megagrams per year.

The facility operates an emergency generator powered by a diesel reciprocating internal combustion engine (RICE). The generator is a Model 200ROZ271 Kohler Diesel Emergency Generator, Serial No. 252242, used to provide power to the facility during outages. This engine presumably was manufactured in 1989 or 1990. The engine is subject to the requirements of 40 CFR 63, Subpart ZZZZ and is classified as an existing, emergency CI engine, by the subpart.

Subsection B. Summary of Emissions Units.

EU No.	Brief Description
Regulated Emissions Units	
001	Municipal Solid Waste Landfill and Gas Collection System with a 750-scfm Candlestick flare

Subsection C. Applicable Regulations.

Based on the Title V Air Operation Permit renewal application received January 24, 2013, this facility is NOT a major source of hazardous air pollutants (HAP). A summary of applicable regulations is shown in the following table.

Regulation	EU No(s).
40 CFR 60, Subpart A NSPS General Provisions	001
40 CFR 63, Subpart ZZZZ	002
40 CFR 60, Subpart WWW	001
Chapter 62-4, F.A.C.	001
Chapter 62-210, F.A.C.	001
Chapter 62-204, F.A.C.	001
Chapter 62-297, F.A.C.	001
Chapter 62-213, F.A.C.	001
Chapter 62-296, F.A.C.	001
Rule 62-297, F.A.C.	001

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. 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.}

FW4. 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. EPA Method 9 is the method of compliance pursuant to Chapter 62-297, F.A.C. This regulation does not impose a specific testing requirement. [Rule 62-296.320(4)(b)1, F.A.C.]

FW5. 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. Posting and enforcing speed limits on landfill roads.
b. Water application to unpaved roads.

[Rule 62-296.320(4)(c), F.A.C.; and, proposed by applicant in Title V Air Operation permit application received January 24, 2013]

Annual Reports and Fees

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

FW6. Annual Operating Report. The permittee shall submit an annual report that summarizes the actual operating rates and emissions from this facility. Annual operating reports shall be submitted to the Compliance Authority by April 1st of each year. [Rule 62-210.370(3), F.A.C.]

FW7. Annual Emissions Fee Form and Fee. The annual Title V emissions fees are due (postmarked) by March 1st of each year. The completed form and calculated fee shall be submitted to: Major Air Pollution Source Annual Emissions Fee, P.O. Box 3070, Tallahassee, Florida 32315-3070. The forms are available for download 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. [Rule 62-213.205, F.A.C.]

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 within 60 days after the end of each calendar year during which the Title V permit was effective. [Rules 62-213.440(3)(a)2. & 3. and (3)(b), F.A.C.]

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 to: 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., and 40 CFR 68]

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

EU No.	Brief Description
001	Municipal Solid Waste Landfill and Gas Collection System with a 750-scfm Candlestick flare

This facility is an existing Municipal Solid Waste Landfill for which construction, reconstruction or modification was commenced before May 30, 1991. The landfill is subject to 40 CFR 60 Subpart WWW because the permitted build out capacity is greater than 2.5 million megagrams. The landfill is filling at rate such that the amount of nonmethane organic compounds (NMOC) produced is well below 50 megagrams per year, which is the threshold for the installation of a gas collection system and flare. There is an existing collection system and 750 scfm Candlestick flare that is used for gas migration odor control only. The landfill will demonstrate compliance with Subpart WWW by monitoring the weight of incoming waste and projecting gas generation rates based on past and projected incoming waste rates. A gas collection system for the purpose of Subpart WWW will not be required until it is demonstrated that NMOC generation rate is greater than 50 megagrams per year.

Applicable Requirements and Emission Limitations and Standards

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

Standards for air emissions from municipal solid waste landfills

A.2. NMOC Emission Rate: The owner or operator of an MSW landfill having a design capacity equal to or greater than 2.5 million megagrams by mass or 2.5 million cubic meters, shall either comply with paragraph (2) or calculate an NMOC emission rate for the landfill using the procedures specified in Specific Condition **A.8**. The NMOC emission rate shall be recalculated annually, except as provided in Specific Condition **A.11.(1)(ii).** The owner or operator of an MSW landfill subject to this subpart 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.

(1) If the calculated NMOC emission rate is less than 50 megagrams per year, the owner or operator shall:

(i) Submit an annual emission report to the Administrator, except as provided in Specific Condition **A.11.(1)(ii)** and;

(ii) Recalculate the NMOC emission rate annually using the procedures specified in Specific Condition **A.8.** until such time as the calculated NMOC emission rate is equal to or greater than 50 megagrams per year, or the landfill is closed.

(A) If the NMOC emission rate upon recalculation required in paragraph (b)(1)(ii) of this section, is equal to or greater than 50 megagrams per year, the owner or operator shall install a collection and control system in compliance with paragraph (b)(2) of this section.

(B) If the landfill is permanently closed, a closure notification shall be submitted to the Administrator as provided in Specific Condition A.12.

(2) If the calculated NMOC emission rate is equal to or greater than 50 megagrams per year, the owner or operator shall:

(i) Submit a collection and control system design plan prepared by a professional engineer to the Administrator within 1 year:

(ii) Install a collection and control system that captures the gas generated within the landfill as required by paragraphs (b)(2)(ii)(A) and (b)(2)(iii) of this section within 30 months after the first annual report in which the emission rate equals or exceeds 50 megagrams per year, unless Tier 2 or Tier 3 sampling demonstrates that the emission rate is less than 50 megagrams per year, as specified in 40 CFR 60.757(c)(1) or (2).

{Permitting Note: The facility installed an active collection and control system for odor control}

(A) An active collection system shall:

(*1*) 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;
(*2*) Collect gas from each area, cell, or group of cells in the landfill in which the initial solid waste has been placed for a period of:
(*i*) 5 years or more if active; or
(*ii*) 2 years or more if closed or at final grade.
(*3*) Collect gas at a sufficient extraction rate;
(*4*) Be designed to minimize off-site migration of subsurface gas.
(B) Not Applicable:
(iii) Route all the collected gas to a control system that complies with the requirements in either paragraph (40 CFR 60.60754 (b)(2)(iii).
(A) (Not applicable)
(B) (Not Applicable)
(C) (Not Applicable)
(iv) Operate the collection and control device installed to comply with this subpart in accordance with the provisions of 40 CFR 60.753, 60.755 and 60.756.
[40 CFR 60.752(b)(i)-(iv), and Rule 62-204.800, F.A.C.]

Removal of the Collection and Control System

A.3. The collection and control system may be capped or removed provided that all the conditions of paragraphs (A), (B), and (C) are met:

(A) The landfill shall be a closed landfill as defined in 40 CFR 60.751. A closure report shall be submitted to the Administrator as provided in 40 CFR 60.757(d);

(B) The collection and control system shall have been in operation a minimum of 15 years; and

(C) Following the procedures specified in 40 CFR 60.754(b), the calculated NMOC gas produced by the landfill shall be less than 50 megagrams per year on three successive test dates. The test dates shall be no less than 90 days apart, and no more than 180 days apart.
[Rule 62-204.800, F.A.C., & 40 CFR 60.752(b)(2)(v)]

{Permitting Note: The start state for the 15 years specified in A.3.(B) will be the day that the collection system is required by 40 CFR 60.752 (b)(2)(ii)(A) and (b)(2)(iii).}

Closure of Landfill

A.4. When a MSW landfill subject to 40 CFR 60, Subpart WWW is closed, the owner or operator is no longer subject to the requirement to maintain an operating permit under 40 CFR 70 or 71 for the landfill if the landfill is not otherwise subject to the requirements of either part 70 or 71 and if either of the following conditions are met:

(1) The landfill was never subject to the requirement for a control system under 40 CFR 60.752(b)(2); or
(2) The owner or operator meets the conditions for control system removal specified in 40 CFR 60.752(b)(2)(v).
[Rule 62-204.800, F.A.C., & 40 CFR 60.752(d)]

Operational Standards for Collection and Control Systems.

A.5. The owner or operator of an MSW landfill with a gas collection and control system used to comply with the provisions of Specific Condition **A.2** shall:

(a) Operate the collection system such that gas is collected from each area, cell, or group of cells in the MSW landfill in which solid waste has been in place for:
(1) 5 years or more if active; or
(2) 2 years or more if closed or at final grade.
[Rule 62-204.800, F.A.C., & 40 CFR 60.753(a)]

Collection System Venting Requirements.

A.6. Operate the system such that all collected gases are vented to a control system designed and operated in compliance with Specific Condition **A.2.** 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.
[Rule 62-204.800, F.A.C., & 40 CFR 60.753(e)]

Requirement for Continuous Operation

A.7. Operate the control or treatment system at all times when the collected gas is routed to the system.
[Rule 62-204.800, F.A.C. & 40 CFR 60.753(f)]

Removal of the Collection and Control System.

A.8. After the installation of a collection and control system in compliance with 40 CFR 60.755, the owner or operator shall calculate the NMOC emission rate for purposes of determining when the system can be removed as provided in 40 CFR 60.752(b)(2)(v), using the following equation:

$$M_{NMOC} = 1.89 \times 10^{-3} Q_{LFG} C_{NMOC}$$

where,

M_{NMOC} = mass emission rate of NMOC, megagrams per year

Q_{LFG} = flow rate of landfill gas, cubic meters per minute

C_{NMOC} = NMOC concentration, parts per million by volume as hexane

(1) The flow rate of landfill gas, Q_{LFG}, shall be determined by measuring the total landfill gas flow rate at the common header pipe that leads to the control device using a gas flow measuring device calibrated according to the provisions of section 4 of Method 2E of appendix A of this part.

(2) The average NMOC concentration, C_{NMOC}, shall be determined by collecting and analyzing landfill gas sampled from the common header pipe before the gas moving or condensate removal equipment using the procedures in Method 25C or Method 18 of appendix A of this part. If using Method 18 of appendix A of this part, the minimum list of compounds to be tested shall be those published in the most recent Compilation of Air Pollutant Emission Factors (AP–42). The sample location on the common header pipe shall be before any condensate removal or other gas refining units. The landfill owner or operator shall divide the NMOC concentration from Method 25C of appendix A of this part by six to convert from C_{NMOC} as carbon to C_{NMOC} as hexane.

(3) The owner or operator may use another method to determine landfill gas flow rate and NMOC concentration if the method has been approved by the Administrator.

[Rule 62-204.800, F.A.C., & 40 CFR 60.754(b)]

Recordkeeping and Reporting Requirements

A.9. 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.11
Facility Closure Report	Within 30 days of Waste acceptance Cessation	A.12

A.10. Other Reporting Requirements: See Appendix RR, Facility-Wide Reporting Requirements, for additional reporting requirements. [Rule 62-213.400(1)(b)]

A.11. NMOC Emission Rate Report: Each owner or operator subject to the requirements of this subpart shall submit an NMOC emission rate report to the Administrator initially and annually thereafter, except as

provided for in paragraphs (1)(ii). The Administrator may request such additional information as may be necessary to verify the reported NMOC emission rate.

(1) The NMOC emission rate report shall contain an annual or five-year estimate of the NMOC emission rate.

(i) NMOC emission rate reports shall be submitted annually, except as provided for in paragraphs (1)(ii).

(ii) If the estimated NMOC emission rate as reported in the annual report to the Administrator is less than 50 megagrams per year in each of the next five consecutive years, the owner or operator may elect to submit an estimate of the NMOC emission rate for the next five-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 five years for which an NMOC emission rate is estimated. All data and calculations upon which this estimate is based shall be provided to the Administrator. This estimate shall be revised at least once every five years. If the actual waste acceptance rate exceeds the estimated waste acceptance rate in any year reported in the five-year estimate, a revised five-year estimate shall be submitted to the Administrator. The revised estimate shall cover the five-year period beginning with the year in which the actual waste acceptance rate exceeded the estimated waste acceptance rate.

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

(3) Each owner or operator subject to the requirements of this subpart is exempted from the requirements of paragraphs (1) and (2), after the installation and in compliance operation of a collection and control system. [40 CFR 60.757]

{Permitting Note: The NMOC emission report submitted with the permit application 0112370-006-AV meets the requirement for the year 2013. The next NMOC emission report may be submitted at time of permit renewal unless the acceptance rate increases from those shown in report that was submitted with the application. The reporting will return to annual if there is an increase in the acceptance rate.}

A.12. Closure Report: Each owner or operator of a controlled landfill shall submit a closure report to the Administrator within 30 days of waste acceptance cessation. The Administrator 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. If a closure report has been submitted to the Administrator, no additional wastes may be placed into the landfill without filing a notification of modification as described under 40 CFR 60.7(a)(4).
[Rule 62-204.800, F.A.C. and 40 CFR 60.757(d)]

A.13. Equipment Removal Report: Each owner or operator of a controlled landfill shall submit an equipment removal report to the Administrator 30 days prior to removal or cessation of operation of the control equipment.

(1)The equipment removal report shall contain all of the following items:

(i) A copy of the closure report submitted in accordance with Specific Condition **A.12**.

(ii) A copy of the initial performance test report demonstrating that the 15 year minimum control period has expired; and

(iii) Dated copies of three successive NMOC emission rate reports demonstrating that the landfill is no longer producing 50 megagrams or greater of NMOC per year.

(2) The Administrator may request such additional information as may be necessary to verify that all of the conditions for removal in Specific Condition **A.3**. have been met.

[Rule 62-204.800, F.A.C. & 40 CFR 60.757(e)]

A.14. Capacity and Acceptance Reports: Each owner or operator of a MSW landfill subject to the provisions of Specific Condition **A.2.** shall keep for at least 5 years up-to-date, readily accessible, on-site records of the design capacity report which triggered 40 CFR 60.752(b), 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.

[Rule 62-204.800, F.A.C., & 40 CFR 60758(a)]

A.15. Design Capacity Calculations: Landfill owners or operators who convert design capacity from volume to mass or mass to volume to demonstrate that landfill design capacity is less than 2.5 million megagrams or 2.5 million cubic meters, as provided in the definition of "design capacity", shall keep readily accessible, on-site records of the annual recalculation of site-specific density, design capacity, and the supporting documentation. Off-site records may be maintained if they are retrievable within 4 hours. Either paper copy or electronic formats are acceptable.
[Rule 62-204.800, F.A.C., & 40 CFR 60.758(f)]

A.16. Title V Requirement: When a MSW landfill subject to 40 CFR 60, Subpart WWW is closed, the owner or operator is no longer subject to the requirement to maintain an operating permit under part 70 or 71.
[40 CFR 60.752(d)]

Candlestick Flare:

A.17. Emissions Unit Operating Rate Limitation After Testing: See the related testing provisions in Appendix TR, Facility-wide Testing Requirements. [Rule 62-297.310(2), F.A.C.]

A.18. Methods of Operation (Fuels): The fuels that are allowed to be burned in this unit are landfill gas, or propane. [Rule 62-213.410, F.A.C.]

A.19. Hours of Operation. This emissions unit may operate continuously (8,760 hours/year). [Rule 62-210.200(PTE), F.A.C.]

A.20. Visible Emissions (VE): No person shall cause, let, permit, suffer or allow to be discharged into the atmosphere the emissions of air pollutants from any activity, the density of which is equal to or greater than the designated as Number 1 on the Ringelmann Chart (20 percent opacity). (Rule 62-296.320(4)(b)1., F.A.C.]

Test Method and Procedures

A.21. Test Methods: When required, tests shall be performed in accordance with the following reference methods:

Method	Description of Method and Comments
22	Visual Determination of fugitive emissions.

{Permitting Note: See Appendix RR facility-Wide Reporting Requirements for Additional reporting requirements. [Rule 62-213.440(1)(B), F.A.C.}

Specifications for non-assisted open flare systems

A.22. The owner or operator shall comply with the following requirements for flares.

(1) Flares shall be designed for and operated with no visible emissions as determined by the methods specified in paragraph (f), except for periods not to exceed a total of 5 minutes during any 2 consecutive hours.

(2) Flares shall be operated with a flame present at all times, as determined by the methods specified in paragraph (f).

(3) Flare shall be used only with the net heating value of gas being combusted being 7.45 MJ/scm (200 Btu/scf) or greater if the flare is non-assisted. The net heating value of the gas being combusted shall be determined by methods specified in paragraph (f).

(4) Steam-assisted and nonassisted flares shall be designed for and operated with an exit velocity, as determined by the methods specified in paragraph 40 CFR 60.18(f)(4), less than 18.3 m/sec (60 ft/sec), except as provided in paragraphs 40 CFR 60.18(c)(4)(ii) and 40 CFR 60.18(c)(4)(iii).

[Rule 62-204.800(8)(d), F.A.C., and 40 CFR 60.18(c)]

A.23. Owners or operators of flares used to comply with the provisions of this subpart shall monitor these control devices to ensure that they are operated and maintained in conformance with their designs. Applicable subparts will provide provisions stating how owners or operators of flares shall monitor these control devices.
[Rule 62-204.800(8)(d), F.A.C., and 40 CFR 60.18(d)]

A.24. Flares used to comply with provisions of this subpart shall be operated at all times when emissions may be vented to them.
[Rule 62-204.800(8)(d), & 40 CFR 60.18(e)]

Testing Requirements

(1) Method 22 of appendix A to this part shall be used to determine the compliance of flares with the visible emission provisions of this subpart. The observation period is 2 hours and shall be used according to Method 22.

(2) The presence of a flare pilot flame shall be monitored using a thermocouple or any other equivalent device to detect the presence of a flame.

(3) The net heating value of the gas being combusted in a flare shall be calculated using the following equation:

$$H_T = K \sum_{i=1}^{n} C_i H_i$$

where:

H_T =Net heating value of the sample, MJ/scm; where the net enthalpy per mole of off gas is based on combustion at 25 °C and 760 mm Hg, but the standard temperature for determining the volume corresponding to one mole is 20 °C;

$$K = \text{Constant, } 1.740 \times 10^{-7} \left(\frac{1}{ppm}\right) \left(\frac{g\ mole}{scm}\right) \left(\frac{MJ}{kcal}\right)$$

where the standard temperature for $\left(\frac{g\ mole}{scm}\right)$ is 20°C;

C_i =Concentration of sample component i in ppm on a wet basis, as measured for organics by Reference Method 18 and measured for hydrogen and carbon monoxide by ASTM D1946-77 or 90 (Reapproved 1994) (Incorporated by reference as specified in § 60.17); and

H_i =Net heat of combustion of sample component i, kcal/g mole at 25 °C and 760 mm Hg. The heats of combustion may be determined using ASTM D2382-76 or 88 or D4809-95 (incorporated by reference as specified in § 60.17) if published values are not available or cannot be calculated.

(4) The actual exit velocity of a flare shall be determined by dividing the volumetric flow rate (in units of standard temperature and pressure), as determined by Reference Methods 2, 2A, 2C, or 2D as appropriate; by the unobstructed (free) cross sectional area of the flare tip.

(5) The maximum permitted velocity, V_{max}, for flares complying with paragraph (c)(4)(iii) shall be determined by the following equation.

$$\text{Log}_{10} (V_{max}) = (H_T + 28.8)/31.7$$

V_{max} =Maximum permitted velocity, M/sec
28.8=Constant
31.7=Constant
H_T =The net heating value as determined in paragraph (f)(3)

(6) The maximum permitted velocity, V_{max} , for air-assisted flares shall be determined by the following equation.

V_{max} =8.706+0.7084 (H_T)
V_{max} =Maximum permitted velocity, m/sec
8.706=Constant
0.7084=Constant
H_T =The net heating value as determined in paragraph (f)(3).

[Rule 62-204.800(8)(d), F.A.C., and 40 CFR 60.18(f)]

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

E.U. ID No.	Brief Description
002	Kohler Fast Response II Generator Model 200ROZ271

This emissions unit consists of an emergency generator unit driven by a reciprocating internal combustion engines (RICE) manufactured by Kohler. The engine has no pollution control device.

The following table provides important details for this emissions unit:

E.U. ID No.	Engine Brake HP	Date of Construction	Model Year	Primary Fuel	Type of Engine	Displacement liters/cylinder (l/c)	Model No.	Date of last mod. or re-construct-ion
002	375	1990	1990	diesel	Emergency	2.3	200ROZ 271	N/A

{Permitting Note: This emissions unit, compression ignition (CI) engine, is regulated under 40 CFR 63, Subpart ZZZZ, NESHAP for Stationary RICE adopted in Rule 62.204.800(11)(b), F.A.C. This RICE is for emergency engines. This permit section address "existing" stationary CI RICE less than 500 HP that is located at an Area source of HAP and that has not been modified or reconstructed after 6/12/2006. If the RICE is modified or reconstructed after 7/11/2005, the NSPS 40 CFR 60, Subpart IIII, will then apply.}

{The permittee shall comply with the following emissions and operating limitations no later than May 3, 2013.}

Essential Potential to Emit (PTE) Parameters

B.1. Engine Startup. During periods of startup the owner or operator must minimize the engine's time spent at idle and minimize the engine's startup time to a period needed for the appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the non-startup emission limitations apply. [40 CFR 63.6625(h)]

Emission Limitations and Operating Requirements

B.2. Work or Management Practice Standards.

a. *Oil*. Change oil and filter every 500 hours of operation or annually, whichever comes first. [40 CFR 63.6603(a) & Table 2d4.a.]
b. *Air Cleaner*. Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first. [40 CFR 63.6603(a) & Table 2d4.b.]
c. *Hoses and Belts*. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary. [40 CFR 63.6603(a) & Table 2d4.c.]
d. *Operation and Maintenance*. Operate and maintain the stationary RICE according to the manufacturer's emission-related operation and maintenance instructions or 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. [40 CFR 63.6625(e), 63.6640(a) & Table 6.9.a.]
e. *Oil Analysis*. The owner or operator has the option of using oil analysis to extend the change requirement. The oil analysis must be performed at the same frequency specified for changing the oil in **F.2.a**. The analysis program must at a minimum analyze the following three parameters: Total Base Number, viscosity, and percent of 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 of 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 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 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. [40 CFR 63.6625(i)]

Compliance

B.3. Continuous Compliance. At all times, this unit:

a. Must be in compliance with the operating limitations in this section.

b. Must be operated and maintained in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require you to make any further efforts to reduce emissions if levels required by this standard 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.

[40 CFR 63.6605]

Recordkeeping Requirements

B.4. Maintenance Records. The owner or operator must keep records of the maintenance conducted on this unit in order to demonstrate that it is operated and maintained according to their own maintenance plan. [40 CFR 63.6655(e)]

B.5. Record Retention.

a. The owner or operator must keep records in a suitable and readily available form for expeditious reviews.

b. The owner or operator must keep each record readily accessible in hard copy or electronic form for at least 5 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record.

[40 CFR 63.6660 and 40 CFR 63.10(b)(1)]

General Provisions

B.6. 40 CFR 63 Subpart A, General Provisions. This engine shall comply with all applicable requirements of 40 CFR 63 Subpart A, General Provisions, which have been adopted by reference in Rule 62-204.800(11)(d)1., F.A.C., except that the Secretary is not the Administrator for purposes of 40 CFR 63.5(e), 40 CFR 63.5(f), 40 CFR 63.6(g), 40 CFR 63.6(h)(9), 40 CFR 63.6(j), 40 CFR 63.13, and 40 CFR 63.14. This engine shall comply with the applicable portions of Appendix 40 NESHAP Subpart A included with this permit, as specified below.

General Provisions Citation	Subject of Citation
§63.1	General applicability of the General Provisions
§63.2	Definitions
§63.3	Units and abbreviations
§63.4	Prohibited activities and circumvention
§63.5	Construction and reconstruction
§63.6(a)	Applicability
§63.9(i)	Adjustment of submittal deadlines
§63.9(j)	Change in previous information
§63.10(a)	Administrative provisions for recordkeeping/reporting
§63.10(b)(1)	Record retention
§63.10(b)(2)(vi)–(xi)	Records

§63.10(b)(2)(xii)	Record when under waiver
§63.10(b)(2)(xiv)	Records of supporting documentation
§63.10(b)(3)	Records of applicability determination
§63.10(d)(1)	General reporting requirements
§63.10(d)(4)	Progress Reports
§63.10(f)	Waiver for recordkeeping/reporting
§63.12	State authority and delegations
§63.13	Addresses
§63.14	Incorporation by reference
§63.15	Availability of information

[40 CFR 63.6665, & Rule 62-204.800(11)(d)1., F.A.C.]