Subsection A. Facility Description.

The existing facility is a Class 1 municipal solid waste landfill. The landfill has an active gas collection and control system with a 3,000 scfm flare. The facility includes five 0.8 MW spark ignition reciprocating internal combustion engines, a gas treatment system, and two 1,200 standard cubic foot per minute (scfm) flares (single skid) as part of a renewable energy project which converts landfill methane gas to energy. A relocatable concrete crusher is authorized to operate on the site.

The Collier County Landfill has a design capacity of 14.1 million megagrams (Mg) by volume. The landfill commenced construction and started receiving waste in 1976. The landfill was modified or reconstructed in 1996, 2001 and 2003. The landfill contains an active asbestos waste disposal site. The landfill does not contain a bioreactor. The gas collection and control system commenced operation on January 24, 1997. The non-methane organic compounds (NMOC) emissions are calculated to be greater than 50 Mg per year.

The landfill consists of active cells and closed cells. Active cells are A1, A2, A3 and phase 3 of cell 6. Cell 6 is broken into three phases. Closed cells are phase 1 and 2 of cell 6 (closed in 2000) and cells 3 and 4 closed in 1995. Cells A1, A2, and A3 began accepting waste in 2005, 2007 and 2009, respectively. Cells 3 and 4 began accepting waste in 1979. Cell 6 began accepting waste in 1988.

The facility is subject to 40 CFR 60 Subpart A, General Provisions, 40 CFR 60 Subpart OOO, Standards of Performance for Nonmetallic Mineral Processing Plants, 40 CFR 60 Subpart WWW, Standards of Performance for Municipal Solid Waste Landfills, 40 CFR 60 Subpart JJJJ, Standards of Performance for Stationary Spark Ignition Internal Combustion Engines, 40 CFR 61 Subpart M, National Emissions Standards for Asbestos, 40 CFR 63 Subpart A, General Provisions, 40 CFR 63 Subpart AAAA, National Emission Standards for Hazardous Air Pollutants: Municipal Solid Waste Landfills and 40 CFR 63 Subpart ZZZZ, National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines.

The facility is a PSD major facility. Any subsequent new construction at this facility will trigger PSD review.

Subsection B. Summary of Emissions Units.

EU No.	Brief Description
Regulated Emissions Units	
002	Landfill
003	Flare
005	Crusher
006	Reciprocating Internal Combustion Engine (RICE) No. 1
007	RICE No. 2
008	RICE No. 3
009	RICE No. 4
010	RICE No. 5
014	1,200 scfm Flare
015	1,200 scfm Flare
016	CI RICE (backup diesel generator)
Unregulated Emissions Units	
017	Yard Waste Grinder

Subsection C. Applicable Regulations.

The above methods are described in 40 CFR 60, Appendix A, and 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. [62-297.401, F.A.C., 40 CFR 60 Subpart WWW]

A.17. 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.]

A.19. Sulfur Analysis.

a. *Frequency.* The owner or operator shall sample and analyze the LFG for site specific sulfur content (total reduced sulfur content) at least once per quarter during each calendar year.

b. *Testing Methods.* Compliance with the sulfur content shall be demonstrated using EPA Method 16. The gas sample shall be collected from the gas collection system header pipe at a location before all flares and engines. The gas sample collected for the analyses shall be a composite sample and collected under normal operating conditions (i.e., with all valves open for all operating cells). Based on the sampling results and Rule 62-297.310(7)(b), F.A.C., the Department may request additional gas sampling and analyses.

[Permit No. 0210051-014-AC]

A.20. Test Requirements: The owner or operator shall notify the Compliance Authority by telephone, email, fax or in writing at least 5 days prior to the quarterly sampling tests. [Permit No. 0210051-014-AC]

A.21. Testing Duration. Sulfur analysis required in Specific Condition **A.19.** shall be performed for a period of 5 years from the date of this permit. After 5 years of testing, the permitee may request to relax the requirements for sulfur analysis testing and frequency of testing through a modification to the air construction permit. [Permit No. 0210051-014-AC]

A.22. Surface Methane Testing. The owner or operator shall monitor the surface concentrations of methane in accordance with the procedures described in 40 CFR 60.753(d) and 40 CFR 60.755(c). The owner or operator shall comply with the instrumentation specifications and procedures for surface emission monitoring devices in accordance with 40 CFR 60.755(d). [40 CFR 60.753 and 60.755]

A.23. GCCS Compliance Determination. The specified methods in Specific Condition **A.11**. shall be used to determine whether the gas collection system is in compliance with the specification for an active collection system as required by 40 CFR 60.752(b)(2)(ii). [40 CFR 60.755(a)]

Recordkeeping and Reporting Requirements

A.24. Reporting Schedule. The following reports and notifications shall be submitted to the Compliance Authority:

Report	Reporting Deadline	Related Condition(s)
NMOC Emission Rate Report	Annually (See exemption criteria Specific Condition **A.18**.)	**A.30.**
Closure Report	With 30 days of waste acceptance cessation	**A.31.**
Equipment Removal Report	30 days prior to removal or cessation of operation of control equipment	**A.32.**
Semi-Annual Reports	Semi-annual	**A.33.**
Total Reduced Sulfur Report	Quarterly	**A.26.**
SO_2 Emissions Reporting	Annual	**A.27.**

[Rule 62-213.440, F.A.C.]

A.25. Other Reporting Requirements. See Appendix RR, Facility-Wide Reporting Requirements, for additional reporting requirements.

A.26. Test Reports/Reporting. The owner or operator shall prepare and submit a report for the LFG TRS content test results to the South District Department in accordance with Appendix D, (Common Testing Requirements). Test results shall report the results on the total reduced sulfur content in ppmv as sulfur (S). Test reports and results shall be submitted with the facility's quarterly reports. [Permit No. 0210051-014-AC; Rule 62-4.070(3), F.A.C.]

A.27. Annual SO_2 Reporting. Annual SO_2 emissions shall be based on the rolling average of the four calendar year quarterly LFG sulfur content analysis results, and shall be included in the annual operating report. See Condition 2. [Permit No. 0210051-014-AC]

A.28. Deposited Solid Waste Records. The owner or operator shall keep for a least 5 years up-to-date, readily accessible, on-site records of 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.29. Control Equipment Records. The owner or operator shall keep up-to-date, readily accessible records for the life of the control equipment of the following data as measured during the initial performance test or compliance determination. Records of subsequent tests or monitoring shall be maintained for a minimum of 5 years. Records of the control device vendor specifications shall be maintained until removal.

a. The maximum expected gas generation flow rate as calculated in 40 CFR 60.755(a)(1).
b. The density of wells, horizontal collectors, surface collectors, or other gas extraction devices determined using the procedures specified in 40 CFR 60.759(a)(1).
c. The flare type.
d. All visible emission readings.
e. Heat content determination.
f. Flow rate or bypass flow rate measurements.
g. Exit velocity determinations made through the performance tests.
h. Continuous records of pilot flame or flare flame monitoring and records of all periods of operations during which the pilot flame of the flare flame is absent.
i. Continuous records of the equipment operating parameters specified to be monitored in 40 CFR 60.756.
j. Up-to –date readily accessible records for periods of operation during which the parameter boundaries established during the most recent performance test are exceeded.
k. Indication of flow to the control device or the indication of bypass flow or records of monthly inspections of car seals or lock and key configurations used to seal bypass lines (see 40 CFR 60.756.).
l. Continuous records of the flame or flare pilot flame monitoring specified under 40 CFR 60.756(c) and up-to-date, readily accessible records of all periods of operation in which the flame of flare pilot flame is absent.
m. Plot map showing each existing and planned collector in the system and providing a unique identification location label for each collector.
n. Records of the installation date and location of all newly installed collectors as specified under 40 CFR 60.755(b).
o. Documentation of the nature, date of deposition, amount, and location of asbestos-containing or non-degradable waste excluded from collection as provided in 40 CFR 60.759(a)(3)(i) as well as any nonproductive areas excluded from collection as provided in 40 CFR 60.759(a)3(ii).
p. Records of all collection and control exceedances of the operational standards in 60.753, the reading in the subsequent month whether or not the second reading is an exceedance, and the location of each exceedance.

[40 CFR 60.758(b)]

A.30. NMOC Emission Rate Reports. The owner or operator shall submit an NMOC emission rate report to the South District office annually in accordance with 40 CFR 60.757(b). The owner or operation is exempt from

submitting an annual report 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)]