

*Mike Halperin*

STATE OF FLORIDA  
DEPARTMENT OF ENVIRONMENTAL PROTECTION  
**NOTICE OF FINAL PERMIT**

In the Matter of an  
Application for Permit by:

Mr. E. David Fernandez  
Utilities Director  
P.O. Box 1409  
Key West, Florida 33041-1409

FINAL Permit No.: 0870047-001-AV  
City of Key West  
Southernmost Waste To Energy Facility

Enclosed is FINAL Permit Number 0870047-001-AV for the operation of the Southernmost Waste To Energy Facility located at 5701 West Junior College Road, Key West, Monroe County, issued pursuant to Chapter 403, Florida Statutes (F.S.).

Any party to this order (permit) has the right to seek judicial review of the permit pursuant to Section 120.68, F.S., by the filing of a Notice of Appeal pursuant to Rule 9.110, Florida Rules of Appellate Procedure, with the Clerk of the permitting authority in the Legal Office; and by filing a copy of the Notice of Appeal accompanied by the applicable filing fees with the appropriate District Court of Appeal. The Notice of Appeal must be filed within 30 (thirty) days from the date this Notice is filed with the Clerk of the permitting authority.

Executed in Tallahassee, Florida.

*C. H. Fancy*

C. H. Fancy, P.E.  
Chief  
Bureau of Air Regulation

**CERTIFICATE OF SERVICE**

The undersigned duly designated deputy agency clerk hereby certifies that this NOTICE OF FINAL PERMIT (including the FINAL permit) was sent by certified mail (\*) and copies were mailed by U.S. Mail before the close of business on 6/15/99 to the person(s) listed or as otherwise noted:

- Mr. E. David Fernandez, City of Key West
- Ms. Marie Whitman, P.E.
- Mr. Phil Barbaccia, P.E., DEP/SD
- Ms. Carla E. Pierce, USEPA, Region 4 (INTERNET E-mail Memorandum)
- Ms. Gracy R. Danois, USEPA, Region 4 (INTERNET E-mail Memorandum)

Clerk Stamp

**FILING AND ACKNOWLEDGMENT FILED**, on this date, pursuant to Section 120.52(7), Florida Statutes, with the designated agency Clerk, receipt of which is hereby acknowledged.

*Barbara J. Boutwell* 6/15/99  
(Clerk) (Date)

# STATEMENT OF BASIS

Title V FINAL Permit No.: 0870047-001-AV  
City of Key West  
Southernmost Waste To Energy Facility  
Monroe County

This Title V air operation permit is issued under the provisions of Chapter 403, Florida Statutes (F.S.), and Chapters 62-4, 62-210 and 62-213, F.A.C. The above named permittee is hereby authorized to perform the work or operate the facility shown on the application and approved drawing(s), plans, and other documents, attached hereto or on file with the permitting authority, in accordance with the terms and conditions of this permit.

The facility (SWTEF) consists of two identical municipal solid waste combustors (Combustor Nos. 1 and 2); an approximately twenty acre municipal solid waste landfill which is no longer accepting waste; storage and handling facilities for ash; oil storage tanks; cooling tower; and ancillary support equipment. Also, included in this permit are miscellaneous unregulated/insignificant emissions units and/or activities.

Municipal Solid Waste Combustor Nos. 1 and 2 are mass-fired waterwall boilers. Steam from these boilers is utilized in the generation of electrical energy (4 MWe per generator). The emissions units are fired on mixed municipal waste only. There are electrostatic precipitators on these emissions units with design control efficiencies of 97.7%. The combustion gases exhaust through a single stack of 140 feet. Both units began commercial operation in 1987. These emissions units are regulated under 40 CFR 60, Subpart E, Standards of Performance for Incinerators.

Contiguous to the facility is an approximately 20 acre landfill which is no longer accepting waste. Landfill gas is emitted through passive gas vents spaced at approximately 100-200 ft. intervals. Landfilling with municipal waste began approximately in the mid 1940's, however when the SWTEF became operational in 1987, ash became the only material landfilled. Closures were made in two phases in 1991 and 1996. Based upon documentation submitted by the application, NMOC emissions from this landfill are minimal and this emissions unit is considered as insignificant.

Based on the initial Title V permit application received June 12, 1996, this facility is a major source of hazardous air pollutants (HAPs):

City of Key West  
Southernmost Waste To Energy Facility  
**Facility ID No.:** 0870047  
Monroe County  
Initial Title V Air Operation Permit  
**FINAL Permit No.:** 0870047-001-AV

Permitting Authority:

State of Florida  
Department of Environmental Protection  
Division of Air Resources Management  
Bureau of Air Regulation  
Title V Section  
Mail Station #5505  
2600 Blair Stone Road  
Tallahassee, Florida 32399-2400  
Telephone: 850/488-1344  
Fax: 850/922-6979

Compliance Authority:

South District Office  
2295 Victoria Avenue, Suite 364  
Fort Myers, FL 33902-2549  
Telephone: 941/332-6975  
Fax: 941/332-6969



# Department of Environmental Protection

Jeb Bush  
Governor

Twin Towers Office Building  
2600 Blair Stone Road  
Tallahassee, Florida 32399-2400

David B. Struhs  
Secretary

**Permittee:**  
City of Key West  
P.O. Box 1409  
Key West, Florida 33041-1409

**FINAL Permit No.:** 0870047-001-AV  
**Facility ID No.:** 0870047  
**SIC No.:** 49; 4953  
**Project:** Initial Title V Air Operation

This permit is for the operation of the City of Key West, Southernmost Waste To Energy Facility. This facility is located at 5701 West Junior College Road, Key West, Monroe County; UTM Coordinates: Zone 17, 424.37 km East and 2718.46 km North; Latitude: 24° 34' 42" North and Longitude: 81° 44' 49" West.

**STATEMENT OF BASIS:** This Title V air operation permit is issued under the provisions of Chapter 403, Florida Statutes (F.S.), and Chapters 62-4, 62-210 and 62-213, F.A.C. The above named permittee is hereby authorized to perform the work or operate the facility shown on the application and approved drawing(s), plans, and other documents, attached hereto or on file with the permitting authority, in accordance with the terms and conditions of this permit.

**Referenced Attachments made a part of this permit:**

Appendix U-1, List of Unregulated Emissions Units and/or Activities  
Appendix I-1, List of Insignificant Emissions Units and/or Activities  
APPENDIX TV-1, TITLE V CONDITIONS (version dated 12/02/97)  
APPENDIX SS-1, STACK SAMPLING FACILITIES (version dated 10/07/96)  
TABLE 297.310-1, CALIBRATION SCHEDULE  
FIGURE 1 - SUMMARY REPORT-GASEOUS AND OPACITY EXCESS EMISSION AND MONITORING SYSTEM PERFORMANCE REPORT (version dated 7/96)  
APPENDIX 40 CFR 60, SUBPART A (40 CFR 60; July 1997)

**Effective Date:** 05/31/99  
**Renewal Application Due Date:** 12/03/03  
**Expiration Date:** 05/31/04

Howard L. Rhodes, Director  
Division of Air Resource Management

HLR/sms/mph

Initial Title V Air Operation Permit  
FINAL Permit No.: 0870047-001-AV

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**Section I. Facility Information.**

**Subsection A. Facility Description.**

This facility consists of two identical municipal solid waste combustors (Unit Nos. 1 and 2) which are mass-fired waterwall boilers; an approximately twenty acre municipal solid waste landfill is contiguous (although it is no longer accepting waste); storage and handling facilities for ash; oil storage tanks; cooling tower; and ancillary support equipment. Also, included in this permit are miscellaneous unregulated/insignificant emissions units and/or activities. Based on the initial Title V permit application received June 12, 1996, this facility is a major source of hazardous air pollutants (HAPs).

**Subsection B. Summary of Emissions Unit ID Nos. and Brief Descriptions.**

<b>E.U. ID Nos.</b>	<b>Brief Description</b>
001	Municipal Waste Combustor No. 1
002	Municipal Waste Combustor No. 2

**Unregulated Emissions Units and/or Activities**

<b>E.U. ID No.</b>	<b>Brief Description</b>
xxx	See Appendix U-1, List of Unregulated Emissions Units and/or Activities.

*Please reference the Permit No., Facility ID No., and Appropriate Emissions Unit(s) ID No(s). on all correspondence, test report submittals, Applications, etc.*

**Subsection C. Relevant Documents.**

The documents listed below are not a part of this permit; however, they are specifically related to this permitting action.

These documents are provided to the permittee for information purposes only:

Table 1, Summary of Air Pollutant Standards and Terms.

Table 2, Summary of Compliance Requirements.

Appendix A-1, Abbreviations, Acronyms, Citations, and Identification Numbers (version dated 2/05/97).

Appendix H-1, Permit History/ID Number Changes.

These documents are on file with the permitting authority:

Initial Title V Permit Application received June 12, 1996.

Initial Design Capacity Report for Landfill received February, 1999.

## Section II. Facility-wide Conditions.

The following Conditions apply facility-wide:

1. APPENDIX TV-1, TITLE V CONDITIONS, is a part of this permit.  
{Permitting note: APPENDIX TV-1, TITLE V CONDITIONS, is distributed to the permittee only. Other persons requesting copies of these conditions shall be provided a copy when requested or otherwise appropriate.}
2. **Not federally enforceable.** General Pollutant Emission Limiting Standards. Objectionable Odor Prohibited. No person shall not cause, suffer, allow, or permit the discharge of air pollutants which cause or contribute to an objectionable odor.  
[Rule 62-296.320(2), F.A.C.]
3. General Particulate Emission Limiting Standards. General Visible Emissions Standard. Except for emissions units that are subject to a particulate matter or opacity limit set forth or established by rule and reflected by conditions in this permit, 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 that designated as Number 1 on the Ringelmann Chart (20 percent opacity). EPA Method 9 is the method of compliance pursuant to Chapter 62-297, F.A.C.  
[Rules 62-296.320(4)(b)1. & 4., F.A.C.]
4. Prevention of Accidental Releases (Section 112(r) of CAA). If required by 40 CFR 68, the permittee shall submit to the implementing agency:
  - a. a risk management plan (RMP) when, and if, such requirement becomes applicable; and,
  - b. certification forms and/or RMPs according to the promulgated rule schedule.[40 CFR 68]
5. Unregulated Emissions Units and/or Activities. Appendix U-1, List of Unregulated Emissions Units and/or Activities, is a part of this permit.  
[Rule 62-213.440(1), F.A.C.]
6. Insignificant Units and/or Activities. Appendix I-1, List of Insignificant Emissions Units and/or Activities, is a part of this permit.  
[Rules 62-213.440(1), 62-213.430(6) and 62-4.040(1)(b), F.A.C.]
7. General Pollutant Emission Limiting Standards. Volatile Organic Compounds Emissions or Organic Solvents 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)(a), F.A.C.]

{Permitting Note: The Department has not ordered any control devices or systems under the referenced rule}.

**8. Not federally enforceable. Reasonable Precautions.** The following techniques shall be used to control unconfined particulate matter emissions on an as needed basis:

- a. Chemical or water application to unpaved road and unpaved yard and landfill areas;
- b. Paving and maintenance of roads, parking areas and yards;
- c. Landscaping or planting of vegetation; and
- d. Confining abrasive blasting where possible and appropriate.

[Rule 62-296.320(4)(c)2., F.A.C.]

{Note: This condition implements the requirements of Rule 62-296.320(4)(c)1., 3., & 4. F.A.C. (Appendix TV-1, Title V Conditions, Condition No. 58)}

**9.** When appropriate, any recording, monitoring, or reporting requirements that are time-specific shall be in accordance with the effective date of the permit, which defines day one.

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

**10.** The permittee shall submit all compliance related notifications and reports required of this permit to the Department's South District office:

Department of Environmental Protection  
South District Office  
2295 Victoria Avenue, Suite 364  
Fort Myers, FL 33902-2549  
Telephone: 941/332-6975  
Fax: 941/332-6969

and

Department of Environmental Protection  
South District Branch Office  
2796 Overseas Highway, Suite 221  
Marathon, FL 33050  
Telephone: 305/289-2310

**12.** Any reports, data, notifications, certifications, and requests required to be sent to the United States Environmental Protection Agency, Region 4, should be sent to:

United States Environmental Protection Agency  
Region 4  
Air, Pesticides & Toxics Management Division  
Air and EPCRA Enforcement Branch, Air Enforcement Section  
61 Forsyth Street  
Atlanta, Georgia 30303  
Telephone: 404/562-9155  
Fax: 404/562-9164



**Section III. Emissions Unit(s) and Conditions.**

**Subsection A. This section addresses the following emissions units.**

<b>E.U. ID No.</b>	<b>Brief Description</b>
001	Municipal Solid Waste Combustor No. 1
002	Municipal Solid Waste Combustor No. 2

These emission units are solid waste combustors and are designated as Combustor Nos. 1 and 2. They are custom-built units by Montenay International Corporation and each is rated at a maximum of 6250 pounds per hour (75 TPD or 68 megagrams/day) of mixed municipal solid waste (per unit). Emissions from the combustors are controlled by electrostatic precipitators and combustion controls. Odor is controlled by drawing combustion air from the refuse area. The combustors share a stack. Combustor Nos. 1 and 2 began commercial operation in 1987.

{Permitting notes: These emissions units are regulated under Rules 62-210.300, Permits Required, and 62-204.800(7)(b)5, F.A.C. These emissions units are subject to 40 CFR 60, Subpart E, Standards of Performance for Incinerators. Each combustor’s exhaust is ducted to a Belco Model RE19 electrostatic precipitator (ESP), after which each ESP exhausts to a common 140 ft. high stack.}

**The following specific Conditions apply to the emissions units listed above:**

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

**A.1. Permitted Capacity.** The maximum input rate (operation rate) is as follows:

<b>E.U. ID No.</b>	<b>Pounds per hour</b>	<b>Fuel Type</b>
001	6250	Mixed municipal waste
002	6250	Mixed municipal waste

[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.]

{Permitting note: The heat input limitations have been placed in each permit to identify the capacity of each emissions unit for purposes of confirming that emissions testing is conducted within 90-100 percent of the emissions unit’s rated capacity (or to limit future operation to 110 percent of the test load), to establish appropriate limits and to aid in determining future rule applicability.}

**A.2. Emissions Unit Operating Rate Limitation After Testing.** See Specific Condition **A.12.**

[Rule 62-297.310(2), F.A.C.]

**A.3. Methods of Operation - Fuels.** Only mixed municipal solid waste shall be fired in the combustors. The daily charging rates shall be recorded. These incinerators shall not be used for the disposal of radioactive materials.

[Rule 62-213.410(1), F.A.C., 40 CFR 60.53(a), and AO44-207778 and AO44-207781]

**A.4. Hours of Operation.** These emission units may operate continuously, i.e., 8,760 hours/year. The hours of operation shall be recorded.

[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C., 40 CFR 60.53(a)]

**A.5. Sootblowing permitted.** The permittee may manually soot blow with compressed air in each of the external boiler soot ports in lieu of automatically soot blowing with steam. The permittee shall maintain at the facility a copy of the current procedure for manually soot blowing.  
[Rule 62-4.070(3), F.A.C.]

### **Emission Limitations and Standards**

{Permitting Note: The attached Table 1-1, Summary of Air Pollutant Standards and Terms, summarizes information for convenience purpose only. This table does not supersede any of the terms or conditions of this permit.}

**A.6. Visible Emissions.** No visible emissions (5 percent opacity) are allowed from these emission units except that visible emissions not exceeding 20 percent opacity are allowed for up to three (3) minutes in any one hour period.  
[Rule 62-296.401, F.A.C.]

**A.7. Particulate Matter Emissions.** Particulate matter emissions shall not exceed 0.08 gr./dscf corrected to 12% carbon dioxide.  
[40 CFR 60.52(a)]

**A.8. Dust, odor and run-off.** This facility shall be operated in such a fashion to preclude objectionable odors. All fugitive dust at this site shall be adequately controlled. There shall be no discharges of liquid effluents or contaminated run-off from the plant site. The applicant shall comply with all provisions of the solid waste rules applicable to ash disposal.  
[AO44-207778 and AO44-207781]

### **Excess Emissions**

{Permitting note: The Excess Emissions Rule at Rule 62-210.700, F.A.C., cannot vary any requirement of an NSPS or NESHAP provision.}

**A.9.** Excess emissions resulting from malfunction, startup or shutdown shall be permitted providing:  
(1) best operational practices to minimize emissions are adhered to and  
(2) the duration of excess emissions shall be minimized but in no case exceed two hours in any 24 hour period unless specifically authorized by the Department for longer duration.  
[Rule 62-210.700(1), F.A.C.]

**A.10.** Excess emissions which are caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure which may reasonably be prevented during startup, shutdown or malfunction shall be prohibited.  
[Rule 62-210.700(4), F.A.C.]

### **Test Methods and Procedures**

{Permitting Note: The attached Table 2-1, Summary of Compliance Requirements, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

**A.11.** These combustors are regulated individually and must be tested individually. Due to the common stack, one unit must be shut down while the other unit is being tested.

[Rules 62-4.070(3) and 62-213.440(1), F.A.C.]

**A.12.** The test method for visible emissions shall be EPA Method 9, as published in 40 CFR-60, Appendix A, or State approved equivalent method. The test method for particulate emissions shall be EPA Method 5 as published in 40 CFR-60, Appendix A, or State approved equivalent method.

[Rules 62-296.401.(1)(c) , 62-297.401, F.A.C., AO44-207778 and AO44-207781]

**A.13. Operating Rate During Testing.** Testing of emissions shall be conducted with the emissions unit operating at permitted capacity. If it is impracticable to test at permitted capacity, an emissions unit may be tested at less than the minimum permitted capacity (i.e., at less than 90 percent of the maximum operation rate allowed by the permit); in this case, subsequent emissions unit operation is limited to 110 percent of the test load until a new test is conducted. Once the emissions unit is so limited, operation at higher capacities is allowed for no more than 15 consecutive days for the purpose of additional compliance testing to regain the authority to operate at the permitted capacity.

[Rules 62-297.310(2) & (2)(b), F.A.C.]

#### **Recordkeeping and Reporting Requirements**

**A.14. Malfunction Reporting.** In the case of excess emissions resulting from malfunctions, each owner or operator shall notify the Department's South District office in accordance with Appendix TV-1, Title V Condition No. 9. A full written report on the malfunctions shall be submitted in a quarterly report, if requested by the Department.

[Rule 62-210.700(6), F.A.C.]

#### **A.15. Test Reports.**

(a) The owner or operator of an emissions unit for which a compliance test is required shall file a report with the Department's South District office on the results of each such test.

(b) The required test report shall be filed with the Department's South District office as soon as practical but no later than 45 days after the last sampling run of each test is completed.

(c) Notification and reporting requirements of this permit shall also be sent to the Marathon DEP office.

(d) Reporting shall comply with Common Condition **B.9.**

[Rule 62-297.310(8), F.A.C., AO44-207778 and AO44-207781]

**Subsection B. Common Conditions.**

<b>E.U. ID No.</b>	<b>Brief Description</b>
001	Municipal Solid Waste Combustor No. 1
002	Municipal Solid Waste Combustor No. 2

The following Conditions apply to the emissions unit(s)/activities listed above:

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

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

**Monitoring of Operations**

**B.2. Determination of Process Variables.**

(a) **Required Equipment.** The owner or operator of an emissions unit for which compliance tests are required shall install, operate, and maintain equipment or instruments necessary to determine process variables, such as process weight input or heat input, when such data are needed in conjunction with emissions data to determine the compliance of the emissions unit with applicable emission limiting standards.

(b) **Accuracy of Equipment.** Equipment or instruments used to directly or indirectly determine process variables, including devices such as belt scales, weight hoppers, flow meters, and tank scales, shall be calibrated and adjusted to indicate the true value of the parameter being measured with sufficient accuracy to allow the applicable process variable to be determined within 10% of its true value.

[Rule 62-297.310(5), F.A.C.]

**Test Methods and Procedures**

{Permitting Note: The attached Table 2-1, Summary of Compliance Requirements, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

**B.3. Frequency of Compliance Tests.** The following provisions apply only to those emissions units that are subject to an emissions limiting standard for which compliance testing is required.

(a) **General Compliance Testing.**

3. Except as otherwise specified in an applicable subsection, the owner or operator of an emissions unit that is subject to any emission limiting standard shall conduct a compliance test that demonstrates compliance with the applicable emission limiting standard prior to obtaining a renewed operation permit. Emissions units that are required to conduct an annual compliance test may submit the most recent annual compliance test to satisfy the requirements of this provision. In renewing an air operation permit pursuant to Rule 62-210.300(2)(a)3.b., c., or d., F.A.C., the Department shall not require submission of emission compliance test results for any emissions unit that, during the year prior to renewal:

- a. Did not operate; or
- b. In the case of a fuel burning emissions unit, burned liquid fuel for a total of no more than 400 hours.

4. During each federal fiscal year (October 1 -- September 30), unless otherwise specified by rule, order, or permit, the owner or operator of each emissions unit shall have a formal compliance test conducted for:

- a. Visible emissions, if there is an applicable standard;
- b. Each of the following pollutants, if there is an applicable standard, and if the emissions unit emits

or has the potential to emit: 5 tons per year or more of lead or lead compounds measured as elemental lead; 30 tons per year or more of acrylonitrile; or 100 tons per year or more of any other regulated air pollutant; and

5. An annual compliance test for particulate matter emissions shall not be required for any fuel burning emissions unit that, in a federal fiscal year, does not burn liquid and/or solid fuel, other than during startup, for a total of more than 400 hours.
8. Any combustion turbine that does not operate for more than 400 hours per year shall conduct a visible emissions compliance test once per each five-year period, coinciding with the term of its air operation permit.
9. The owner or operator shall notify the Department's South District office, at least 15 days prior to the date on which each formal compliance test is to begin, of the date, time, and place of each such test, and the test contact person who will be responsible for coordinating and having such test conducted for the owner or operator.

(b) 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 owner or operator of the emissions unit to conduct compliance tests which identify the nature and quantity of pollutant emissions from the emissions unit and to provide a report on the results of said tests to the Department.

(c) Waiver of Compliance Test Requirements. If the owner or operator of an emissions unit that is subject to a compliance test requirement demonstrates to the Department, pursuant to the procedure established in Rule 62-297.620, F.A.C., that the compliance of the emissions unit with an applicable weight emission limiting standard can be adequately determined by means other than the designated test procedure, such as specifying a surrogate standard of no visible emissions for particulate matter sources equipped with a bag house or specifying a fuel analysis for sulfur dioxide emissions, the Department shall waive the compliance test requirements for such emissions units and order that the alternate means of determining compliance be used, provided, however, the provisions of Rule 62-297.310(7)(b), F.A.C., shall apply.  
[Rule 62-297.310(7), F.A.C.; and, SIP approved]

**B.4. Required Number of Test Runs**. For mass emission limitations, a compliance test shall consist of three complete and separate determinations of the total air pollutant emission rate through the test section of the stack or duct and three complete and separate determinations of any applicable process variables corresponding to the three distinct time periods during which the stack emission rate was measured provided, however, that three complete and separate determinations shall not be required if the process variables are not subject to variation during a compliance test, or if three determinations are not necessary in order to calculate the unit's emission rate. The three required test runs shall be completed within one consecutive five day period. In the event that a sample is lost or one of the three runs must be discontinued because of circumstances beyond the control of the owner or operator, and a valid third run cannot be obtained within the five day period allowed for the test, the Secretary or his or her designee may accept the results of the two complete runs as proof of compliance.  
[Rule 62-297.310(1), F.A.C. and 40 CFR 60.8]

**B.5. Calculation of Emission Rate**. The indicated emission rate or concentration shall be the arithmetic average of the emission rate or concentration determined by each of the three separate test runs unless otherwise specified in a particular test method or applicable rule.  
[Rule 62-297.310(3), F.A.C.]

**B.6. Applicable Test Procedures.**

**(a) Required Sampling Time.**

1. Unless otherwise specified in the applicable rule, the required sampling time for each test run shall be no less than one hour and no greater than four hours, and the sampling time at each sampling point shall be of equal intervals of at least two minutes.

2. Opacity Compliance Tests. When either EPA Method 9 or DEP Method 9 is specified as the applicable opacity test method, the required minimum period of observation for a compliance test shall be sixty (60) minutes for emissions units which emit or have the potential to emit 100 tons per year or more of particulate matter, and thirty (30) minutes for emissions units which have potential emissions less than 100 tons per year of particulate matter and are not subject to a multiple-valued opacity standard. The opacity test observation period shall include the period during which the highest opacity emissions can reasonably be expected to occur.

Exceptions to these requirements are as follows:

c. The minimum observation period for opacity tests conducted by employees or agents of the Department to verify the day-to-day continuing compliance of a unit or activity with an applicable opacity standard shall be twelve minutes.

(b) Minimum Sample Volume. Unless otherwise specified in the applicable rule, the minimum sample volume per run shall be 25 dry standard cubic feet.

(c) Required Flow Rate Range. For EPA Method 5 particulate sampling, acid mist/sulfur dioxide, and fluoride sampling which uses Greenburg Smith type impingers, the sampling nozzle and sampling time shall be selected such that the average sampling rate will be between 0.5 and 1.0 actual cubic feet per minute, and the required minimum sampling volume will be obtained.

(d) Calibration of Sampling Equipment. Calibration of the sampling train equipment shall be conducted in accordance with the schedule shown in Table 297.310-1.

(e) Allowed Modification to EPA Method 5. When EPA Method 5 is required, the following modification is allowed: the heated filter may be separated from the impingers by a flexible tube.

[Rule 62-297.310(4), F.A.C.]

**B.7. Required Stack Sampling Facilities.** When a mass emissions stack test is required, the permittee shall comply with the requirements contained in Appendix SS-1, Stack Sampling Facilities (version dated 10/07/96), attached to this permit.

[Rule 62-297.310(6), F.A.C.]

**Record Keeping and Reporting Requirements**

**B.8. Malfunctions - Notification.** In the case of excess emissions resulting from malfunctions, each owner or operator shall notify the Department's South District office in accordance with Appendix TV-1, Title V Condition No. 9, F.A.C. A full written report on the malfunctions shall be submitted in a quarterly report, if requested by the Department's South District office.

[Rule 62-210.700(6), F.A.C.]

**B.9. Test Reports.** The test report shall provide sufficient detail on the emissions unit tested and the test procedures used to allow the Department's South District office to determine if the test was properly conducted and the test results properly computed. As a minimum, the test report, other than for an EPA or DEP Method 9 test, shall provide the following information:

1. The type, location, and designation of the emissions unit tested.
2. The facility at which the emissions unit is located.
3. The owner or operator of the emissions unit.

4. The normal type and amount of fuels used and materials processed, and the types and amounts of fuels used and material processed during each test run.
5. The means, raw data and computations used to determine the amount of fuels used and materials processed, if necessary to determine compliance with an applicable emission limiting standard.
6. The type of air pollution control devices installed on the emissions unit, their general condition, their normal operating parameters (pressure drops, total operating current and GPM scrubber water), and their operating parameters during each test run.
7. A sketch of the duct within 8 stack diameters upstream and 2 stack diameters downstream of the sampling ports, including the distance to any upstream and downstream bends or other flow disturbances.
8. The date, starting time and duration of each sampling run.
9. The test procedures used, including any alternative procedures authorized pursuant to Rule 62-297.620, F.A.C. Where optional procedures are authorized in this chapter, indicate which option was used.
10. The number of points sampled and configuration and location of the sampling plane.
11. For each sampling point for each run, the dry gas meter reading, velocity head, pressure drop across the stack, temperatures, average meter temperatures and sample time per point.
12. The type, manufacturer and configuration of the sampling equipment used.
13. Data related to the required calibration of the test equipment.
14. Data on the identification, processing and weights of all filters used.
15. Data on the types and amounts of any chemical solutions used.
16. Data on the amount of pollutant collected from each sampling probe, the filters, and the impingers, are reported separately for the compliance test.
17. The names of individuals who furnished the process variable data, conducted the test, analyzed the samples and prepared the report.
18. All measured and calculated data required to be determined by each applicable test procedure for each run.
19. The detailed calculations for one run that relate the collected data to the calculated emission rate.
20. The applicable emission standard, and the resulting maximum allowable emission rate for the emissions unit, plus the test result in the same form and unit of measure.
21. A certification that, to the knowledge of the owner or his authorized agent, all data submitted are true and correct. When a compliance test is conducted for the Department or its agent, the person who conducts the test shall provide the certification with respect to the test procedures used. The owner or his authorized agent shall certify that all data required and provided to the person conducting the test are true and correct to his knowledge.

[Rules 62-213.440 and 62-297.310(8), F.A.C.]

**B.10. Acid Rain Part Application.** For any unit which was a solid waste incinerator, burning less than 20 percent fossil fuel as described in 40 CFR 72.6(b)(7), adopted and incorporated by reference at Rule 62-204.800, F.A.C. the designated representative of the source containing the unit shall submit a complete Acid Rain Part application governing such unit to the Department before the later of January 1, 1998, or March 1 of the year following the three calendar year period in which the incinerator consumed 20 percent or more fossil fuel on a British thermal unit (BTU) basis.

[Chapter 62-214.320(1)(h), F.A.C.]

**B.11.** The permittee shall comply with the requirements contained in Appendix 40 CFR 60, Subpart A, attached to this permit.

[Rule 62-204.800(7)(d), F.A.C.]

## Appendix H-1, Permit History/ID Number Changes

City of Key West  
Southernmost Waste To Energy Facility

FINAL Permit No.: 0870047-001-AV  
Facility ID No.: 0870047

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**Permit History (for tracking purposes):**

<u>E.U. ID No</u>	<u>Description</u>	<u>Permit No.</u>	<u>Issue Date</u>	<u>Expiration Date</u>	<u>Extended Date<sup>1,2</sup></u>
-001	Municipal Waste Combustor No. 1	AO44-207778	04/03/92	04/01/97	
-002	Municipal Waste Combustor No. 2	AO44-207781	04/03/92	04/01/97	
-001	MWC No.1 Soot Blowing Mod	0870047-002-AC	12/04/98		
-002	MWC No.2 Soot Blowing Mod	0870047-002-AC	12/04/98		

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**(if applicable) ID Number Changes (for tracking purposes):**

From: Facility ID No.: 52FTM44004702  
To: Facility ID No.: 0870047

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Notes:

1 - AO permit(s) automatic extension(s) in Rule 62-210.300(2)(a)3.a., F.A.C., effective 03/21/96.

2 - AC permit(s) automatic extension(s) in Rule 62-213.420(1)(a)4., F.A.C., effective 03/20/96.

{Rule 62-213.420(1)(b)2., F.A.C., allows Title V Sources to operate under existing valid permits that were in effect at the time of application until the Title V permit becomes effective}



**Table 1, Summary of Air Pollutant Standards and Terms**

City of Key West  
Southernmost Waste To Energy Facility

FINAL Permit No.: 0870047-001-AV  
Facility ID No.: 0870047

**E.U. ID Nos.            Brief Description**

-001		Solid Waste Combustor Unit #1				Allowable Emissions		Equivalent Emissions		Regulatory Citation(s)	See Permit Condition(s)
Pollutant Name	Fuel(s) *	Hours/ Year *	Standards	lb/ hour	TPY	lb/hour **	TPY **				
PM Emissions	Mixed municipal waste	8760	0.08 gr/dscf			7.60	33.26	A044-207778 40 CFR 60.52(a)	A.7.		
Visible Emissions	Mixed municipal waste	8760	5% Opacity					A044-207778 Rule 62-296.401, F.A.C.	A.6.		

-002		Solid Waste Combustor Unit #2				Allowable Emissions		Equivalent Emissions		Regulatory Citation(s)	See Permit Condition(s)
Pollutant Name	Fuel(s) *	Hours/ Year *	Standards	lb/ hour	TPY	lb/hour **	TPY **				
PM Emissions	Mixed municipal waste	8760	0.08 gr/dscf			7.60	33.26	A044-207781 40 CFR 60.52(a)	A.7.		
Visible Emissions	Mixed municipal waste	8760	5% Opacity					A044-207781 Rule 62-296.401, F.A.C.	A.6.		

\*\* The "Equivalent Emissions" listed are for informational purposes only.

This table summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.

**Table 2, Summary of Compliance Requirements**

City of Key West  
Southernmost Waste To Energy Facility

**FINAL Permit No.: 0870047-001-AV**  
**Facility ID No.: 0870047**

E.U. # -001	Municipal Solid Waste Combustor #1
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Pollutant Name or Parameter	Fuel(s)	Compliance Method	Testing Time or Frequency	Frequency Base Date <sup>1</sup>	Min. Compliance Test Time	CMS <sup>2</sup>	See Permit Condition(s)
PM Emissions	Mixed municipal waste	EPA Method 5	Annual	N/A	6 hours	No	A.11., A.12.
Visible Emissions	Mixed municipal waste	EPA Method 9	Annual	N/A	1 hour	No	A.11., A.12.

E.U. # -002	Municipal Solid Waste Combustor #2
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Pollutant Name or Parameter	Fuel(s)	Compliance Method	Testing Time or Frequency	Frequency Base Date <sup>1</sup>	Min. Compliance Test Time	CMS <sup>2</sup>	See Permit Condition(s)
PM Emissions	Mixed municipal waste	EPA Method 5	Annual	N/A	6 hours	No	A.11., A.12.
Visible Emissions	Mixed municipal waste	EPA Method 9	Annual	N/A	1 hour	No	A.11., A.12.

1 - Frequency base date established for planning purposes only; see Rule 62-297.310, F.A.C.

2 - Continuous Monitoring System.

These tables summarize information for convenience purposes only. These tables do not supersede any of the terms or conditions of this permit.

**Appendix U-1. List of Unregulated Emissions Units and/or Activities.**

Unregulated Emissions Units and/or Activities. An emissions unit which emits no “emissions-limited pollutant” and which is subject to no unit-specific work practice standard, though it may be subject to regulations applied on a facility-wide basis (e.g., unconfined emissions, odor, general opacity) or to regulations that require only that it be able to prove exemption from unit-specific emissions or work practice standards.

The below listed emissions units and/or activities are neither ‘regulated emissions units’ nor ‘insignificant emissions units’.

<b>Emissions Unit</b>	<b>Description</b>
-xxx	Surface Coating and Solvent Cleaning
-xxx	General Purpose Engines
-xxx	Fuel Storage Tanks
-xxx	Helper Cooling Towers
-xxx	Emergency Generators

**Appendix I-1, List of Insignificant Emissions Units and/or Activities.**

The facilities, emissions units, or pollutant-emitting activities listed in Rule 62-210.300(3)(a), F.A.C., Categorical Exemptions, are exempt from the permitting requirements of Chapters 62-210 and 62-4, F.A.C.; provided, however, that exempt emissions units shall be subject to any applicable emission limiting standards and the emissions from exempt emissions units or activities shall be considered in determining the potential emissions of the facility containing such emissions units. Emissions units and pollutant-emitting activities exempt from permitting under Rule 62-210.300(3)(a), F.A.C., shall not be exempt from the permitting requirements of Chapter 62-213, F.A.C., if they are contained within a Title V source; however, such emissions units and activities shall be considered insignificant for Title V purposes provided they also meet the criteria of Rule 62-213.430(6)(b), F.A.C. No emissions unit shall be entitled to an exemption from permitting under Rule 62.210.300(3)(a), F.A.C., if its emissions, in combination with the emissions of other units and activities at the facility, would cause the facility to emit or have the potential to emit any pollutant in such amount as to make the facility a Title V source.

The below listed emissions units and/or activities are considered insignificant pursuant to Rule 62-213.430(6), F.A.C.

3	Closed Landfill
4	Ash handling and transfer activities
5	Recyclable handling and processing activities

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**(version dated 07/01/97)**

Quarterly Report. The Permittee shall submit a quarterly excess emissions and monitoring systems performance report. All reports shall be postmarked by the 30th day following the end of each calendar half (or quarter, as appropriate). Written reports of excess emissions shall include the following information:

1. The magnitude of excess emissions computed in accordance with 40 CFR 60.13(h), any conversion factor(s) used, and the date and time of commencement and completion of each time period of excess emissions. The process operating time during the reporting period.

2. Specific identification of each period of excess emissions that occurs during startups, shutdowns and malfunctions of the affected facility. The nature and cause of any malfunction (if known), the corrective action taken or preventative measures adopted.

3. The date and time identifying each period during which the continuous monitoring system was inoperative except for zero and span checks and the nature of the system repairs or adjustments.

4. When no excess emissions have occurred or the continuous monitoring system(s) have not been inoperative, repaired, or adjusted, such information shall be stated in the report.

[40 CFR 60.7(c)]

Summary Report. The summary report form shall contain the information and be in the format shown in Figure 1 (attached) unless otherwise specified by the Department. One summary report form shall be submitted for each pollutant monitored.

1. If the total duration of excess emissions for the reporting period is less than one percent of the operating time for the reporting period and CMS downtime for the reporting period is less than five percent of the total operating time for the reporting period, only the summary report form shall be submitted and the excess emission report described in 40 CFR 60.7(c) need not be submitted unless requested by the Department.

2. If the total duration of excess emissions for the reporting period is one percent or greater of the total operating time for the reporting period or the total CMS downtime for the reporting period is five percent or greater of the total operating time for the reporting period, the summary report form and the excess emission report described in 40 CFR 60.7(c) shall both be submitted.

*{See attached Figure 1: Summary Report-Gaseous and Opacity Excess Emission and Monitoring System Performance} (electronic file name: figure1.doc)*

[40 CFR 60.7(d)]

Reporting Frequency. (1) Notwithstanding the frequency of reporting requirements specified in 40 CFR 60.7(c), an owner or operator who is required by an applicable subpart to submit excess emissions and monitoring systems performance reports (and summary reports) on a quarterly (or more frequent) basis may reduce the frequency of reporting for that standard to semiannual if the following conditions are met:

(i) For 1 full year (e.g., 4 quarterly or 12 monthly reporting periods) the affected facility's excess emissions and monitoring systems reports submitted to comply with a standard under 40 CFR 60 continually demonstrate that the facility is in compliance with the applicable standard;

(ii) The owner or operator continues to comply with all recordkeeping and monitoring requirements specified in 40 CFR 60, Subpart A, and the applicable standard; and

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**(version dated 07/01/97)**

(iii) The Department does not object to a reduced frequency of reporting for the affected facility, as provided in 40 CFR 60.7(e)(2).

(2) The frequency of reporting of excess emissions and monitoring systems performance (and summary) reports may be reduced only after the owner or operator notifies the Department in writing of his or her intention to make such a change and the Department does not object to the intended change. In deciding whether to approve a reduced frequency of reporting, the Department may review information concerning the source's entire previous performance history during the required recordkeeping period prior to the intended change, including performance test results, monitoring data, and evaluations of an owner or operator's conformance with operation and maintenance requirements. Such information may be used by the Department to make a judgment about the source's potential for noncompliance in the future. If the Department disapproves the Permittee's request to reduce the frequency of reporting, the Department will notify the Permittee in writing within 45 days after receiving notice of the owner or operator's intention. The notification from the Department to the Permittee will specify the grounds on which the disapproval is based. In the absence of a notice of disapproval within 45 days, approval is automatically granted.

(3) As soon as monitoring data indicate that the affected facility is not in compliance with any emission limitation or operating parameter specified in the applicable standard, the frequency of reporting shall revert to the frequency specified in the applicable standard, and the Permittee shall submit an excess emissions and monitoring systems performance report (and summary report, if required) at the next appropriate reporting period following the noncomplying event. After demonstrating compliance with the applicable standard for another full year, the Permittee may again request approval from the Department to reduce the frequency of reporting for that standard as provided for in 40 CFR 60.7(e)(1) and (e)(2).

[40 CFR 60.7(e)]

Records Retention. The Permittee shall maintain a file of all measurements, including continuous monitoring system, monitoring device, and performance testing measurements; all continuous monitoring system performance evaluations; all continuous monitoring system or monitoring device calibration checks; adjustments and maintenance performed on these systems or devices; and, all other information required by 40 CFR 60 recorded in a permanent form suitable for inspection. The file shall be retained for at least **5 (five)** years following the date of such measurements, maintenance, reports, and records.

[40 CFR 60.7(f); Rule 62-213.440(1)(b)2.b., F.A.C.]

Performance tests shall be conducted and data reduced in accordance with the test methods and procedures contained in each applicable subpart unless the Department (1) specifies or approves, in specific cases, the use of a reference method with minor changes in methodology, (2) waives the requirement for performance tests because the owner or operator of a source has demonstrated by other means to the Department's satisfaction that the affected facility is in compliance with the standard, or (3) approves shorter sampling times and smaller sample volumes when necessitated by process variables or other factors. Nothing in 40 CFR 60.8 shall be construed to abrogate the Department's authority to require testing under section 114 of the Act.

[40 CFR 60.8(b)(1), (4) & (5)]

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Performance tests shall be conducted under such conditions as the Department shall specify to the plant operator based on representative performance of the affected facility. The owner or operator shall make available to the Department such records as may be necessary to determine the conditions of the performance tests. Operations during periods of startup, shutdown, and malfunction shall not constitute representative conditions for the purpose of a performance test nor shall emissions in excess of the level of the applicable emission limit during periods of startup, shutdown, and malfunction be considered a violation of the applicable emission limit unless otherwise specified in the applicable standard.

[40 CFR 60.8(c)].

Department Notification.

(a) The Permittee shall provide to the Department's South District office at least 15 days prior notice of any compliance or performance test, except as specified under other subparts, to afford the District office the opportunity to have an observer present. Test results shall be submitted to the District office no later than 45 days after completion of the test.

(b) The Permittee shall give written notification to the Department when there is any modification to this facility. This notice shall be submitted timely and in advance of any critical date involved to allow sufficient time for review, discussion, and revision of plans, if necessary. Such notice shall include, but not be limited to, information describing the precise nature of the change; modifications to any emission control system; production capacity of the facility before and after the change; and, the anticipated completion date of the change.

[40 CFR 60.8(d) and Rule 62-297.310(7)(a)8., F.A.C.]

The Permittee shall provide, or cause to be provided, performance testing facilities as follows:

1. Sampling ports adequate for test methods applicable to such facility. This includes (a) constructing the air pollution control system such that volumetric flow rates and pollutant emission rates can be accurately determined by applicable test methods and procedures and (b) providing a stack or duct free of cyclonic flow during performance tests, as demonstrated by applicable test methods and procedures.

2. Safe sampling platform(s).

3. Safe access to sampling platform(s).

4. Utilities for sampling and testing equipment. [40 CFR 60.8(e)]

Each performance test shall consist of three separate runs using the applicable test method. Each run shall be conducted for the time and under the conditions specified in the applicable standard. For the purpose of determining compliance with an applicable standard, the arithmetic means of results of the three runs shall apply. In the event that a sample is accidentally lost or conditions occur in which one of the three runs must be discontinued because of forced shutdown, failure of an irreplaceable portion of the sample train, extreme meteorological conditions, or other circumstances, beyond the owner or operator's control, compliance may, upon the Department's approval, be determined using the arithmetic mean of the results of the two other runs.

[40 CFR 60.8(f)].

Compliance with Standards and Maintenance Requirements

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Compliance with opacity standards in 40 CFR 60 shall be determined by conducting observations in accordance with Reference Method 9 in appendix A of 40 CFR 60, any alternative method that is approved by the Department, or as provided in 40 CFR 60.11(e)(5). For purposes of determining initial compliance, the minimum total time of observations shall be 3 hours (30 6-minute averages) for the performance test or other set of observations (meaning those fugitive-type emission sources subject only to an opacity standard).  
[40 CFR 60.11(b)].

The Permittee shall follow the manufacturer's instructions during periods of start-up, shutdown, malfunction, or load change to ensure that the best operational practices to minimize emissions will be adhered to and the duration of any excess emissions will be minimized. The instructions shall be kept on file at the plant site and made available for inspection upon request by the Department.  
[40 CFR 60.11(d)]

Credible Evidence. For the purpose of submitting compliance certifications or establishing whether or not a person has violated or is in violation of any standard in 40 CFR 60, nothing in 40 CFR 60 shall preclude the use, including the exclusive use, of any credible evidence or information, relevant to whether a source would have been in compliance with applicable requirements if the appropriate performance or compliance test or procedure had been performed.  
[40 CFR 60.11(g)].

Circumvention. No owner or operator subject to the provisions of 40 CFR 60 shall build, erect, install, or use any article, machine, equipment or process, the use of which conceals an emission which would otherwise constitute a violation of an applicable standard. Such concealment includes, but is not limited to, the use of gaseous diluents to achieve compliance with an opacity standard or with a standard which is based on the concentration of a pollutant in the gases discharged to the atmosphere.  
[40 CFR 60.12]

Modifications

Except as provided under 40 CFR 60.14(e) and 40 CFR 60.14(f), any physical or operational change to an existing facility which results in an increase in the emission rate to the atmosphere of any pollutant to which a standard applies shall be considered a modification within the meaning of section 111 of the Act. Upon modification, an existing facility shall become an affected facility for each pollutant to which a standard applies and for which there is an increase in the emission rate to the atmosphere.  
[40 CFR 60.14(a)].

Emission rate shall be expressed as kg/hr (lb./hour) of any pollutant discharged into the atmosphere for which a standard is applicable. The Department shall use the following to determine emission rate:



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(1) Emission factors as specified in the latest issue of "Compilation of Air Pollutant Emission Factors", EPA Publication No. AP-42, or other emission factors determined by the Department to be superior to AP-42 emission factors, in cases where utilization of emission factors demonstrate that the emission level resulting from the physical or operational change will either clearly increase or clearly not increase.

(2) Material balances, continuous monitor data, or manual emission tests in cases where utilization of emission factors as referenced in 40 CFR 60.14(b)(1) does not demonstrate to the Department's satisfaction whether the emission level resulting from the physical or operational change will either clearly increase or clearly not increase, or where an owner or operator demonstrates to the Department's satisfaction that there are reasonable grounds to dispute the result obtained by the Department utilizing emission factors as referenced in 40 CFR 60.14(b)(1). When the emission rate is based on results from manual emission tests or continuous monitoring systems, the procedures specified in 40 CFR 60 appendix C of 40 CFR 60 shall be used to determine whether an increase in emission rate has occurred. Tests shall be conducted under such conditions as the Department shall specify to the owner or operator based on representative performance of the facility. At least three valid test runs must be conducted before and at least three after the physical or operational change. All operating parameters which may affect emissions must be held constant to the maximum feasible degree for all test runs.

[40 CFR 60.14(b)].

The addition of an affected facility to a stationary source as an expansion to that source or as a replacement for an existing facility shall not by itself bring within the applicability of 40 CFR 60 any other facility within that source.

[40 CFR 60.14(c)].

The following shall not, by themselves, be considered modifications under 40 CFR 60:

(1) Maintenance, repair, and replacement which the Department determines to be routine for a source category, subject to the provisions of 40 CFR 60.14(c) and 40 CFR 60.15.

(2) An increase in production rate of an existing facility, if that increase can be accomplished without a capital expenditure on that facility.

(3) An increase in the hours of operation.

(4) Use of an alternative fuel or raw material if, prior to the date any standard under 40 CFR 60 becomes applicable to that source type, as provided by 40 CFR 60.1, the existing facility was designed to accommodate that alternative use. A facility shall be considered to be designed to accommodate an alternative fuel or raw material if that use could be accomplished under the facility's construction specifications as amended prior to the change. Conversion to coal required for energy considerations, as specified in section 111(a)(8) of the Act, shall not be considered a modification.

(5) The addition or use of any system or device whose primary function is the reduction of air pollutants, except when an emission control system is removed or is replaced by a system which the Department determines to be less environmentally beneficial.

(6) The relocation or change in ownership of an existing facility.

[40 CFR 60.14(e)].

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Special provisions set forth under an applicable subpart of 40 CFR 60 shall supersede any conflicting provisions of this section.

[40 CFR 60.14(f)].

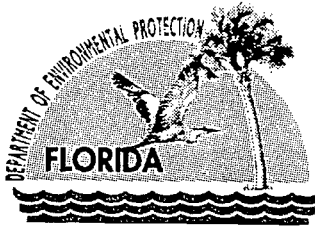
Within 180 days of the completion of any physical or operational change subject to the control measures specified in 40 CFR 60.14(a), compliance with all applicable standards must be achieved.

[40 CFR 60.14(g)].

Definitions. For the purposes of Rule 62-204.800(7), F.A.C., the definitions contained in the various provisions of 40 CFR 60, shall apply except that the term "Administrator" when used in 40 CFR 60, shall mean the Secretary or the Secretary's designee.

[40 CFR 60.2; Rule 62-204.800(7)(a), F.A.C.]

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Jeb Bush  
Governor

# Department of Environmental Protection

Twin Towers Office Building  
2600 Blair Stone Road  
Tallahassee, Florida 32399-2400

David B. Struhs  
Secretary

## STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

Mr. E. David Fernandez  
Utilities Director  
City of Key West  
P.O. Box 1409  
Key West, Florida 33041-1409

### ORDER EXTENDING PERMIT EXPIRATION DATE Southernmost Waste To Energy Facility, **Facility ID No.:** 0870047

Section 403.0872(2)(b), Florida Statutes (F.S.), specifies that any facility which submits to the Department of Environmental Protection (Department) a timely and complete application for a Title V permit "is entitled to operate in compliance with its existing air permit pending the conclusion of proceedings associated with its application."

Section 403.0872(6), F.S., provides that a proposed Title V permit which is not objected to by the United States Environmental Protection Agency (EPA) "must become final no later than fifty-five (55) days after the date on which the proposed permit was mailed" to the EPA.

Pursuant to the Federal Acid Rain Program as defined in Rule 62-210.200, Florida Administrative Code (F.A.C.), all Acid Rain permitting must become effective on January 1 of a given year.

This facility, which will be permitted pursuant to Section 403.0872, F.S., (Title V permit) will be required to have a permit effective date subsequent to the final processing date of the facility's Title V permit.

To prevent misunderstanding and to assure that the above identified facility continues to comply with existing permit terms and conditions until its Title V permit becomes effective, it is necessary to extend the expiration date(s) of its existing valid permit(s) until the effective date of its Title V permit. Therefore, under the authority granted to the Department by Section 403.061(8), F.S., **IT IS ORDERED:**

1. The expiration date(s) of the existing valid permit(s) under which the above identified facility is currently operating is (are) hereby extended until the effective date of its permit issued pursuant to Section 403.0872, F.S., (Title V permit);
2. The facility shall comply with all terms and conditions of its existing valid permit(s) until the effective date of its Title V permit;
3. The facility will continue to comply with the requirements of Chapter 62-214, F.A.C., and the Federal Acid Rain Program, as defined in Rule 62-210.200, F.A.C., pending final issuance of its Title V permit.

### PETITION FOR ADMINISTRATIVE REVIEW

The Department will take the action described in this Order unless a timely petition for an administrative hearing is filed pursuant to Sections 120.569 and 120.57, F.S.

*"Protect, Conserve and Manage Florida's Environment and Natural Resources"*

A person whose substantial interests are affected by the proposed permitting decision may petition for an administrative hearing in accordance with Sections 120.569 and 120.57, F.S. The petition must contain the information set forth below and must be filed (received) in the Office of General Counsel of the Department of Environmental Protection, 3900 Commonwealth Boulevard, Mail Station #35, Tallahassee, Florida 32399-3000 (Telephone: 850/488-9730; Fax: 850/487-4938). Petitions filed by the permit applicant or any of the parties listed below must be filed within 14 days of receipt of this Order. Petitions filed by any persons other than those entitled to written notice under Section 120.60(3), F.S., must be filed within 14 days of publication of the public notice or within 14 days of receipt of this Order, whichever occurs first. Under Section 120.60(3), F.S., however, any person who asked the permitting authority for notice of agency action may file a petition within 14 days of receipt of that notice, regardless of the date of publication. A petitioner shall mail a copy of the petition to the applicant at the address indicated above, at the time of filing. The failure of any person to file a petition within the appropriate time period shall constitute a waiver of that person's right to request an administrative determination (hearing) under Sections 120.569 and 120.57, F.S., or to intervene in this proceeding and participate as a party to it. Any subsequent intervention will be only at the approval of the presiding officer upon the filing of a motion in compliance with Rule 28-106.205, F.A.C.

A petition that disputes the material facts on which the permitting authority's action is based must contain the following information:

- (a) The name and address of each agency affected and each agency's file or identification number, if known;
- (b) The name, address, and telephone number of the petitioner; the name, address and telephone number of the petitioner's representative, if any, which shall be the address for service purposes during the course of the proceeding; and an explanation of how the petitioner's substantial interests will be affected by the agency determination;
- (c) A statement of how and when each petitioner received notice of the agency action or proposed action;
- (d) A statement of all disputed issues of material fact. If there are none, the petition must so indicate;
- (e) A concise statement of the ultimate facts alleged, as well as the rules and statutes which entitle the petitioner to relief; and,
- (f) A statement of the specific rules or statutes the petitioner contends require reversal or modification of the agency's proposed action; and,
- (g) A statement of the relief sought by the petitioner, stating precisely the action petitioner wishes the agency to take with respect to the agency's proposed action.

A petition that does not dispute the material facts upon which the permitting authority's action is based shall state that no such facts are in dispute and otherwise shall contain the same information as set forth above, as required by Rule 28-106.301, F.A.C.

Because the administrative hearing process is designed to formulate final agency action, the filing of a petition means that the Department's final action may be different from the position taken by it in this Order. Persons whose substantial interests will be affected by any such final decision of the Department on the application have the right to petition to become a party to the proceeding, in accordance with the requirements set forth above.

Mediation will not be available in this proceeding.

In addition to the above, a person subject to regulation has a right to apply for a variance from or waiver of the requirements of particular rules, on certain conditions, under Section 120.542, F.S. The relief provided by this state statute applies only to state rules, not statutes, and not to any federal regulatory requirements. Applying for a variance or waiver does not substitute or extend the time for filing a petition for an administrative hearing or exercising any other right that a person may have in relation to the action proposed in this Order.

The application for a variance or waiver is made by filing a petition with the Office of General Counsel of the Department, 3900 Commonwealth Boulevard, Mail Station 35, Tallahassee, Florida 32399-3000. The petition must specify the following information:

- (a) The name, address, and telephone number of the petitioner;
- (b) The name, address, and telephone number of the attorney or qualified representative of the petitioner, if any;
- (c) Each rule or portion of a rule from which a variance or waiver is requested;
- (d) The citation to the statute underlying (implemented by) the rule identified in (c) above;
- (e) The type of action requested;
- (f) The specific facts that would justify a variance or waiver for the petitioner;
- (g) The reason why the variance or waiver would serve the purposes of the underlying statute (implemented by the rule); and,
- (h) A statement whether the variance or waiver is permanent or temporary and, if temporary, a statement of the dates showing the duration of the variance or waiver requested.

The Department will grant a variance or waiver when the petition demonstrates both that the application of the rule would create a substantial hardship or violate principles of fairness, as each of those terms is defined in Section 120.542(2), F.S., and that the purpose of the underlying statute will be or has been achieved by other means by the petitioner.

Persons subject to regulation pursuant to any federally delegated or approved air program should be aware that Florida is specifically not authorized to issue variances or waivers from any requirements of any such federally delegated or approved program. The requirements of the program remain fully enforceable by the Administrator of EPA and by any person under the Clean Air Act unless and until the Administrator separately approves any variance or waiver in accordance with the procedures of the federal program.

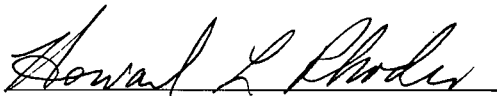
This Order constitutes final agency action unless a petition is filed in accordance with the above paragraphs.

#### RIGHT TO APPEAL

Any party to this Order has the right to seek judicial review of the Order pursuant to Section 120.68, F.S., by the filing of a Notice of Appeal pursuant to Rule 9.110, Florida Rules of Appellate Procedure, with the Clerk of the Department in the Office of General Counsel, 3900 Commonwealth Boulevard, MS35, Tallahassee, Florida 32399-3000; and, by filing a copy of the Notice of Appeal accompanied by the applicable filing fees with the appropriate District Court of Appeal. The Notice of Appeal must be filed within 30 days from the date the Notice of Agency Action is filed with the Clerk of the Department.

DONE AND ORDERED this 27<sup>th</sup> day of March, 1999, in Tallahassee, Florida.

STATE OF FLORIDA DEPARTMENT  
OF ENVIRONMENTAL PROTECTION



HOWARD L. RHODES, Director  
Division of Air Resources Management  
Twin Towers Office Building  
Mail Station 5500  
2600 Blair Stone Road  
Tallahassee, Florida 32399-2400  
850/488-0114

**CERTIFICATE OF SERVICE**

The undersigned duly designated deputy agency clerk hereby certifies that this order and all copies were sent by certified mail before the close of business on 3/30/99 to the person(s) listed:

Mr. E. David Fernandez, City of Key West  
Ms. Marie Whitman Mahan, P.E.  
Mr. Phil Barbaccia, P.E., DEP/SD

Clerk Stamp

**FILING AND ACKNOWLEDGMENT FILED**, on this date, pursuant to Section 120.52(7), Florida Statutes, with the designated agency Clerk, receipt of which is hereby acknowledged.

Barbara J. Boutwell  
(Clerk)

3/30/99  
(Date)

Published Daily  
Key West, Monroe County, Florida 33040

**RECEIVED**

NOV 16 1998

BUREAU OF  
AIR REGULATION

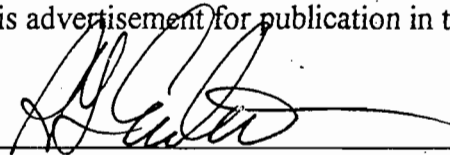
**STATE OF FLORIDA  
COUNTY OF MONROE**

Before the undersigned authority personally appeared Randy G. Erickson, who on oath says that he is director of the Advertising Department of the Key West Citizen, a daily newspaper published at Key West, in Monroe County Florida; that the attached copy of advertisement, being a legal notice in the matter of

Notice of Intent to Issue Title V Air Operation Permit  
Permit No. 0870047-001-AV

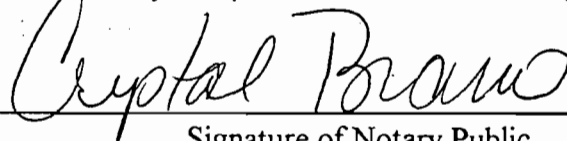
In the \_\_\_\_\_ Court, was published in said newspaper in the issues of  
Nov. 9th, 1998

Affiant further says that The Key West Citizen is a newspaper published in Key West, in said Monroe County, Florida, and that the said newspaper has heretofore been continuously published in said Monroe County, Florida each day (except Saturdays) and has been entered as second-class mail matter at the post office in Key West, in said Monroe County, Florida, for a period of 1 year next preceding the first publication of the attached copy of advertisement; and affiant further says that he has neither paid nor promised any person, firm or corporation any discount, rebate, commission or refund for the purpose of securing this advertisement for publication in the said newspaper.



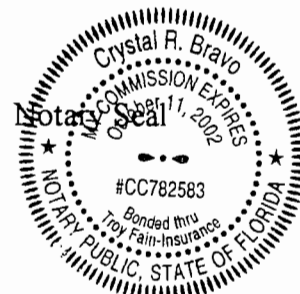
Signature of Affiant

Sworn and subscribed before me this 12<sup>th</sup> day of November, 1998.



Signature of Notary Public

Expires Oct. 11, 2002  
Personally Known  Produced Identification \_\_\_\_\_  
Type of Identification Produced \_\_\_\_\_



**PUBLIC NOTICE OF INTENT TO  
ISSUE TITLE V AIR OPERATION  
PERMIT**

**STATE OF FLORIDA DEPARTMENT  
OF ENVIRONMENTAL  
PROTECTION**

Title V DRAFT Permit No.  
0870047-001-AV

Southernmost Waste to Energy  
Monroe County

The Department of Environmental Protection (permitting authority) gives notice of its intent to issue a Title V air operation permit to Utility Board of the City of Key West for the Southernmost Waste to Energy located at 5701 West Junior College Road Key West, Monroe County. The applicant's name and address are: E. David Fernandez, City of Key West, P.O. Box 1409, Key West, Florida 33041-1409

The permitting authority will issue the Title V DRAFT Permit, and subsequent the Title V FINAL permit, in accordance with the conditions of the Title V DRAFT Permit, unless a response received in accordance with the following procedures results in a different decision or significant change of term or conditions.

The Permitting authority will accept written comments concern-

ing the proposed Title V DRAFT Permit issuance action for a period of 30 (thirty) days from the date of publication of this Notice. Written comments should be provided to the Department's Bureau of Air Regulations, 2600 Blair Stone Road, Mail Station #5505, Tallahassee, Florida 32399-2400. Any written comments filed shall be made available for public inspection. If written comments received result in a significant change in this DRAFT Permit the permitting authority shall issue a Revised Permit and acquire, if applicable, another Public Notice.

The permitting authority will issue the permit unless a timely petition for an administrative hearing is filed pursuant to Sections 120.569 and 120.57, F.S. Mediation under Section 120.573, F.S. The petition must contain the information set forth below and must be filed (received in the Office of General Counsel of the De-

partment of Environmental Protection, 3900 Commonwealth Boulevard, Mail Station #35, Tallahassee, Florida 32399-3000 (Telephone 850-488-9730; Fax 850-487-4938). Petitions must be filed within 14 (fourteen) days of publication of the public notice within fourteen days of receipt of the notice of intent, whichever occurs first. Under Section 120.60(3), F.S., However, any person who asked the permitting authority for notice of agency action may file a petition within fourteen days receipt of that notice, regardless of the date of publication. A petitioner must mail a copy the petition to the applicant at the address indicated above, at the time of filing. The failure of any person to file a petition within the applicable time period shall constitute a waiver of that person's right to request an administrative determination (hearing) under Sections 120.569 and 120.57, F.S. or to intervene in this proceedings and participate as a party to it. Any subsequent intervention will be only at the approval of the presiding officer the filing of a motion in compliance with the Rule 28-106.205 of the Florida Administrative Code. (F.A.C.)

A petition that disputes the material facts on which the permitting authority's action is based must contain the following information:

- (a) The name and address of each agency affected and each agency's file or identification number if known;
- (b) The name, address, and telephone number of each petitioner, name address and telephone of petitioner's representative, if any, which shall be the address for service purposes during the course of the proceeding; and an explanation of how petitioner's substantial rights will be affected by the agency determination;
- (c) A statement of how and when each petitioner received notice of the agency action or proposed action;
- (d) A statement of all disputed issues of material fact. If there are none, the petition must so state;
- (e) A concise statement of the ultimate facts alleged as well as the rules and statutes which entitle petitioner to relief; and
- (f) A demand for relief.

A petition that does not dispute the material facts upon which the permitting authority's action is to be based shall state that no such facts are in dispute and otherwise shall contain the same information set as set forth above, as required by Rule 28-106.301, F.A.C.

Because the administrative hearing process is designed to formulate the final action may be different from the position taken by it in this notice of intent. Persons whose substantial interests will be affected by any such final decision of the permitting authority on the application have the right to petition to become a party to the proceeding, in accordance with the requirements set forth above.

In addition to the above pursuant to 42 United States Code (U.S.C) Section 7661d(b)(2), any person may petition the Administrator of the EPA within 60 (sixty) days of the expiration of the Administrator's 45 (forty-five) day review period as established at 24 U.S.C.

Section 7661d(b)(1), to object to issuance of any permit. Any petition shall be based only on objections to the permit that were raised with reasonable specificity during the 30 (thirty) day public comment period provided in this notice, unless the petitioner demonstrated to the Administrator of

the EPA docs not stay the effective the effective date of any permit properly issued pursuant to the provisions of Chapter 62-213, F.A.C. Petitions filed with the Administrator of the EPA at 401 M. Street, SW, Washington, D.C. 20460.

A complete project file is available for public inspection during normal business hours, 8:00 a.m. to 5:00p.m., Monday through Friday, except legal holidays, at:

Permitting Authority  
Department of Environmental Protection  
Bureau of Air Regulation  
111 South Magnolia Drive, Suite 4

Tallahassee, Florida 32301  
Telephone: 850/488-1344  
Fax: 850/922-6979

Affected District  
FDEP South Florida District Office  
2295 Victoria Avenue, Suite 364

Fort Myers, Florida 33901  
Telephone 941/332-6975  
Fax 941/332-6969

The complete project file includes the DRAFT Permit, the application, and the information submitted by the responsible official, exclusive of Confidential records under Section 403.111, F.S. Interested persons may contact Scott M. Sheplak, P.E., at the above address, or call 850/921-9532, for additional information.  
November 9th, 3



FACSIMILE TRANSMISSION SHEET

CDM

Environmental engineers, scientists, planners & management consultants

CAMP DRESSER & MCKEE INC.

DATE: 4/6/98

FROM: Marie Whitman Mahan PE

TO: Michael Malpin PE

CAMP DRESSER & MCKEE  
1342 Colonial Boulevard  
Suite F-44  
Fort Myers, Florida 33907  
Phone: (941) 275-8575  
Fax: (941) 275-8141  
Naples Local 643-4908

CDM PN: \_\_\_\_\_

Subject: Southern most Waste to Energy facility

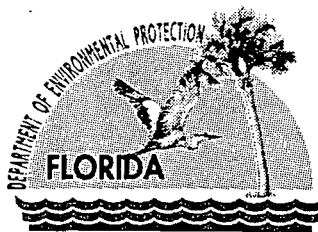
Please note that our mailing address  
has changed to the above address.

Thanks

Marie

1 Pages (includes Cover Sheet)

Questions/Problems? Contact: Melanie at (941) 275-8575



Jeb Bush  
Governor

# Department of Environmental Protection

Twin Towers Office Building  
2600 Blair Stone Road  
Tallahassee, Florida 32399-2400

David B. Struhs  
Secretary

March 25, 1999

Mr. E. David Fernandez  
Utilities Director  
City of Key West  
P.O. Box 1409  
Key West, Florida 33041-1409

Re: PROPOSED Title V Permit No.: 0870047-001-AV  
Southernmost Waste To Energy Facility

Dear Mr. Fernandez:

One copy of the "PROPOSED PERMIT DETERMINATION" for the Southernmost Waste To Energy Facility located at 5701 West Junior College Road, Key West, Monroe County, is enclosed. This letter is only a courtesy to inform you that the DRAFT permit has become a PROPOSED permit.

An electronic version of this determination has been posted on the Division of Air Resources Management's world wide web site for the United States Environmental Protection Agency (USEPA) Region 4 office's review. The web site address is <http://www2.dep.state.fl.us/air>.

Pursuant to Section 403.0872(6), Florida Statutes, if no objection to the PROPOSED permit is made by the USEPA within 45 days, the PROPOSED permit will become a FINAL permit no later than 55 days after the date on which the PROPOSED permit was mailed (posted) to USEPA. If USEPA has an objection to the PROPOSED permit, the FINAL permit will not be issued until the permitting authority receives written notice that the objection is resolved or withdrawn.

If you should have any questions, please contact Michael P. Halpin, P.E. at 850/921-9530.

Sincerely,

C. H. Fancy, P.E.  
Chief  
Bureau of Air Regulation

CHF/h

Enclosures

copy furnished to:

Ms. Marie Whitman Mahan, P.E., Camp Dresser & McKee, Inc.  
Mr. John Wood, P.E., CH2M Hill, Deerfield Beach, Florida  
Mr. Phil Barbaccia, South District  
Mr. Jim Edds, South District, Marathon  
Ms. Gracy R. Danois, USEPA, Region 4 (INTERNET E-mail Memorandum)  
Ms. Carla E. Pierce, USEPA, Region 4 (INTERNET E-mail Memorandum)

*"Protect, Conserve and Manage Florida's Environment and Natural Resources"*

## PROPOSED PERMIT DETERMINATION

PROPOSED Permit No.: 0870047-001-AV

### **I. Public Notice.**

An "INTENT TO ISSUE TITLE V AIR OPERATION PERMIT" to City of Key West for the Southernmost Waste To Energy Facility located at 5701 West Junior College Road, Key West, Monroe County was clerked on October 28, 1998. The "PUBLIC NOTICE OF INTENT TO ISSUE TITLE V AIR OPERATION PERMIT" was published in the Key West Citizen on November 9, 1998. The DRAFT Title V Air Operation Permit was available for public inspection at the permitting authority's office in Fort Myers. Proof of publication of the "PUBLIC NOTICE OF INTENT TO ISSUE TITLE V AIR OPERATION PERMIT" was received on November 12, 1998.

### **II. Public Comment(s).**

1) The only comments received were via a phone call. Mr. John Wood with CH2M Hill in Deerfield Beach indicated that he was calling on the behalf of Mr. E. David Fernandez (the Authorized Rep. for the subject facility). Specifically, Mr. Wood stated that he would be filing an "initial design capacity report" for the adjacent landfill and suggested that there is some likelihood that Key West Southernmost's landfill may be considered as an insignificant source for Title V purposes based upon the calculated emissions resulting from that report. After reviewing this report (which is on file with the Department) the comment is considered to be acceptable and is incorporated as follows:

#### **Request to consider landfill as an insignificant emission:**

**Response:** The landfill is hereby deemed as an insignificant emission unit and is so stated in the permit.

2) Additionally, the permit condition concerning the Standard for Particulate Matter was modified in order to be consistent with 40 CFR 60 Subpart E. The permit condition before and after the change is being shown here for clarification.

Change From: A.7. Particulate Emissions. Particulate matter emissions shall not exceed 0.08 gr./dscf corrected to 50% excess air.  
[AO44-207778 and AO44-207781]

Change To: A.7. Particulate Matter Emissions. Particulate matter emissions shall not exceed 0.08 gr./dscf corrected to 12% carbon dioxide.  
[40 CFR 60.52(a)]

The enclosed PROPOSED Title V Air Operation Permit includes the aforementioned changes to the DRAFT Title V Air Operation Permit.

### **III. Conclusion.**

The permitting authority hereby issues the PROPOSED Permit No.: 0870047-001-AV, with changes noted above.

Mike,  
lets discuss  
& wrap up another Scott

ADAM

DARM - COMMON

bar/tite v/ ts tools/ conditns

Subpart E-Standards of Performance for Incinerators

[for emission units (federal affected facilities) that commence construction or modification after August 17, 1971]

40 CFR 60.52 Standard for particulate matter.

1. Particulate matter emissions shall not be in excess of 0.18 g/dscm (0.08 gr/dscf) corrected to 12 percent CO<sub>2</sub>; \_\_\_ lbs./hr.; \_\_\_ TPY).

[Rule ~~62-296.800~~, F.A.C.; 40 CFR 60.52(a)]

204

40 CFR 60.53 Monitoring of operations.

2. The owner or operator shall record the daily charging rates and hours of operation.

[Rule ~~62-296.800~~, F.A.C.; 40 CFR 60.53(a)]

204

40 CFR 60.54 Test methods and procedures.

3. Compliance with the particulate matter standard in 40 CFR 60.52 shall be determined as follows:

a. The emission rate ( $c_{12}$ ) of particulate matter, corrected to 12 percent CO<sub>2</sub>, shall be computed for each run using the following equation:

$$c_{12} = c_s(12/\%CO_2)$$

where:

$c_{12}$  = concentration of particulate matter, corrected to 12 percent CO<sub>2</sub>, g/dscm (gr/dscf).

$c_s$  = concentration of particulate matter, g/dscm(gr/dscf).

$\%CO_2$  = CO<sub>2</sub> concentration, percent dry basis.

b. Method 5 shall be used to determine the particulate matter concentration ( $c_s$ ). The sampling time and sample volume for each run shall be at least 60 minutes and 0.85 dscm (30 dscf).

c. The emission rate correction factor, integrated or grab sampling and analysis procedure of EPA Method 3B shall be used to determine CO<sub>2</sub> concentration ( $\%CO_2$ ).

(1.) The CO<sub>2</sub> sample shall be obtained simultaneously with, and at the same traverse points as, the particulate run. If the particulate run has more than 12 traverse points, the CO<sub>2</sub> traverse points may be reduced to 12 if EPA Method 1 is used to locate the 12 CO<sub>2</sub> traverse points. If individual CO<sub>2</sub> samples are taken at each traverse point, the CO<sub>2</sub> concentration ( $\%CO_2$ ) used in the correction equation shall be the arithmetic mean of all the individual CO<sub>2</sub> sample concentrations at each traverse point.

(2.) If sampling is conducted after a wet scrubber, an "adjusted" CO<sub>2</sub> concentration [ $(\%CO_2)_{adj}$ ], which accounts for the effects of CO<sub>2</sub> absorption and dilution air, may be used instead of the CO<sub>2</sub> concentration determined in 40 CFR 60.54. The adjusted CO<sub>2</sub> concentration shall be determined by either of the procedures in 40 CFR 60.54(c).

Initial Title V Air Operation Permit  
**DRAFT Permit No.:** 0870047-001-AV

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**Section I. Facility Information.**

**Subsection A. Facility Description.**

This facility consists of two identical municipal solid waste combustors (Unit Nos. 1 and 2) which are mass-fired waterwall boilers; an approximately twenty acre municipal solid waste landfill is contiguous (although it is no longer accepting waste); storage and handling facilities for ash; oil storage tanks; cooling tower; and ancillary support equipment. Also, included in this permit are miscellaneous unregulated/insignificant emissions units and/or activities. Based on the initial Title V permit application received June 12, 1996, this facility is a major source of hazardous air pollutants (HAPs).

**Subsection B. Summary of Emissions Unit ID Nos. and Brief Descriptions.**

<b>E.U. ID Nos.</b>	<b>Brief Description</b>
001	Municipal Waste Combustor No. 1
002	Municipal Waste Combustor No. 2
003	Municipal Solid Waste Landfill

**Unregulated Emissions Units and/or Activities**

<b>E.U. ID No.</b>	<b>Brief Description</b>
xxx	See Appendix U-1, List of Unregulated Emissions Units and/or Activities.

*Please reference the Permit No., Facility ID No., and Appropriate Emissions Unit(s) ID No(s). on all correspondence, test report submittals, Applications, etc.*

**Subsection C. Relevant Documents.**

The documents listed below are not a part of this permit; however, they are specifically related to this permitting action.

These documents are provided to the permittee for information purposes only:

Table 1, Summary of Air Pollutant Standards and Terms.

Table 2, Summary of Compliance Requirements.

Appendix A-1, Abbreviations, Acronyms, Citations, and Identification Numbers (version dated 2/05/97).

Appendix H-1, Permit History/ID Number Changes.

These documents are on file with the permitting authority:

Initial Title V Permit Application received June 12, 1996.

## Section II. Facility-wide Conditions.

### The following Conditions apply facility-wide:

1. APPENDIX TV-1, TITLE V CONDITIONS, is a part of this permit.  
{Permitting note: APPENDIX TV-1, TITLE V CONDITIONS, is distributed to the permittee only. Other persons requesting copies of these conditions shall be provided a copy when requested or otherwise appropriate.}
2. **Not federally enforceable.** General Pollutant Emission Limiting Standards. Objectionable Odor Prohibited. No person shall not cause, suffer, allow, or permit the discharge of air pollutants which cause or contribute to an objectionable odor.  
[Rule 62-296.320(2), F.A.C.]
3. General Particulate Emission Limiting Standards. General Visible Emissions Standard. Except for emissions units that are subject to a particulate matter or opacity limit set forth or established by rule and reflected by conditions in this permit, 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 that designated as Number 1 on the Ringelmann Chart (20 percent opacity). EPA Method 9 is the method of compliance pursuant to Chapter 62-297, F.A.C.  
[Rules 62-296.320(4)(b)1. & 4., F.A.C.]
4. Prevention of Accidental Releases (Section 112(r) of CAA). If required by 40 CFR 68, the permittee shall submit to the implementing agency:
  - a. a risk management plan (RMP) when, and if, such requirement becomes applicable; and,
  - b. certification forms and/or RMPs according to the promulgated rule schedule.[40 CFR 68]
5. Unregulated Emissions Units and/or Activities. Appendix U-1, List of Unregulated Emissions Units and/or Activities, is a part of this permit.  
[Rule 62-213.440(1), F.A.C.]
6. Insignificant Units and/or Activities. Appendix I-1, List of Insignificant Emissions Units and/or Activities, is a part of this permit.  
[Rules 62-213.440(1), 62-213.430(6) and 62-4.040(1)(b), F.A.C.]
7. General Pollutant Emission Limiting Standards. Volatile Organic Compounds Emissions or Organic Solvents 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)(a), F.A.C.]

{Permitting Note: The Department has not ordered any control devices or systems under the referenced rule}.

**8. Not federally enforceable. Reasonable Precautions.** The following techniques shall be used to control unconfined particulate matter emissions on an as needed basis:

- a. Chemical or water application to unpaved road and unpaved yard and landfill areas;
- b. Paving and maintenance of roads, parking areas and yards;
- c. Landscaping or planting of vegetation;
- d. Confining abrasive blasting where possible and appropriate,  
[Rule 62-296.320(4)(c)2., F.A.C.]

{Note: This condition implements the requirements of Rule 62-296.320(4)(c)1., 3., & 4. F.A.C. (Appendix TV-1, Title V Conditions, Condition No. 58)}

**9.** When appropriate, any recording, monitoring, or reporting requirements that are time-specific shall be in accordance with the effective date of the permit, which defines day one.

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

**10.** The permittee shall submit all compliance related notifications and reports required of this permit to the Department's South District office:

Department of Environmental Protection  
South District Office  
2295 Victoria Avenue, Suite 364  
Fort Myers, FL 33902-2549  
Telephone: 941/332-6975  
Fax: 941/332-6969

and

Department of Environmental Protection  
South District Branch Office  
2796 Overseas Highway, Suite 221  
Marathon, FL 33050  
Telephone: 305/289-2310

**12.** Any reports, data, notifications, certifications, and requests required to be sent to the United States Environmental Protection Agency, Region 4, should be sent to:

United States Environmental Protection Agency  
Region 4  
Air, Pesticides & Toxics Management Division  
Operating Permits Section  
61 Forsyth Street  
Atlanta, Georgia 30303  
Telephone: 404/562-9099  
Fax: 404/562-9095



**Section III. Emissions Unit(s) and Conditions.**

**Subsection A. This section addresses the following emissions units.**

<b>E.U. ID No.</b>	<b>Brief Description</b>
001	Municipal Solid Waste Combustor No. 1
002	Municipal Solid Waste Combustor No. 2

These emission units are solid waste combustors and are designated as Combustor Nos. 1 and 2. They are custom built units by Montenay International Corporation and each is rated at a maximum of 6250 pounds per hour (75 tpd or 68 megagrams/day) of mixed municipal solid waste (per unit). Emissions from the combustors are controlled by electrostatic precipitators and combustion controls. Odor is controlled by drawing combustion air from the refuse area. The combustors share a stack. Combustor Nos. 1 and 2 began commercial operation in 1987.

{Permitting notes: These emissions units are regulated under Rules 62-210.300, Permits Required, and 62-204.800(7)(b)5, F.A.C. These emissions units are subject to 40 CFR 60, Subpart E, Standards of Performance for Incinerators. Each combustor's exhaust is ducted to a Belco Model RE19 electrostatic precipitator (ESP), after which each ESP exhausts to a common 140 ft. high stack.}

**The following specific Conditions apply to the emissions units listed above:**

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

**A.1. Permitted Capacity.** The maximum input rate (operation rate) is as follows:

<b>E.U. ID No.</b>	<b>Pounds per hour</b>	<b>Fuel Type</b>
001	6250	Mixed municipal waste
002	6250	Mixed municipal waste

[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.]

{Permitting note: The heat input limitations have been placed in each permit to identify the capacity of each emissions unit for purposes of confirming that emissions testing is conducted within 90-100 percent of the emissions unit's rated capacity (or to limit future operation to 110 percent of the test load), to establish appropriate limits and to aid in determining future rule applicability.}

**A.2. Emissions Unit Operating Rate Limitation After Testing.** See Specific Condition **A.12.**  
[Rule 62-297.310(2), F.A.C.]

**A.3. Methods of Operation - Fuels.** Only mixed municipal solid waste shall be fired in the combustors. The daily charging rates shall be recorded. These incinerators shall not be used for the disposal of radioactive materials.

[Rule 62-213.410(1), F.A.C., 40 CFR 60.53(a), and AO44-207778 and AO44-207781]

**A.4. Hours of Operation.** These emission units may operate continuously, i.e., 8,760 hours/year. The hours of operation shall be recorded.

[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C., 40 CFR 60.53(a)]

### **Emission Limitations and Standards**

{Permitting Note: The attached Table 1-1, Summary of Air Pollutant Standards and Terms, summarizes information for convenience purpose only. This table does not supersede any of the terms or conditions of this permit.}

**A.5. Visible Emissions.** No visible emissions (5 percent opacity) are allowed from these emission units except that visible emissions not exceeding 20 percent opacity are allowed for up to three (3) minutes in any one hour period.

[Rule 62-296.401, F.A.C.]

**A.6. Particulate Emissions.** Particulate matter emissions shall not exceed 0.08 gr./dscf corrected to 50% excess air.

[AO44-207778 and AO44-207781]

**A.7. Dust, odor and run-off.** This facility shall be operated in such a fashion to preclude objectionable odors. All fugitive dust at this site shall be adequately controlled. There shall be no discharges of liquid effluents or contaminated run-off from the plant site. The applicant shall comply with all provisions of the solid waste rules applicable to ash disposal.

[AO44-207778 and AO44-207781]

### **Excess Emissions**

{Permitting note: The Excess Emissions Rule at Rule 62-210.700, F.A.C., cannot vary any requirement of an NSPS or NESHAP provision.}

**A.8. Excess emissions resulting from malfunction, startup or shutdown shall be permitted providing:**

- (1) best operational practices to minimize emissions are adhered to and
- (2) the duration of excess emissions shall be minimized but in no case exceed two hours in any 24 hour period unless specifically authorized by the Department for longer duration.

[Rule 62-210.700(1), F.A.C.]

**A.9. Excess emissions which are caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure which may reasonably be prevented during startup, shutdown or malfunction shall be prohibited.**

[Rule 62-210.700(4), F.A.C.]

### **Test Methods and Procedures**

{Permitting Note: The attached Table 2-1, Summary of Compliance Requirements, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

**A.10. These combustors are regulated individually and must be tested individually. Due to the common stack, one unit must be shut down while the other unit is being tested.**

[Rules 62-4.070(3) and 62-213.440(1), F.A.C.]

**A.11.** The test method for visible emissions shall be EPA Method 9, as published in 40 CFR-60, Appendix A, or State approved equivalent method. The test method for particulate emissions shall be EPA Method 5 as published in 40 CFR-60, Appendix A, or State approved equivalent method.  
[Rules 62-296.401.(1)(c) , 62-297.401, F.A.C., AO44-207778 and AO44-207781]

**A.12. Operating Rate During Testing.** Testing of emissions shall be conducted with the emissions unit operating at permitted capacity. If it is impracticable to test at permitted capacity, an emissions unit may be tested at less than the minimum permitted capacity (i.e., at less than 90 percent of the maximum operation rate allowed by the permit); in this case, subsequent emissions unit operation is limited to 110 percent of the test load until a new test is conducted. Once the emissions unit is so limited, operation at higher capacities is allowed for no more than 15 consecutive days for the purpose of additional compliance testing to regain the authority to operate at the permitted capacity.  
[Rules 62-297.310(2) & (2)(b), F.A.C.]

### **Recordkeeping and Reporting Requirements**

**A.13. Malfunction Reporting.** In the case of excess emissions resulting from malfunctions, each owner or operator shall notify the Department's South District office in accordance with Appendix TV-1, Title V Condition No. 9. A full written report on the malfunctions shall be submitted in a quarterly report, if requested by the Department.  
[Rule 62-210.700(6), F.A.C.]

**A.14. Test Reports.**

- (a) The owner or operator of an emissions unit for which a compliance test is required shall file a report with the Department's South District office on the results of each such test.
  - (b) The required test report shall be filed with the Department's South District office as soon as practical but no later than 45 days after the last sampling run of each test is completed.
  - (c) Notification and reporting requirements of this permit shall also be sent to the Marathon DEP office.
  - (d) Reporting shall comply with Common Condition **C.9**.
- [Rule 62-297.310(8), F.A.C., AO44-207778 and AO44-207781]

**Subsection B. This section addresses the following emissions unit.**

<b>E.U. ID No.</b>	<b>Brief Description</b>
003	Municipal Solid Waste Landfill

{Permitting note(s): This emissions unit is regulated under 40 CFR 60.752, Standards for air emissions from municipal solid waste landfills.}

**The following specific Conditions apply to the emissions units listed above:**

**Sections 60.752(a)-(d) Standards for air emissions from municipal solid waste landfills.**

**B.1. Reporting of design capacity.**

(a) Each owner or operator of an MSW landfill having a design capacity less than 2.5 million megagrams by mass or 2.5 million cubic meters by volume shall submit an initial design capacity report to the Administrator as provided in 40 CFR 60.757(a). The landfill may calculate design capacity in either megagrams or cubic meters for comparison with the exemption values. Any density conversions shall be documented and submitted with the report. For purposes of part 70 permitting, a landfill with a design capacity less than 2.5 million megagrams or 2.5 million cubic meters does not require an operating permit under part 70 of this chapter. Submittal of the initial design capacity report shall fulfill the requirements of this subpart except as provided for in paragraphs (a)(1) and (a)(2) of this section.

(1) The owner or operator shall submit to the Administrator an amended design capacity report, as provided for in 40 CFR 60.757(a)(3), when there is any increase in the design capacity of a landfill subject to the provisions of this subpart, whether the increase results from an increase in the area or depth of the landfill, a change in the operating procedures of the landfill, or any other means.

(2) If any increase in the maximum design capacity of a landfill exempted from the provisions of 40 CFR 60.752(b) through 40 CFR 60.759 of this subpart on the basis of the design capacity exemption in paragraph (a) of this section results in a revised maximum design capacity equal to or greater than 2.5 million megagrams or 2.5 million cubic meters, the owner or operator shall comply with the provision of paragraph (b) of this section.

**B.2. Determination of non-methane organic compounds.**

(b) Each owner or operator shall either comply with condition (2) below or calculate an NMOC emission rate for the landfill using the procedures specified in section 60.754 of this permit. The NMOC emission rate shall be recalculated annually, except as provided in condition 60.757(b)(1)(ii).

(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 for in condition 60.757(b)(1)(ii); and

(ii) Recalculate the NMOC emission rate annually using the procedures specified in condition 60.754(a)(1) 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 condition (2) below.

(B) If the landfill is permanently closed, a closure notification shall be submitted to the Administrator as provided for in condition 60.757(d).

(2) If a NMOC emission rate for the landfill, using the procedures specified in section 60.754 of this permit, has not been calculated or 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**:

(A) The collection and control system as described in the plan shall meet the design requirements of condition (b)(2)(ii) of this permit.

(B) The collection and control system design plan shall include any alternatives to the operational standards, test methods or procedures, compliance measures, monitoring or recordkeeping requirements, or reporting provisions, of sections 60.753 through 60.758 of this permit, proposed by the owner or operator.

(C) The collection and control system design plan shall either conform with specifications for active collection systems in section 60.759 of this permit or include a demonstration to the Administrator's satisfaction of the sufficiency of the alternative provisions to section 60.759.

(D) The Administrator shall review the information submitted under conditions (2)(i) (A),(B) and (C) above and either approve it, disapprove it, or request that additional information be submitted. Because of the many site-specific factors involved with landfill gas system design, alternative systems may be necessary. A wide variety of system designs are possible, such as vertical wells, combination horizontal and vertical collection systems, or horizontal trenches only, leachate collection components, and passive systems.

(ii) Install a collection and control system that captures the gas generated within the landfill as required by paragraphs (b)(2)(ii)(A) or (B) 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 section 60.757(c)(1) or (2).

(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) A passive collection system shall:

- (1) Comply with the provisions specified in conditions (2)(ii)(A) (1), (2), and (4) above.
- (2) Be installed with liners on the bottom and all sides in all areas in which gas is to be collected. The liners shall be installed as required under 40 CFR 258.40.

(iii) Route all the collected gas to a control system that complies with the requirements in either of the following conditions (2)(iii) (A), (B) or (C).

(A) An open flare designed and operated in accordance with 40 CFR 60.18;

(B) A control system designed and operated to reduce NMOC by 98 weight-percent, or, when an enclosed combustion device is used for control, to either reduce NMOC by 98 weight percent or reduce the outlet NMOC concentration to less than 20 parts per million by volume, dry basis as hexane at 3 percent oxygen. The reduction efficiency or parts per million by volume shall be established by an initial performance test to be completed no later than 180 days after the initial startup of the approved control system using the test methods specified in section 60.754(d).

(1) If a boiler or process heater is used as the control device, the landfill gas stream shall be introduced into the flame zone.

(2) The control device shall be operated within the parameter ranges established during the initial or most recent performance test. The operating parameters to be monitored are specified in section 60.756;

(C) Route the collected gas to a treatment system that processes the collected gas for subsequent sale or use. All emissions from any atmospheric vent from the gas treatment system shall be subject to the requirements of condition (2)(iii) (A) or (B) above.

(iv) Operate the collection and control device installed to comply with this permit in accordance with the provisions of sections 60.753, 60.755 and 60.756.

(v) The collection and control system may be capped or removed provided that all the conditions of paragraphs (2)(v) (A), (B), and (C) below are met:

(A) The landfill shall be a closed landfill as defined in section 60.751. A closure report shall be submitted to the Administrator as provided in section 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 condition 60.754(b) of this permit, 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)]

**B.3. Requirement to obtain a Title V Permit.**

(c) For purposes of obtaining a Title V Operation Permit, the owner or operator of a MSW landfill subject to this subpart with a design capacity less than 2.5 million megagrams or 2.5 million cubic meters is not subject to the requirement to obtain a Title V Operation Permit, unless the landfill is otherwise subject to Title V. For purposes of submitting a timely application for a Title V operation permit, the owner or operator of a MSW landfill subject to subpart WWW with a design capacity greater than or equal to 2.5 million megagrams and 2.5 million cubic meters, and not otherwise subject to Title V, must submit an application, regardless of when the design capacity report is actually submitted, no later than:

(1) (Reserved)

(2) Ninety days after the date of commenced construction, modification, or reconstruction for MSW landfills that commence construction, modification, or reconstruction on or after March 12, 1996.

[Rule 62-204.800, F.A.C.; 40 CFR 60.752(c)]

**B.4. Closure of landfill.**

(d) When a MSW landfill subject to this subpart is closed, the owner or operator is no longer subject to the requirement to maintain a Title V Operation Permit for the landfill if the landfill is not otherwise subject to Title V and if either one of the following conditions are met:

(1) The landfill was never subject to the requirement for a control system under section 60.752(b)(2); or

(2) The owner or operator meets the conditions for control system removal specified in section 60.752(b)(2)(v).

[Rule 62-204.800, F.A.C.; 40 CFR 60.752(d)]

**Section 60.753 Operational standards for collection and control systems.**

**B.5. Length of time required to operate control system.**

(a) Each owner or operator of a MSW landfill with a gas collection and control system used to comply with the provisions of section 60.752(b)(2)(ii) above shall 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)]

**B.6. Collection system pressure requirements.**

(b) Each owner or operator of an MSW landfill gas collection and control system used to comply with the provisions of condition 60.752(b)(2)(ii) above shall operate the collection system with negative pressure at each wellhead except under the following conditions:

(1) A fire or increased well temperature. The owner or operator shall record instances when positive pressure occurs in efforts to avoid a fire. These records shall be submitted with the annual reports as provided in condition 60.757(f)(1);

(2) Use of a geomembrane or synthetic cover. The owner or operator shall develop acceptable pressure limits in the design plan;

(3) A decommissioned well. A well may experience a static positive pressure after shut down to accommodate for declining flows. All design changes shall be approved by the Administrator.

[Rule 62-204.800, F.A.C.; 40 CFR 60.753(b)]

**B.7. Collection system temperature, oxygen and nitrogen requirements.**

(c) Each owner or operator of an MSW landfill gas collection and control system used to comply with the provisions of condition 60.752(b)(2)(ii) above shall operate each interior wellhead in the collection system with a landfill gas temperature less than 55 °C and with either a nitrogen level less than 20 percent or an oxygen level less than 5 percent. The owner or operator may establish a higher operating temperature, nitrogen, or oxygen value at a particular well. A higher operating value demonstration shall show supporting data that the elevated parameter does not cause fires or significantly inhibit anaerobic decomposition by killing methanogens.

(1) The nitrogen level shall be determined using Method 3C, unless an alternative test method is established as allowed by condition 60.752(b)(2)(i) above.

(2) Unless an alternative test method is established as allowed by condition 60.752(b)(2)(i) above, the oxygen shall be determined by an oxygen meter using Method 3A except that:

(i) The span shall be set so that the regulatory limit is between 20 and 50 percent of the span;

(ii) A data recorder is not required;

(iii) Only two calibration gases are required, a zero and span, and ambient air may be used as the span;

(iv) A calibration error check is not required;

(v) The allowable sample bias, zero drift, and calibration drift are  $\pm 10$  percent.

[Rule 62-204.800, F.A.C.; 40 CFR 60.753(c)]

**B.8. Collection system background methane requirements.**

(d) Each owner or operator of an MSW landfill gas collection and control system used to comply with the provisions of condition 60.752(b)(2)(ii) above shall operate the collection system so that the methane concentration is less than 500 parts per million above background at the surface of the landfill. To determine if this level is exceeded, the owner or operator shall conduct surface testing around the perimeter of the collection area and along a pattern that traverses the landfill at 30 meter intervals and where visual observations indicate elevated concentrations of landfill gas, such as distressed vegetation and cracks or seeps in the cover. The owner or operator may establish an alternative traversing pattern that ensures equivalent coverage. A surface monitoring design plan shall be developed that includes a topographical map with the monitoring route and the rationale for any site-specific deviations from the 30 meter intervals. Areas with steep slopes or other dangerous areas may be excluded from the surface testing.

[Rule 62-204.800, F.A.C.; 40 CFR 60.753(d)]

**B.9. Collection system venting requirements.**

(e) Each owner or operator of an MSW landfill gas collection and control system used to comply with the provisions of condition 60.752(b)(2)(ii) above shall operate the system such that all collected gases are vented to a control system designed and operated in compliance with condition 60.752(b)(2)(iii) above. 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)]

**B.10. Requirement for continuous operation.**

(f) Each owner or operator of an MSW landfill gas collection and control system used to comply with the provisions of condition 60.752(b)(2)(ii) above shall 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)]

**B.11. Requirement to take corrective action.**

(g) If monitoring demonstrates that the operational requirements in conditions (b), (c), or (d) of this section are not met, corrective action shall be taken as specified in section 60.755(a)(3) through (a)(5) or Sec. 60.755(c) of this permit. If corrective actions are taken as specified in section 60.755, the monitored exceedance is not a violation of the operational requirements in this section.

[Rule 62-204.800, F.A.C.; 40 CFR 60.753(g)]

**Section 60.754 Test methods and procedures.**

**B.12. Method of calculation of NMOC emissions when actual solid waste acceptance rates are unknown.**

(a)(1) The landfill owner or operator shall calculate the NMOC emission rate using either the equation provided in condition (a)(1)(i) below or the equation provided in condition (a)(1)(ii) below. Both equations may be used if the actual year-to-year solid waste acceptance rate is unknown, as specified in (a)(1)(ii), for part of the life of the landfill. The values to be used in both equations are 0.05 per year for  $k$ , 170 cubic meters per megagram for  $L_o$ , and 4,000 parts per million by volume as hexane for the  $C_{NMOC}$ . For landfills located in geographical areas with a thirty year annual average precipitation of less than 25 inches, as measured at the nearest representative official meteorologic site, the  $k$  value to be used is 0.02 per year.

(i) The following equation shall be used if the actual year-to-year solid waste acceptance rate is known.

$$M_{NMOC} = \sum_{i=1}^n 2kL_oM_i(e^{-kt_i})(C_{NMOC})(3.6 \times 10^{-9})$$

where,

$M_{NMOC}$  = Total NMOC emission rate from the landfill, megagrams per year

$k$  = methane generation rate constant, year<sup>-1</sup>

$L_o$  = methane generation potential, cubic meters per megagram solid waste

$M_i$  = mass of solid waste in the  $i^{\text{th}}$  section, megagrams

$t_i$  = age of the  $i^{\text{th}}$  section, years

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

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

The mass of nondegradable 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.

(ii) The following equation shall be used if the actual year-to-year solid waste acceptance rate is unknown.

$$M_{NMOC} = 2L_oR(e^{-kc} - e^{-kt})(C_{NMOC})(3.6 \times 10^{-9})$$



where,

$M_{\text{NMOC}}$  = mass emission rate of NMOC, megagrams per year  
 $L_o$  = methane generation potential, cubic meters per megagram solid waste  
 $R$  = average annual acceptance rate, megagrams per year  
 $k$  = methane generation rate constant, year<sup>-1</sup>  
 $t$  = age of landfill, years  
 $C_{\text{NMOC}}$  = concentration of NMOC, parts per million by volume as hexane  
 $c$  = time since closure, years. For active landfill  $c = 0$  and  $e^{-kc} = 1$   
 $3.6 \times 10^{-9}$  = conversion factor

The mass of nondegradable solid waste may be subtracted from the average annual acceptance rate when calculating a value for  $R$ , if documentation of the nature and amount of such wastes is maintained.  
[Rule 62-204.800, F.A.C.; 40 CFR 60.754(a)(1)]

**B.13. Requirements if calculated NMOC emissions are less than 50 megagrams per year.**

(a)(2) Tier 1. The owner or operator shall compare the calculated NMOC mass emission rate to the standard of 50 megagrams per year.

(i) If the NMOC emission rate calculated in condition (a)(1) of this section is less than 50 megagrams per year, then the landfill owner shall submit an emission rate report as provided in condition 60.757(b)(1), and shall recalculate the NMOC mass emission rate annually as required under condition 60.752(b)(1).

(ii) If the calculated NMOC emission rate is equal to or greater than 50 megagrams per year, then the landfill owner shall either comply with condition 60.752(b)(2), or determine a site-specific NMOC concentration and recalculate the NMOC emission rate using the procedures provided in specific condition (a)(3) below.

[Rule 62-204.800, F.A.C.; 40 CFR 60.754(a)(2)]

**B.14. Method for determining site-specific NMOC emissions.**

(a)(3) Tier 2. The landfill owner or operator shall determine the NMOC concentration using the following sampling procedure. The landfill owner or operator shall install at least two sample probes per hectare of landfill surface that has retained waste for at least 2 years. If the landfill is larger than 25 hectares in area, only 50 samples are required. The sample probes should be located to avoid known areas of nondegradable solid waste. The owner or operator shall collect and analyze one sample of landfill gas from each probe to determine the NMOC concentration using Method 25C or Method 18 of 40 CFR 60 Appendix A. If using Method 18, the minimum list of compounds to be tested shall be those published in the most recent Compilation of Air Pollutant Emission Factors (AP-42). If composite sampling is used, equal volumes shall be taken from each sample probe. If more than the required number of samples are taken, all samples shall be used in the analysis. The landfill owner or operator shall divide the NMOC concentration from Method 25C by six to convert from  $C_{\text{NMOC}}$  as carbon to  $C_{\text{NMOC}}$  as hexane.

(i) The landfill owner or operator shall recalculate the NMOC mass emission rate using the equations provided in condition (a)(1)(i) or (a)(1)(ii) of this section and using the average NMOC concentration from the collected samples instead of the default value in the equation provided in specific condition (a)(1) of this section.

(ii) If the resulting mass emission rate calculated using the site-specific NMOC concentration is equal to or greater than 50 megagrams per year, then the landfill owner or operator shall either comply with condition 60.752(b)(2), or determine the site-specific methane generation rate constant and recalculate the NMOC emission rate using the site-specific methane generation rate using the procedure specified in specific condition (a)(4) of this section.

(iii) If the resulting NMOC mass emission rate is less than 50 megagrams per year, the owner or operator shall submit a periodic estimate of the emission rate report as provided in

condition 60.757(b)(1) and retest the site-specific NMOC concentration every 5 years using the methods specified in this section.

[Rule 62-204.800, F.A.C.; 40 CFR 60.754(a)(3)]

**B.15. Method for determining site-specific methane emissions.**

(a)(4) Tier 3. The site-specific methane generation rate constant shall be determined using the procedures provided in Method 2E of 40 CFR 60 Appendix A. The landfill owner or operator shall estimate the NMOC mass emission rate using equations in condition (a)(1)(i) or (a)(1)(ii) of this section and using a site-specific methane generation rate constant  $k$ , and the site-specific NMOC concentration as determined in condition (a)(3) of this section instead of the default values provided in condition (a)(1) of this section. The landfill owner or operator shall compare the resulting NMOC mass emission rate to the standard of 50 megagrams per year.

(i) If the NMOC mass emission rate as calculated using the site-specific methane generation rate and concentration of NMOC is equal to or greater than 50 megagrams per year, the owner or operator shall comply with condition 60.752(b)(2).

(ii) If the NMOC mass emission rate is less than 50 megagrams per year, then the owner or operator shall submit a periodic emission rate report as provided in condition 60.757(b)(1) and shall recalculate the NMOC mass emission rate annually, as provided in condition 60.757(b)(1) using the equations in condition (a)(1) of this section and using the site-specific methane generation rate constant and NMOC concentration obtained in condition (a)(3) of this section. The calculation of the methane generation rate constant is performed only once, and the value obtained from this test shall be used in all subsequent annual NMOC emission rate calculations.

[Rule 62-204.800, F.A.C.; 40 CFR 60.754(a)(4)]

**B.16. Alternative methods.**

(a)(5) The owner or operator may use other methods to determine the NMOC concentration or a site-specific  $k$  as an alternative to the methods required in conditions (a)(3) and (a)(4) of this section if the method has been approved by the Administrator.

[Rule 62-204.800, F.A.C.; 40 CFR 60.754(a)(5)]

**B.17. Calculating NMOC rate to determine when a collection and control system may be removed.**

(b) After the installation of a collection and control system in compliance with section 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 condition 60.752(b)(2)(v), using the following equation:

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

where,

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

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

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

(1) The flow rate of landfill gas,  $Q_{\text{LFG}}$ , 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 40 CFR 60 Appendix A.

(2) The average NMOC concentration,  $C_{\text{NMOC}}$ , 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 40 CFR 60 Appendix A. If using Method 18, 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 by six to convert from  $C_{\text{NMOC}}$  as carbon to  $C_{\text{NMOC}}$  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)]

**B.18. Calculating emissions for PSD purposes.**

(c) When calculating emissions for PSD purposes, the owner or operator of each MSW landfill subject to the provisions of this subpart shall estimate the NMOC emission rate for comparison to the PSD major source and significance levels in 40 CFR 51.166 or 40 CFR 52.21 using AP-42 or other approved measurement procedures. If a collection system, which complies with the provisions in Sec. 60.752(b)(2) is already installed, the owner or operator shall estimate the NMOC emission rate using the procedures provided in condition (b) of this section.

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

**B.19. Performance test methods.**

(d) For the performance test required in condition 60.752(b)(2)(iii)(B), Method 25C or Method 18 of 40 CFR 60 Appendix A shall be used to determine compliance with 98 weight-percent efficiency or the 20 ppmv outlet concentration level, unless another method to demonstrate compliance has been approved by the Administrator as provided by condition 60.752(b)(2)(i)(B). If using Method 18, 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 following equation shall be used to calculate efficiency:

$$\text{Control Efficiency} = (\text{NMOC}_{\text{in}} - \text{NMOC}_{\text{out}}) / (\text{NMOC}_{\text{in}})$$

where,

$\text{NMOC}_{\text{in}}$  = mass of NMOC entering control device

$\text{NMOC}_{\text{out}}$  = mass of NMOC exiting control device

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

**Section 60.755 Compliance provisions.**

**Except as provided in condition 60.752(b)(2)(i)(B), the specified methods in paragraphs (a)(1) through (a)(6) of this section shall be used to determine whether the gas collection system is in compliance with Sec. 60.752(b)(2)(ii).**

**B.20. Methods for ensuring collection system accuracy.**

(a)(1) For the purposes of calculating the maximum expected gas generation flow rate from the landfill to determine compliance with condition 60.752(b)(2)(ii)(A)(1), one of the following equations shall be used. The  $k$  and  $L_0$  kinetic factors should be those published in the most recent Compilation of Air Pollutant Emission Factors (AP-42) or other site specific values demonstrated to be appropriate and approved by the Administrator. If  $k$  has been determined as specified in condition 60.754(a)(4), the value of  $k$  determined from the test shall be used. A value of no more than 15 years shall be used for the intended use period of the gas mover equipment. The active life of the landfill is the age of the landfill plus the estimated number of years until closure.

(i) For sites with unknown year-to-year solid waste acceptance rate:

$$Q_m = 2L_0R(e^{-kc} - e^{-kt})$$

where,

$Q_m$  = maximum expected gas generation flow rate, cubic meters per year  
 $L_o$  = methane generation potential, cubic meters per megagram solid waste  
 $R$  = average annual acceptance rate, megagrams per year  
 $k$  = methane generation rate constant, year<sup>-1</sup>  
 $t$  = age of the landfill at equipment installation plus the time the owner or operator intends to use the gas mover equipment or active life of the landfill, whichever is less. If the equipment is installed after closure,  $t$  is the age of the landfill at installation, years  
 $c$  = time since closure, years (for an active landfill  $c = 0$  and  $e^{-kc} = 1$ )

(ii) For sites with known year-to-year solid waste acceptance rate:

$$Q_m = \sum_{i=1}^n 2kL_oM_i(e^{-kt_i})$$

where,

$Q_m$  = maximum expected gas generation flow rate, cubic meters per year  
 $k$  = methane generation rate constant, year<sup>-1</sup>  
 $L_o$  = methane generation potential, cubic meters per megagram solid waste  
 $M_i$  = mass of solid waste in the  $i^{\text{th}}$  section, megagrams  
 $t_i$  = age of the  $i^{\text{th}}$  section, years

(iii) If a collection and control system has been installed, actual flow data may be used to project the maximum expected gas generation flow rate instead of, or in conjunction with, the equations in conditions (a)(1) (i) and (ii) of this section. If the landfill is still accepting waste, the actual measured flow data will not equal the maximum expected gas generation rate, so calculations using the equations in conditions (a)(1) (i) or (ii) or other methods shall be used to predict the maximum expected gas generation rate over the intended period of use of the gas control system equipment.

[Rule 62-204.800, F.A.C.; 40 CFR 60.755(a)(1)]

(a)(2) For the purposes of determining sufficient density of gas collectors for compliance with condition 60.752(b)(2)(ii)(A)(2), the owner or operator shall design a system of vertical wells, horizontal collectors, or other collection devices, satisfactory to the Administrator, capable of controlling and extracting gas from all portions of the landfill sufficient to meet all operational and performance standards.

[Rule 62-204.800, F.A.C.; 40 CFR 60.755(a)(2)]

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

[Rule 62-204.800, F.A.C.; 40 CFR 60.755(a)(3)]

(a)(4) Owners or operators are not required to expand the system as required in condition (a)(3) during the first 180 days after gas collection system startup.

[Rule 62-204.800, F.A.C.; 40 CFR 60.755(a)(4)]

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

[Rule 62-204.800, F.A.C.; 40 CFR 60.755(a)(5)]

(a)(6) An owner or operator seeking to demonstrate compliance with condition 60.752(b)(2)(ii)(A)(4) through the use of a collection system not conforming to the specifications provided in section 60.759 of this permit shall provide information satisfactory to the Administrator as specified in condition 60.752(b)(2)(i)(C) demonstrating that off-site migration is being controlled.

[Rule 62-204.800, F.A.C.; 40 CFR 60.755(a)(6)]

**B.21. Installation according to design plan.**

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

- (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 60.755(b)]

**B.22. Surface methane requirements.**

(c) The following procedures shall be used for compliance with the surface methane operational standard as provided in condition 60.753(d).

(1) After installation of the collection system, the owner or operator shall monitor surface concentrations of methane along the entire perimeter of the collection area and along a pattern that traverses the landfill at 30 meter intervals (or a site-specific established spacing) for each collection area on a quarterly basis using an organic vapor analyzer, flame ionization detector, or other portable monitor meeting the specifications provided in condition (d) of this section.

(2) The background concentration shall be determined by moving the probe inlet upwind and downwind outside the boundary of the landfill at a distance of at least 30 meters from the perimeter wells.

(3) Surface emission monitoring shall be performed in accordance with Section 4.3.1 of Method 21 of 40 CFR 60 Appendix A, except that the probe inlet shall be placed within 5 to 10 centimeters of the ground. Monitoring shall be performed during typical meteorological conditions.

(4) Any reading of 500 parts per million or more above background at any location shall be recorded as a monitored exceedance and the actions specified in conditions (c)(4) (i) through (v) of this section shall be taken. As long as the specified actions are taken, the exceedance is not a violation of the operational requirements of condition 60.753(d).

(i) The location of each monitored exceedance shall be marked and the location recorded.

(ii) Cover maintenance or adjustments to the vacuum of the adjacent wells to increase the gas collection in the vicinity of each exceedance shall be made and the location shall be re-monitored within 10 calendar days of detecting the exceedance.

(iii) If the re-monitoring of the location shows a second exceedance, additional corrective action shall be taken and the location shall be monitored again within 10 days of the second exceedance. If the re-monitoring shows a third exceedance for the same location, the action specified in condition (v) below shall be taken, and no further monitoring of that location is required until the action specified in condition (v) has been taken.

(iv) Any location that initially showed an exceedance but has a methane concentration less than 500 ppm methane above background at the 10-day re-monitoring specified in condition (ii) or (iii) above shall be re-monitored 1 month from the initial exceedance. If the 1-month re-monitoring shows a concentration less than 500 parts per million above background, no further monitoring of that location is required until the next quarterly monitoring period. If the 1-month re-monitoring shows an exceedance, the actions specified in condition (iii) or (v) shall be taken.

(v) For any location where monitored methane concentration equals or exceeds 500 parts per million above background three times within a quarterly period, a new well or other collection device shall be installed within 120 calendar days of the initial exceedance. An alternative remedy to the exceedance, such as upgrading the blower, header pipes or control device, and a corresponding timeline for installation may be submitted to the Administrator for approval.

(5) The owner or operator shall implement a program to monitor for cover integrity and implement cover repairs as necessary on a monthly basis.

[Rule 62-204.800, F.A.C.; 40 CFR 60.755(c)]

**B.23. Method for ensuring accuracy of surface methane measurements.**

(d) Each owner or operator seeking to comply with the provisions in condition 60.755(c) above shall comply with the following instrumentation specifications and procedures for surface emission monitoring devices:

(1) The portable analyzer shall meet the instrument specifications provided in Section 3 of 40 CFR 60 Appendix A Method 21, except that "methane" shall replace all references to VOC.

(2) The calibration gas shall be methane, diluted to a nominal concentration of 500 parts per million in air.

(3) To meet the performance evaluation requirements in Section 3.1.3 of Method 21, the instrument evaluation procedures of Section 4.4 of Method 21 shall be used.

(4) The calibration procedures provided in Section 4.2 of Method 21 shall be followed immediately before commencing a surface monitoring survey.

[Rule 62-204.800, F.A.C.; 40 CFR 60.755(d)]

**B.24. Applicability of permit provisions.**

(e) The provisions of this permit apply at all times, except during periods of start-up, shutdown, or malfunction, provided that the duration of start-up, shutdown, or malfunction shall not exceed 5 days for collection systems and shall not exceed 1 hour for treatment or control devices.

[Rule 62-204.800, F.A.C.; 40 CFR 60.755(e)]

**Section 60.756 Monitoring of operations.**

**B.25. Active gas collection system.**

(a) Except as provided in condition 60.752(b)(2)(i)(B), each owner or operator seeking to comply with condition 60.752(b)(2)(ii)(A) for an active gas collection system shall install a sampling port and a thermometer or other temperature measuring device, or an access port for temperature measurements at each wellhead and:

(1) Measure the gauge pressure in the gas collection header on a monthly basis as provided in condition 60.755(a)(3); and

(2) Monitor nitrogen or oxygen concentration in the landfill gas on a monthly basis as provided in condition 60.755(a)(5); and

(3) Monitor temperature of the landfill gas on a monthly basis as provided in condition 60.755(a)(5).  
[Rule 62-204.800, F.A.C.; 40 CFR 60.756(a)]

**B.26. Enclosed combustor.**

(b) Except as provided in condition 60.752(b)(2)(i)(B), each owner or operator seeking to comply with condition 60.752(b)(2)(iii) using an enclosed combustor shall calibrate, maintain, and operate according to the manufacturer's specifications, the following equipment.

(1) A temperature monitoring device equipped with a continuous recorder and having a minimum accuracy of  $\pm 1$  percent of the temperature being measured expressed in degrees Celsius or  $\pm 0.5$  °C, whichever is greater. A temperature monitoring device is not required for boilers or process heaters with design heat input capacity greater than 44 megawatts.

(2) A device that records flow to or bypass of the control device. The owner or operator shall either:

(i) Install, calibrate, and maintain a gas flow rate measuring device that shall record the flow to the control device at least every 15 minutes; or

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

[Rule 62-204.800, F.A.C.; 40 CFR 60.756(b)]

**B.27. Open flare.**

(c) Except as provided in condition 60.752(b)(2)(i)(B), each owner or operator seeking to comply with condition 60.752(b)(2)(iii) using an open flare shall install, calibrate, maintain, and operate according to the manufacturer's specifications the following equipment:

(1) A heat sensing device, such as an ultraviolet beam sensor or thermocouple, at the pilot light or the flame itself to indicate the continuous presence of a flame.

(2) A device that records flow to or bypass of the flare. The owner or operator shall either:

(i) Install, calibrate, and maintain a gas flow rate measuring device that shall record the flow to the control device at least every 15 minutes; or

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

[Rule 62-204.800, F.A.C.; 40 CFR 60.756(c)]

**B.28. Other control devices.**

(d) Except as provided in condition 60.752(b)(2)(i)(B), each owner or operator seeking to demonstrate compliance with condition 60.752(b)(2)(iii) using a device other than an open flare or an enclosed combustor shall provide information satisfactory to the Administrator as provided in condition 60.752(b)(2)(i)(B) describing the operation of the control device, the operating parameters that would indicate proper performance, and appropriate monitoring procedures. The Administrator shall review the information and either approve it, or request that additional information be submitted. The Administrator may specify additional appropriate monitoring procedures.

[Rule 62-204.800, F.A.C.; 40 CFR 60.756(d)]

**B.29. Alternate methods of compliance.**

(e) Except as provided in condition 60.752(b)(2)(i)(B), each owner or operator seeking to install a collection system that does not meet the specifications in Section 60.759 or seeking to monitor alternative parameters to those required by Section 60.753 through Section 60.756 shall provide information satisfactory to the Administrator as provided in conditions 60.752(b)(2)(i) (B) and (C) describing the design and operation of the

collection system, the operating parameters that would indicate proper performance, and appropriate monitoring procedures. The Administrator may specify additional appropriate monitoring procedures. [Rule 62-204.800, F.A.C.; 40 CFR 60.756(e)]

**B.30. Surface methane operational standard.**

(f) Except as provided in condition 60.752(b)(2)(i)(B), each owner or operator seeking to demonstrate compliance with condition 60.755(c), shall monitor surface concentrations of methane according to the instrument specifications and procedures provided in condition 60.755(d). Any closed landfill that has no monitored exceedances of the operational standard in three consecutive quarterly monitoring periods may skip to annual monitoring. Any methane reading of 500 ppm or more above background detected during the annual monitoring returns the frequency for that landfill to quarterly monitoring.

[Rule 62-204.800, F.A.C.; 40 CFR 60.756(f)]

**Section 60.757 Reporting requirements.**

**B.31. Notification of any increase in design capacity.**

(a) An amended design capacity report shall be submitted to the Administrator providing notification of any increase in the design capacity of the landfill, whether the increase results from an increase in the permitted area or depth of the landfill, a change in the operating procedures, or any other means which results in an increase in the maximum design capacity of the landfill above 2.5 million megagrams or 2.5 million cubic meters. The amended design capacity report shall be submitted within 90 days of the issuance of an amended construction or operating permit, or the placement of waste in additional land, or the change in operating procedures which will result in an increase in maximum design capacity, whichever occurs first. An amended design capacity report shall be submitted to the Administrator providing notification of an increase in the design capacity of the landfill, within 90 days of an increase in the maximum design capacity of the landfill to or above 2.5 million megagrams and 2.5 million cubic meters. This increase in design capacity may result from an increase in the permitted volume of landfill or an increase in the density as documented in the annual recalculation required in section 60.758(f).

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

**B.32. Annual NMOC emission rate.**

(b) Except as provided in condition 60.752(b)(2)(i)(B), each owner or operator subject to the requirements of this subpart shall submit an annual NMOC emission rate report to the Administrator, except as provided for in condition (b)(1)(ii) or (b)(3) of this section. 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 5-year estimate of the NMOC emission rate calculated using the formula and procedures provided in condition 60.754(a) or (b), as applicable.

(i) The initial NMOC emission rate report may be combined with the initial design capacity report and shall be submitted no later than ninety days after the date of commenced construction, modification, or reconstruction for landfills that commence construction, modification, or reconstruction on or after March 12, 1996. Subsequent NMOC emission rate reports shall be submitted annually thereafter, except as provided for in conditions (b)(1)(ii) and (b)(3) of this section.

(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 5 consecutive years, the owner or operator 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 Administrator. 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 Administrator. 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.

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

(3) Each owner or operator subject to the requirements of this subpart is exempted from the requirements of conditions (b)(1) and (2) of this section, after the installation of a collection and control system in compliance with condition 60.752(b)(2), during such time as the collection and control system is in operation and in compliance with Section 60.753 and Section 60.755.

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

**B.33. Collection and control system design plan.**

(c) Except as provided in condition 60.752(b)(2)(i)(B), each owner or operator subject to the provisions of condition 60.752(b)(2)(i) shall submit a collection and control system design plan to the Administrator within 1 year of the first report, in which the emission rate exceeds 50 megagrams per year, except as follows:

(1) If the owner or operator elects to recalculate the NMOC emission rate after Tier 2 NMOC sampling and analysis as provided in condition 60.754(a)(3) and the resulting rate is less than 50 megagrams per 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 megagrams per 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 megagrams per year.

(2) If the owner or operator elects to recalculate the NMOC emission rate after determining a site-specific methane generation rate constant (k), as provided in Tier 3 in condition 60.754(a)(4), and the resulting NMOC emission rate is less than 50 Mg/yr., 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 condition 60.754(a)(4) and the resulting site-specific methane generation rate constant (k) shall be submitted to the Administrator within 1 year of the first calculated emission rate exceeding 50 megagrams per year.

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

**B.34. Closure report.**

(d) Except as provided in condition 60.752(b)(2)(i)(B), 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.; 40 CFR 60.757(d)]

**B.35. Equipment removal report.**

(e) Except as provided in condition 60.752(b)(2)(i)(B), 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 condition (d) of this section;

(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 condition 60.752(b)(2)(v) have been met.

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

**B.36. Active collection system annual reports.**

(f) Except as provided in condition 60.752(b)(2)(i)(B), each owner or operator of a landfill seeking to comply with condition 60.752(b)(2) using an active collection system designed in accordance with condition 60.752(b)(2)(ii) shall submit to the Administrator annual reports of the recorded information in (f)(1) through (f)(6) below. The initial annual report shall be submitted within 180 days of installation and start-up of the collection and control system, and shall include the initial performance test report required under 40 CFR 60.8. For enclosed combustion devices and flares, reportable exceedances are defined under condition 60.758(c).

(1) Value and length of time for exceedance of applicable parameters monitored under conditions 60.756(a), (b), (c), and (d).

(2) Description and duration of all periods when the gas stream is diverted from the control device through a bypass line or the indication of bypass flow as specified under Section 60.756.

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

(4) All periods when the collection system was not operating in excess of 5 days.

(5) The location of each exceedance of the 500 parts per million methane concentration as provided in condition 60.753(d) and the concentration recorded at each location for which an exceedance was recorded in the previous month.

(6) The date of installation and the location of each well or collection system expansion added pursuant to conditions (a)(3), (b), and (c)(4) of Section 60.755.

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

**B.37. Passive collection system reporting.**

(g) Each owner or operator seeking to comply with section 60.752(b)(2)(iii) shall include the following information with the initial performance test report required under 40 CFR 60.8:

(1) A diagram of the collection system showing collection system positioning including all wells, horizontal collectors, surface collectors, or other gas extraction devices, including the locations of any areas excluded from collection and the proposed sites for the future collection system expansion;

(2) The data upon which the sufficient density of wells, horizontal collectors, surface collectors, or other gas extraction devices and the gas mover equipment sizing are based;

(3) The documentation of the presence of asbestos or nondegradable material for each area from which collection wells have been excluded based on the presence of asbestos or nondegradable material;

(4) The sum of the gas generation flow rates for all areas from which collection wells have been excluded based on nonproductivity and the calculations of gas generation flow rate for each excluded area; and

(5) The provisions for increasing gas mover equipment capacity with increased gas generation flow rate, if the present gas mover equipment is inadequate to move the maximum flow rate expected over the life of the landfill; and

(6) The provisions for the control of off-site migration.

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

**Section 60.758 Recordkeeping requirements.**

**B.38. Capacity and acceptance reports.**

(a) Except as provided in section 60.752(b)(2)(i)(B), each owner or operator of an MSW landfill subject to the provisions of condition 60.752(b) shall keep for at least 5 years up-to-date, readily accessible, on-site records of the design capacity report which triggered section 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 60.758(a)]

**B.39. Control equipment test results.**

(b) Except as provided in section 60.752(b)(2)(i)(B), each owner or operator of a controlled landfill shall keep up-to-date, readily accessible records for the life of the control equipment of the data listed in conditions (b)(1) through (b)(4) of this section 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.

(1) Where an owner or operator subject to the provisions of this subpart seeks to demonstrate compliance with condition 60.752(b)(2)(ii):

(i) The maximum expected gas generation flow rate as calculated in condition 60.755(a)(1). The owner or operator may use another method to determine the maximum gas generation flow rate, if the method has been approved by the Administrator.

(ii) The density of wells, horizontal collectors, surface collectors, or other gas extraction devices determined using the procedures specified in condition 60.759(a)(1).

(2) Where an owner or operator subject to the provisions of this subpart seeks to demonstrate compliance with condition 60.752(b)(2)(iii) through use of an enclosed combustion device other than a boiler or process heater with a design heat input capacity greater than 44 megawatts:

(i) The average combustion temperature measured at least every 15 minutes and averaged over the same time period of the performance test.

(ii) The percent reduction of NMOC determined as specified in condition 60.752(b)(2)(iii)(B) achieved by the control device.

(3) Where an owner or operator seeks to demonstrate compliance with condition 60.752(b)(2)(iii)(B)(1) through use of a boiler or process heater of any size: a description of the location at which the collected gas vent stream is introduced into the boiler or process heater over the same time period of the performance testing.

(4) Where an owner or operator subject to the provisions of this subpart seeks to demonstrate compliance with condition 60.752(b)(2)(iii)(A) through use of an open flare, the flare type (i.e., steam-assisted, air-assisted, or nonassisted), all visible emission readings, heat content determination, flow rate or bypass flow rate measurements, and exit velocity determinations made during the performance test as specified in 40 CFR 60.18; continuous records of the flare pilot flame or flare flame monitoring and records of all periods of operations during which the pilot flame of the flare flame is absent.

[Rule 62-204.800, F.A.C.; 40 CFR 60.758(b)]

**B.40. Equipment operating parameters.**

(c) Except as provided in section 60.752(b)(2)(i)(B), each owner or operator of a controlled landfill subject to the provisions of this subpart shall keep for 5 years up-to-date, readily accessible continuous records of the equipment operating parameters specified to be monitored in Section 60.756 as well as up-to-date, readily accessible records for periods of operation during which the parameter boundaries established during the most recent performance test are exceeded.

(1) The following constitute exceedances that shall be recorded and reported under condition 60.757(f):

(i) For enclosed combustors except for boilers and process heaters with design heat input capacity of 44 megawatts (150 million British thermal unit per hour) or greater, all 3-hour periods of operation during which the average combustion temperature was more than 28 °C below the average combustion temperature during the most recent performance test at which compliance with condition 60.752(b)(2)(iii) was determined.

(ii) For boilers or process heaters, whenever there is a change in the location at which the vent stream is introduced into the flame zone as required under condition (b)(3)(i) of this section.

(2) Each owner or operator shall keep up-to-date, readily accessible continuous records of the 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, specified under Section 60.756.

(3) Each owner or operator who uses a boiler or process heater with a design heat input capacity of 44 megawatts or greater to comply with condition 60.752(b)(2)(iii) shall keep an up-to-date, readily accessible record of all periods of operation of the boiler or process heater. (Examples of such records could include records of steam use, fuel use, or monitoring data collected pursuant to other State, local, or Federal regulatory requirements.)

(4) Each owner or operator seeking to comply with the provisions of this permit by use of an open flare shall keep up-to-date, readily accessible continuous records of the flame or flare pilot flame monitoring specified under condition 60.756(c), and up-to-date, readily accessible records of all periods of operation in which the flame or flare pilot flame is absent.

[Rule 62-204.800, F.A.C.; 40 CFR 60.758(c)]

**B.41. Plot map.**

(d) Except as provided in section 60.752(b)(2)(i)(B), each owner or operator shall keep for the life of the collection system an up-to-date, readily accessible plot map showing each existing and planned collector in the system and providing a unique identification location label for each collector.

(1) Each owner or operator subject to the provisions of this subpart shall keep up-to-date, readily accessible records of the installation date and location of all newly installed collectors as specified under condition 60.755(b).

(2) Each owner or operator subject to the provisions of this subpart shall keep readily accessible documentation of the nature, date of deposition, amount, and location of asbestos-containing or nondegradable waste excluded from collection as provided in condition 60.759(a)(3)(i) as well as any nonproductive areas excluded from collection as provided in condition 60.759(a)(3)(ii).

[Rule 62-204.800, F.A.C.; 40 CFR 60.758(d)]

**B.42. Exceedances.**

(e) Except as provided in section 60.752(b)(2)(i)(B), each owner or operator shall keep for at least 5 years up-to-date, readily accessible records of all collection and control system exceedances of the operational standards in condition 60.753, the reading in the subsequent month whether or not the second reading is an exceedance, and the location of each exceedance.

[Rule 62-204.800, F.A.C.; 40 CFR 60.758(e)]

**B.43. Design capacity calculations.**

(f) 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 or 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)]

**Section 60.759 Specifications for active collection systems.**

**B.44. Placement of collection devices.**

(a) Each owner or operator seeking to comply with condition 60.752(b)(2)(i) shall site active collection wells, horizontal collectors, surface collectors, or other extraction devices at a sufficient density throughout all gas producing areas using the following procedures unless alternative procedures have been approved by the Administrator as provided in conditions 60.752(b)(2)(i)(C) and (D):

(1) The collection devices within the interior and along the perimeter areas shall be certified to achieve comprehensive control of surface gas emissions by a professional engineer. The following issues shall be addressed in the design: depths of refuse, refuse gas generation rates and flow characteristics, cover properties, gas system expandability, leachate and condensate management, accessibility, compatibility with filling operations, integration with closure end use, air intrusion control, corrosion resistance, fill settlement, and resistance to the refuse decomposition heat.

(2) The sufficient density of gas collection devices determined in condition (a)(1) above shall address landfill gas migration issues and augmentation of the collection system through the use of active or passive systems at the landfill perimeter or exterior.

(3) The placement of gas collection devices determined in condition (a)(1) above shall control all gas producing areas, except as provided by conditions (a)(3)(i) and (a)(3)(ii) below.

(i) Any segregated area of asbestos or nondegradable material may be excluded from collection if documented as provided under condition 60.758(d). The documentation shall provide the nature, date of deposition, location and amount of asbestos or nondegradable material deposited in the area, and shall be provided to the Administrator upon request.

(ii) Any nonproductive area of the landfill may be excluded from control, provided that the total of all excluded areas can be shown to contribute less than 1 percent of the total amount of NMOC emissions from the landfill. The amount, location, and age of the material shall be documented and provided to the Administrator upon request. A separate NMOC emissions estimate shall be made for each section proposed for exclusion, and the sum of all such sections shall be compared to the NMOC emissions estimate for the entire landfill. Emissions from each section shall be computed using the following equation:

$$Q_i = 2kL_oM_i(e^{-kt_i}) (C_{NMOC}) (3.6 \times 10^{-9})$$

where,

$Q_i$  = NMOC emission rate from the  $i^{\text{th}}$  section, megagrams per year

$k$  = methane generation rate constant, year<sup>-1</sup>

$L_o$  = methane generation potential, cubic meters per megagram solid waste

$M_i$  = mass of the degradable solid waste in the  $i^{\text{th}}$  section, megagram

$t_i$  = age of the solid waste in the  $i^{\text{th}}$  section, years

$C_{NMOC}$  = concentration of nonmethane organic compounds, parts per million by volume

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

(iii) The values for  $k$ ,  $L_o$ , and  $C_{NMOC}$  determined in field testing shall be used, if field testing has been performed in determining the NMOC emission rate or the radii of influence (the distance from the well center to a point in the landfill where the pressure gradient applied by the blower or compressor approaches zero). If field testing has not been performed, the default values for  $k$ ,  $L_o$  and  $C_{NMOC}$  provided in condition 60.754(a)(1) or the alternative values from section 60.754(a)(5) shall be used. The mass of nondegradable solid waste contained within the given section may be subtracted from the total mass of the section when estimating emissions provided the nature, location, age, and amount of the nondegradable material is documented as provided in condition (a)(3)(i) of this section.

[Rule 62-204.800, F.A.C.; 40 CFR 60.759(a)]

#### **B.45. Design of collection devices.**

(b) Each owner or operator seeking to comply with condition 60.752(b)(2)(i)(A) shall construct the gas collection devices using the following equipment or procedures:

(1) The landfill gas extraction components shall be constructed of polyvinyl chloride (PVC), high density polyethylene (HDPE) pipe, fiberglass, stainless steel, or other nonporous corrosion resistant material of suitable dimensions to: convey projected amounts of gases; withstand installation, static, and settlement forces; and withstand planned overburden or traffic loads. The collection system shall extend as necessary to comply with

emission and migration standards. Collection devices such as wells and horizontal collectors shall be perforated to allow gas entry without head loss sufficient to impair performance across the intended extent of control. Perforations shall be situated with regard to the need to prevent excessive air infiltration.

(2) Vertical wells shall be placed so as not to endanger underlying liners and shall address the occurrence of water within the landfill. Holes and trenches constructed for piped wells and horizontal collectors shall be of sufficient cross-section so as to allow for their proper construction and completion including, for example, centering of pipes and placement of gravel backfill. Collection devices shall be designed so as not to allow indirect short circuiting of air into the cover or refuse into the collection system or gas into the air. Any gravel used around pipe perforations should be of a dimension so as not to penetrate or block perforations.

(3) Collection devices may be connected to the collection header pipes below or above the landfill surface. The connector assembly shall include a positive closing throttle valve, any necessary seals and couplings, access couplings and at least one sampling port. The collection devices shall be constructed of PVC, HDPE, fiberglass, stainless steel, or other nonporous material of suitable thickness.

[Rule 62-204.800, F.A.C.; 40 CFR 60.759(b)]

**B.46. Capacity of collection system.**

(c) Each owner or operator seeking to comply with condition 60.752(b)(2)(i)(A) shall convey the landfill gas to a control system in compliance with condition 60.752(b)(2)(iii) through the collection header pipe(s). The gas mover equipment shall be sized to handle the maximum gas generation flow rate expected over the intended use period of the gas moving equipment using the following procedures:

(1) For existing collection systems, the flow data shall be used to project the maximum flow rate. If no flow data exists, the procedures in condition (c)(2) below shall be used.

(2) For new collection systems, the maximum flow rate shall be in accordance with condition 60.755(a)(1).

[Rule 62-204.800, F.A.C.; 40 CFR 60.759(c)]

**Subsection C. Common Conditions.**

<b>E.U. ID No.</b>	<b>Brief Description</b>
001	Municipal Solid Waste Combustor No. 1
002	Municipal Solid Waste Combustor No. 2

The following Conditions apply to the emissions unit(s)/activities listed above:

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

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

**Monitoring of Operations**

**C.2. Determination of Process Variables.**

(a) Required Equipment. The owner or operator of an emissions unit for which compliance tests are required shall install, operate, and maintain equipment or instruments necessary to determine process variables, such as process weight input or heat input, when such data are needed in conjunction with emissions data to determine the compliance of the emissions unit with applicable emission limiting standards.

(b) Accuracy of Equipment. Equipment or instruments used to directly or indirectly determine process variables, including devices such as belt scales, weight hoppers, flow meters, and tank scales, shall be calibrated and adjusted to indicate the true value of the parameter being measured with sufficient accuracy to allow the applicable process variable to be determined within 10% of its true value.

[Rule 62-297.310(5), F.A.C.]

**Test Methods and Procedures**

{Permitting Note: The attached Table 2-1, Summary of Compliance Requirements, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

**C.3. Frequency of Compliance Tests.** The following provisions apply only to those emissions units that are subject to an emissions limiting standard for which compliance testing is required.

(a) General Compliance Testing.

3. Except as otherwise specified in an applicable subsection, the owner or operator of an emissions unit that is subject to any emission limiting standard shall conduct a compliance test that demonstrates compliance with the applicable emission limiting standard prior to obtaining a renewed operation permit. Emissions units that are required to conduct an annual compliance test may submit the most recent annual compliance test to satisfy the requirements of this provision. In renewing an air operation permit pursuant to Rule 62-210.300(2)(a)3.b., c., or d., F.A.C., the Department shall not require submission of emission compliance test results for any emissions unit that, during the year prior to renewal:

- a. Did not operate; or
- b. In the case of a fuel burning emissions unit, burned liquid fuel for a total of no more than 400 hours.

4. During each federal fiscal year (October 1 -- September 30), unless otherwise specified by rule, order, or permit, the owner or operator of each emissions unit shall have a formal compliance test conducted for:

- a. Visible emissions, if there is an applicable standard;
- b. Each of the following pollutants, if there is an applicable standard, and if the emissions unit emits

or has the potential to emit: 5 tons per year or more of lead or lead compounds measured as elemental lead; 30 tons per year or more of acrylonitrile; or 100 tons per year or more of any other regulated air pollutant; and

5. An annual compliance test for particulate matter emissions shall not be required for any fuel burning emissions unit that, in a federal fiscal year, does not burn liquid and/or solid fuel, other than during startup, for a total of more than 400 hours.

8. Any combustion turbine that does not operate for more than 400 hours per year shall conduct a visible emissions compliance test once per each five-year period, coinciding with the term of its air operation permit.

9. The owner or operator shall notify the Department's South District office, at least 15 days prior to the date on which each formal compliance test is to begin, of the date, time, and place of each such test, and the test contact person who will be responsible for coordinating and having such test conducted for the owner or operator.

(b) 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 owner or operator of the emissions unit to conduct compliance tests which identify the nature and quantity of pollutant emissions from the emissions unit and to provide a report on the results of said tests to the Department.

(c) Waiver of Compliance Test Requirements. If the owner or operator of an emissions unit that is subject to a compliance test requirement demonstrates to the Department, pursuant to the procedure established in Rule 62-297.620, F.A.C., that the compliance of the emissions unit with an applicable weight emission limiting standard can be adequately determined by means other than the designated test procedure, such as specifying a surrogate standard of no visible emissions for particulate matter sources equipped with a bag house or specifying a fuel analysis for sulfur dioxide emissions, the Department shall waive the compliance test requirements for such emissions units and order that the alternate means of determining compliance be used, provided, however, the provisions of Rule 62-297.310(7)(b), F.A.C., shall apply.

[Rule 62-297.310(7), F.A.C.; and, SIP approved]

**C.4. Required Number of Test Runs**. For mass emission limitations, a compliance test shall consist of three complete and separate determinations of the total air pollutant emission rate through the test section of the stack or duct and three complete and separate determinations of any applicable process variables corresponding to the three distinct time periods during which the stack emission rate was measured; provided, however, that three complete and separate determinations shall not be required if the process variables are not subject to variation during a compliance test, or if three determinations are not necessary in order to calculate the unit's emission rate. The three required test runs shall be completed within one consecutive five day period. In the event that a sample is lost or one of the three runs must be discontinued because of circumstances beyond the control of the owner or operator, and a valid third run cannot be obtained within the five day period allowed for the test, the Secretary or his or her designee may accept the results of the two complete runs as proof of compliance.

[Rule 62-297.310(1), F.A.C. and 40 CFR 60.8]

**C.5. Calculation of Emission Rate**. The indicated emission rate or concentration shall be the arithmetic average of the emission rate or concentration determined by each of the three separate test runs unless otherwise specified in a particular test method or applicable rule.

[Rule 62-297.310(3), F.A.C.]



**C.6. Applicable Test Procedures.**

**(a) Required Sampling Time.**

1. Unless otherwise specified in the applicable rule, the required sampling time for each test run shall be no less than one hour and no greater than four hours, and the sampling time at each sampling point shall be of equal intervals of at least two minutes.

2. Opacity Compliance Tests. When either EPA Method 9 or DEP Method 9 is specified as the applicable opacity test method, the required minimum period of observation for a compliance test shall be sixty (60) minutes for emissions units which emit or have the potential to emit 100 tons per year or more of particulate matter, and thirty (30) minutes for emissions units which have potential emissions less than 100 tons per year of particulate matter and are not subject to a multiple-valued opacity standard. The opacity test observation period shall include the period during which the highest opacity emissions can reasonably be expected to occur.

Exceptions to these requirements are as follows:

c. The minimum observation period for opacity tests conducted by employees or agents of the Department to verify the day-to-day continuing compliance of a unit or activity with an applicable opacity standard shall be twelve minutes.

**(b) Minimum Sample Volume.** Unless otherwise specified in the applicable rule, the minimum sample volume per run shall be 25 dry standard cubic feet.

**(c) Required Flow Rate Range.** For EPA Method 5 particulate sampling, acid mist/sulfur dioxide, and fluoride sampling which uses Greenburg Smith type impingers, the sampling nozzle and sampling time shall be selected such that the average sampling rate will be between 0.5 and 1.0 actual cubic feet per minute, and the required minimum sampling volume will be obtained.

**(d) Calibration of Sampling Equipment.** Calibration of the sampling train equipment shall be conducted in accordance with the schedule shown in Table 297.310-1.

**(e) Allowed Modification to EPA Method 5.** When EPA Method 5 is required, the following modification is allowed: the heated filter may be separated from the impingers by a flexible tube.

[Rule 62-297.310(4), F.A.C.]

**C.7. Required Stack Sampling Facilities.** When a mass emissions stack test is required, the permittee shall comply with the requirements contained in Appendix SS-1, Stack Sampling Facilities (version dated 10/07/96), attached to this permit.

[Rule 62-297.310(6), F.A.C.]

**Record Keeping and Reporting Requirements**

**C.8. Malfunctions - Notification.** In the case of excess emissions resulting from malfunctions, each owner or operator shall notify the Department's South District office in accordance with Appendix TV-1, Title V Condition No. 9, F.A.C. A full written report on the malfunctions shall be submitted in a quarterly report, if requested by the Department's South District office.

[Rule 62-210.700(6), F.A.C.]

**C.9. Test Reports.** The test report shall provide sufficient detail on the emissions unit tested and the test procedures used to allow the Department's South District office to determine if the test was properly conducted and the test results properly computed. As a minimum, the test report, other than for an EPA or DEP Method 9 test, shall provide the following information:

1. The type, location, and designation of the emissions unit tested.
2. The facility at which the emissions unit is located.
3. The owner or operator of the emissions unit.

4. The normal type and amount of fuels used and materials processed, and the types and amounts of fuels used and material processed during each test run.
5. The means, raw data and computations used to determine the amount of fuels used and materials processed, if necessary to determine compliance with an applicable emission limiting standard.
6. The type of air pollution control devices installed on the emissions unit, their general condition, their normal operating parameters (pressure drops, total operating current and GPM scrubber water), and their operating parameters during each test run.
7. A sketch of the duct within 8 stack diameters upstream and 2 stack diameters downstream of the sampling ports, including the distance to any upstream and downstream bends or other flow disturbances.
8. The date, starting time and duration of each sampling run.
9. The test procedures used, including any alternative procedures authorized pursuant to Rule 62-297.620, F.A.C. Where optional procedures are authorized in this chapter, indicate which option was used.
10. The number of points sampled and configuration and location of the sampling plane.
11. For each sampling point for each run, the dry gas meter reading, velocity head, pressure drop across the stack, temperatures, average meter temperatures and sample time per point.
12. The type, manufacturer and configuration of the sampling equipment used.
13. Data related to the required calibration of the test equipment.
14. Data on the identification, processing and weights of all filters used.
15. Data on the types and amounts of any chemical solutions used.
16. Data on the amount of pollutant collected from each sampling probe, the filters, and the impingers, are reported separately for the compliance test.
17. The names of individuals who furnished the process variable data, conducted the test, analyzed the samples and prepared the report.
18. All measured and calculated data required to be determined by each applicable test procedure for each run.
19. The detailed calculations for one run that relate the collected data to the calculated emission rate.
20. The applicable emission standard, and the resulting maximum allowable emission rate for the emissions unit, plus the test result in the same form and unit of measure.
21. A certification that, to the knowledge of the owner or his authorized agent, all data submitted are true and correct. When a compliance test is conducted for the Department or its agent, the person who conducts the test shall provide the certification with respect to the test procedures used. The owner or his authorized agent shall certify that all data required and provided to the person conducting the test are true and correct to his knowledge.

[Rules 62-213.440 and 62-297.310(8), F.A.C.]

**C.10. Acid Rain Part Application.** For any unit which was a solid waste incinerator, burning less than 20 percent fossil fuel as described in 40 CFR 72.6(b)(7), adopted and incorporated by reference at Rule 62-204.800, F.A.C. the designated representative of the source containing the unit shall submit a complete Acid Rain Part application governing such unit to the Department before the later of January 1, 1998, or March 1 of the year following the three calendar year period in which the incinerator consumed 20 percent or more fossil fuel on a British thermal unit (BTU) basis.

[Chapter 62-214.320(1)(h), F.A.C.]

**C.11.** The permittee shall comply with the requirements contained in Appendix 40 CFR 60, Subpart A, attached to this permit.

[Rule 62-204.800(7)(d), F.A.C.]